

### **Keeping Accessibility In-Mind**

2020





### Assistive Technology - Example







for Customers

DHS > about IDHS > Initiatives >

### Illinois Information Technology Accessibility Act (IITAA)

The Illinois Information Technology Accessibility Act (IITAA) requires Illinois agencies and universities to ensure that their web sites, information systems, and information technologies are accessible to people with disabilities. While the <u>Americans with Disabilities Act</u> and <u>Section 504 of the Rehabilitation Act</u> already require the State to ensure accessibility, the IITAA establishes specific standards and encourages the State to address accessibility proactively.

- Public Act 095-0307
- IITAA Frequently Asked Questions

#### IITAA 2.0

The IITAA requires the State to review and update its accessibility standards to reflect advances and changes in information technology. As of July 18, 2017, the IITAA Standards Workgroup has completed and published updated standards that harmonize Illinois' requirements with the revised Federal Section 508 Standards and the World Wide Web Consortium's Web Content Accessibility Guidelines (WCAG) 2.0. In accordance with the Act, the updated IITAA Standards will apply to information technology developed, procured, or substantially modified after January 18, 2018.

- About the IITAA Standards Update
- IITAA 2.0 Standards
- IITAA 2.0 Techniques

Goals

### Your users' goals

- Your users' main goal is to be like everyone else, and that means using the web to perform their daily tasks, to gather news and information, and to provide entertainment amongst other things.
- According to W3C, there are five main types of disabilities:
  - Visual 0
  - Auditory
  - Cognitive, learning, and neurological
  - **Physical**
  - Speech
- It is now a responsibility of web site maintainers to make them accessible

WCAG

### **WCAG**

- Web Content Accessibility Guidelines (WCAG) is developed through the <u>W3C process</u> in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.
- The WCAG documents explain how to make web content more accessible to people with disabilities.

#### WCAG is primarily intended for:

- Web content developers (page authors, site designers, etc.)
- Web authoring tool developers
- Web accessibility evaluation tool developers

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### Ref: Accessibility Checklist Levels: Perceivable Guidelines

Guideline	Level A	Level AA	Level AAA
1.1 Non-Text Content	<ul> <li>Alt text or CSS backgrounds on all image elements &amp; their links</li> <li>Descriptive values on form buttons</li> <li>Text labels associated with form input fields</li> <li>Text identifiers for embedded multimedia</li> <li>Frame titles</li> </ul>		
1.2 Video, Audio & Captions Time-based Media	<ul> <li>For non-live content:</li> <li>Descriptive text for audio</li> <li>Descriptive text OR audio for video w/ no audio track</li> <li>Synchronized captions &amp; descriptive text OR audio for full video</li> </ul>	<ul> <li>For non-live content:</li> <li>Audio descriptions for all video content</li> <li>For live content:</li> <li>Synchronized captions for all audio content</li> </ul>	<ul> <li>For non-live content:</li> <li>Sign language video for all audio content</li> <li>Alternate video versions to sync audio/video timing</li> <li>Text transcript for all video content</li> <li>For live content:</li> <li>Text transcript for all audio content</li> </ul>



### Ref: Accessibility Checklist Levels: Perceivable Guidelines

Guideline	Level A	Level AA	Level AAA
1.3 Adaptable Content	<ul> <li>Information Relationships</li> <li>Semantic markup on headings and emphasized/ special text</li> <li>Table data associations, captions &amp; summaries</li> <li>Text labels associated with form input fields &amp; field grouping</li> <li>Meaningful Sequence</li> <li>Intuitive reading &amp; navigation order</li> <li>Sensory Characteristics</li> <li>Instructions do not include shape, size, or visual location &amp; do not rely on sound</li> </ul>		
1.4 Distinguishable Content	<ul> <li>Color cannot be used alone to distinguish visual elements or links</li> <li>Audio control mechanisms</li> </ul>	<ul> <li>Text &amp; image contrast ratio requirements</li> <li>Text size requirements</li> </ul>	<ul> <li>Stricter text &amp; image contrast ratio requirements</li> <li>Low background noise on speech audio</li> <li>Requirements for text blocks over 1 sentence long</li> <li>Text in images are decoration only</li> </ul>



