

High-Level Accessibility Evaluation (WCAG 2.1)

Readex World Newspaper Archive

December 16, 2021

Prepared for: BTAA-Library Accessibility Alliance

Prepared by: Emily Mason, UX Researcher User-Experience Laboratory Center for Information and Communication Studies University of Tennessee uxl@utk.edu

Primary Point of Contact: Songhee Kim, UXL Manager skim142@vols.utk.edu

TABLE OF CONTENTS

SUMM	IARY	3
Тор	p Findings	3
ACCES	SIBILITY FINDINGS	4
1.	Landing Page	4
2.	Search Results Page	5
3.	Item Page	6
4.	Advanced Search Page	7
5.	Browse Publications Page	8





SUMMARY

This report reflects the findings of a high-level assessment of the Readex World Newspaper Archive for its conformance with the W3C Web Content Accessibility Guidelines version 2.1 level AA (WCAG 2.1).

This report shows that the Readex World Newspaper Archive is mostly in compliance with the WCAG 2.1 guidelines, but does have some issues, particularly around page structure and programmatic landmarks that are essential for the proper function of assistive technologies such as screen readers. These findings significantly impact the accessibility of this database for users that require the use of assistive technologies, preventing them from using the system either partially or altogether. These are the most critical issues to focus on correcting to improve access for all potential users of the system.

Top Findings

- 1. **Non-Text Content:** The individual documents within the document viewer on the item page are not screen readable, preventing users that require the use of screen readers from being able to access these resources at all.
- 2. Name, Role, Value Compatibility: Several issues were found on each page surrounding ARIA landmarks and screen reader compatibility and accuracy. These structural issues can make it very difficult for users that require assistive technologies to interpret the site in a logical order.
- 3. **Predictability On Input:** The function of some elements in the document viewer navigation panel are visually unclear.



ACCESSIBILITY FINDINGS

This report was conducted against the Readex World Newspaper Archive database and covers a selection of pages and features that were to be tested as a representative sample of the database.

The resource was reviewed using a combination of manual and automatic review tools and assistive technologies, including the WAVE Accessibility Assessment tool, Axe Accessibility Assessment tool, WCAG Color Contrast Checker, and NVDA screen reader. All problems identified by automatic tools were double checked manually. This evaluation was performed using Firefox on Windows 10.

Below are the findings revealed during the accessibility evaluation of the Readex World Newspaper Archive database. Some of these issues were persistent across several pages, and some were specific to each page. Details about each finding are provided along with the success criterion that is problematic.

1. Landing Page

Test Case: Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible.



SC 1.1.1 - No alt text for image in main content area.



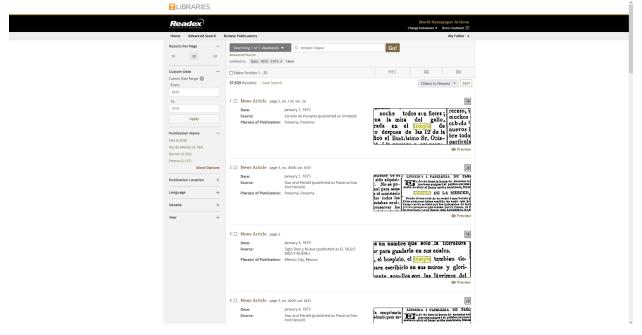
Page **4** of **8**



- **SC 1.4.3** 'Skip to main content' link does not meet AA contrast requirements.
- **SC 2.4.2** Page title in browser is indistinct and very similar to the page title for the search results page.
- **SC 4.1.2** Improper ARIA landmark for search bar.
- **SC 4.1.2** Improper ARIA landmarks for banner content.
- **SC 4.1.2** Improper ARIA landmark for navigation content (located under 'My Folder').
- **SC 4.1.2** Screen reader doesn't identify the 'searching 1 of 1 databases' dropdown as collapsible.

2. Search Results Page

Test Case: Conduct a search for: "Templo Mayor." Test search results page, including filters/refine search. Sort by "Best", change number of results displayed to 20, and limit to years: 1875-1915.



- **SC 1.3.1** No h1 heading to identify page.
- **SC 1.4.3** 'Skip to main content' link does not meet AA contrast requirements.
- **SC 2.1.1** Information next to the document link is not screen readable without the mouse.
- **SC 2.4.2** Page title in browser is indistinct and not easily distinguishable from the homepage title.
- **SC 3.3.2** The "select" element for sorting search results needs a programmatically associated label element.
- **SC 4.1.2** Improper ARIA landmark for search bar.





