

ADA Digital Toolkit

A Guide to Digital Accessibility

**June 2017**

Contents

[**WHAT IS IN THIS TOOLKIT? 4**](#_Toc484461876)

[Part 1: What is Digital Accessibility? 4](#_Toc484461877)

[Part 2: Barriers to Digital Access 4](#_Toc484461878)

[Part 3: Digital Accessibility and the ADA 4](#_Toc484461879)

[Part 4: Digital Accessibility Guidelines 4](#_Toc484461880)

[Part 5: Getting Started with Digital Accessibility 4](#_Toc484461881)

[Part 6: Digital Access Quick Check 4](#_Toc484461882)

[Part 7: Developing an Accessibility Plan 4](#_Toc484461883)

[Part 8: Digital Accessibility Resources 5](#_Toc484461884)

[What is Digital Accessibility? 6](#_Toc484461885)

[Perceivable 6](#_Toc484461886)

[Operable 6](#_Toc484461887)

[Understandable 6](#_Toc484461888)

[Robust 6](#_Toc484461889)

[Barriers to Digital Access 7](#_Toc484461890)

[Auditory Disabilities 7](#_Toc484461891)

[Barriers to access 7](#_Toc484461892)

[Removing those barriers 7](#_Toc484461893)

[Cognitive and Neurological Disabilities 7](#_Toc484461894)

[Barriers to access 8](#_Toc484461895)

[Removing those barriers 8](#_Toc484461896)

[Physical Disabilities 8](#_Toc484461897)

[Barriers to access 9](#_Toc484461898)

[Removing those barriers 9](#_Toc484461899)

[Speech Disabilities 9](#_Toc484461900)

[Barriers to access 9](#_Toc484461901)

[Removing those barriers 9](#_Toc484461902)

[Visual Disabilities 10](#_Toc484461903)

[Barriers to access 10](#_Toc484461904)

[Removing those barriers 10](#_Toc484461905)

[Reference 10](#_Toc484461906)

[Digital Accessibility and the ADA 11](#_Toc484461907)

[A Right to Digital Access? 11](#_Toc484461908)

[The Web as a Place of Public Accommodation? 11](#_Toc484461909)

[Websites Connected to Physical Stores 12](#_Toc484461910)

[Website-only businesses 13](#_Toc484461911)

[An Unclear Path: Enforcing Digital Accessibility Under the ADA 14](#_Toc484461912)

[The Takeaway 15](#_Toc484461913)

[Reference 15](#_Toc484461914)

[Digital Accessibility Guidelines 16](#_Toc484461915)

[WCAG 2.0 Overview 16](#_Toc484461916)

[Perceivable 16](#_Toc484461917)

[Operable 16](#_Toc484461918)

[Understandable 16](#_Toc484461919)

[Robust 16](#_Toc484461920)

[Meeting WCAG 2.0 16](#_Toc484461921)

[Success Criteria 17](#_Toc484461922)

[Section 508 22](#_Toc484461923)

[References 22](#_Toc484461924)

[Getting Started with Digital Accessibility 23](#_Toc484461925)

[HTML 23](#_Toc484461926)

[Add alternative text to every meaningful image 23](#_Toc484461927)

[Structure your content with headings 23](#_Toc484461928)

[Add navigation landmarks to your page 23](#_Toc484461929)

[Use a custom focus indicator 23](#_Toc484461930)

[Make sure your content can be accessed using the keyboard 24](#_Toc484461931)

[Use descriptive links 24](#_Toc484461932)

[Microsoft Word 24](#_Toc484461933)

[Use document styles 24](#_Toc484461934)

[Add alternative text to images and objects 24](#_Toc484461935)

[Use short titles in headings 24](#_Toc484461936)

[Name your hyperlinks appropriately 25](#_Toc484461937)

[Use simple table structure 25](#_Toc484461938)

[Set column header rows in tables 25](#_Toc484461939)

[Avoid using repeated blank characters 25](#_Toc484461940)

[Avoid using floating objects 25](#_Toc484461941)

[Avoid watermarks 25](#_Toc484461942)

[Fill in document properties 25](#_Toc484461943)

[Use the Accessibility Checker 25](#_Toc484461944)

[Social Media 25](#_Toc484461945)

[Profile Tips 25](#_Toc484461946)

[Posting Tips 26](#_Toc484461947)

[Email 26](#_Toc484461948)

[Use HTML format when possible 27](#_Toc484461949)

[Fonts and font size are important 27](#_Toc484461950)

[Add alternative text to images and objects 27](#_Toc484461951)

[Adding attachments 27](#_Toc484461952)

[Use styles 27](#_Toc484461953)

[Name your hyperlinks appropriately 27](#_Toc484461954)

[Avoid using repeated blank characters 27](#_Toc484461955)

[Check your color contrast 27](#_Toc484461956)

[Use plain language 27](#_Toc484461957)

[Make your signature accessible 28](#_Toc484461958)

[Digital Access Quick Check 29](#_Toc484461959)

[Developing an Accessibility Plan 30](#_Toc484461960)

[Address all areas of your digital platform 30](#_Toc484461961)

[Use WCAG 2.0 AA as your accessibility standard 30](#_Toc484461962)

[Appoint an accessibility coordinator 30](#_Toc484461963)

[Hire an independent consultant, if needed 30](#_Toc484461964)

[Training all staff in the creation of accessible content 30](#_Toc484461965)

[Add accessibility to performance evaluations 30](#_Toc484461966)

[Adopt an accessibility policy 31](#_Toc484461967)

[Post an accessibility statement on your website 31](#_Toc484461968)

[Test your content for accessibility 31](#_Toc484461969)

[Reference 31](#_Toc484461970)

[Digital Accessibility Resources 32](#_Toc484461971)

[What is Digital Accessibility? 32](#_Toc484461972)

[Digital Accessibility and the Law 32](#_Toc484461973)

[Federal Regulations 32](#_Toc484461974)

[Minnesota State Regulations 33](#_Toc484461975)

[Guidelines and Standards 34](#_Toc484461976)

[Document Accessibility 35](#_Toc484461977)

[Website Accessibility 36](#_Toc484461978)

[Social Media Accessibility 37](#_Toc484461979)

[Multimedia Accessibility 37](#_Toc484461980)

[Testing for Accessibility 37](#_Toc484461981)

# What is in this Toolkit?

This ADA Digital Toolkit is designed to help users understand the importance and impact of digital accessibility and its relation to the Americans with Disabilities Act (ADA). While there are currently no technical requirements regarding digital accessibility within the ADA, the exponential growth of the Internet and information technologies into all areas of our lives over the last 27 years makes this a vital area of interest for those concerned with equal access for all. The sections in this Toolkit are intended to provide you with information, tools, and resources you need to make your websites, documents, and others electronic information accessible to people with disabilities.

## Part 1: What is Digital Accessibility?

This section provides an overview of digital accessibility and the principles that underlie it.

## Part 2: Barriers to Digital Access

This section covers common barriers people with disabilities face when attempting to access electronic information.

## Part 3: Digital Accessibility and the ADA

This section reviews how digital accessibility is currently considered under the Americans with Disability Act and what you can do to prepare for proposed new regulations.

## Part 4: Digital Accessibility Guidelines

This section provides an overview of the Web Content Accessibility Guidelines (WCAG) 2.0, the internationally-recognized standard for digital accessibility.

## Part 5: Getting Started with Digital Accessibility

This section provides some tips and best practices to help you get started with digital accessibility

## Part 6: Digital Access Quick Check

This section offers five basic checks you can do to quickly learn something about the accessibility of your web content.

## Part 7: Developing an Accessibility Plan

This section provides an overview of a plan your organization can put in place to incorporate accessibility into your existing workflows--and to maintain it moving forward.

## Part 8: Digital Accessibility Resources

This section provides additional information and resources for digital accessibility.

# What is Digital Accessibility?

In practical terms, digital accessibility is making your content work with the technologies people use, whether that is a mobile phone or a dedicated assistive device such as a screen reader.

Just as including access ramps and curb cuts in the built environment can remove barriers to access, incorporating accessibility features, such as alternative text and keyboard control, can improve the digital “environment”. While there are a number of techniques you can use to achieve this barrier removal, there are four general principles to keep in mind: perceivable, operable, understandable, and robust.