### Ref: Accessibility Checklist Levels: Operable Guidelines

Guideline	Level A	Level AA	Level AAA
2.1 Keyboard Access	<ul> <li>As much functionality as possible is available via the keyboard &amp; is not trapped on one page element</li> <li>Shortcut/access keys are compatible with current browsers</li> </ul>		All page functionality is available via the keyboard
2.2 Timing	<ul> <li>Options to adjust timing for page/ application / scrolling/ automatically updating content</li> </ul>		<ul> <li>Content has no time limits</li> <li>Interruptions can be controlled by the user</li> <li>Maintaining authentication data over page time-outs</li> </ul>
2.3 Seizures	Page content does not flash more than 3x/sec unless exceptions		<ul> <li>Page content does not flash more than 3x/sec</li> </ul>
2.4 Navigation	<ul> <li>Requirements for skipping navigation</li> <li>Navigation is intuitive &amp; distinguishable</li> <li>Descriptive page titles</li> </ul>	<ul> <li>Multiple options for finding pages on the site</li> <li>Heading &amp; label requirements</li> <li>Visual indicator for which element has keyboard focus</li> </ul>	<ul> <li>Sequential indicators for current page location</li> <li>Link purpose distinguishable from link text</li> <li>No same link/ text combos go to different locations</li> <li>Individual content sections have headings</li> </ul>

### Ref: Accessibility Checklist Levels: Understandable Guidelines

Guideline	Level A	Level AA	Level AAA
3.1 Readable	HTML attributes used	Different language content denoted	<ul> <li>Adjacent text for complex words, language &amp; meanings</li> <li>Expansions for abbreviations</li> <li>Pronunciations for complex words</li> </ul>
3.2 Predictability	Focus on an element or interaction with a control do not result in significant page changes	<ul> <li>Navigation/ links do not change order</li> <li>Consistent identifiers for elements with the same functionality</li> </ul>	User must initiate substantial page changes
3.3 Input Assistance	<ul> <li>Form requirements &amp; errors clearly identified</li> <li>Specific cues for interactive elements</li> </ul>	<ul> <li>Provide suggestions for input errors</li> <li>Verification if user can change/ delete confidential information</li> </ul>	<ul> <li>Instructions &amp; cues to assist with form completion</li> <li>Provide whether submission is reversible, verified, or confirmed</li> </ul>

### Ref: Accessibility Checklist Levels: Robust Guidelines

Guideline	Level A	Level AA	Level AAA
4.1 Parsing	<ul> <li>Avoid significant HTML/XHTML validation/parsing errors</li> <li>Markup facilitates accessibility in forms, frames, etc</li> </ul>		



### WCAG Recommended Process



Develop understanding of accessibility and build organizational enthusiasm.

- · Learn the basics
- · Explore the current environment
- Set objectives
- · Develop business case
- Raise awareness
- Gather support



#### <u>Plan</u>

Develop clear goals and an environment that supports accessibility.

- Create accessibility policy
- Assign responsibilities
- · Determine budget and resources
- · Review environment
- Review websites
- · Establish monitoring framework
- · Engage with stakeholders



#### <u>Implement</u>

Ensure personnel are trained, tools are available, and accessibility is included throughout.

- · Build skills and expertise
- · Integrate goals into policies
- Assign tasks and support delivery
- · Evaluate early and regularly
- Prioritize issues
- Track and communicate progress



#### Sustain

Continue to review and report on content, processes, and resources.

- Monitor websites
- Engage with stakeholders
- · Track standards and legislation
- · Adapt to new technologies
- Incorporate user feedback





# Lawyers Awarded \$100K After Historic Verdict For Blind Internet Users; Winn-Dixie Appealing







### Gil v. Winn Dixie Stores, Inc – Opinion, Verdict and Order

No. 1:2016cv23020 - Document 63

•"No later than	(date)	, shall adopt and implement a Web
Accessibility Police 2.0criteria."	cy which ensure	es that its website conforms with the WCAG
<del></del> \	/	, shall make publicly available and directly link from the statement of WinnDixie's Accessibility Policy to
ensure the persons	with disabilities	s have full and equal enjoyment of its website and shall
accompany the pub	olic policy staten	ment with an accessible means of submitting
accessibility question	ons and problen	ns.

