Falling Leaf Productions
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Our County – Website Accessibility Evaluation

SEC. 1 - PROJECT NAME

Our County website - http://our_county.com/home.html

SEC. 2 – PROJECT SEVERITY RANKINGS AND TESTING ENVIRONMENT

The following review is structured in a hierarchical fashion with priorities indicated as follows:

1. ***SS (critical)*** – This ranking indicates a showstopper. These are issues that will prevent some visitors from being able to perform certain functions on the web site. These items must be fixed before the website is published.
2. ***P1 (high)*** – Priority One issues, while not showstoppers, must be given high priority for being fixed.
3. ***P2 (medium)*** – Priority Two issues make the site difficult to use and should be fixed as soon as the more critical problems are remedied.
4. ***P3 (low)*** – Priority Three issues are annoyances that make the website less user friendly for some audiences.

SEC. 3 – TESTING ENVIRONMENT

This accessibility evaluation used Windows 7 and Mac OS10.11.3 as platforms. Internet Explorer 9, Firefox 44.0.2 (Mac), Safari 9.0.3, and Chrome 48 (Mac) were tested as browsers. Jaws 16, NVDA and VoiceOver were used as assistive technologies.

The report findings are mapped to WCAG 2.0 when applicable.

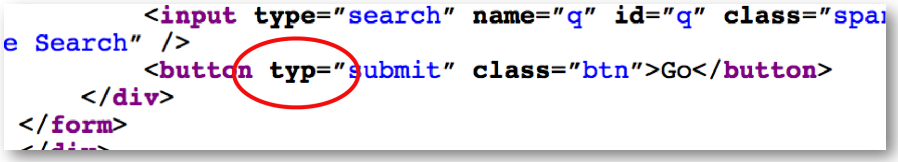
SEC. 4 – SUMMARY

The Our County website does some things very well. The ARIA and other indicators demonstrate a good effort went into building an accessible site. The code is very clean which is always a good sign. There are some areas that will need attention but otherwise the site is in pretty good shape. Full remediation based on this report will yield an accessible web site in accordance with WCAG 2.0 Level AA.

SEC. 5 – CODE REVIEW

P2 - Web sites should be 100% code compliant meaning that the HTML adheres to the Document Type Declaration (DTD). It's fortunate that the County Clerk site is using the modern DTD - HTML5 – that works well with new accessibility techniques. Compliance with the DTD ensures that assistive technology will interpret the HTML correctly. The new HTML5 validator - https://validator.w3.org/nu/ - was used in this evaluation. (Reference WCAG 2.0 4.1.1 - Parsing)

1. The County website is in very good shape code-wise. There was only one error found and that was due to a typo. On (or near) line 69, the word "type" was not spelled out correctly.



2. Although this is not an error, because HTML5 is being used for the site, HTML5 sectioning elements should also be used. For instance the "footer" is marked up as <div id="footer"…> instead it should be <footer …>. Also, is used instead of <header…>. HTML5 sectioning elements automatically map to ARIA roles, although redundant use of both the sectioning element and the ARIA role is recommended until assistive technologies fully support this mapping.
3. Also, although not flagged as an error, the self-closing / should not be used with HTML5. <meta…/> should be <meta…>,
 should be
.

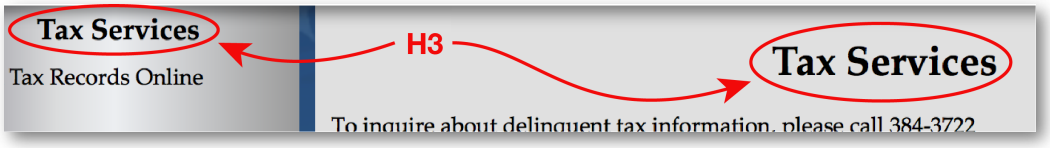
SEC. 6 – AUTOMATED TOOL EVALUATION

In compliance with Sect. K #47.d of the Settlement Agreement, the use of an automated tool for accessibility testing is required. The AInspector tool (https://addons.mozilla.org/en-US/firefox/addon/ainspector-sidebar/) was used. Testing with an automated accessibility evaluator typically highlights only issues that can be detected by a computer program so further Manual Checks are required (see Sec.6 below). Issues found by the AInspector tool are noted here:

1. ***ARIA:***
   The County site does an excellent job of using ARIA. Accessible Rich Internet Applications (ARIA) is a recommended technique for meeting the requirements of WCAG 2.0 1.3.1 - Info and Relationships and 2.4.1 – Bypass Blocks. (Level A)
   a. ***(P1)*** The Home page is missing the "main" landmark role.
   b. ***(P2)*** The left hand navigation area is assigned a role="complementary" but it's actually a secondary navigation. It should have role="navigation" with aria-label="secondary". The main navigation bar should have an aria-label="primary". The aria-label allows screen reader users to differentiate between the two navigation roles. Do not use the term "navigation" in the aria-label attribute because the assistive technology already announces navigation as the role.