## Perceivable

Can users perceive your information? For many people, vision is the primary mode of perception and this explains why so much effort is placed on the visual presentation. However, this does not account for other means of perception: namely, hearing and tactile feedback. Content should be developed with these perceptions in mind. More importantly, content needs to be easily changeable among these three modes--visual, auditory, and tactile--to meet the needs of individual users.

## Operable

Can users interact with your information? Traditionally, users have interacted with electronic information using a mouse and keyboard. However, limiting access to these interactions does not account for people who cannot use such devices--or cannot use them in traditional ways--and rely on assistive technology. Nor does it account for the different interactions used with mobile devices. However they choose to access your information, people should be able to use it.

## Understandable

Can users understand your information? As the content creator, your information makes sense to you. But would it make sense to someone who has never encountered it before? Is it written in clear and precise language? If people are asked to interact with it, are instructions provided and potential errors anticipated and easily corrected? Does it take into account people who have difficulty comprehending, remembering, or focusing?

## Robust

Does the presentation of your content actually work as you intend it to, on any device a user chooses to use? Will it continue to work for the foreseeable future?

# Barriers to Digital Access

The four accessibility principles—**perceivable**, **operable**, **understandable**, and **robust**—address potential barriers people with disabilities might face when accessing your information. These barriers can be grouped under five broad categories of disability: auditory, cognitive and neurological, physical, speech, and visual.

**Note:** Each disability category includes different types and levels of severity. There can also be many areas of overlap.

## Auditory Disabilities

Auditory disabilities include various levels of hearing impairment from the moderate (hard of hearing) to the severe (deafness). It also includes people who are both deaf and blind.

### Barriers to access

For people with these disabilities, information cannot be accessed if it relies on sound. Examples include:

* Audio content that doesn't provide captions or transcripts
* Media players that do not allow for captions, or players that do not allow for volume controls
* Any interaction that requires someone to speak

### Removing those barriers

To make content accessible to people with auditory disabilities, you need to:

* Provide alternatives to audio content in the form of captions or transcripts, depending on the type of media
* Give the user the ability to control any audio they encounter, including the ability to stop, pause, or adjust the volume

**Note:** Those who are deaf or hard of hearing may use sign language as their first language; therefore, they might have more difficulty understanding written English. As an aid anyone who might have difficulty comprehending, your writing should be concise, straightforward, and easy to understand.

## Cognitive and Neurological Disabilities

In addition to affecting mobility and language, cognitive and neurological disabilities can affect how people understand and process information. Examples of this include:

* Attention Deficit Hyperactivity Disorder
* Developmental disabilities that affect intelligence and ability to understand complex concepts
* Learning disabilities, such as dyslexia
* Memory impairments
* Mental health disorders that may affect the ability to remember to and focus
* Seizure disorders

### Barriers to access

For people with these disabilities, a barrier to access is anything that causes confusion, distraction, or otherwise makes your content difficult to understand. Examples include:

* Complex navigation and page layouts
* Long passages of text without images, graphs, or other illustrations to reinforce context
* Moving, blinking, or flickering content that cannot be paused or turned off
* Background audio that cannot be turned off
* Visual page designs that cannot be adapted using custom style sheets

### Removing those barriers

To make content accessible to people with cognitive and neurological disabilities, you need to present information in a clear, concise, and consistent way while minimizing possible distractions.

* Write in a way that is concise, straightforward, and easy to understand--including graphs and illustrations where beneficial.
* Structure your content so that people can orient themselves to the page and get an overview of it before moving to any one part
* Label links, page controls, and forms consistently so that the function is always apparent
* Provide different ways to navigate your site, such as a search box or site map
* Provide the option to turn off or hide blinking, flashing, or otherwise distracting content

## Physical Disabilities

Physical disabilities can affect mobility, strength and endurance, and fine motor control. Examples of such disabilities include:

* Amputation or limb deformity
* Arthritis
* Reduced ability to control hand movements
* Repetitive stress injury
* Tremors and spasms
* Various forms of paralysis

### Barriers to access

For people with these disabilities, a barrier to access is anything that fails to consider the difficulty users may have inputting information or otherwise interacting with your content, including:

* Parts of the page that cannot be accessed using only the keyboard
* Insufficient time limits for completing tasks, such as filling out forms
* Lack of location cues to tell people where they are on the page
* Links and other controls that are too close together or have small click targets

### Removing those barriers

To make content accessible to people with physical disabilities, you need to:

* Ability to access all elements of a page using only the keyboard
* Extended (ideally no) time limits for interacting with page
* Large clickable areas
* Error identification and suggestions when filling out forms
* Visual focus indicator on all elements that receive keyboard focus
* Ability to skip over repeated items, such as navigation menus
* Design that minimizes the number of clicks needed to get to information

## Speech Disabilities

Speech disabilities are those which lead to speech that is difficult to understand. Examples include:

* Issues with fluency
* Stuttering
* Muteness

### Barriers to access

For people with these disabilities, a barrier to access is any interaction that requires the use of speech, including the use phone numbers as the only point of contact with your organization.

### Removing those barriers

To make content accessible to people with speech disabilities, you need to:

* Provide text-based alternatives to voice interactions
* Provide keyboard commands as an alternative to voice-operated applications
* Provide email or chat options in addition to phone number as point of contact

## Visual Disabilities

Visual disabilities include various levels of vision impairment from the moderate (low vision) to the severe (blindness). It also includes people who are both deaf and blind and those who live with various forms of color blindness.

### Barriers to access

For people with these disabilities, a barrier to access is anything that relies on a visual component to convey information. Examples include:

* Images, controls, and other structural elements that do not have text alternatives
* Text, images, and page layouts that cannot be resized, or that lose information when resized
* Missing visual and non-visual orientation cues, page structure, and other navigational aids
* Video content that does not have text or audio alternatives, such as an audio-description track
* Inconsistent, unpredictable, and overly complex navigation mechanisms and page functions
* Text and with insufficient contrast between foreground and background color combinations
* Websites that do not support use of custom color combinations

### Removing those barriers

To make content accessible to people with visual disabilities, you need to:

* Allow for the presentation of your content to be independent of its structure, i.e. content needs to be able to be presented in ways that best fit the user.
* Create headings, lists, and links that maintain their original meaning if their presentation changes, such as being taken out of context
* Provide text alternatives for all non-text content, such as images, controls, and form fields
* Allow text to be magnified without becoming cut off or obscured
* Ensure that any information that is relayed through color is also relayed through text
* Provide full keyboard access for those not able to see a pointer

## Reference

[Diversity of Web Users - How People with Disabilities Use the Web | Web Accessibility Initiative (WAI) | W3C](https://www.gw3.org/WAI/intro/people-use-web/diversity) (https://www.gw3.org/WAI/intro/people-use-web/diversity) DRAFT. Copyright © 2015 W3C® (MIT, ERCIM, Keio, Beihang).

# Digital Accessibility and the ADA

People interested in the enforcement of digital accessibility usually ask: "How do I make my [website or electronic document] ADA compliant?" "ADA" being short for the Americans with Disabilities Act.

The short answer is: you can't.

## A Right to Digital Access?

The Americans with Disabilities Act is intended to "provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities."[[1]](#footnote-1)

To enforce this mandate there are broad anti-discrimination requirements that prohibit discrimination requirements in employment, state and local government, places of public accommodation, and telecommunications. There are **not, however, any such requirements for websites and other forms of electronic information**. When the Americans with Disabilities Act was signed into law in 1990, the Internet as we know it did not exist.

As information technology has advanced over the last 27 years, it has found its way into all areas of life, and as such is increasingly regarded as an avenue for other rights:

* the right to health care information
* the right to financial information
* the right to work
* the right to transportation
* the right to learn
* the right to vote
* the right to entertainment[[2]](#footnote-2)

The timeliness, convenience, privacy, and flexibility of electronic information all reinforce the idea that there are few meaningful alternatives to such access. Failure to provide accessible digital content is increasingly seen as discrimination.[[3]](#footnote-3)

## The Web as a Place of Public Accommodation?

Title III of the Americans with Disabilities Act states:

No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation by any person who owns, leases (or leases to), or operates a place of public accommodation.[[4]](#footnote-4)

For businesses in particular, the question of digital accessibility under the ADA hinges on one question: are electronic communications, and specifically websites, considered places of public accommodation?

