

Internet and Intranet Static Website Standards

Last Updated: March 17, 2016

PURPOSE: Provide standards by which all sites that reside on Florida Department of Transportation (FDOT) central and district office servers must comply. These standards are designed to establish a consistent look and feel for the Department's Internet and Intranet presence which supports the Department's core value of One FDOT.

Website Review Request: All requests for site reviews require the review templates (<u>508 Template</u> and <u>Static Website Template</u>) and must be submitted along with the <u>request review form</u>. To complete the review templates, put an "X" in the appropriate column (Yes, No, or Other) to indicate compliance with 508 regulations and website standards.

Any external persons can't access Webmaster SharePoint site or the request review form, please E-Mail to webmaster@dot.state.fl.us.

STRUCTURE: These Standards are listed with numerical references. Supporting details are included for some items that provide more details, explanations, links, tips and techniques that can be used in conjunction with the referenced standards.

DEFINITIONS

OIT: Office of Information Technology.

Application Services: Application Services is responsible for developing and maintaining enterprise applications for the Department.

STWG (Standards and Technical Work Group): A team that manages the technical aspect of various standards for web application, website and the approval or disapproval of the exception request.

Exception: An action, function or practice excluded from or not part of defined standards, accepted procedures, or specific requirements.

PIO (Public Information Office): Staff that provides communication support for the Florida Department of Transportation. The Public Information Office keeps the public informed about DOT-related issues that are paramount to maintaining a positive relationship with the residents of the state of Florida.

Plug-in: Additional software provided by other parties that extend the abilities of a web browser or application. This usually involves opening various file types or media. A plug-in allows developers to extend an application's functionality by providing additional functions or capabilities when it is installed.

URL (Uniform Resource Locator): The address used by a browser to access a web page or file.

Website Design Guidelines: The Website Design Guidelines provide guidance for the development of the Department's internet sites. This resource also includes definitions for the page elements and properties that have been included in the style sheet that may not be overwritten or modified.

STANDARDS

1. Approved Software

- 1.1. The following products are approved, and shall be used, for website development, as defined in the Adopted Information Technology Standards.
 - 1.1.1. SharePoint Designer 2007
 - 1.1.2. Visual Studio
 - 1.1.3. Expressions Web

Section 1

Identification of a standard set of languages, tools and technologies for use by OIT programmers allows staff to maintain multiple applications. The decision to adopt new approved software is made by OIT, so that we can ensure all tools fit within the enterprise and can be supported over the long term.

2. Accessibility

- 2.1. All websites must meet the state standards for accessibility established in Florida Administrative Code Rule Chapter 60-8, Section 508 Template.
 - 2.1.1. All files, including Portable Document Format (PDF) and Microsoft Word documents, must be compliant with 508 regulations.
- 2.2. For websites that require additional software for the site to function, a link to the following web page must be provided: Plug-Ins. This link is already included in the footer of all FDOT internet sites using the Department's template. Requests to add a new plug-in to the summary page should be directed to Web Master.
- 2.3. All websites must be compatible with the version of Internet Explorer currently used in FDOT's standard desktop configuration, along with the latest release of Internet Explorer, Chrome, and Firefox.

SUPPORTING DETAILS

Section 2.1

Florida Administrative Code Rule Chapter 60-8 requires all State Agencies be compliant with accessibility standards based on Section 508 of the Rehabilitation Act of 1973.

Section 2.1.1

The PDF files and documents must be 508 compliant. For tips, see the following links below. Accessible PDFs with Adobe acrobat Professional, Meet PDF Accessibility Standards

Section 2.2

It is also a requirement of Florida Administrative Code Rule Chapter 60-8.002 (b) 13 that when a "web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with rule sub-subparagraphs 60EE-1.002(1)(b)1.-12, F.A.C."

Section 2.3

Chrome, Firefox and Internet Explorer are the most commonly used browsers. For this reason, Internet applications must be compatible with all three. Internet Explorer is the department's standard web browser, so Internet applications written to the version of Internet Explorer currently used by FDOT will work correctly for Intranet users.

3. Fonts and Colors

3.1. Intranet Websites:

- 3.1.1. Intranet or District websites must use one of the approved color palettes.
- 3.1.2. Allowed font colors, body backgrounds, hyperlinks and text logos are defined on the standard application color palette.
- 3.1.3. The font face must be selected from the true type font family of "Arial, Helvetica, San Serif" in the listed order. When monospace fonts are needed for alignment purposes, then the font family of "Courier New, Courier, Monospace" must be used.
- 3.1.4. Font size must fall within the ranges of Size 1 (8 point) and Size 5 (18 point).
- 3.1.5. Text or graphic-based text must not blink.

Section 3.1.1

Using the standard Fonts and Colors ensures that all applications share a consistent or common look and feel. A color palette sampler application is available at http://www.dot.state.fl.us/OIS/docs/standards/colorpalette-10252013.htm.

Section 3.1.3

Font Family defines the fonts that the text should be displayed in. If for some reason the Arial font is not available on the user's PC, the next available font in the family will be used to display the text. Using a set Font Family provides consistency across each file of the application. The Arial, Helvetica, san serif fonts are most commonly found on people's computers, and are easy to read both in the browser and in print.