2. ***Headings:*** (Reference WCAG 2.0 1.3.1 – Info and Relationships, 2.4.6 – Headings and labels)
   a. ***(P2)*** The "Tweets" title in the Twitter module is an h1. This is not an appropriate use for this h-tag. H1's are reserved to mimic the page title and reflect the purpose of the page. "Tweets" should be an h2 or h3, whatever falls into sequential order.
   b. ***(P2)*** On the Tax Services page, there are two h3's with the same name – Tax Services. The two h3's headline two different sections of the page. This makes it confusing for screen reader users who rely upon a header list to help them navigate the page. One of

the h3's needs to be changed.



3. ***Forms:*** (Reference WCAG 2.0 2.4.6 – Headings and Labels, 3.3.2 – Labels or Instructions)
    a. ***(P3)*** The Twitter has multiple instances of duplicate labeling for links identified as buttons such as Expand or Show Photo but it does not uniquely identify the button. The screen reader user will hear "expand" or "show photo" without knowing what to associate it with. (This is ranked as a P3 issue due to associated text being in close proximity and also the limitations of being able to modify the Twitter widget.)

4. ***Widgets*** (Reference WCAG 2.0 4.1.2 – Name, Role, Value)
    a. ***(P3)*** The AInspector flags the Twitter Widget stating, "Widgets must have required child roles." The recommended technique for resolving this is, "Use required ARIA owned elements to describe the features and options of a widget." (This is ranked as a P3 issue due to the severity of noncompliance and the limitations of being able to modify the Twitter widget.)

5. ***Images:*** (Reference WCAG 2.0 1.1.1 – Non-text Content)
    a. ***(P3)*** There are images being used in the Google Language Selector without any associated ALT text. These images appear to be acting as some type of spacer gif and should therefore have empty ALT text – alt="".

SEC. 7 – MANUAL CHECKS

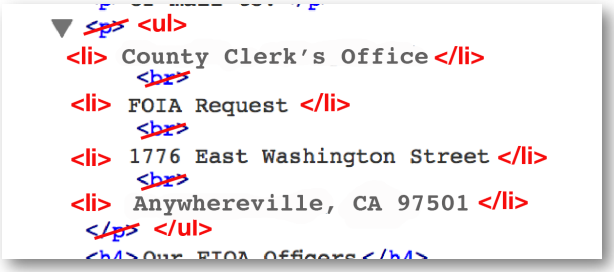
1. ***(SS)*** Several pages link to the GovEpay.com site for payment information or to submit a payment. ***This site is not accessible.***
    a. The forms are not labeled properly so AT users will not be able to associate the input fields with their purpose.
    b. The forms use layout tables instead of CSS to structure the visual page.
    c. The W3C validator flags 30 errors in the HTML code.
    d. The Illinoisepay.com site is not using a modern Document Type Declaration (DTD) nor is it making use of ARIA.
    e. The site is also not using Header markup (h-tags) for structuring the pages.

2. ***(SS)*** The Vital Record Forms (PDF) under the Vital Records section are readable with assistive technology (AT) but disabled audiences cannot fill these forms out without assistance. In order to be compliant with WCAG and the ADA these forms will need to use proper tagging and labeling. The W3C recommends the use of **Adobe LiveCycle Designer** (http://www.adobe.com/products/livecycle/tools/designer.html). (Reference WCAG 2.0 Technique PDF10: Providing labels for interactive form controls in PDF documents, PDF12: Providing name, role, value information for form fields in PDF documents)

