I'm not able to use a mouse. I have to rely on my keyboard to get around a website. Sometimes it's really hard to access information I need.

The organization obviously spent a lot of time making that video, but I need closed captioning or a transcript to know what's being said or it's useless. I guess they don't care about people like me.

I have software that reads web pages to me because I am blind and I don't read braille. I wish I didn't have to "listen" to everything on the page that comes before the navigation bar.

It takes so long to get anything done!

After digging through the website for five minutes, I still couldn't locate the organization's mailing address. I gave up!
An Overview of Web Accessibility

What is web accessibility?

“Web accessibility” means creating websites that provide equal access to information, features and functionality to ALL website users, including people with disabilities.

This guide answers common questions that leaders have about web accessibility, while the companion guide Web Accessibility for Nonprofit Web Developers provides resources for your web developer to implement accessibility on your organization’s website.

How can our organization create an accessible website?

Start a conversation about the level of accessibility on your existing website, whether you maintain your website in-house or contract with an external web developer.

If you are about to embark on a website overhaul, you’ll want to discuss accessibility early in the planning process.

Why should we do this?

By their very nature, nonprofits exist to make the world a better place and to create positive social change. This sense of social responsibility should generate a desire for creating equal access to their programs, opportunities and services.

With an ever-increasing amount of work, leisurely pursuits, and educational opportunities moving to an online format, the need for accessible websites continues to grow. (Source: http://www.un.org/Overview/rights.html)

Questions to ask your web developer

- “Do you conform to web standards?
  - If not, why not?
  - If so, can you explain what and why?
- Does it cost more to make my website accessible?
- Who will maintain the website after it has been built?
  - If we will be maintaining it, how can we ensure that new content continues to meet accessibility standards?
  - If we will be maintaining it via Content Management System (CMS), how does the CMS address accessibility? Will the system be upgraded when new standards of accessibility have been released? What about other web standards updates?
  - If you will be maintaining it, do your maintenance technicians conform to the same accessibility standards as the developers did? How will we provide updates to you, and when will they be completed?
- Can you explain some of the measures you will take to ensure that our website is accessible? Do these measures include usability testing by real people?
- Based on our community and website goals, are there any additional accessibility or usability features that you would recommend for us?”

Examples of common web accessibility practices -

With the onset of mobile and tablet devices, web usability has become a priority. Usability and accessibility have become largely intertwined.

You may have seen these features on websites you have visited:

- **Buttons that allow you to re-size the text without the fonts becoming blurry.**
  Assist people with vision-related disabilities and people using small mobile devices.

- **A description of a photo that appears when you hover over it.**
  Assist people with low-bandwidth Internet or who have turned off images in their browsers and people using screen reader software to have a web page read aloud.

- **All navigation buttons and sections of the page can be accessed via a keyboard only and when you use the Tab button, it moves through the page in a logical order.**
  Assist people with physical or motor-related disabilities and people using mobile devices without a touchscreen.

- **Forms that offer instructions like “Asterisk denotes a required field” rather than “Fields highlighted in red are required.”**
  Assist people with color-blindness or limited vision.
Will it cost more?

Implementing web accessibility should not cost more, since a website built using web standards makes accessibility much easier to achieve. Web accessibility is built into a website from the ground up, not “added on” after a site is built.

Developers who are unfamiliar with web accessibility standards may not understand this and feel the need to charge for what they consider an additional “feature” of a site’s development. If a web developer charges more for accessibility, you may want to question their development methods and tools in more detail.

What are some universal benefits of an accessible website?

In addition to serving audiences with disabilities, there are many other advantages to having an accessible website:

- Site can be viewed in any web browser
- Greater search engine visibility
- Pages convert easily to other formats (Word, PDF, etc.)
- Easy to update content or appearance without having to "re-do" the entire site
- Low-bandwidth viewers can access the site more easily
- Better / faster access on mobile devices (iPads, Smartphones, etc.)

Web accessibility is the primary goal, but the benefits extend to all users, creating a better web experience for everyone who uses sites that incorporate these standards.
How do people with disabilities use the web?