A public accommodation is a business open to the public that falls under one of [12 categories listed in the ADA](https://www.ada.gov/regs2010/titleIII_2010/titleIII_2010_regulations.htm#a104) (https://www.ada.gov/regs2010/titleIII\_2010/titleIII\_2010\_regulations.htm#a104), including restaurants, movie theaters, schools, recreation facilities, and doctor's offices.[[5]](#footnote-5)

Historically, public accommodations have been thought of solely as physical structures. However, as far back as 1996, the Department of Justice considered public accommodations to extend to the Internet as well. In a letter to Sen. Tom Harkin, Assistant Attorney General Deval Patrick issued the follow guidance regarding electronic communications:

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.[[6]](#footnote-6)

Although Patrick's letter makes reference to "places of public accommodation", it does not discuss whether or not a website is a place of accommodation. Among the many [discrimination lawsuits](http://karlgroves.github.io/a11y-lawsuits/lawsuits.html) (http://karlgroves.github.io/a11y-lawsuits/lawsuits.html) filed overly purportedly inaccessible websites, there has yet to be consensus on the issue. However, two lawsuits point to the changing application of the law.

### Websites Connected to Physical Stores

In 2006, the National Federation of the Blind filed a lawsuit against the Target Corporation arguing that Target's website contained accessibility issues that prevented people with disabilities from fully accessing the site's goods and services. Target argued that Title III of the ADA did not apply to its website because it was not a physical accommodation. The court disagreed, denying the motion to dismiss the complaint, stating that Title III applies to "services of a place of public accommodation, not services in a place of public accommodation. To limit the ADA to discrimination in the provision of services occurring on the premises of a public accommodation would contradict the plain language of the statute."[[7]](#footnote-7)

The decision strengthens the idea that websites that serve as a "nexus" to a physical store are likely to fall under the ADA: Target's website, the court found, "is heavily integrated with the brick-and-mortar stores and operates in many ways as a gateway to the stores."[[8]](#footnote-8) Therefore, the inaccessible website impeded access to goods and services offered in the store.

In the resulting settlement, Target agreed to modify its website to ensure "that blind guests using screen reader software may acquire the same information and engage in the same transactions as are available to sighted guests."[[9]](#footnote-9)

### Website-only businesses

Beyond websites that serve as a nexus to physical stores, website-only businesses have been found to fall under Title III of the ADA. In 2012, the National Association of the Deaf filed a lawsuit against Netflix asserting that their streaming videos violated the ADA because they lacked closed captions. For its part, Netflix argued that the website was not a place of public accommodation.[[10]](#footnote-10)

The Department of Justice disagreed.

Filing a statement of interest in the case, the DOJ stated outright: "Netflix is subject to [T]itle III of the ADA, even if it has no physical structure." The DOJ, it continued, "has long interpreted [T]itle III to apply to web services, and [our] ongoing regulatory developments concerning the accessibility of web content and services support that Netflix is a public accommodation subject to [T]itle III of the ADA" because it brings its service into people's homes. [[11]](#footnote-11)

Part of the Department of Justice’s ongoing regulatory history was an amicus brief filed in Hooks v. OKBridge. In 2000, an individual sued the website OKBridge for not allowing him to participate in an online bridge tournament because of a bipolar disorder. In contrast to the previously discussed cases, this was not a matter of technical barriers to access but a question of attitude toward people with disabilities: according to the suit, this individual was denied access to the website when it was discovered he had bipolar disorder. The court found that as a “private club” the defendant was exempt from the ADA and that lacking a physical space, it would not be considered a physical space anyway.[[12]](#footnote-12)

On appeal, the Department of Justice had the opportunity to weigh in. First, as a business with “18,000 fee-paying members in over 90 countries” OKBridge did not qualify as a private club.[[13]](#footnote-13) Second, limiting the ADA to the site of a physical structure was an "arbitrary and irrational limitation on coverage that conflicts with the clear and important purposes of the Act." The DOJ went on to say that the examples of public accommodations listed in Title III are not exhaustive and that the definition of public accommodation is "plainly broad enough to encompass establishments that provide services in their clients' homes, over the telephone, or through the internet."[[14]](#footnote-14)

## An Unclear Path: Enforcing Digital Accessibility Under the ADA

It would be nice if all businesses covered by its provisions agreed with the Department of Justice's interpretation for "[T]itle III to apply to web services." Unfortunately, that is not the case, and the DOJ's "ongoing regulatory developments concerning the accessibility of web content" may, in fact be holding it back.

In March of 2017, a discrimination lawsuit against Domino's Pizza was dismissed on the grounds that having an inaccessible website. Three arguments were made for the case's dismissal. First, websites are not currently covered under by Title III of the ADA. Second, until the ADA contains regulations regarding website accessibility, other modes of access--such as a 24-hour toll-free phone number--are acceptable. Third, holding Domino's accountable for an inaccessible website would violate due process because the Department of Justice has not issued any regulations regarding website accessibility.[[15]](#footnote-15)

Despite its stance that digital accessibility is covered under Title III of the ADA, the Department of Justice has been slow to develop enforceable regulations to that effect.

In September 2010, the DOJ announced in an [Advanced Notice of Proposed Rulemaking (ANPRM) (PDF)](http://www.ada.gov/anprm2010/factsht_web_anrpm_2010.pdf) (http://www.ada.gov/anprm2010/factsht\_web\_anrpm\_2010.pdf) that it would issue regulations for web accessibility under Title III of the ADA. The ANPRM acknowledge the growing role of the Internet in everyday life since the Americans with Disabilities Act was signed in 1990 and repeated the stance that the Department of Justice considers web accessibility for public accommodations to fall under Title III. It also acknowledged that a lack of clear guidance at the federal level had allowed courts to take differing opinions on the applicability of web accessibility, resulting in the absence of consistent enforcement.[[16]](#footnote-16)

A request for guidance from the Department of Justice in the development of regulations seemed like a major step forward for digital accessibility--until it was allowed to languish for nearly six years. Proposed dates for the issuance of final regulations came and went, and court rulings still left the matter unresolved.

In April 2016, the DOJ did act--but not in a way observers had hoped. Instead of issuing regulations, they issued a [Supplemental ANPRM (SANPRM) (PDF)](https://www.gpo.gov/fdsys/pkg/FR-2016-05-09/pdf/2016-10464.pdf) (https://www.gpo.gov/fdsys/pkg/FR-2016-05-09/pdf/2016-10464.pdf) requesting further input on the scope, measurement, and possible exemptions for compliance. While these are important issues to consider, it was easy to ask: Why hadn't these things been in the original ANPRM? Why hadn't they been addressed in the ensuing five to six years?

It seemed like the Department of Justice was simply dragging its feet.

### The Takeaway

While there is little indication that the DOJ will issue regulations for digital accessibility under Title III of the ADA in the near future, there are two things to take away from this process:

1. The U.S. Department of Justice does believe the digital accessibility of public accommodations is covered under Title III of the Americans with Disabilities Act.
2. Federal regulations regarding digital accessibility, when they are issued, will in all likelihood make the [Web Content Accessibility Guidelines (WCAG) 2.0](https://www.w3.org/TR/WCAG20/) (https://www.w3.org/TR/WCAG20/) Level AA the measure of compliance.[[17]](#footnote-17)

## Reference

The guiding reference for this section was the webinar [Websites and the ADA: Accessibility in the Digital Age](https://www.accessibilityonline.org/ada-legal/archives/10351) (https://www.accessibilityonline.org/ada-legal/archives/10351).

# Digital Accessibility Guidelines

The four accessibility principles outlined in the section "[What is Digital Accessibility?](#_What_is_Digital)" are part of accessibility guidelines developed by the [World Wide Web Consortium (W3C)](https://www.w3.org/) (https://www.w3.org/), an organization that makes standards for the Internet. These guidelines, the [Web Content Accessibility Guidelines (WCAG) 2.0](https://www.w3.org/TR/WCAG20/) (https://www.w3.org/TR/WCAG20/), have been recognized and adopted by businesses, organizations, and governments around the world.