The Courier New, Courier, Monospace fonts may be used when alignment of text is needed. A monospace font displays like a typewriter font meaning that all characters use the same width.

Section 3.1.4

Limiting the font size range provides consistency across the various applications. Fonts that are smaller than the listed limit can be hard to read to users with your most basic vision problems. Fonts larger than the listed limit take up more room than needed to convey the message. The fonts should be used consistently throughout your application. (i.e., the contact information found in the footer of each page should use the same font size(s).) Remember to keep it consistent.

Section 3.1.5

Not all browsers support the html <bli>k> tag. Techniques from "WAI Guidelines: Page Authoring" provided by the W3C provide the following information:

Avoid blinking: <u>Technique A.7.3</u> Authors should avoid creating motion and blinking in a page where possible; blinking may cause seizures in some users and is annoying to many other users. They should also provide a mechanism for freezing motion. If style sheets are used to create an effect (e.g., 'text-decoration: blink'), users may cancel the effect through style sheets as well.

Reference: WAI Guidelines: Page Authoring http://www.w3.org/WAI/GL/wai-gl-techniques-19980918#style

4. Hyperlinks

- 4.1. The destination of every hyperlink must be identified with descriptive text.
- 4.2. Text hyperlinks must not extend beyond the element to which it is related.
- 4.3. All hyperlinks must use the default appearance. Mouse hover over are methods that could possibly change the appearance of hyperlinks. For instance, change the link to show bold fonts, bigger fonts size, highlighted and underline the hyperlink when mouse hover over.
- 4.4. Hyperlinks that open a new browser instance must use an ALT or Title attribute to indicate the link will open new browser window. A description of the link must precede the phrase, "Opens in new window".

4.5. Internet Website:

- 4.5.1. Hyperlinks that navigate within the www.dot.state.fl.us website must not open a new browser instance.
- 4.5.2. Hyperlinks must not link to internal URLs such as INFONET, SharePoint Sites or internal web applications. These links will appear broken to our external customers.
- 4.6. Hyperlinks to downloadable files must include a text description that includes the file size and file type, for example Sample File (PDF, 45.6 KB). If the resulting file size varies because the file is created on request, then it must be stated if the file size is unknown.

Section 4.1

Good Example: More information on special events.

Bad Example: Click here for special events.

Section 4.2

Good Example: DOT Website
Bad Example: DOT Website

Section 4.4

Although modern screen readers and some web browsers alert users when a link opens a new browser window, old screen readers and some browsers do not. Users with cognitive disabilities may not be able to interpret what happened when a new browser window is spawned.

Reference:

UIAccess.com – Resources for Accessibility http://www.uiaccess.com/spawned.html#wcag Web Content Accessibility Guidelines 1.0 http://www.w3.org/TR/WCAG/

Section 4.5.1

Opening website external links in new window — published usability tests http://ux.stackexchange.com/questions/19892/opening-website-external-links-in-new-window-published-usability-tests/

Section 4.6

Text descriptions provide information to the customer to ensure they have the proper software to view the file, and that they know when they may be attempting to download a file that is too large for their connection speed.

Example: Please review Sample File (PDF, 45.6 KB).

5. File Size and Page Width

- 5.1. All Web pages must be viewable with no horizontal scrolling on a screen width of 1280 pixels.
- 5.2. Total web page size (all source code and graphics) as received by the browser, must not exceed 750 kilobytes excluding the following:
 - 5.2.1. Cascading Style Sheets
 - 5.2.2. JS File implemented as Include Files

SUPPORTING DETAILS

Section 5

Horizontal scrolling is undesirable. The screen width of 1280 pixels was chosen because it is the most common screen width used within FDOT. Pages sized to meet this screen width will not have problems meeting this standard at higher screen resolutions/widths. Screen sizing should be considered to match the target audience. For example, if the target audience will be connecting with a mobile device, using relative page sizing may be the optimal design.

The intent of this standard is to ensure that each user has a reliable experience in the load time of the web page. By keeping the requested content size within 750 kilobytes, we can provide a reasonable load time even if the user does not have broadband connectivity. Performance is one of the areas that OIT has identified as important for continued customer service and support in our OIS Business Plan.

Cascading Style Sheets and .JS Files are excluded because they are cached by the browser and are usually considered a necessary contribution to the page size.

6. Printing

- 6.1. Pages must be printable using the browser's print function.
- 6.2. Customized printing ("printer friendly" pages) must not interfere with the browser's print function.