United States District Court for the Southern District of Florida			
Juan Carlos Gil, Plaintiff	)		
v.	) Civil Action No. 16-23020-Civ-Scola		
Winn-Dixie Stores, Inc., Defendant	}		



### Gil v. Winn Dixie Stores, Inc – Opinion, Verdict and Order

No. 1:2016cv23020 - Document 63

•No later than(d	ate),	shall require any third party vendors who participate
	e fully accessible	to the disabled by conforming with WCAG 2.0
criteria.		
•No later than(d	ate),	and at least once yearly thereafter, shall provide
mandatory web a	ccessibility train	ning to all employees who write or develop programs
or code for, or who	publish final conf	tent to www.winndixie.com on how to conform all web
content and service	es with WCAG 2.0	0 criteria.

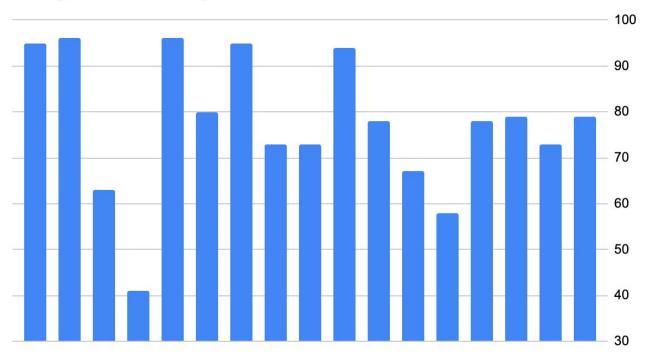
United States District Court for the Southern District of Florida			
Juan Carlos Gil, Plaintiff	)		
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### NWSRA Analysis

### Google Accessibility Score



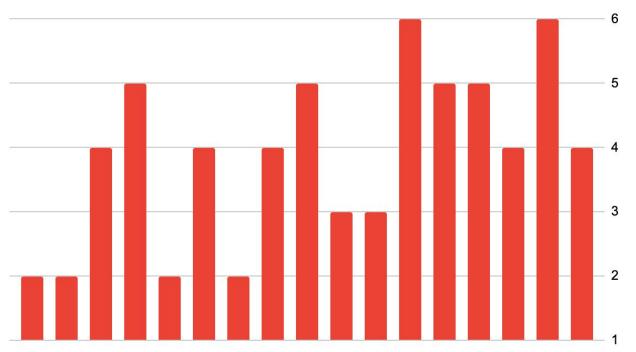


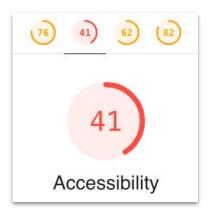




### NWSRA Analysis

### #Errors on Home Page









#### **Contrast -** These are opportunities to improve the legibility of your content.

**Contrast** — These are opportunities to improve the legibility of your content.

▲ Background and foreground colors do not have a sufficient contrast ratio.

Low-contrast text is difficult or impossible for many users to read. Learn more.

#### Failing Elements

#### Take the Community Survey Now

<a href="https://www.surveymonkey.com/r/ElkGroveCompSurvey" target="\_blank" title="Elk Grove Park District Community
Survey" class="btn-primary">Take the Community Survey Now</a>

#### Check the hours for the indoor skate park.

<a href="/audubon-skate-park/hours" title="Audubon Indoor Skate Park Hours">Check the hours for the indoor skate
park.</a>