## WCAG 2.0 Overview

As noted, the Web Content Accessibility Guidelines (WCAG) 2.0 are based on four principles, each of which can be divided in guidance for increasing accessibility:

### Perceivable

* Provide text alternatives for non-text content.
* Provide captions and other alternatives for multimedia.
* Create content that can be presented in different ways, including by assistive technologies, without losing meaning.
* Make it easier for users to see and hear content.

### Operable

* Make all functionality available from a keyboard.
* Give users enough time to read and use content.
* Do not use content that causes seizures.
* Help users navigate and find content.

### Understandable

* Make text readable and understandable.
* Make content appear and operate in predictable ways.
* Help users avoid and correct mistakes.

### Robust

* Maximize compatibility with current and future user tools.

## Meeting WCAG 2.0

WCAG 2.0 is comprised of testable success criteria that need to be met for content to be considered accessible. The point of each success criterion is a particular outcome for end users, not necessarily the use of specific techniques for implementing accessibility (although [suggested techniques are provided in an accompanying document](https://www.w3.org/TR/WCAG-TECHS/) [https://www.w3.org/TR/WCAG-TECHS/]).

As you will notice, each criterion is assigned a Level A, Level AA, and Level AAA.

* **Level A** - Meeting this level would provide the minimum level of accessibility.
* **Level AA** - Meeting this level would address the most common and impactful barriers to access.
* **Level AAA** - This is the highest level of accessibility and is considered going "above and beyond" expectations. Fully meeting Level AAA can be complex and is often beyond the resources of most organizations.

The requirement adopted by most organizations and standards (including the Section 508 Refresh) is compliance with WCAG 2.0 Level AA. Beyond that, it is recommended that Level AAA success criteria are incorporated where feasible. The levels of compliance build upon each other: to meet Level AA, content must meet the success criteria under Level A **and** those under Level AA.

### Success Criteria

**Note:** The following is only an interpretation of the WCAG 2.0 guidelines. For complete information, including exceptions, refer to the [official specification](http://www.w3.org/TR/WCAG20/) (http://www.w3.org/TR/WCAG20/).

#### 1.1.1 Non-text Content - Level A

All non-text content that is presented to the user (e.g., images, graphs, and charts) has a text alternative that can serve as its replacement.

#### 1.2.1 Audio-only and Video-only (Prerecorded) - Level A

* **Prerecorded Audio-only:** A descriptive transcript is provided for any audio-only content (such as a podcast).
* **Prerecorded Video-only:** Either a descriptive transcript **or** audio description is provided for any video-only content.

#### 1.2.2 Captions (Prerecorded) - Level A

Captions are provided for all prerecorded audio in a video that contains both audio and visual content.

#### 1.2.3 Audio Description or Media Alternative - Level A

A descriptive transcript **or** audio description of prerecorded video content is provided for a video that contains both audio and visual content.

**Note:** A transcript is needed to meet Level A; audio description is needed to meet Level AA, unless all of the information in the video track is already provided in the audio track.

#### 1.2.4 Captions (Live) - Level AA

Captions are provided for all live audio content in a video that contains both audio and visual content.

#### 1.2.5 Audio Description (Prerecorded) - Level AA

Audio description is provided for all prerecorded video elements in a video that contains both audio and visual content.

#### 1.3.1 Info and Relationships - Level A

Information, structure, and relationships conveyed through presentation (i.e., visual/auditory cues) can be programmatically determined (e.g., through semantic markup, form labels, or table markup) or are available in text (as alternatives).

#### 1.3.2 Meaningful Sequence - Level A

If the meaning of content is affected by the order in which it is read, the correct order can be recognized and displayed by various technologies, including browsers and assistive devices.

#### 1.3.3 Sensory Characteristics - Level A

Instructions for understanding and using content do not rely solely on sensory characteristics such as shape, size, visual location, orientation, or sound.

#### 1.4.1 Use of Color - Level A

Color is not used as the only visual means of conveying information.

#### 1.4.2 Audio Control - Level A [Non-Interference]

If any audio on a Web page plays automatically for more than 3 seconds, the user is able to pause, stop, or adjust the volume of the audio.

**Note:** This criterion is labeled as Non-Interference. That is, an issue that will interfere with someone's ability to use the entire page, regardless of how other accessible technologies are implemented.

#### 1.4.3 Contrast (Minimum) - Level AA

The visual presentation of text and images of text has a contrast ratio of at least 4.5:1 (3:1 for large text).

#### 1.4.4 Resize text - Level AA

Text can be resized up to 200% and all content remains readable and functional.

#### 1.4.5 Images of Text - Level AA

Wherever possible, actual text is used and not images of text.

#### 2.1.1 Keyboard - Level A

All functionality of the content can be accessed using only a keyboard (or its equivalent).

#### 2.1.2 No Keyboard Trap - Level A [Non-Interference]

Keyboard focus does not become stuck on any of the elements that can receive focus, requiring a mouse click or other pointer method to become unstuck.

**Note:** This criterion is labeled as Non-Interference. That is, an issue that will interfere with someone's ability to use the entire page, regardless of how other accessible technologies are implemented.

#### 2.2.1 Timing Adjustable - Level A

Avoid having a time limit for interacting with content, unless such a limit is necessary.

#### 2.2.2 Pause, Stop, Hide - Level A [Non-Interference]

For any moving, blinking or scrolling content, the user can pause, stop, or hide it unless the movement, blinking, or scrolling is essential to an activity. For any auto-updating content, the user can pause, stop, or hide it or to control the frequency of the update unless it is essential to an activity.

**Note:** This criterion is labeled as Non-Interference. That is, an issue that will interfere with someone's ability to use the entire page, regardless of how other accessible technologies are implemented.

#### 2.3.1 Three Flashes or Below Threshold - Level A [Non-Interference]

Content does not contain anything that flashes more than three times in any one second period. Also, the flash only occurs on a small portion of the screen and does not involve too much of certain colors.

**Note:** This criterion is labeled as Non-Interference. That is, an issue that will interfere with someone's ability to use the entire page, regardless of how other accessible technologies are implemented.

#### 2.4.1 Bypass Blocks - Level A

A mechanism (such as skip links, landmarks, or headings) is available to bypass blocks of content that are repeated on multiple Web pages.

#### 2.4.2 Page Titled – Level A

Web pages have titles that describe their topic or purpose.

#### 2.4.3 Focus Order - Level A

Elements that can receive focus do so in a logical order.

#### 2.4.4 Link Purpose (In Context) - Level A

The purpose of each link can be determined from the link text alone **or from the link text and the link's context**. Examples of acceptable link context include within the same sentence, paragraph, list item, or table.

#### 2.4.5 Multiple Ways - Level AA

Within a website there is more than one way to locate a particular page. Example ways to locate a page include:

* a list of related pages
* a table of contents
* a site map
* a site search
* a list of all available web pages
* links to all pages from the home page

#### 2.4.6 Heading and Labels - Level AA

Headings and labels (text used to identify particular components in content, such as a form field) describe their topic or purpose.

#### 2.4.7 Focus Visible - Level AA

For any elements that receive keyboard focus, the focus indicator is visible.

#### 3.1.1 Language of Page - Level A

The default language of each page can be recognized and displayed by various technologies, including browsers and assistive devices.

#### 3.1.2 Language of Parts - Level AA

The language of each passage or phrase in content that is different from the default can be recognized and displayed by various technologies, including browsers and assistive devices.

#### 3.2.1 On Focus - Level A

When any component receives focus, it does not automatically initiate a change of context. Examples include:

* forms submitted automatically when the last field is exited
* new windows launched when a menu item receives focus
* focus is automatically changed from one component to another when the first receives focus

#### 3.2.2 On Input - Level A

Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component. For example, selecting an item from a drop down menu doesn't automatically cause a change; the user must click a Submit button first.

#### 3.2.3 Consistent Navigation - Level AA

Navigational mechanisms that appear on multiple pages of a website occur in the same relative order, unless a change is initiated by the user.

