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Fort Worth Public Library

Website Accessibility Report



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Services

Fort Worth Public Library

Executive Summary

The Fort Worth Public Library website – <http://www.fortworthgov.org/Library/> -- is a highly accessible site. It is obvious that both the library and the city have taken time to work through the implementation of accessibility for their community.

Most of the issues found during this consultation were minor, highly detailed and can easily be modified; many were updated before the on-site meeting. Three larger issues were discussed at the on-site meeting:

- Use of an `<iframe>` element for the listing of branches and their information. As is, this information is not accessible to those that cannot see the web page. We discussed various ways to accomplish this. FWPL staff members have dealt with this and it is no longer an issue.
- Calendar of Events – this section of the website is highly inaccessible. Because the library cannot control the HTML in this section, it was not included in this report. If the library is interested in more detailed findings for the Calendar, please contact the author, Christine Peterson.
- Online catalog – library online catalogs were not checked for accessibility for any of the libraries in this project. In general, libraries have limited or no ability to modify the HTML for online catalogs, so they were not included.

Fort Worth Public Library

Website Accessibility Report

In fiscal year 2010, the North Texas Regional Library System moved into the second year of their *Expanding Accessibility in Libraries* pilot program. In 2009, eight libraries voluntarily studied the accessibility needs of their communities and used funding available in the program to purchase items that would extend library services and programs to this population.

In 2010, each of the original eight libraries hosted an accessibility fair for their communities and eight libraries (two which were part of the original group) had their websites analyzed for accessibility issues. This report deals with this last project.

Between May 11th and May 20th, each library was visited to discuss the draft accessibility report for their website. After this discussion, each report was finalized and emailed both to the library contact and to the North Texas Regional Library System. Questions concerning the content of this report should be directed to:

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Christine Peterson is a Continuing Education Librarian for Amigos Library Services, a member-based non-profit organization that helps its members obtain affordable services and share library resources and knowledge. In her capacity as a Continuing Education Librarian, Peterson trains and consults in the area of library technology, which includes website accessibility, website authoring and design, technology planning, and web-based social software. She has trained and consulted in the area of library technology for eighteen years, working for both Amigos Library Services and the Texas State Library and Archives Commission. Before that, she was the system administrator for two academic libraries, e.g., San Antonio College of the Alamo Colleges, Florida Institute of Technology.

Accessibility Defined

An accessible website is one in which any person can perceive, understand, navigate and interact with that site. Disabilities are categorized in the following ways:

- Visual – those that are blind, partially blind, have low vision or color blindness.
- Hearing – those that are deaf or hard of hearing.
- Physical – those that have muscle weakness, missing limbs, joint problems, limitations of sensation, or cannot control muscles.
- Speech – those that have difficulty in producing speech that is recognizable.
- Cognitive/neurological – this can include, among others, learning disabilities such as dyslexia, attention deficit disorder, memory impairments, and seizures.

It is possible and, as we age, normal to have multiple disabilities. One of the largest generations is now starting to retire – the Baby Boomer generation. As the first generation to retire that has used the Internet both at work and at home, they can be expected to continue using the Internet through retirement.

Accessibility Guidelines

To help web authors create websites that are as accessible as possible, the World Wide Web Consortium (home of an international community that creates standards to ensure the long-term growth of the Web) created an effort called the Web Accessibility Initiative. Within this initiative, they have provided twelve guidelines, called the Web Accessibility Content Guidelines, which include conformance levels of website accessibility – A, AA, and AAA.

For example, one guideline deals with the ability for users to distinguish foreground and background elements, both visually and auditorially. There are three levels of compliance, starting from a basic level of accessibility at Level A to a higher level of accessibility at Level AAA. This report for the library's website is based on Level A.

In this report, each of the twelve guidelines is listed with a discussion of changes to be considered for the library's website to come into conformance at Level A. Requirements for Levels AA and AAA can be found at <http://www.w3.org/WAI/WCAG20/quickref/> by submitting the form with the desired levels checked.

Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, Braille, speech, symbols or simpler language. The purpose of this guideline is to ensure that all non-text content is also available in text.