The Web Accessibility Initiative (WAI) recognizes a variety of disabilities that can affect a person’s access to the web. Each type of disability presents different challenges for using a computer and the web.

There are a number of assistive computing technology devices available, at varying degrees in cost, to assist people with disabilities in using computers and the web.

These devices are only effective, however, when websites are coded to meet web accessibility standards.

<table>
<thead>
<tr>
<th>Type of impairment</th>
<th>How the web may be accessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>• Screen reader (text-to-speech) software or device</td>
</tr>
<tr>
<td></td>
<td>• Braille display</td>
</tr>
<tr>
<td></td>
<td>• Text-based browser (such as Lynx)</td>
</tr>
<tr>
<td></td>
<td>• Voice input/output browser</td>
</tr>
<tr>
<td></td>
<td>• Screen magnification software</td>
</tr>
<tr>
<td>Hearing</td>
<td>• Captions</td>
</tr>
<tr>
<td></td>
<td>• Transcripts</td>
</tr>
<tr>
<td></td>
<td>• Easily adjusted volume</td>
</tr>
<tr>
<td>Physical or Motor</td>
<td>• Specialized mouse or keyboard</td>
</tr>
<tr>
<td></td>
<td>• Assistive pointing device (such as a head-mouse, head-pointer or mouth-stick)</td>
</tr>
<tr>
<td></td>
<td>• Voice recognition software</td>
</tr>
<tr>
<td></td>
<td>• Custom assistive devices</td>
</tr>
<tr>
<td>Speech</td>
<td>• Ability to input via text for sites using voice input</td>
</tr>
<tr>
<td>Cognitive or Neurological</td>
<td>May be able to use typical hardware and software, but may require:</td>
</tr>
<tr>
<td></td>
<td>• Clear structure and navigation</td>
</tr>
<tr>
<td></td>
<td>• Simple language</td>
</tr>
<tr>
<td></td>
<td>• Complementary graphics</td>
</tr>
<tr>
<td></td>
<td>• Ability to turn off distracting audio or visual elements</td>
</tr>
<tr>
<td></td>
<td>• Easily adjusted font size</td>
</tr>
<tr>
<td></td>
<td>• No flashing graphics or text (may cause seizures in some people)</td>
</tr>
</tbody>
</table>

If someone has multiple disabilities, he or she requires a high level of flexibility in accessing content on a website. The assistance required is dependent on the symptoms experienced by the person.
Who decides the rules for web accessibility? -

There are two recognized authorities in the United States when it comes to web accessibility:

1. **World Wide Web Consortium (W3C)**
   - Web Accessibility Initiative (WAI)
   - Web Content Accessibility Guidelines (WCAG)

2. **U.S. Federal Government**
   - Rehabilitation Act of 1973
     - Section 508 (Sub-sections 1194.21 and 1194.22)

The Web Accessibility Initiative (WAI) produces a set of guidelines in a document called the **Web Content Accessibility Guidelines (WCAG)**. The most recent version of this document is WCAG 2.0 and can be found in its original form at: [www.w3.org/TR/WCAG20/](http://www.w3.org/TR/WCAG20/).

The other source for web accessibility for organizations in the United States is the federal government’s **Rehabilitation Act of 1973**. One particular section of this Act provides standards for web accessibility: **Section 508**.

Section 508 requires that all technology and electronic information produced by Federal agencies as well as programs and organizations receiving Federal funding must be accessible to people with disabilities.

What is interesting (and frustrating) about these two sets of guidelines is that they overlap, but don’t map point-for-point easily. In the companion guide for web developers, we attempt to simplify this by citing the WAI and Section 508 standards for each web accessibility rule in our list.
Additional Resources -

These resources are provided for informational purposes only. The Bayer Center for Nonprofit Management at Robert Morris University and FISA Foundation are neither affiliated with nor endorse any of the resources listed herein.

