

Memorandum



CITY OF DALLAS

DATE November 12, 2021

TO Honorable Mayor and Members of the City Council

SUBJECT **Redistricting Website ADA Review**

This memorandum serves as a follow up to concerns raised by Councilmember Mendelsohn during the October 28, 2021 briefing of the redistricting website and compliance with the Americans with Disabilities Act (ADA).

The City of Dallas' vendor, Knowbility, has conducted a review of the Redistricting website and an executive summary of their findings is attached. In response to these findings, staff made modifications to the main webpage, identified alternative compatible mapping tools, and is incorporating best practices in inclusive community into redistricting meetings.

The Office of Government Affairs staff is implementing several measures to receive community input and feedback on the proposed maps. In addition to the online mapping tool, the public can participate by:

- Providing their input by signing up to speak at Redistricting Commission meetings and the town hall community meetings;
- Calling the Redistricting Hotline at (214) 671-5197 to provide input to the redrawing of the City Council districts; or
- Submitting a comprehensive map plan by email to: redistricting@dallascityhall.com.

Plans are underway to provide accommodations including American Sign Language (ASL) interpreters, large print, and braille at community meetings as requested through the email above. Residents may develop their own maps using ESRI or ArcGIS, which are fully compatible with the current tool and ADA compliant.

Any person requesting accommodation for redistricting meetings, or to learn more about future meetings, may contact redistricting@dallascityhall.com.

To review the schedule of upcoming redistricting meetings, please go to: <https://dallasredistricting.com/meetings/>. Please direct any questions to Brett Wilkinson, Director, Office of Government Affairs.



Kimberly Bizzor Tolbert

Chief of Staff

[Attachment]

c: T.C. Broadnax, City Manager
Chris Caso, City Attorney
Mark Swann, City Auditor
Billerae Johnson, City Secretary
Preston Robinson, Administrative Judge
Majed A. Al-Ghafry, Assistant City Manager

Jon Fortune, Assistant City Manager
Joey Zapata, Assistant City Manager
Dr. Eric A. Johnson, Chief of Economic Development and Neighborhood Services
M. Elizabeth Reich, Chief Financial Officer
Liz Cedillo-Pereira, Chief of Equity & Inclusion
Directors and Assistant Directors

Executive Summary City of Dallas Redistricting Page

Introduction

Knowbility previously delivered two detailed technical documents to identify accessibility barriers and recommend methods for remediation. This document is meant to illustrate the impact of the issues identified in non-technical language and a summarized format for an audience that may not have an extensive programming and development perspective.

Digital Accessibility Issues

Fundamental accessibility errors, listed below, were found on the Redistricting 2021 Home Page of the City of Dallas at <http://dev.rathergodly.com/>.

- **Keyboard navigation insufficient:** Header does not provide users of keyboard-only navigation, like screen reader users, ways to navigate to other sections of the website.
- **Heading order is illogical:** May cause confusion and lack of confidence that user is getting complete information
- **Skip Link:** Does not skip to content
- **Contrast (text-to-background) ratio:** Fails to meet 4.5 to 1 standard
- **Search:** Function is not accessible to assistive technology used by people with disabilities.

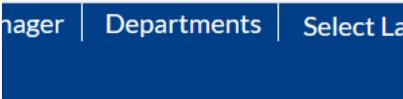
In addition, the City provides graphic maps in PDF format that fail to meet minimum accessibility standards. Details are provided in the full report and are not included here.

Issue Summary

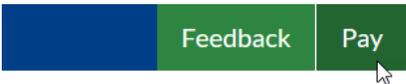
Issue #1 - Insufficient keyboard control of typical interactions

Blind people use screen readers to listen to web page content. Blind users cannot "point and click" at content and so rely on keyboard access using the tab, enter, space, and arrow keys. There are accepted protocols to where these keystrokes are used and how they are expected to interact with the content for screen reader users. First, a user must be able to tab into the web page component. Secondly, any interaction such as entering data, closing a pop-up, submitting entered data, and such must not be dependent on mouse interaction but must be available using only the keyboard. Here are some items that failed that requirement:

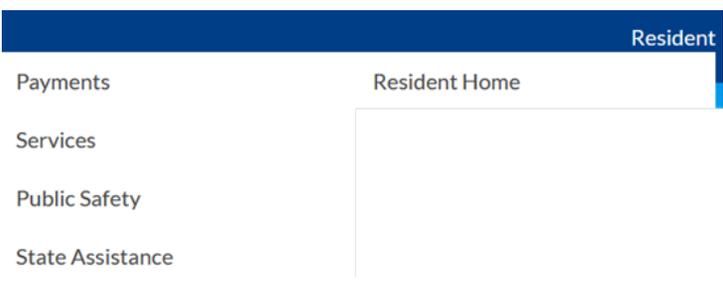
- **"Departments" pop-up menu**

<p>Departments menu selection pops up a selection menu when hovered over using the mouse</p> 	<p>When tabbing with the keyboard, the Department choice never receives focus and the sub-menu is not revealed.</p> 
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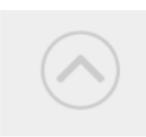
- **“Pay” pop-up menu**