#### Click here to sign up

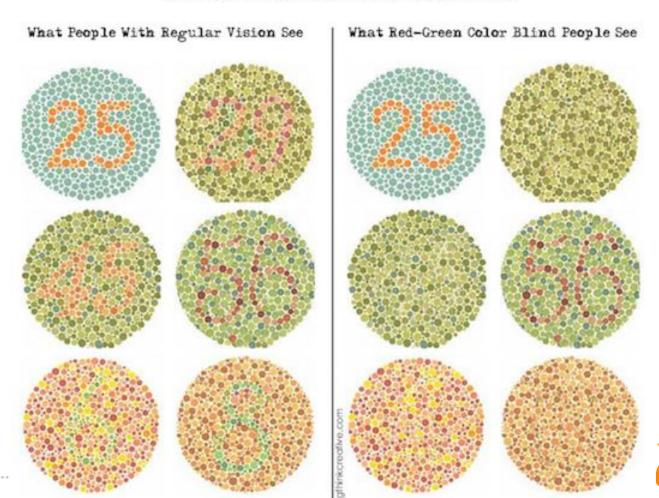
<a class="btn btn-default" href="http://visitor.r20.constantcontact.com/manage/optin?
v=001Utocbh1JAdW6bpKeSxeD0sNG3TPdVlJNowwq9o23fMwYn1n0vWXKMDt9w2QlVE5SJBc1MmMqzU7kCmWlZX0LQQ%3D%3D"
target="\_blank">Click here to sign up</a>



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#### Ishihara Test For Color Blindness

### **Color Blindness**



### **Color Blindness**



### **Color Blindness**

Red-Blind/Protanopia



### **Color Bli**

CCRI

**Poor Contrast** 

CCRI

Good contrast

CCRI

Good contrast

CCRI

Unreadable for Color Blind

#### Labels - forms

### EMAIL THE PARK DISTRICT

MESSAGE *		
		, and the second



#### Labels - forms





#### Labels - forms





#### Labels - alt text for images

#### ▲ Image elements do not have [alt] attributes

Informative elements should aim for short, descriptive alternate text. Decorative elements can be ignored with an empty alt attribute. <u>Learn more</u>.

#### Failing Elements

#### img

<img src="https://www.palatineparks.org/rccms/wp-content/uploads/2015/08/WebButtons\_17\_Online.png" class="center">

#### img

<img src="https://www.palatineparks.org/rccms/wp-content/uploads/2015/09/WebButtons\_17\_Feedback-1.png"
class="center">

#### img

<img src="https://www.palatineparks.org/rccms/wp-content/uploads/2019/02/WebButtons\_19\_MobileApp.png"
class="center">

#### img

<img src="https://www.palatineparks.org/rccms/wp-content/uploads/2015/08/WebButtons\_17\_Email.png" class="center">

#### img

<img class="aligncenter simple-border size-full wp-image-1996" src="https://www.palatineparks.org/rccms/wpcontent/uploads/2018/11/HRC-Block.png" width="225" height="115">

#### img

<img class="aligncenter simple-border size-full wp-image-1996" src="https://www.palatineparks.org/rccms/wpcontent/uploads/2018/03/Pools-Block.png" width="225" height="115">



#### alt="JacobsParkSign"



<a href="https://mortongroveparks.com/wp-content/uploads/2016/09/JacobsParkSign.jpg" title="JacobsParkSign"> <img src="https://mortongroveparks.com/wp-content/uploads/2016/09/JacobsParkSign.jpg" alt="JacobsParkSign" <span class="et\_overlay"></span>

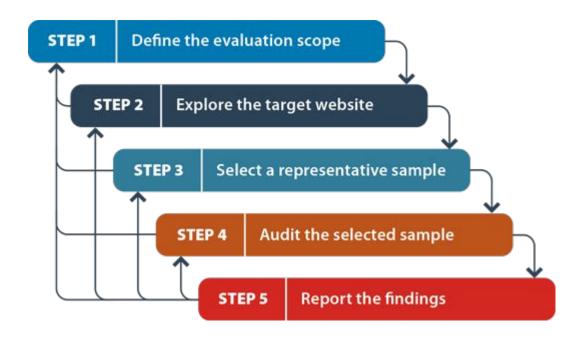
</a>



### Comprehensive Audit Workflow

- Identify scope/pages
- 2. Audit of the scope/pages
- 3. Remediate scope/pages
- 4. Verify & Repeat

# WCG Recommended Evaluation Procedure



Resource:

https://www.w3.org/TR/WCAG-EM/



### Representative Page Templates (RPT)

#### **Identify Most Common and important Content and Functionality**

- Identify essential content and functionality of the website
- Based on modern Content Management Systems architecture, those pages are built on "templates" (terms vary by CMS type) that are composed of code and content