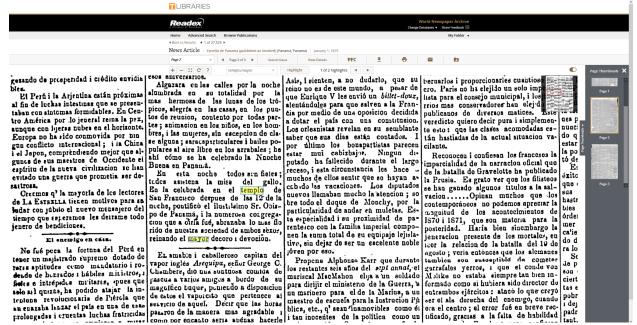
SC 4.1.2 - Improper ARIA landmarks for banner content.

SC 4.1.2 - Improper ARIA landmark for navigation content (located under 'My Folder').

SC 4.1.2 - Screen reader doesn't identify 'searching databases' dropdown as collapsible.

3. Item Page

Test Case: Test individual search result. Test both the news article text as well as the reader and reader features/icons/buttons.



- SC 1.1.1 Document in the document viewer is not screen readable.
- SC 1.1.1 Page thumbnails have alternative text that is repeated below the image as plain text.
- SC 1.4.3 'Skip to main content' link does not meet AA contrast requirements.
- **SC 2.1.2** 'Viewer Keyboard & Mouse Controls' are not screen readable without using the mouse.
- **SC 2.4.3** 'Highlight' function keyboard navigation does not follow a logical order.
- **SC 2.4.4** Page thumbnails read the full webpage link when the thumbnail image is hovered over.
- **SC 2.4.7** Navigation viewfinder toggle switch does not clearly focus when highlighted with the keyboard.
- **SC 3.3.2** Page selector dropdown in document viewer is not clearly defined using a screen reader.
- SC 3.3.2 'Find' function in the document viewer does not have a proper, visible label.
- SC 3.2.2 'Search Issue' drawer is not clearly identified as a collapsible drawer visually.
- SC 3.2.2 'View Details' drawer is not clearly identified as a collapsible drawer visually.

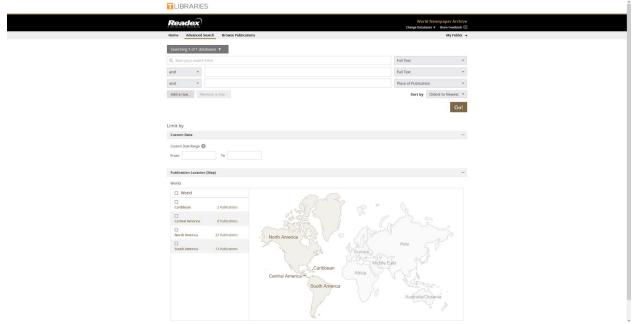




- **SC 3.2.2** 'Cite' drawer is not clearly identified as a collapsible drawer visually.
- **SC 3.2.2** 'Download' drawer is not clearly identified as a collapsible drawer visually.
- **SC 3.2.2** 'Save' drawer is not clearly identified as a collapsible drawer visually.
- **SC 4.1.2** Page selector dropdown in document viewer does not have a proper parent role.
- **SC 4.1.2** Improper ARIA landmarks for banner content.
- SC 4.1.2 Improper ARIA landmark for navigation content (located under 'My Folder')
- **SC 4.1.2** Document viewer navigation panel does not have an appropriate ARIA landmark.
- **SC 4.1.2** Document viewer film strip panel does not have an appropriate ARIA landmark.

4. Advanced Search Page

Test Case: Test initial Advanced Search page to ensure menus, sub-menus, search box, images, icons, etc. are accessible.



- **SC 1.3.1** No h1 heading to identify page.
- SC 1.3.2 The 'Limit By' features 'Custom Date' and 'Publication Location' are placed after the 'Go' button. It may be unclear to people that are visually impaired that there are more search criteria on the page.
- **SC 1.4.3** 'Skip to main content' link does not meet AA contrast requirements.
- **SC 4.1.2** Screen reader doesn't identify 'searching databases' dropdown as collapsible.
- **SC 4.1.2** Improper ARIA landmark for search function.
- SC 4.1.2 Improper ARIA landmarks for banner content.
- SC 4.1.2 Improper ARIA landmark for navigation content (located under 'My Folder')





5. Browse Publications Page

Test Case: Test initial Browse Publications page to ensure menus, sub-menus, search box, images, icons, etc. are accessible.