#### 3.2.4 Consistent Identification - Level AA

Components that have the same functionality within a website are identified consistently. For example:

* the same icons refer to the same functions
* references to other pages are consistent
* an icon and its adjacent text link go to same destination

#### 3.3.1 Error Identification - Level A

If an input error is automatically detected, the error is identified and described to the user in text.

#### 3.3.2 Labels or Instructions - Level A

Labels or instructions are provided when content requires user input.

#### 3.3.3 Error Suggestion - Level AA

If an input error is automatically detected and suggestions to correct it are known, then the suggestions are provided to the user.

#### 3.3.4 Error Prevention (Legal, Financial, Data) - Level AA

For webpages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true:

1. Submissions are reversible.
2. Data entered by the user is checked for input errors, and the user is provided an opportunity to correct them.
3. A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.

#### 4.1.1 Parsing - Level A

The website is coded properly, using current specifications.

#### 4.1.2 Name, Role, Value - Level A

For all user interface components:

* name and role can be recognized and displayed by various technologies
* states, properties, and values that can be set by the user can be set by various technologies
* notification of changes to these items are available to user agents (including browsers and assistive devices)

**Note:** This success criterion is primarily for developers who create their own user interface components. Standard HTML controls already meet this success criterion when used correctly.

## Section 508

The other major digital accessibility standard in the United States is [Section 508 of the Rehabilitation Act of 1973](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards) (https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards). Section 508 requires that information and technology developed, procured, maintained, or used by federal agencies be accessible to people with disabilities. Businesses that contract with the federal government may also be subject to Section 508.

Section 508 does have standards for web accessibility; however, the [Section 508 Refresh](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh) (https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh) of January 2017 largely incorporates WCAG 2.0 into those standards. (Section 508 contains other provisions covering hardware and communication systems, but the provisions for electronic content--including documents and websites--reference to WCAG 2.0.)

## References

[How to Meet WCAG 2.0](https://www.w3.org/WAI/WCAG20/quickref/) (https://www.w3.org/WAI/WCAG20/quickref/). Copyright © 2016 W3C ® (MIT, ERCIM, Keio, Beihang)

[WCAG 2.0 at a Glance | Web Accessibility Initiative (WAI) | W3C](https://www.w3.org/WAI/WCAG20/glance/) (https://www.w3.org/WAI/WCAG20/glance/). Copyright © 2016 W3C® (MIT, ERCIM, Keio, Beihang).

# Getting Started with Digital Accessibility

Attempting to address all of the issues covered in the section “[Digital Accessibility Guidelines](#_Digital_Accessibility_Guidelines)” might seem like an overwhelming challenge. However, it need not be. Here are some tips and best practices to help you get started with digital accessibility.

## HTML

Here are six things you can do to begin making your web content accessible

### Add alternative text to every meaningful image

Add alternative text (or "alt text") to your images adds text content that can be read be screen readers and other assistive technologies. Alt text should be concise and descriptive. A good question to ask is: if I could not use this image, what text would I replace it with?

For more information, refer to WebAIM's article on [alternative text](http://webaim.org/techniques/alttext/) (http://webaim.org/techniques/alttext/).

### Structure your content with headings

Headings divide your content into manageable, well-organized sections. Visually, headings allow users to scan your content for important information and to see how pieces of that information relate to each other. Headings also allow assistive technology users to quickly navigate your information.

For more information on the use of headings, refer to WebAIM's article on [semantic structure](http://webaim.org/techniques/semanticstructure/) (http://webaim.org/techniques/semanticstructure/).

### Add navigation landmarks to your page

Like headings, navigation landmarks (or ARIA landmarks) allow users to quickly navigate by taking them directly to a portion of your site. For example, the "navigation" landmark would take users to your navigation menu, the one for "search" would take them to your site search box, and the one for "main" would take them to the main content of the page.

Unlike headings, landmarks are typically hidden and only available to assistive technologies.

For more information on the use of navigational landmarks, refer to this article: [ARIA landmarks](https://accessibility.oit.ncsu.edu/it-accessibility-at-nc-state/developers/accessibility-handbook/aria-landmarks/) (https://accessibility.oit.ncsu.edu/it-accessibility-at-nc-state/developers/accessibility-handbook/aria-landmarks/).

### Use a custom focus indicator

Visual users should be able to see where they are on your web page as each element receives keyboard focus. The visual focus indicator varies by browser, but the default is typically a dotted outline that can be difficult to see. Use a custom focus indicator that is easier to see and that will be consistent across browsers.

For more information, refer to Deque's article on [useful and usable focus indicators](https://www.deque.com/blog/give-site-focus-tips-designing-usable-focus-indicators/) (https://www.deque.com/blog/give-site-focus-tips-designing-usable-focus-indicators/).

### Make sure your content can be accessed using the keyboard

It can be argued that keyboard access forms the basis of web accessibility. Keyboard access not only benefits people who cannot operate a traditional pointer device, but it also forms the underlying interactions for most assistive technologies. Ensure that all links, form fields and buttons, and other interactive elements can be reached and operated using the keyboard alone.

For more information, refer to WebAIM's article on [keyboard accessibility](http://webaim.org/techniques/keyboard/) (http://webaim.org/techniques/keyboard/).

### Use descriptive links

Links function like road signs in your content, telling people where to go, or where you would like them to go. Link text should describe for users where they are being taken to or the function that will be performed when clicked. "Click here" is not a descriptive link; it does not provide the user with any meaningful information.

For more information, refer to WebAIM's article on [links and hypertext](http://webaim.org/techniques/hypertext/) (http://webaim.org/techniques/hypertext/).

## Microsoft Word

Follow these best practices to help ensure your documents are accessible. For more information, visit [mn.gov/mint/accessibility](http://mn.gov/mint/accessibility).

### Use document styles

Use paragraph and heading styles to structure the document.

### Add alternative text to images and objects

This includes pictures, clip art, charts, shapes, SmartArt graphics, and embedded objects. Use clear, concise terms in your description. For example, "Person in wheelchair on ramp may suffice rather than "Smiling woman in wheelchair posing on ramp."

### Use short titles in headings

Keep headings short (fewer than 20 words or one line long). This makes it easy for readers to quickly navigate your document.

### Name your hyperlinks appropriately

Your link should contain meaningful text that reflects the link destination or subject, rather than simply saying "click here."

### Use simple table structure

Avoid using nested tables, merged or split cells, or blank cells for formatting.

### Set column header rows in tables

Clear column headings provide context and assist with navigating the table. Bookmarks are also a useful tool.

### Avoid using repeated blank characters

Extra spaces, tabs, and empty paragraphs can cause people using screen readers to repeatedly hear the word "blank." Instead, use styles with formatting and indenting to create white space.

### Avoid using floating objects

Place objects in line with text for easy navigation.

### Avoid watermarks

Watermarks and other background images may be hidden or confusing to people with vision or cognitive disabilities. Instead of using a watermark to identify a document as a "draft" or "confidential," include the text in the document title or heading.

### Fill in document properties

In advanced document properties, enter title, subject, and author.

### Use the Accessibility Checker

This built-in tool will tell you about some possible accessibility issues in your document and give suggestions on how to correct them. Note that the Accessibility Checker will not find every possible accessibility issue; it is only a place to start.

## Social Media

Follow these best practices to help ensure your social media content is as accessible as it can be. For more information, visit [mn.gov/mint/accessibility](http://mn.gov/mint/accessibility).

### Profile Tips

#### Don't use text in banner art images

Outside of your name, or that of your organization, assistive technologies do not recognize text in your banner photo. Only use text in text fields.

#### Use high resolution images

Images should be easy to see no matter how big they are viewed.

#### Use text colors that can be easily seen

When possible, choose good contrast between text and background. Validate your colors with contrast checkers such as [WebAIM’s contrast checker](http://webaim.org/resources/contrastchecker/) (http://webaim.org/resources/contrastchecker/).

#### Point of contact

List a point of contact on your profile to address questions.

### Posting Tips

#### Add alternative text to images

When this is not possible, describe the image in clear, concise terms as part of the post. This includes pictures, clip art, tables, and charts.