3. ***(P1)*** There is no Skip to Content link which would enable keyboard users to go directly to the content rather than having to tab through the navigation menu system. (Reference WCAG 2.0 2.4.1 – Bypass Blocks)
4. ***(P1)*** Recommend that aria-label="Twitter Timeline" and role="complementary" be added to the DIV for the Twitter feed, (id= "twitterItem"). This will identify and allow blind users to either enter or skip over the Twitter widget. (Reference WCAG 2.0 2.4.1 – Bypass Blocks)
5. ***(P1)*** The YouTube videos on the County Board Videos page are not captioned. (Reference WCAG 2.0 1.2.2 – Captions)
6. ***(P1)*** ***Keyboard*** (Reference WCAG 2.0 2.1.1 – Keyboard)
    a. The main navigation throughout the site does not provide the same functionality for the keyboard that it does for the mouse. For users who are restricted to the keyboard, they cannot activate the drop down navigation menu. Although the top-level menu choices open "jump pages" which presumably have all the same link connections that are available from the drop menu, this is not considered an adequate solution. Drop down menu functionality should be provided through scripting that responds to the keyboard so that all users will have effective equality in their experience with the website. ***NOTE:*** Sometimes assistive technology (AT) will boost keyboard functionality so that AT users will be able to access the submenus, but not all disabled audiences will be using screen reading software so scripting a keyboard accessible dropdown menu system is still important.
    b. The "visual focus" as one tabs through the website using only the keyboard is inadequate. The "focus" pseudo state of the <a> tag is not styled. Minimally one should have the same visual experience using either the mouse or keyboard. This can be accomplished by attaching the focus and hover states together in the style sheet. Ideally it's best if the visual focus has an even greater visual contrast level for keyboard users to compensate for low vision disabilities. This will require separate styling for the focus state.
    c. When using VoiceOver (Apple) as the assistive technology, the select menus do not operate in a standard way. For instance on the Government Bodies and Elected Officials page, control + option + spacebar is the expected key combination for clicking to select an item. Instead the Enter key is required which is not normal behavior for VoiceOver. If the disabled user hits control + option + spacebar, the select menu closes and they have to start over although nothing alerts them to this fact.
7. ***(P1)*** ***The Carousel*** (Reference WCAG 2.0 2.2.2 - Pause, Stop, Hide)
Carousels are very popular but present challenges for screen reader users and other disabled audiences. Please take a look at this helpful web site for excellent information on building accessible carousels - http://www.w3.org/WAI/tutorials/carousels/
    a. Ideally users should know how many slides there are and be able to advance/return to a particular slide.
    b. The carousel text and image ALT tags are not announced for screen reader users.
    c. The carousel pauses on mouseover but not on focus. This means that the carousel will not stop for keyboard users.

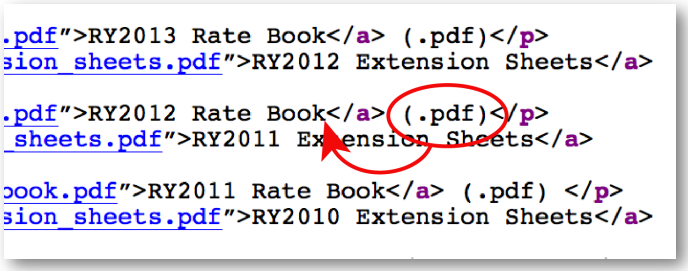
d. The rate the carousel advances is too rapid for some deaf users whose reading level is much slower because English is not considered their native language. This applies to all users for whom English is a second language (ESL).
e. The carousel should have a role="complementary" and aria-label="carousel".

8. ***Mark up techniques***
   a. ***(P2)*** Various pages on the site have empty <p> tags which are being used to force additional space between blocks of text. This type of presentational mark up should be accomplished with CSS rather than within the HTML. (Reference WCAG 2.0 1.3.1 – Info and Relationships, F43 - Using structural markup in a way that does not represent relationships in the content)
   b. ***(P2)*** Similar to item 8a above, the <HR> tag is being used to separate the footer from the page. This type of presentational mark up is announced by some screen readers and should be avoided because it adds unnecessary "noise" to the page. Visually the same effect can be accomplished with CSS. (Reference WCAG 2.0 1.3.1 – Info and Relationships)
   c. ***(P2)*** Lists should be used wherever possible to group similar information. For instance on the Government Officials page and the Freedom of Information Act (FOIA) page the contact-type information should be grouped in a list. This will also help in removing
 tags, presentational markup, which are used in several places. (Reference WCAG 2.0 1.3.1 - Info and Relationships, Technique H48: Using ol, ul and dl for lists or groups of links)



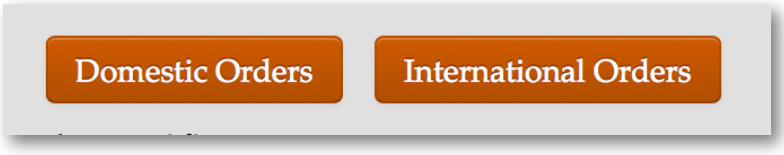
9. ***(P2)*** Color Contrast – The main page template for the site relies upon a background image to provide adequate contrast for the left hand navigation and the main navigation. While this background image is in place, the colored and black text show up reasonably well. But once the background menu bars are removed, which will be the case for low vision users in high contrast mode, the text is far below minimal contrast levels. Most contrast checkers will evaluate the text minus a style sheet. (Reference WCAG 2.0 1.4.3 – Contrast (Minimum))