7. Copyright and Attribution

- 7.1. Text, diagrams, photographs, audio, multimedia, program source code, script or graphics from another author's web pages, must not be used, unless the author explicitly states it may be freely copied or you make appropriate arrangements with the author.
- 7.2. Content that is copied or paraphrased information (obtained with permission), must make an attribution to the author/organization and web page.
 - 7.2.1. The following statement must be used when making attribution: "This information is reproduced with permission from [Author/Organization Name, Web Address]. By including this material, the FDOT does not endorse [Author/Organization Name, Web Address]."
 - 7.2.2. The above example must be modified to accommodate any author or organization who asks that specific language be used for the attribution.
- 7.3. Prior permission must be obtained from the appropriate office when linking a document or graphic from an FDOT site.
- 7.4. Logos may only be used if they are registered with the U. S. Patent and Trademark Office and directly relate to the official business of the Florida Department of Transportation. Prior permission for the logo's use must also be obtained in writing from the registered owner.
- 7.5. Internet/Intranet website: Copyrighted materials are prohibited.

SUPPORTING DETAILS

Section 7

Copyright is the legal right granted to the owner of the copyright to distribute, make derivative works, or show in public the product of their work. The "work" includes software which is considered to be copyrighted in most countries by default even if it does not contain the copyright symbol identification.

Because the technology of websites allows direct links to a particular web page URL, it is important to pay attention to the page being linked to in order to ensure that credit is given to information shown by external authors. The credit for the work may have been given on the initial "home page", but when we directly link, we miss seeing the credit.

The programming work that we do for FDOT is considered the ownership of FDOT.

Section 7.3 - 7.4

Most documents and images that are published online are protected by law and cannot be reproduced. For additional information on these protections, please visit the U.S. Copyright Office at http://www.copyright.gov/.

8. Coding Methods and Techniques

- 8.1. Browser features and functions must not be disabled.
- 8.2. Server settings must not be overridden (e.g. by using Server.ScriptTimeout, etc.)
- 8.3. URLs must not include spaces.
- 8.4. URLs that are displayed in the browser must not use the underscore "."
- 8.5. URLs and email addresses must be fully qualified.
 - 8.5.1. Good example: http://www.dot.state.fl.us, http://infonet.dot.state.fl.us
 - 8.5.2. Bad example: www.transportation, http://infonet
- 8.6. All web pages must have a link to the website's homepage.

Section 8.3

Some browsers interpret spaces in file names as "%20". Cutting and pasting of URLs with a file name that includes spaces can results in problems for application users.

Section 8.4

Underscores can easily get lost within a hyperlink. The hyperlink hides that fact that there is an underscore separating two parts of the URL. When people try to retype the URL they can mistakenly put in a space instead of the underscore.

If you must visually separate a two-word file or directory name, use a dash (hyphen) rather than an underscore.

Section 8.5

This standard ensures that links are usable by all users, including district, handheld and VPN users.

- 9. Website Design Templates or Formatting for FDOT Internet (Excludes Intranet websites).
 - 9.1. Websites must be developed in accordance with the FDOT Website Design Guidelines.

9.2. Website Content:

- 9.2.1. The Central Office's Public Information Office is responsible for content review and compliance with Website Design Guidelines.
- 9.2.2. Website content must be written using plain language.
- 9.2.3. Information that is proprietary, confidential or may pose a security risk for the Department must not be included on a Department site. Examples include department user IDs, security system plans, bridge structure data or information that has been defined as a trade secret. Additional details are available via the following: FDOT Procedure 050-020-026-f, Distribution of Exempt Documents Concerning Department Structures and Confidential and Exempt Security System Plans and OIT Manual.
- 9.3. When pages or directories are renamed or deleted do not use automatic redirects. Instead, use a "change of address" page that notifies the user in plain text that the page has been relocated.
- 9.4. An applied style sheet must not be overridden.

10. Intranet Websites:

10.1. **Header:**

- 10.1.1. Each page must include a page header.
- 10.1.2. The header must include but is not limited to the following:
 - 10.1.2.1. Office/District website title.
 - 10.1.2.2. If FDOT Logo is used, it must be located in the top left corner of the header. The FDOT Logo is not required.

10.2. Footer:

- 10.2.1. Each page must include a page footer.
- 10.2.2. The footer must include but is not limited to the following:
 - 10.2.2.1. Contact Information must include contact description, name/title, email address, and phone number.
- 10.2.3. The footer must include a link to the Department's Web Policies and Notices located at http://www.dot.state.fl.us/agencyresources/webpoliciesandnotices.shtm.
 - 10.2.3.1. The text for this link must be titled "Web Policies and Notices".

Section 10

The use of Headers and Footers provides the user with a consistent experience for all developed websites. The users learn that certain information can always be found in the Header and Footer.

It is acceptable for the Application title (Section 10.1.2.1) to be displayed as text or graphic.

11. Requesting an Exception to the Standards

All exceptions to these standards must be requested through the Standards and Technical Work Group (STWG), with final approval by the Application Services Manager. Please see the <u>OIT Methods and Practices</u> to reference the STWG Exception Request Process for detailed information regarding exception requests.

SUPPORTING DETAILS

Section 11

The Application Development arena is constantly changing. The Application Web Standards must also change to meet the needs of our growing Application Development community. The process for requesting exceptions is the method by which the Application Services group is made aware of the possible need for changes (temporarily – as an exception, or permanently – as a standards change). Exception requests should be processed as soon as they are recognized in the Project. Project Teams requesting changes/exceptions are required to provide the listed documentation to assist in the research and understanding of their particular situation.