Standards and guidelines

- **Website Accessibility Initiative (WAI):** [www.w3.org/WAI](http://www.w3.org/WAI)
- **Section 508 Standards:** [www.section508.gov](http://www.section508.gov)

Online website testing for accessibility

- **Web Accessibility Evaluation Tool (WAVE):** [wave.webaim.org](http://wave.webaim.org)

Informational sites

- **American Foundation for the Blind:** [www.afb.org/webaccess.asp](http://www.afb.org/webaccess.asp)
- **Microsoft Accessibility:** [www.microsoft.com/enable/index.aspx](http://www.microsoft.com/enable/index.aspx)

Accessibility consulting and training services

- **Blind & Vision Rehabilitation Services of Pittsburgh:** [www.bvrsppittsburgh.org/contracting/](http://www.bvrsppittsburgh.org/contracting/)
- **Knowbility:** [www.knowbility.org](http://www.knowbility.org)
- **Equal Access to Software and Information (EASI):** [www.easi.cc](http://www.easi.cc)
About These Guides -

This guide and its companion guide Web Accessibility for Nonprofit Web Developers are designed with a nonprofit audience in mind.

There are a number of available quick reference lists, guides, and checklists centered on the topic of web accessibility. We wanted, however, to create guides that could be used by non-technical and technical people involved in the development of nonprofits’ websites. Non-technical people should be able to make a case for accessibility to the decision-makers in their organizations without having to learn website coding in detail. At the same time, website accessibility can be simplified only so far. We hope these guides will serve as a starting point for conversations between non-technical and technical staff.

Additionally, we desired a guide that mapped the two sets of web accessibility standards: Web Content Accessibility Guidelines 2.0 (WCAG 2.0), produced by the Website Accessibility Initiative, and Section 508 Standards for Web Accessibility, produced by the United States Federal Government. WCAG 1.0 has previously been mapped to Section 508. The Web Accessibility for Nonprofit Web Developers guide provides a mapping for the updated version, WCAG 2.0 to Section 508, including links to all referenced resources.

Much of the information in Web Accessibility for Nonprofit Web Developers has been taken directly from the Web Accessibility Initiative’s Website and Section508.gov. Clearly, much work has gone into both sites, and we do not feel it necessary to re-invent the wheel by altering the language of the actual standards and guidelines for web accessibility. Both entities have created standards and guidelines that are concise, yet comprehensive.
About the author

Cindy Leonard is the Senior Manager, Technology Program, for the Bayer Center for Nonprofit Management at Robert Morris University. Cindy has been helping nonprofits to leverage technology since 1999. She facilitates Bagels & Bytes meetings, organizes the Bayer Center's annual TechNow conference, and writes the monthly e-newsletter TechNotes, all while spending most of her time consulting with and teaching technology-related classes to local nonprofits. She has presented at conferences for a variety of organizations, including the Nonprofit Technology Network, the Alliance for Nonprofit Management, the Pennsylvania Association for Nonprofit Organizations, the Association of Fundraising Professionals and the Pennsylvania Pathways for Victim Services. She previously served as the Information Technology Coordinator for PA CleanWays, an environmental organization. Cindy holds a B.S. in Computer Science, an M.B.A. and a M.Ed. in Instructional Design Technology, all from Seton Hill University.

About The Bayer Center for Nonprofit Management at Robert Morris University

The Bayer Center for Nonprofit Management at Robert Morris University was founded in 1999 to provide the necessary tools for nonprofit organizations to effectively manage and compete in today's society. The Center works with clients to assure that the money invested from public and private sources is efficiently and effectively spent to advance their charitable mission.

The Center offers Consulting Services and non-credit workshops in many areas including: board development, business planning, collaboration and alliances, financial management, fund development, organizational effectiveness, and technology. In addition, The Center provides information and referral services, conducts applied research and convenes in-depth discussions on the problems of society addressed by nonprofit organizations.

Contact the Bayer Center via phone at (412) 397-6000 or bcnm@rmu.edu to find out how we can help your organization or visit www.bcnm-rmu.org.