10. ***(P2)*** The links to Tax Services documents on the Tax Services page do a good job indicating what type of link they are but the indicator is outside the <a>… markup. This means the type indicator will be read ***after*** the screen reader announces the link. The type indicator needs to be inside the <a> tag. (Reference WCAG 2.0 2.4.4 – Link Purpose)



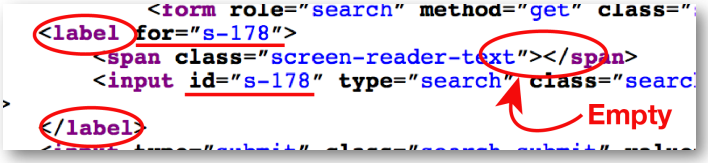
    a. In terms of readability, the text should say "(PDF)" rather than including the period.
    b. Note there are other links on this same page – e.g., "Mobile Home Registration" – that go to PDF files but do not have indicators.

11. ***(P2)*** On the same Tax Services page, multiple links are targeted to open a new window. This type of behavior "breaks the back button" because the newly opened window will no longer have a page history. This issue can be problematic for all users who may not be aware a new window has opened. If target="_blank" must be used, the link should have some type of indicator to alert users what will happen. An image/icon with appropriate ALT text works well for this type of link. (Reference WCAG 2.0 G201: Giving users advanced warning when opening a new window. Also see WCAG 2.0 H83)
12. ***(P2)*** On various pages under Vital Records some links are marked up with role= "button". This is improper use of the ARIA widget role and should be removed. The ARIA widget role is used for clickable elements that trigger a response when activated by the user. Role="button" can make any element (e.g. <p>, or) appear as a button control to a screen reader. However additional mark up is required for this such as "tab index." In this instance, "Domestic Orders" and "International Orders" are simple links and should remain as such. See https://developer.mozilla.org/en-US/docs/Web/Accessibility/ARIA/ARIA_Techniques/Using_the_button_role for additional information. (Reference WCAG 2.0 4.1.2 – Name, Role, Value)



13. ***(P3)*** The way the Videos, Agenda, Action Reports and Minutes are laid out in a table-like structure on the County Board Meetings page does not allow screen reader users the ability to associate which items go with which meeting date. A data-table would be preferable because then AT users could hear the correlation between the meeting date and its associated information. Also see the Election History page. When utilizing a data table, be sure to use <TH> for the top row and also the first column. See http://accessibility.psu.edu/tableshtml for excellent information on formatting a simple data table. The *TH and SCOPE* section is particularly useful. (Reference WCAG 2.0 1.3.1 – Info and Relationships)

14. ***(P3)*** The Marriage License Application page is using a table for Partner A and Partner B information. A table is not necessary in this instance and in fact makes this information more confusing for screen reader users. With AT it sounds like this: Partner A, Partner B, Name, Name, Address, Address and so forth. An unordered list (UL) would work much better. (Reference WCAG 2.0 1.3.1 – Info and Relationships)
15. ***Blog Page***
    a. ***(P2)*** The Search form input field has several things going on. (1) It's using both the for/ID attributes and encapsulation to associate a label with the input field, but (2) the label tag is empty – there's no text. Encapsulation wraps the label and input field together. There's no reason to use both methods. The For/ID attribute approach is the preferable method. (Reference WCAG 2.0 3.3.2 – Labels or Instructions)



    b. ***(P3)*** There are 3 H1 tags on the Blog page. Preferably there should only be one.