#### Place hyperlinks toward the end of the post

Let people read your message before providing the link. Consider adding [PIC], [VIDEO], [AUDIO], or [PDF] before hyperlinks to help the reader know where they are going.

#### Put extra hashtags after hyperlinks

Hashtags can be complicated for those using assistive technology. One or two is OK in the main body; otherwise, post them at the end.

#### Use CamelCase for hashtags

Capitalizing the first letter in each word helps people decipher the hashtag.

#### Multimedia needs to be seen and heard

Any video you create or link to needs to have captioning. Podcasts must have transcripts. When writing a script, describe key visuals.

#### Use plain language

Clear content will engage more readers. Avoid acronyms.

## Email

Follow these best practices to help ensure your emails are accessible. For more information on email accessibility, visit [mn.gov/mnit/accessibility](http://mn.gov/mnit/accessibility). Note that although these tips were written with Outlook in mind, the principles apply to other email clients, as well.

### Use HTML format when possible

Avoid using Rich Text Format (RTF) as it may not be compatible with other email programs.

### Fonts and font size are important

Choose san serif fonts of at least 12-point size for greater readability. Calibri, Arial, Helvetica, Tahoma, or Verdana are good font options.

### Add alternative text to images and objects

All graphics (photos, images, charts, screen shots) require alternative text or captions. Use clear, concise terms in your descriptions.

### Adding attachments

When attaching documents or other files to emails, ensure those documents are accessible. Consider using descriptive file names so users know what they are opening.

### Use styles

If your email client supports it in HTML, when writing longer emails, use built-in formatting styles such as lists and headings.

### Name your hyperlinks appropriately

Use meaningful text for hyperlinks. It is acceptable to display just the URL for your email address in your signature. Links should go to accessible content: linked websites and PDFs should be accessible and linked videos should have captions.

### Avoid using repeated blank characters

Extra spaces, tabs, and empty paragraphs can cause people using screen readers to repeatedly hear the word "blank." Instead, use styles with formatting and indenting to create white space.

### Check your color contrast

Backgrounds for emails should be white. Custom backgrounds can cause security issues and load slower on mobile devices. They also may prevent people from being able to read an image's alternative text if they do not accept the automatic downloading of images (e.g., mobile). Font styles also need good contrast.

### Use plain language

Put key information up front. Use bulleted lists to segment supporting points. Write using active voice: the subject of the sentence performs the action.

### Make your signature accessible

Do not use tables to format signatures. Contact information should be in real text, not a graphic. If a logo is included, ensure it has alternative text.

# Digital Access Quick Check

Here are five checks you can do to quickly learn something about the accessibility of your web content. These checks are not meant to be part of a comprehensive testing process; rather, they may clue you in to potential barriers to access.

1. Do audio files, such as podcast episodes, come with transcripts?
2. Do videos have the option to enable captions? Do those captions reflect the content of what is spoken? (YouTube's auto-generated captions, for example, frequently contain transcription errors.)
3. If you increase the browser zoom to 200%, is all content still readable and functional?
4. Can you move through the interactive elements (links, form fields, on-page controls) on the page using the TAB key? Some form fields, such as radio buttons, require additional commands, but can you tab to each group of buttons?
5. As you are tabbing through page elements, is there a visual focus indicator that shows you where you are?

# Developing an Accessibility Plan

The accessible best practices given in the section “[Getting Started with Digital Accessibility](#_Getting_Started_with)” is good place to start, but if you want to make digital accessibility a part of your organization's culture, you should develop an accessibility plan. Not only will it aid you in incorporating accessibility into existing policies and procedures, but having an accessibility plan to point to could help you avoid discrimination lawsuits.

As part of an accessibility plan, your organization should:

## Address all areas of your digital platform

Usable and functional web content is an important part of digital accessibility, but it is not the only part. Ensure your plan covers mobile sites and applications, electronic documents, emails, and social media presence.

## Use WCAG 2.0 AA as your accessibility standard

The [Web Content Accessibility Guidelines (WCAG) 2.0](https://www.w3.org/TR/WCAG20/), have been recognized and adopted by businesses, organizations, and governments around the world. They are also the guidelines most often referenced in discrimination settlements.

## Appoint an accessibility coordinator

Find someone within your organization to lead your accessibility efforts. This person should have knowledge of digital accessibility, or is willing to learn, and should continually advocate for accessibility at all levels of your organization.

## Hire an independent consultant, if needed

If you don't have the expertise for determining your current levels of accessibility, find someone who does. They will be able to identify issues and help you develop a plan and approach for fixing them.

## Training all staff in the creation of accessible content

Everyone who creates digital content in your organization should have a basic understanding of accessibility principles and how to implement them as best practices. Creating content free of major accessibility errors should be as common as creating content with no spelling errors.

## Add accessibility to performance evaluations

Consider accessibility as just another part of your content creation processes. Don't think of it as a collection of features to be added when content is finished. Regularly reviewing accessibility efforts will make it a part of your organizational culture.

## Adopt an accessibility policy

Develop an official written policy that outlines your organization's commitment to digital accessibility as well as how you plan to maintain and improve such accessibility.

## Post an accessibility statement on your website

Your accessibility statement should convey your organization's commitment to delivering content in an accessible manner. It should (1) reference the accessibility standard you are working towards achieving, (2) provide information users might need to successfully access your content, and (3) provide a point of contact for accessibility concerns.

## Test your content for accessibility

Regularly test your content for accessibility, and review the accessibility of new content before it is released to the public. Proper accessibility testing should rely heavily on manual review. Automated testing can give you a high-level view of issues, but it typically only finds between 25 and 40% of all accessibility issues.

## Reference

Accessibility plan components taken from: [March 2017 Digital Accessibility Legal Update - Law Office of Lainey Feingold](http://www.lflegal.com/2017/03/update-csun17/)

# Digital Accessibility Resources

Here you will find additional information and resources for digital accessibility.

## What is Digital Accessibility?

[Introduction to Web Accessibility - WebAIM](http://webaim.org/intro/)

An introduction to digital accessibility that provides a brief overview of how people with disabilities interact with the Web, what you need to consider before implementing accessibility in your organization, and the basic principles of accessible design.

[Getting Started with Web Accessibility - W3C-WAI](https://www.w3.org/WAI/gettingstarted/Overview.html)

Provides an introduction to the concept of digital accessibility, explores how it affects people with disabilities, and offers some basic considerations for making your website more accessible.

[Considering the User Perspective - WebAIM](http://webaim.org/articles/userperspective/)

A summary of the barriers people with disabilities often face when they encounter common design issues. [The Electronic Curb Cut (Video) - MNDHS](https://www.youtube.com/watch?v=HmkOct8OeCU) Video produced by the Minnesota Department of Human Services highlighting how digital accessibility can benefit everyone, not just people with disabilities. [Audio described version](https://www.youtube.com/watch?v=ahGuLziPZHc)

## Digital Accessibility and the Law

### Federal Regulations

[ADA.gov - Accessible Technology Index](https://www.ada.gov/access-technology/index.html)

The Americans with Disabilities Act (ADA) broadly protects the rights of individuals with disabilities in employment, access to State and local government services, places of public accommodation, transportation, and other important areas of American life. The Department of Justice's [regulation](https://www.ada.gov/access-technology/regulations.html) and [enforcement](https://www.ada.gov/access-technology/enforcement.html) efforts have repeatedly emphasized that websites and other forms of electronic communication are covered under the ADA.

[Section 508 - US Access Board](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards)

In 1998, Congress amended the Rehabilitation Act of 1973 to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. Inaccessible technology interferes with an ability to obtain and use information quickly and easily. Section 508 was enacted to eliminate barriers in information technology, open new opportunities for people with disabilities and encourage development of technologies that will help achieve these goals.

[Section508.gov](https://section508.gov/)

This site provides information and links to guidance, resources, tools and blog articles focusing on helping the government implement the requirements of Section 508. Using this web site, federal employees and the public can access resources for understanding and implementing the requirements of Section 508 as they apply to the development, procurement, maintenance, or use of Information and Communication Technology (ICT) products and services.