### Representative Page Templates (RPT)

Repeated Code driven functionality - Typically the header, footer and menu items, this code is repeated on every representative page, example:

- https://voice.ons.org/news-and-views/why-arent-nurses-adhering-to-ppe-requirements
- <a href="https://voice.ons.org/news-and-views/should-a-provider-be-on-site-during-chemotherapy-administration">https://voice.ons.org/news-and-views/should-a-provider-be-on-site-during-chemotherapy-administration</a>
- <a href="https://voice.ons.org/news-and-views/evidence-supports-strategies-for-better-safe-handling-practice">https://voice.ons.org/news-and-views/evidence-supports-strategies-for-better-safe-handling-practice</a>









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- https://voice.ons.org/news-and-views/should-a-provider-be-on-site-during-chemotherapyadministration
- https://voice.ons.org/news-and-views/evidence-supports-strategies-for-better-safe-handli ng-practice

Once manually tested and all errors remediated on **one** page, all other pages inherit the fixes

Content: Different on every page and controlled by the copy editors. Generally, manual test not necessary once CSS is verified to work correctly on a representative page.

Automatic testing suffices to validate all general content accessibility guidelines





### FREE ACCESSIBILITY RESOURCES:

- AXE Chrome Plugin: <a href="https://www.deque.com/axe/axe-for-web/">https://www.deque.com/axe/axe-for-web/</a>
- Google Lighthouse: <a href="https://web.dev/measure/">https://web.dev/measure/</a>
- Siteimprove: <a href="https://siteimprove.com/en-us/accessibility/">https://siteimprove.com/en-us/accessibility/</a>
- WAVE Web Accessibility Tool: <a href="https://wave.webaim.org/">https://wave.webaim.org/</a>
- WCAG: <a href="https://www.w3.org/">https://www.w3.org/</a>

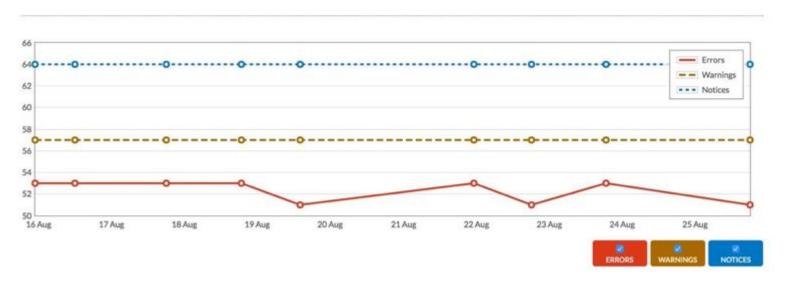
## PDF Accessibility Resource:

• <a href="https://webaim.org/techniques/acrobat/">https://webaim.org/techniques/acrobat/</a>

### Pally Dashboard Screenshots

### **Individual Page Views**







# **Pally Dashboard Screenshots**



Promet's Accessibility Solutions	Option 1: Audits Only	Option 2: Turnkey Solution
<b>Statement of Accessibility</b> posted to share with users that you've started the process	<b>⊘</b>	
<b>Automated Testing</b> with an accessibility dashboard to identify content errors	<b>⊘</b>	
<b>Manual Testing</b> to identify all violations against the WCAG 2.1 guidelines		
Code-Level Remediation of all issues		
<b>Confirmation Testing</b> // 2nd round of testing to confirm that the site is 100% compliant and all issues are resolved		
Confirmation and Documentation // Updated Statements to document level of conformance achieved	<b>⊘</b>	<b>⊘</b>

Promet's Accessibility Solutions	Option 1: Audits Only no Fixes)	Option 2: Turnkey Solution (Audit & Remediation)
<b>Small</b> number of Representative Pages (5 RPTs)	\$11,125.00	\$18,562.00
<b>Large</b> number of Representative Pages (11 RPTs)	\$19,375.00	\$33,562.50

### **AUDIT STEPS**

PA11Y SETUP





Discount 5% - Six Districts

Discount 12 % - Nine Districts





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