SEC. 8 – GENERAL USABILITY

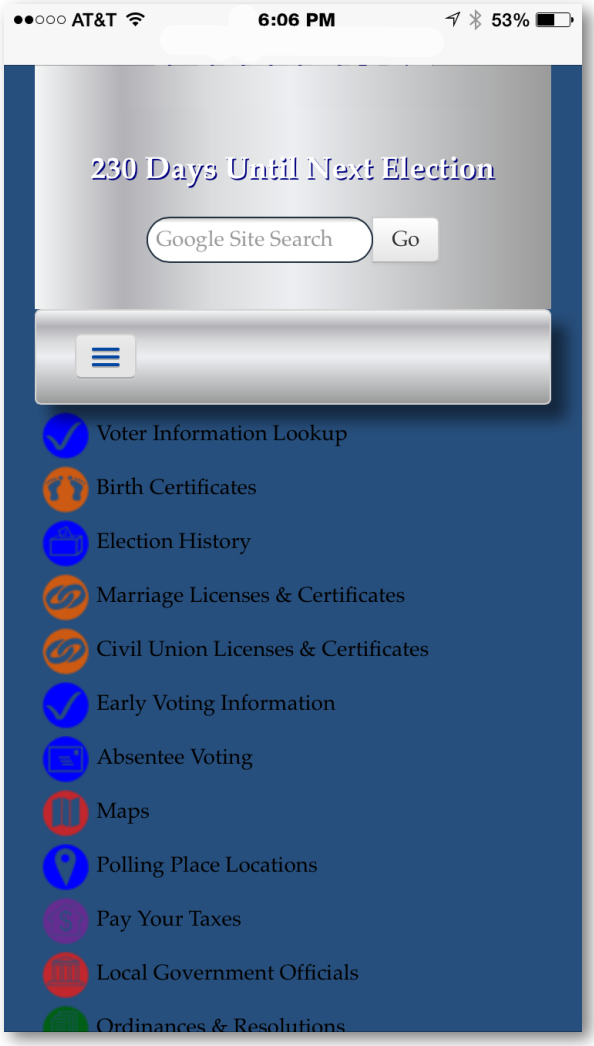
1. ***(P2)*** The site does not provide a "location indicator". It's always helpful when one goes to a subpage, that the menu system retains a visual highlight of how the user got to where they're at. This is usually accomplished by retaining the same look for the menu item as it had when it was initially focused upon.

SEC. 9 – MOBILE AND TABLET ENVIRONMENTS

This is a review of the usability and accessibility issues encountered in the mobile and tablet interfaces. This evaluation has been performed on an iPhone 6 using iOS 8.4 and an iPad 2 with iOS 8.3.

1. ***(P2)*** On touch screens, on the Government Bodies and Elected Officials page, when a select menu item is selected, screen reader users double tap to signal their choice but then the web page refreshes which requires the user to start all over at the top of the page. The user should be able to continue on from the point of selection. (Reference WCAG 2.0 2.4.3 – Focus Order)
2. ***(P2)*** Assistive Technology (AT) users cannot choose to bypass the main navigation like visual users can. For the visual user, the navigation menu is accessed when the user clicks on the hamburger icon allowing the menu to drop down. When using assistive technology (AT), the hamburger icon will not receive focus so the user it not aware it's even there nor can they expand or collapse it. However, the visibly "hidden" navigation is still being read by the AT even though it's not displayed. The AT reads off "Home", "Vital Records", etc. even though the menu system is not exposed. For the blind user this is not really an issue but being able to bypass the main navigation if they choose to do so is important. A skip link at the top of the page is the typical solution but on the home page it's not clear where the user should skip to. Recommend a brief skip-link menu at the very beginning of the page allowing the user to choose the top choices; main navigation, secondary navigation, Popular items, Twitter Feed. This type of skip link would have to be customized for different pages throughout the site. The same issue exists for tablet users in landscape view. (Reference WCAG 2.0 2.4.1 – Bypass Blocks)

3. ***(P2)*** Once the user scrolls below the initial splash screen, the left hand navigation shows up as black text on a dark blue background. This is well below minimal contrast levels. Recommend changing the text to white which is how the footer text shows up. (Reference WCAG 2.0 1.4.3 – Contrast Minimum)



SEC. 10 – MOBILE USABILITY

1. ***(P1)*** The link text is below minimal size for accurate selection. Users who suffer from "fat finger" syndrome will have difficulty trying to select links, particularly on pages with long link lists (i.e., Vital Records).
2. ***(P3)*** On the mobile screen, the banner dominates the initial screen making it impossible to determine what page the user is on until they scroll down. Screen real estate is at such a premium on the mobile screen that it is highly recommended the banner be reduced in this context so that specific page information displays upon opening.
3. ***(P3)*** The left hand navigation gets in the way when moving from page to page. It should be collapsed in a similar fashion to the main navigation or some kind of skip-link provided. Be sure to provide expand/collapse functionality for AT as well.

SEC. 11 – DISCLAIMER

This review is not exhaustive. Accessibility evaluation is iterative and needs to be conducted at various points during the development life cycle of a website. Often, when an issue is corrected, new issues will arise therefore follow up is strongly recommended. Please contact Falling Leaf Productions for follow up reviews.