- Each image must have alternative text so that visually-impaired users understand what the image is trying to portray. Although most of this site include alternative text, there are three pages missing a these attributes:
 - <http://www.fortworthgov.org/library/branches/COOL/> - library image in middle
 - <http://www.fortworthgov.org/library/info/default.aspx?id=57604> – cover art for Darkmans and Zugzwang
 - <http://www.fortworthgov.org/library/info/default.aspx?id=73104> – image for 3rd Thursday Jazz Series
- On the page listing library branches and their locations - <http://www.fortworthgov.org/library/branches/> - an iframe element is used. Because this is a visual element, there must also be a textual alternative. This can be done by including the text between the opening and closing iframe tags, e.g.,

```
<iframe width="500" height="400" frameborder="0" scrolling="no"
marginheight="0" marginwidth="0"
src="http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msi
d=110196169263402130686.000471967dac16ff99f76&ll=32.772265,-
97.311401&spn=0.46188,0.823975&z=10&output=embed">Locations
include the Central Library at 500 West Third Street, phone 817-871-
7701, website http://www.fortworthgov.org/library/branches/central/.
East Regional Branch at . . . </iframe>
```

Or by letting users know the textual equivalent is below this visual . . .

```
<iframe width="500" height="400" frameborder="0" scrolling="no"
marginheight="0" marginwidth="0"
src="http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msi
d=110196169263402130686.000471967dac16ff99f76&ll=32.772265,-
97.311401&spn=0.46188,0.823975&z=10&output=embed">Location
information for our branches; text version provided.</iframe>
<ul>
<li>Central Library at 500 West Third Street, phone 817-871-7701</li>
<li>East Regional Branch at . . . </li>
</ul>
```

Or by including a link under the table which takes the user to a separate page with the information in a textual manner or including the contact information within the table already on the page. Depending on the library's requirements, there may be other options as well.

Time-Based Media

Provide alternatives for time-based media.

The purpose of this guideline is to provide access to audio and video files.

- No issues were found pertaining to this guideline.

Adaptable

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

The purpose of this guideline is to ensure that all information is available in a form that can be perceived by all users, for example, spoken aloud, or presented in a simpler visual layout.

- ID attributes must be unique within the document; if used more than once, this can cause problems with screen readers as well as readers on mobile devices. This only happens on two pages and is easily fixed:
 - <http://www.fortworthgov.org/library/info/default.aspx?id=24724>
 - <http://www.fortworthgov.org/library/info/default.aspx?id=26512>

- The form for the search box in the upper right corner of many of the web pages should include "label" element that allows a screen reader to determine which line of text or image – find.gif – goes with which form element - <input>.
<input type="text" name="searchText" style="width:120px;font-size:12px;" maxlength="256" value="" id="search" onkeypress="return DoSearch(event);"/>

```
<a href="../search/default.aspx?searchstring="
onclick="javascript:SubmitSearch();return false;"><label
for="search"></label></a>
```

Distinguishable

Make it easier for users to see and hear content including separating foreground from background.

The purpose of this guideline is to ensure that the default presentation is as easy to perceive as possible to people with disabilities.

- No issues were found pertaining to this guideline.

Keyboard Accessible

Make all functionality available from a keyboard.

The purpose of this guideline is to ensure that all functionality can be achieved using the keyboard.

- Throughout the site, there are hover events; hovers can only be accomplished using a mouse. To be accessible, these functions must also be available through the keyboard. In addition to the `a:hover` styles, `a:focus` styles should be defined. For example, instead of just this style:

```
#topNav a:hover {text-decoration:underline;}
```

Also include:

```
#topNav a:focus {text-decoration:underline;}
```

Enough Time

Provide users enough time to read and use content.

This guideline focuses on ensuring that users are able to complete the tasks required by the content with their own individual response times.

- No issues were found pertaining to this guideline.

Seizures

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

The objective of this guideline is to ensure that content that is marked as conforming to WCAG 2.0 avoids the types of flash that are most likely to cause seizures when viewed even for a second or two.

- No issues were found pertaining to this guideline. However, one question that arose in during our on-site discussion was the rate of flashing that causes seizures. Level AAA states that web pages should not contain anything that flashes more than three times a second. For more detail, please see <http://www.w3.org/TR/WCAG20/#seizure>.

Navigable

Provide ways to help users navigate, find content and determine where they are.

The intent of this guideline is to help users find the content they need and allow them to keep track of their location.

