

**STATE OF VERMONT**  
**Agency of Administration**

<b>STANDARD</b>  <b>STC</b>  <b>State Technology Collaborative</b>	<b>ORIGINAL POLICY ADOPTED BY STC</b>  <b>DATE:</b>	<b>ORIGINAL POLICY NUMBER</b>
	<b>EFFECTIVE DATE</b>	<b>ASSOCIATED DOCUMENTS</b>  Standards for Usability on State of Vermont Web Sites

STATUTORY REFERENCE

OR OTHER AUTHORITY: Policy for Web Look and Feel Requirements

APPROVAL DATE:

APPROVED BY: **Secretary of Administration**

POLICY TITLE: **Usability Standard**

POLICY STATEMENT:

## ***Usability Standard***

### **1. Browser Compliance**

All State of Vermont Web sites will be developed using technology that is compatible with all popular, modern Web browsers. No site will be created using proprietary features available to the visitor only when using a certain brand of Web browser.

- 1.1. Any browser that is ranked as more than 10% of the Web traffic from each represented operating system must be supported. Browsers running under the current versions of the Microsoft, Apple, and Linux operating systems must be supported.
- 1.2. Popularity of browsers must be tracked via Web server logs, or some other utility, to identify browser and platform trends.
- 1.3. New Web designs must be tested for multiple browsers, operating systems, and versions (including backward compatibility) based on intended audience.
- 1.4. If a page will be rendered inoperable on an older browser the page must contain a notice to that effect that is viewable in non-compliant browsers.

### **2. Storage and Processing on Visitors Computer**

All State of Vermont Web sites will be developed in such a way as to minimize impact on the visitor's machine. This includes choosing options other than client side processing for all Web-based applications unless there is a compelling business justification for such a strategy. This also includes any use of the visitor's machine to house temporary files of any kind or excessively large instances of persistent client-side data.

- 2.1. Visitors must be alerted to workstation requirements, if any, for all dynamic Web pages.
- 2.2. Web sites and Web-based applications must be designed to use plug-ins that require minimal workstation requirements.
- 2.3. When the option exists, state Web sites must use plug-ins that are free to the visitor.
- 2.4. Any page requiring a plug-in must clearly demonstrate how and where to obtain and install it.
- 2.5. In development, all state Web pages must be tested for compatibility with various workstation configurations, especially when the Java runtime environment is required.

### 3. Image Optimization

All state of Vermont Web sites will use digital images sparingly, and only when they provide useful information. All images must provide added information to the accompanying text. It is the purpose of state Web sites to deliver information and services to the broadest user base possible. This means making design choices that favor older computers and dial-up connections over more, image-heavy, graphic design.

When informational images are used, they will be displayed as "thumbnails," small representations of the larger image. Thumbnail images should not be simply rescaled versions of the larger file but a cropped version of the image focusing on relevant details and simple elements. Thumbnails or text linking to large images will include an indication of the size of the linked file as part of the link. More effective thumbnails are created by selecting photos that include fewer people and objects, in less complicated settings and by selecting photos that include close-ups and clean backgrounds

- 3.1. Any page that requires a "photo gallery," or large collection of digital images will be described as such in any links to that page. An indication of the size of the page must be included in any such links.
- 3.2. All online images must be optimized for download speed and quality.
- 3.3. Images should not contain compression artifacts (visible distortions) when compressed to yield smaller file sizes.
- 3.4. All photos for online use must be presented as JPG images.
  - 3.4.1. The only exception to this would be using the Internet to distribute print quality images in which case file type is dependant on need.
  - 3.4.2. In this case a thumbnail must be presented and the size of the download must be shown.
- 3.5. GIF files must be used for all other images (non-photos) presented on state Web pages.
  - 3.5.1. PNG files may be substituted for GIF files if all browsers as defined in section 1.1 support them.
- 3.6. Images must be presented using the size attributes in the <img> tag to improve page loading.
- 3.7. JPG and GIF images must be displayed at the correct monitor resolution, 120 ppi
- 3.8. GIS data is not covered by this standard. GIS will have its own standard.

#### 4. Review and Maintenance

All State of Vermont Web pages will be included in a review schedule created by the owner of the content. Every page on a state site that is likely to change will be part of a schedule showing, when, and how often it will be reviewed. From this information a schedule will be created that meets the specific needs of each site.