[Section 504, Rehabilitation Act of 1973](https://www.dol.gov/oasam/regs/statutes/sec504.htm)

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against qualified individuals with disabilities. Upon request, federal agencies are required to provide reasonable accommodations--including accessible information and communication--to people with disabilities to ensure equal access to their programs and activities.

### Minnesota State Regulations

[Minnesota Statute 16E.03, Subd. 9: State Information and Communications Systems](https://www.revisor.mn.gov/statutes/?id=16E.03#stat.16E.03.9)

Effective July 1, 2009 or when standards become effective (which turned out to be September 1, 2010), the statute requires all state agencies to adhere to standards for accessibility developed by the State Chief Information Officer. Those standards were to incorporate both Section 508 of the Rehabilitation Act and Web Content Accessibility Guidelines (WCAG) 2.0 or to have an exception to the requirements granted by the State CIO. Refer to State of Minnesota Accessibility Standard.

[Minnesota Statute 363A.42: Public Records; Accessibility](https://www.revisor.mn.gov/statutes/?id=363A.42)

Under the [Minnesota Human Rights Act](https://mn.gov/mdhr/yourrights/mhra/):

Upon request by an individual, records must be made available within a reasonable time period to persons with disabilities in a manner consistent with state and federal laws prohibiting discrimination against persons with disabilities.

[Minnesota Statute 363A.43: Continuing Education; Accessibility](https://www.revisor.mn.gov/statutes/?id=363A.43)

Under the [Minnesota Human Rights Act](https://mn.gov/mdhr/yourrights/mhra/):

Upon request by an individual, any continuing education or professional development course, offering, material or activity approved or administered by the state, political subdivisions of the state, the University of Minnesota or the Minnesota State Colleges and Universities, must be made available within a reasonable time period to persons with disabilities in a manner consistent with state and federal laws prohibiting discrimination against persons with disabilities....Violation of this section is subject to a penalty of $500 per violation, plus reasonable attorney fees, costs and disbursements.

[Executive Order 14-14, Providing for Increased State Employment for Individuals with Disabilities](https://mn.gov/mmb/employee-relations/equal-opportunity/eo-14-14/)

Governor Dayton signed Executive Order 14-14, Providing for Increased State Employment for Individuals with Disabilities on August 4, 2014 tasking Minnesota Management and Budget (MMB) with developing best practices for the recruitment and retention for individuals with disabilities, The strategies developed are to ensure that state employment of individuals with disabilities reaches its goal of 7% in the next four years.

## Guidelines and Standards

[WCAG 2.0 Overview - W3C-WAI](https://www.w3.org/WAI/gettingstarted/)

The Web Content Accessibility Guidelines (WCAG) are developed through the [W3C process](http://www.w3.org/WAI/intro/w3c-process.php) in cooperation with individuals and organizations around the world, with a goal of proving a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

[Web Content Accessibility Guidelines (WCAG) 2.0](https://www.w3.org/TR/WCAG20/)

Web Content Accessibility Guidelines (WCAG) 2.0 covers a wide range of recommendations for making Web content more accessible. Following these guidelines will make content accessible to a wider range of people with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and combinations of these.

[Guide to the Section 508 Standards - US Access Board](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards/guide-to-the-section-508-standards)

The purpose of this technical assistance document is to ensure successful implementation of section 508 of the Rehabilitation Act of 1973, as amended.

[Section 508 Checklist - WebAIM](http://webaim.org/standards/508/checklist)

[WebAIM](http://webaim.org/)'s unofficial checklist of portions of the Section 508 standards.

[State of Minnesota Accessibility Standard (PDF)](https://mn.gov/mnit/assets/Stnd_State_Accessibility_tcm38-61585.pdf)

The goal of the Accessibility Standard is to improve the accessibility and usability of information technology products and services for all government end-users in the State of Minnesota. The standard incorporates the [Web Content Accessibility Guidelines 2.0](http://www.w3.org/TR/WCAG/) and [Section 508](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards) of the Rehabilitation Act of 1973.

## Document Accessibility

[Minnesota State Accessible Document Reference Guide: Office 2013 (PDF)](https://mn.gov/mnit/assets/MinnesotaStateAccessibleDocumentReferenceGuide2013_tcm38-223313.pdf)

The [Office of Accessibility](https://mn.gov/mnit/programs/accessibility/) offers a reference guide for the creation of accessible Word, PowerPoint, and Excel documents. A [reference guide for Office 2010 documents (PDF)](https://mn.gov/mnit/assets/Minnesota-State-Accessible-Document-Reference-Guide_tcm38-62559.pdf) is also available.

[Microsoft Word Accessibility Quick Card (PDF)](https://mn.gov/mnit/assets/AccessibilityQuickCard-Word_tcm38-62118.pdf)

A checklist of best practices to help ensure your Word documents are accessible. Use in conjunction with the Minnesota State Accessible Document Reference Guide.

[Microsoft PowerPoint Accessibility Quick Card (PDF)](https://mn.gov/mnit/assets/AccessibilityQuickCard-PPT_tcm38-61574.pdf)

A checklist of best practices to help ensure your PowerPoint documents are accessible. Use in conjunction with the Minnesota State Accessible Document Reference Guide.

[Microsoft Excel Accessibility Quick Card (PDF)](https://mn.gov/mnit/assets/AccessibilityQuickCard-Excel_tcm38-61932.pdf)

A checklist of best practices to help ensure your Excel documents are accessible. Use in conjunction with the Minnesota State Accessible Document Reference Guide.

[PDF Accessibility Overview - Adobe](http://www.adobe.com/accessibility/pdf/pdf-accessibility-overview.html)

This guide details what is meant by accessibility in the PDF file format. It distinguishes between the accessibility features of the file format, of Adobe Acrobat DC and of the Adobe Acrobat Reader application, and how the features of the software and the file format interact to achieve accessibility for people with disabilities.

[Acrobat Pro DC PDF Accessibility Repair Workflow](http://www.adobe.com/accessibility/products/acrobat/acrobat-pro-dc-pdf-accessibility-repair-workflow.html)

This guide provides a step-by-step method for analyzing existing PDF files and making them accessible based upon that analysis. This workflow coincides with the workflow provided in the Make Accessible Action wizard and potential issues tested for in the Accessibility Checker tool.

[Acrobat Pro DC Accessible Forms and Interactive Documents](http://www.adobe.com/accessibility/products/acrobat/creating-accessible-forms.html)

This guide describes how to use the forms tools within Adobe Acrobat Pro DC to add descriptions to form fields, tag untagged forms, set the tab order, manipulate tags and perform other PDF accessibility tasks.

[Using the Accessibility Checker in Acrobat Pro DC](http://www.adobe.com/accessibility/products/acrobat/using-acrobat-pro-accessibility-checker.html)

This guide describes the PDF accessibility checkers that are included in Adobe Acrobat Pro DC. Even if you generate an accessible PDF file from an authoring application such a word processor or desktop publishing program, you should then follow the steps in this guide in order to identify any items that may have been missed in the initial conversion, or to add PDF accessibility features that were not provided by the authoring tool.

[PDF Accessibility Quick Card (PDF)](https://mn.gov/mnit/assets/AccessibilityQuickCardPDF_tcm38-61717.pdf)

A checklist of best practices to help ensure your PDF documents created with Adobe Acrobat Pro are accessible.

[Email - Office of Accessibility](https://mn.gov/mnit/programs/accessibility/social-media.jsp#7)

Tips for creating accessible email.

[Outlook 2013 & 2016: Creating Accessible Emails (PDF)](http://gov.texas.gov/files/disabilities/accessdocs/13_Email.pdf)

Email is an important communication tool for most of us. One of the unknown factors about email is that we never know who the final recipients of our messages may be. Therefore, we want to be sure that our emails can be read by anyone, including people with disabilities.

## Website Accessibility

[Tips on Designing for Web Accessibility](https://www.w3.org/WAI/gettingstarted/tips/designing)

This page introduces some basic considerations to help you get started making your user interface design and visual design more accessible to people with disabilities. These tips are good practice to help you meet Web Content Accessibility Guidelines (WCAG) requirements.