<p>The same effect on the Pay option:</p>  <p>Water Bill</p> <p>Traffic & Civil Tickets</p> <p>Parking Ticket</p> <p>Ambulance Bill</p>	<p>Using the keyboard 'Pay' does not receive focus at all, it skips right to the next menu item</p> 
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- **“Residents” pop-up menu**

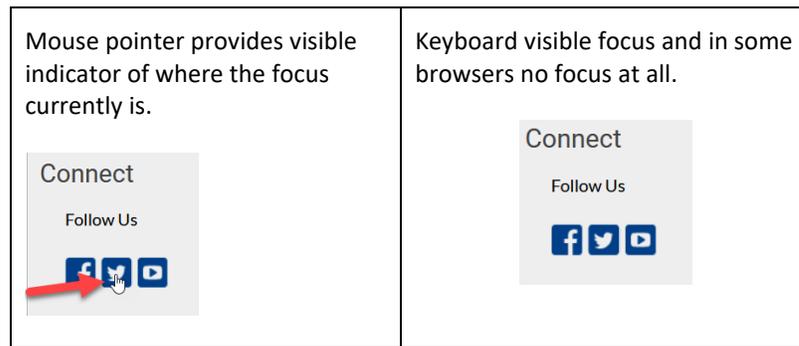
<p>Double flyout menu revealed with mouseover Resident</p> 	<p>No focus at all with keyboard tabbing. Skips past the resident menu item and goes to Visitor</p> 
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- **“Back to Top” link**

<p>Focus and ability to move focus back to top of page when using a mouse</p> 	<p>No ability to reach the widget and no ability to move to the top using the keyboard.</p> 
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- **Social Media icons in the footer (in some browsers)**

In some browsers, the keystrokes never move to the social media icons at all. In other browsers, the focus may move to the icon but there is no indication of focus which is needed for sighted keyboard users. While we commonly think of screen reader users requiring keyboard access there are other types of users who can see but rely on the keyboard for reasons like hand injury, tremors, or simply better user experience. Visible focus is required for these users.



Issue #2 - Illogical order of heading structure

Headings provide important information about the organization of a page. They must be indicated programmatically as well as visually. A large majority of screen reader users default to navigation by headings. They either generate and use a list of headings to choose where to skip to, or quickly move from heading to heading for a quick overview of the page. Without properly nested (organized) headings, pages can be hard to navigate. Just as sighted users skim a page to determine important topics and content structure, so do screen reader users use heading structure to determine the same information.

<http://dev.rathergodly.com/>

☰ 8 headings

<h1> (Missing heading)

<h2> (Missing heading)

<h3> Redistricting 2021

<h2> Join us in making a redistricting map that represents your community!

<h3> A Message from the Chairman

<h3> How do you want to be represented for the next 10 years?

<h4> (Missing heading)

<h5> Address

<h5> Connect

<h5> Subscribe

<h1> Original text

In this case, "Redistricting 2021" should be a <h1>, the subsequent headings "Join us in making a redistricting map that represents your community!", "A Message from the Chairman", and "How do you want to be represented for the next 10 years?" should be all on the same level. Refer to the [W3C Headings Tutorial](#) for more information.

Issue #3 Skip Link leads into navigation rather than past it

As most keyboard-only users navigate through the content sequentially, focusing every single interactive element, navigation menus can be a barrier to get to the main content of the page. "Skip links" are meant to allow users to skip over blocks of repeating information and directly to the main content.

<p>On this page there is a Skip Link that says it will move into the main content:</p>  A screenshot of a website header. At the top, there is a navigation bar with 'Council' and 'City Manager' links. Below that is a blue banner with the City of Dallas logo and the text 'City of Dallas'. A white button with a hand cursor icon and the text 'Skip to content' is overlaid on the banner.	<p>However, when the link is activated it takes the user, not to the main content but instead into the redistricting navigation menu:</p>  A screenshot of a blue navigation menu. The main heading is 'Redistricting 2021'. Below it are three links: 'Home', 'About Us', and 'Commissioners'.
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Either make the link say "Skip to Section Navigation" or take the user into the Main page content as advertised.

Issue #4: Contrast

Foreground and background colors have a certain amount of contrast. Black on white has a greater contrast than light grey on white. High contrast is especially important for people with low vision or colorblind people, but it also helps in situations where a screen is read in broad daylight.

Contrast is most important for text but also to identify graphical and interactive elements, like links, buttons, and form fields. There are instances of text with insufficient contrast against background colors, which means users with low vision or color blindness may not be able to read the text. Detail about specific instances and how to repair them are in the full report.

Issue #5: Search function is inaccessible

When activating the search link in the top right of the page, a (visually) modal dialog appears. However, the focus is not moved to that dialog. This means a keyboard or screen reader user cannot interact with the modal dialog as they are used to. The focus is obscured by the semitransparent background. There is no apparent way to close the dialog box without searching. Details on how to repair this error is found in the full report.

Conclusion

As currently presented, the site does not meet minimum accessibility standards and will not be usable by people who are blind, have low vision, or who rely on keyboard navigation. Details on related standards and how to repair these issues are found in the full report.

For more information, see full reports or contact Ron Hicks at Knowbility (512) 527-3138 x 101.