- 4.1. A review schedule will consist of appropriate categories for each site. Each page will then be classified as belonging to a particular category.
- 4.2. Typical categories might include monthly review, annual review, review when management changes, review when legislation changes, review when fiscal year changes, etc.
- 4.3. A site may have only one category, such as, "review every page every six months." Also one page might have several categories, such as, "review annually" and "review when legislation changes."
- 4.4. The site must also be monitored regularly to locate and fix broken links.
- 4.5. All Web pages must provide a convenient means for visitors to report any problems found on the page/site.
- 4.6. External sites that link to a site/page that is renamed or removed should be notified. External sites that link to a site/page can be identified through a number of tools including Alta Vista's Webmaster Search.  
<http://www.altavista.com/web/webmaster>

#### 5. Navigation Design

A Web visitor must be able to navigate a Web site without being required to understand the structure of the agency or department.

- 5.1. All state Web sites will be designed with user-centric navigation. Material must be organized by how a user would expect to find it not how the state classifies it.
- 5.2. Web sites must present consistent navigational choices throughout the site to help visitors understand and learn its structure.
- 5.3. Sites must provide the visitors with clear and simple navigation paths
- 5.4. Sites must use multiple navigation paths (e.g. search, index, menus, etc.)
- 5.5. A combination of task-based and role-based navigation systems is highly recommended and should be the default style.
  - Task-based (e.g. "Start a business" or "Find a job.")

- Role-based: (e.g. "For Citizens" or "For Business.")
- 5.6. Sites must provide unambiguous visual cues to help visitors determine where they are on the site. (e.g. breadcrumbs or highlighting nav elements)
  - 5.7. Sites must provide a topical index or site map
  - 5.8. Sites must use the page title tag to provide a concise, meaningful description of content for each page.
  - 5.9. RSS feeds may be used as a secondary means of providing content to the user.
  - 5.10. Any link to a site outside of state government must launch a new browser window to indicate to the user that they are no longer on a state site.
  - 5.11. Users will not be required to have pop-ups enabled to effectively use state Web sites.
    - 5.11.1. If a situation arises where pop-ups are essential (purchased software that uses pop-ups, etc) then a notice will be provided on the Web site providing information on how to allow pop-ups.
    - 5.11.2. If pop-ups are used as per 5.9.1 an alternate method of acquiring the information or performing the transaction must be provided.

## 6. Writing for the Web

Web content must adhere to proper grammar and punctuation rules. Content should be kept simple and brief. All State of Vermont Web sites will follow accepted best practices for Web content.

- 6.1. Use the language, keywords, and terminology of the primary audience and not insider/technical vocabulary.
- 6.2. Organize text into meaningful headings followed by short sentences or supporting statements. Headings should include action verbs and descriptive adjectives.
- 6.3. Put your conclusion or main point first and provide background and details last or through a link.
- 6.4. Make text scannable by breaking it into short sections using the fewest words possible to convey the information.
- 6.5. Provide links to other pages or Web sites offering related information and resources.
- 6.6. Create space on the page using headings, short paragraphs, bulleted lists, and visuals that complement the text

6.7. Do not use exaggerated, subjective or unsubstantiated claims.

## 7. Downloadable Files

When files are provided electronically over the Internet the format of the files must be convenient to the browsers identified in 1.1 and the user must be provided with enough information to use the files effectively.

- 7.1. The standard format for all electronic files provided via state Web sites will be the Portable Document Format (PDF).
- 7.2. Microsoft Office files will not be posted electronically unless there is no other format that provides the same functionality. Forms intended to be filled out and returned electronically may be posted as a Word file if all other options, including online forms, have been exhausted. Calculators may be distributed as Excel files if there is a strong reason that they cannot be created in HTML.
- 7.3. Other file types such as presentations and multimedia will be provided in a format that best serves the intended audience.
- 7.4. Large files will be distributed in standard extractable format. Self-extracting files will not be used.
- 7.5. No file with an EXE extension will be provided for download. If there is a need to distribute such a file it should be done only by written request.
- 7.6. Information of file format and file size will be provided in links to all files provided for download.
- 7.7. Any Web page that presents a file for download will provide a link to a page, for each file type presented, where users may download a free viewer. Instructions for downloading / installing the viewer will also be provided. This applies to all file types including Microsoft Office files.

For further information on usability issues visit <http://usability.gov/>