[Tips on Writing for Web Accessibility](https://www.w3.org/WAI/gettingstarted/tips/writing.html)

This page introduces some basic considerations to help you get started writing web content that is more accessible to people with disabilities. These tips are good practice to help you meet Web Content Accessibility Guidelines (WCAG) requirements.

[Tips on Developing for Web Accessibility](https://www.w3.org/WAI/gettingstarted/tips/developing.html)

This page introduces some basic considerations to help you get started developing web content that is more accessible to people with disabilities. These tips are good practice to help you meet Web Content Accessibility Guidelines (WCAG) requirements.

[HTML Accessibility - WebAIM](http://webaim.org/articles/#html)

A collection of articles covering various elements of accessible HTML, including:

* [Semantic Structure](http://webaim.org/techniques/semanticstructure/)
* [Links & Hypertext](http://webaim.org/techniques/hypertext/)
* ["Skip Navigation" Links](http://webaim.org/techniques/skipnav/)
* [Alternative Text](http://webaim.org/techniques/alttext/)
* [Keyboard Accessibility](http://webaim.org/techniques/keyboard/)
* [Web Accessibility Tutorials - W3C-WAI](https://www.w3.org/WAI/tutorials/)

This collection of tutorials shows you how to develop web content that is accessible to people with disabilities, and that provides a better user experience for everyone.

[How to Meet WCAG 2.0](https://www.w3.org/WAI/WCAG20/quickref/)

A customizable quick reference to Web Content Accessibility Guidelines (WCAG) 2.0 requirements (success criteria) and techniques.

[Techniques for WCAG 2.0](https://www.w3.org/TR/WCAG20-TECHS/Overview.html)

A collection of techniques--and failures--for meeting the Web Content Accessibility Guidelines 2.0. The techniques listed are only informative; they are not required to meet WCAG 2.0. For important information about techniques, refer to [Understanding Techniques for WCAG Success Criteria](https://www.w3.org/TR/UNDERSTANDING-WCAG20/understanding-techniques.html).

[Great Lakes Accessible Information Technology Initiative](http://adagreatlakes.com/AIT/)

The Great Lakes Accessible Information Technology (AIT) Initiative, within the Great Lakes Center, provides individuals and organizations with information and resources on Information Technology (IT) and its ease of use to the widest range of end users. They provide technical assistance, education, training, referrals, and materials to individuals and entities that seek information related to information technology accessibility.

## Social Media Accessibility

[Social Media - Office of Accessibility](https://mn.gov/mnit/programs/accessibility/social-media.jsp)

The Office of Accessibility offers tips for effective, accessible social media use and outreach--including a [social media accessibility checklist (PDF)](https://mn.gov/mnit/assets/Accessibility%20Quick%20Card-Social%20Media_tcm38-156541.pdf).

[Federal Social Media Accessibility Toolkit Hackpad](https://www.digitalgov.gov/resources/federal-social-media-accessibility-toolkit-hackpad/)

This Toolkit is your guide to improving the accessibility of social media for public service. Created with the input of social media leaders and users across government and the private sector, this living document contains helpful tips, real-life examples and best practices to ensure that your social media content is usable and accessible to all citizens, including those with disabilities.

## Multimedia Accessibility

[Captions, Transcripts, and Audio Descriptions - WebAIM](http://webaim.org/techniques/captions/)

An overview of the use of captions, transcripts, and audio descriptions in accessible multimedia.

## Testing for Accessibility

[The 6 Simplest Web Accessibility Tests Anyone Can Do](http://www.karlgroves.com/2013/09/05/the-6-simplest-web-accessibility-tests-anyone-can-do/) A list of six accessibility checks you can perform on a webpage--without needing to know accessibility guidelines or development practices.

[Easy Checks: A First Review of Web Accessibility - WAI-W3C](https://www.w3.org/WAI/eval/preliminary)

This page helps you start to assess the accessibility of a web page. With these simple steps, you can get an idea whether or not accessibility is addressed in even the most basic way.

1. [Americans with Disabilities Act of 1990,AS AMENDED with ADA Amendments Act of 2008](https://www.ada.gov/pubs/adastatute08.htm) (https://www.ada.gov/pubs/adastatute08.htm) [↑](#footnote-ref-1)
2. [2016 Legal Update on Digital Accessibility Cases](http://www.3playmedia.com/resources/webinars/legal-update-09-29-2016/) (http://www.3playmedia.com/resources/webinars/legal-update-09-29-2016/) [↑](#footnote-ref-2)
3. [An Architect of the ADA on its Application to Modern Technology](http://www.3playmedia.com/resources/webinars/architect-of-ada-10-20-2016/) (http://www.3playmedia.com/resources/webinars/architect-of-ada-10-20-2016/) [↑](#footnote-ref-3)
4. [Nondiscrimination on the Basis of Disability in Public Accommodations and Commercial Facilities](https://www.ada.gov/regs2010/titleIII_2010/titleIII_2010_regulations.htm) (https://www.ada.gov/regs2010/titleIII\_2010/titleIII\_2010\_regulations.htm) [↑](#footnote-ref-4)
5. [Public Accommodations and Commercial Facilities (Title III)](https://www.ada.gov/ada_title_III.htm) (https://www.ada.gov/ada\_title\_III.htm) [↑](#footnote-ref-5)
6. Patrick, Deval L. (1996, September 9). Accessibility of "web pages" on the Internet to people with visual disabilities [Letter]. <https://www.justice.gov/crt/foia/file/666366/download> [↑](#footnote-ref-6)
7. [National Federation of the Blind v. Target Corp., 452 F. Supp. 2d 946 - Dist. Court, ND California 2006 - Google Scholar](https://scholar.google.com/scholar_case?case=18339911093524957140&hl=en&as_sdt=400006&as_vis=1) (https://scholar.google.com/scholar\_case?case=18339911093524957140&hl=en&as\_sdt=400006&as\_vis=1) [↑](#footnote-ref-7)
8. *Ibid.* [↑](#footnote-ref-8)
9. [National Federation of the Blind v. Target Corp. Settlement Agreement (PDF)](http://dralegal.org/index.php?get_file=2012/09/settlementagreement_2.pdf) (http://dralegal.org/index.php?get\_file=2012/09/settlementagreement\_2.pdf) [↑](#footnote-ref-9)
10. [National Association of the Deaf v. Netflix (PDF)](http://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?article=1092&context=historical) (http://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?article=1092&context=historical) [↑](#footnote-ref-10)
11. [National Association of the Deaf v. Netflix - Statement of Interest of the United States of America in Opposition to Defendant's Motion for Judgement on the Pleadings (PDF)](https://www.ada.gov/briefs/netflix_SOI.pdf) (https://www.ada.gov/briefs/netflix\_SOI.pdf) [↑](#footnote-ref-11)
12. [Enforcing the ADA: A Status Report from the Department of Justice](https://www.ada.gov/aprsep00.htm#anchor507185) (https://www.ada.gov/aprsep00.htm#anchor507185) [↑](#footnote-ref-12)
13. *Ibid*. [↑](#footnote-ref-13)
14. [CRT | Department of Justice](https://www.justice.gov/crt/table-contents) (https://www.justice.gov/crt/table-contents) [↑](#footnote-ref-14)
15. [Court Dismisses Website Accessibility Case as Violating Due Process, Since DOJ Still Has Not Issued Regulations](http://www.lexology.com/library/detail.aspx?g=525bdba9-e049-4987-ba59-53e13200b105) (http://www.lexology.com/library/detail.aspx?g=525bdba9-e049-4987-ba59-53e13200b105) [↑](#footnote-ref-15)
16. [Advanced Notice of Proposed Rulemaking (ANPRM) (PDF)](http://www.ada.gov/anprm2010/factsht_web_anrpm_2010.pdf) (http://www.ada.gov/anprm2010/factsht\_web\_anrpm\_2010.pdf) [↑](#footnote-ref-16)
17. [Supplemental ANPRM (SANPRM) (PDF)](https://www.gpo.gov/fdsys/pkg/FR-2016-05-09/pdf/2016-10464.pdf) (https://www.gpo.gov/fdsys/pkg/FR-2016-05-09/pdf/2016-10464.pdf) [↑](#footnote-ref-17)