LIBRARIES		
Readex		World Newspaper Archive
Home Advanced Search Browse Publications		Change Databases Share Feedback
56 Publications		
▼ Filter by Publication, Location, Date Range, or Language		
Publication	Location	Date Range
Clarin	Mexico - Chihuahua	1912-05-05 - 1912-05-05 Spanish
Comercio	Peru - Lima	1839-05-04 - 1910-03-24 Spanish
Correo de Sotavento	Mexico - Tlacotalpan	1911-04-27 - 1911-07-16 Spanish
Daily Chronicle	Guyana - Georgetown	1881-11-05 - 1897-12-29 English
🔲 Dia Diario de la Manana	Mexico - Mexico City	1914-05-15 - 1914-05-19 Spanish
Diario	Mexico - Mexico City	1907-02-03 - 1914-04-20 Spanish
Diario comercial: destinado a la defensa de los intereses mercantiles de la localidad	Mexico - Veracruz Llave	1880-07-16 - 1900-03-17 Spanish
Diario de la Guerra	Mexico - Mexico City	1914-04-23 - 1914-05-08 Spanish
Diario de la Marina	Cuba - Havana	1844-04-16 - 1909-12-31 Spanish
Diario de Mexico	Mexico - Mexico City	1805-10-01 - 1816-12-31 Spanish
Diario del Hogar	Mexico - Mexico City	1882-03-01 - 1885-05-24 Spanish
Dictamen	Mexico - Veracruz Llave	1902-04-02 - 1922-09-30 Spanish
Estado de Sao Paulo	Brazil - Seo Paulo	1875-01-04 - 1922-12-31 Portuguese
Estado de Veracruz	Mexico - Jalapa-Enriquez	1912-08-11 - 1912-08-13 Spanish
Estrella de Panama	Panama - Panama	1858-09-30 - 1906-02-26 English, Spanish
Estrella de Panama	Panama - Panama	1868-01-08 - 1905-12-31 English, Spanish
Excelsior	Mexico - Mexico City	1917-03-18 - 1922-12-31 Spanish
Guatemalteco	Guatemala - Guatemala Oty	1873-02-18 - 1922-12-30 Spanish
Imparcial	Mexico - Mexico City	1897-01-06 - 1914-08-17 Spanish
🗋 Iris Veracruzano	Mexico - Jalapa-Enriquez	1908-11-01 - 1908-11-01 Spanish
Jornal do Commercio	Brazil - Rio de Janeiro	1884-08-31 - 1901-12-31 Portuguese
🗖 La Antigua Republica	Mexico - Tlaxcala	1908-07-26 - 1908-07-26 Spanish
Liberal	Mexico - Veracruz	1912-07-22 - 1912-07-22 Spanish
Lucha Electoral	Mexico - Orizaba	1911-08-13 - 1911-08-13 Spanish
Mercurio	Chile - Santiago	1914-06-01 - 1922-12-31 English, Spanish
Mexican Herald	Mexico - Mexico City	1895-09-02 - 1915-10-29 English
Monitor Republicano	Mexico - Mexico City	1845-01-31 - 1895-10-03 Spanish
Mosca Parlera	Mexico - Mexico City	1823-06-05 - 1823-07-30 Spanish
Nacion	Argentina - Buenos Aires	1905-01-01 - 1922-12-31 Spanish

- **SC 1.3.1** No h1 heading to identify page.
- SC 1.3.2 Improper ARIA landmark for search function.
- **SC 1.4.3** 'Skip to main content' link does not meet AA contrast requirements.
- SC 1.4.3 Contrast between 'Search Issue' button text and background is not AA compliant.
- **SC 1.4.3** Contrast between 'View Details' button text and background is not AA compliant.
- **SC 1.4.3** Contrast between 'Highlight' button text and background is not AA compliant.
- **SC 4.1.2** Improper ARIA landmarks for banner content.
- SC 4.1.2 Improper ARIA landmark for navigation content (located under 'My Folder')
- SC 4.1.2 'Banner' ARIA landmark is contained within the 'Main' ARIA landmark
- **SC 4.1.2** 'Contentinfo' ARIA landmark is contained within the 'Main' ARIA landmark
- **SC 1.4.3** 'Skip to main content' link does not meet AA contrast requirements. Page contains multiple 'Banner' landmarks.
- **SC 4.1.2** Page contains multiple 'contentinfo' landmarks.
- **SC 4.1.2** Screen reader repeats descriptive text in filter search bar.

Disclaimer: This high-level evaluation was conducted for the Library Accessibility Alliance, and represents a good faith effort conducted within a limited time frame. It should not be assumed to be complete or free from error. No warranties or guarantees are implied. UT is not responsible for direct, indirect, or incidental damages based on this work; its use or interpretation by any individual, group, or organization; or on conditions beyond our control.