- The Research Databases page includes a table which is used to select specific topic areas or databases. When used for tabular data (and not for layout purposes), table headers `<th>` are required for the first row so that those using screen readers can understand the structure of the table. This table uses only table data `<td>` cells. Instead of:
`<td>Jump to databases on . . . </td>`

It should be:

```
<th><strong>Jump to databases on</strong> . . . </th>
```

Because the table is only one row, it might make more sense to place these drop down boxes inside paragraphs instead of a table.

- During our on-site meeting, we discussed a list of URLs that did not have unique titles; each used “Welcome to the City of Fort Worth, Texas” or the name of a branch as the title for multiple pages. Before the meeting, city and library staff took time to fix each of these items and asked if I would run the test again to see if other pages were still problematic. After running the test, I found no additional issues with duplicate titles on web pages for the library’s website.
- Provide a way for non-sighted users to skip repetitive navigation links on each page. Users using screen readers must read the page as it looks in the HTML. By providing them a way to skip these links, they are able to more quickly move to the information they need. These links can be created in one of two ways: by providing a link near the top of the page that is visible, or by providing an invisible link that only those reading the HTML can see.

Readable

Make text content readable and understandable.

The intent of this guideline is to allow text content to be read by users and by assistive technology, and to ensure that information necessary for understanding it is available.

- The language used on a website should be identified either at the site level, the page level, or the element level so that screen readers can pronounce words correctly. For example, if the entire page is in English, then it should state so at the top of the page. This web site does not have a default language encoded, e.g.,

```
<html lang="en">
```

- When the language changes within a page, this should be noted as well. If the new language is not stated, screen readers will try to read the text in the default language. Instead of:

```
<h2><a id="Espanol" class="bookmark" title="Espanol"
name="Espanol"></a>En Español</h2>
```

It should be:

```
<h2 lang="es"><a id="Espanol" class="bookmark" title="Espanol"
name="Espanol"></a>En Español</h2>
```

The language changes on these pages:

- <http://www.fortworthgov.org/library/info/default.aspx?id=26512>
- <http://www.fortworthgov.org/library/info/default.aspx?id=4262>
- Although not part of the Level A of the Web Content Accessibility Guidelines 2.0, Section 508 (accessibility requirements for federal agencies) requires a link to download software needed to view a file. In this case, if a PDF document is posted, a link to PDF software is also required:
 - <http://www.fortworthgov.org/Library/>
 - <http://www.fortworthgov.org/library/info/default.aspx?id=24716>
 - <http://www.fortworthgov.org/library/info/default.aspx?id=4204>
 - <http://www.fortworthgov.org/library/info/default.aspx?id=52000>
 - <http://www.fortworthgov.org/library/info/default.aspx?id=52128>
 - <http://www.fortworthgov.org/library/info/default.aspx?id=6592>
- Using the home page as an example, the web page has a 7th grade reading level.

Predictable

Make Web pages appear and operate in predictable ways.

The intent of this Success Criterion is to help users with disabilities by presenting content in a predictable order from Web page to Web page and by making the behavior of functional and interactive components predictable.

- No issues were found pertaining to this guideline.

Input Assistance

Help users avoid and correct mistakes.

This guideline seeks to reduce the number of serious or irreversible errors that are made, increase the likelihood that all errors will be noticed by the user, and help users understand what they should do to correct an error.

- No issues were found pertaining to this guideline.

Compatible

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

The purpose of this guideline is to support compatibility with current and future user agents, especially assistive technologies (AT).

- Most of this website validates to XHTML 1.0 Transitional, which is stated at the top of the document. Incorrect tagging can cause problems with screen readers understanding the structure of the web page. However, when scanning the results of the validation, I see only minor problems such as:
 - Forgetting a required action attribute within a form element
 - Nesting a block-level element (div) inside an inline element (span)
 - ID attributes not unique within a web page

The calendar page - <http://host2.evanced.info/fortworth/evanced/eventcalendar.asp> - is not valid and has over 1,000 HTML errors. Many are because of the scripts and can be discounted, but that leaves hundreds. More time would have been needed to determine the accessibility issues within this page.

- Use of both HTML and Cascading Style Sheets is considered the best way to future-proof your website. When created to these standards, changes to come into compliance with future standards should be less demanding. This site seems to have two primary CSS files and inline style have been used within the HTML itself. Even so, modifications were also done with HTML formatting instead of CSS. This will cause problems in the future when updating or revising this site. Even the use of inline styles is falling into disfavor as it still places the formatting with the structural HTML.