

NYS Technology Policy P04-002 &
Mandatory Technology Standard S04-001

Accessibility of State Agency Web-based
Intranet and Internet Information
and Applications

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Accessibility Committee

Potential Impact

Disabled Seniors

Percentage of people over 65 with a disability in select cities, 2004

St. Louis	57.5	Columbus	39.8
Philadelphia	53.1	Chicago	39.5
Detroit	50.1	New York City	39.4
Oklahoma City	49.6	Raleigh	39.0
San Antonio	45.8	Washington, D.C.	37.9
Seattle	43.9	San Diego	37.5
Indianapolis	42.7	Dallas	36.3
Los Angeles	41.7	Phoenix	35.2
San Francisco	41.5	Tampa	33.2
Houston	40.7	Las Vegas	30.9

Source: U.S. Census Bureau

Potential Impact

- 3.6 million New Yorkers self-identified as disabled
- 2.2 million of those in the 21-64 age group (of working age)
- 54.1% employed (i.e., 45.9% NOT employed)

Source: 2000 U. S. Census

History

- Technology Policy 99-3: Universal Accessibility for NYS Web Sites
- Relied on the W3C's WAI Web Content Accessibility Guidelines (WCAG) Priority 1
- Few resources dedicated to supporting web developers in creating accessible sites
- W3C reportedly working on successor guidelines in completely different format
- NYS Policy tied to whatever the WCAG was

Current Policy & Standards

- Developed by IT Accessibility Steering Committee, interagency volunteer group advising OFT
- Hybrid of W3C and federal Section 508
- OFT worked with NYS Forum IT Accessibility Committee to implement
- IT Accessibility Committee developed resource site & complete curriculum
(<http://www.nysforum.org/accessibility/resources>)

Current Policy and Standards

- NYS Forum IT Accessibility Committee formed in November, 2003
- IT Accessibility Committee worked with OFT on implementation; new policy announced in May, 2004
- IT Accessibility Committee developed resource site & complete curriculum
(<http://www.nysforum.org/accessibility/resources>)

Technology Policy P04-002

- Effective 6/21/04
- Four parts:
 - Part 1 – State Agency Content Accessibility for Persons with Disabilities
 - Part 2 – Notice and Contact Information
 - Part 3 – Procurement of Content Design, Development and Maintenance
 - Compliance

Policy: Part 1

- Development and Posting of New Content – any content developed after 6/21/04 must comply
- Review of Existing Content – establishes method for identifying most critical content
- Compliance Schedule – establishes staggered time frame to bring content into compliance
- Some (low traffic) content only as modified

Policy: Part 2

- Requires agencies to post contact information (e-mail and telephone) for persons with disabilities having trouble accessing site
- Must be posted in the footer of the home page and distinguishable from any other link

Policy: Part 3

- Covers procurement of outside web development services
- Provides specific language to be included in all solicitation and procurement documents
- Notes exception for content outside the agency's control (e.g., links off agency site)

Compliance

- Compliance: each agency or designee/ contractor MUST “...prior to posting any content validate the content’s accessibility for persons with disabilities against NYS Mandatory Technology Standard S04-001...”
- Each agency must annually validate content and develop correction plan

Compliance (cont'd)

- Exemptions:
 - “Fundamental alteration of service”
 - “Undue financial and administrative burden”
 - As determined by State agency
- Must document determinations of exemption and keep on file for potential OFT review

Technology Standard S04-001

- Mandatory – 14 individual Standards
- Must ensure that “...all web-based intranet and internet information and applications...made available by state agencies to the general public, state employees and any other persons are accessible to persons with disabilities”
- Scope: All content including web-based applications, plug-ins, applets, online documents, forms and multimedia

Level-Setting

- HTML commands consist of “elements” and “attributes”
- For example: `<p>` is the paragraph element.
- In the statement `<p class=“centered“>`, the normal flow of the paragraph is modified by the class attribute, which refers to a class defined in the style sheet.

Standard 1: Text Equivalents for Non-Text Content

- 1.1 – Text equivalent for all non-text element(s), including:
 - Images
 - Graphical representations of text
 - Image map regions
 - Animations
 - Applets & Programmatic elements
 - Frames
 - Scripts
 - Images used as list bullets, spacers, graphical buttons, sounds, stand-alone audio files, audio tracks on video and video

Standard 1 (cont'd)

- 1.2 – Concurrent update for text equivalent of dynamic content
- 1.3 – Pages must be usable when scripts, applets or other programmatic elements turned off/un-supported
- 1.4 – Text equivalent via alt or longdesc attributes
- 1.5 – alt attribute will convey same information as intended by the image

Standard 1 (cont'd)

- 1.6 – Graphics used strictly for decoration will have alt attribute filled with one space *
- 1.7 – alt attribute value will not exceed 150 characters
- 1.8 – If > 150 characters needed to explain image, use longdesc attribute and descriptive link (e.g. “link to text description”)

Standard 2: Use of Color for the Conveyance of Information

- 2.1 – Information must be conveyed in a manner not solely dependent on color
- 2.2 – Foreground and background color must provide sufficient contrast – (i.e., avoid this)

Standard 3 – Document Structure

- 3.1 – Web pages will be created using the most current web document specifications (e.g., HTML, XHTML, XML)
- 3.2 – All web pages will include a valid document type declaration (DTD)
- 3.3 – Deprecated elements/attributes not allowed

Standard 3 (cont'd)

- 3.4 – Web pages will be created using style sheets to achieve formatting and stylistic effects. When using style sheets, pages must convey all content in an accessible manner if style sheet is disabled
- 3.5 – Use of non-English language will be noted using the lang attribute

Standard 4: Navigation and Links

- 4.1 – Enable users to skip repetitive navigation links
- 4.2 – Text links will indicate destination or purpose (i.e., avoid “click here” links)
- 4.3 – All pages will include link to home page
- 4.4 – Pages will be designed to be device-independent

Standard 5: Flicker/Blink

- 5.1 – Screen elements will not flicker between 2 to 55 flashes per second
- 5.2 – If using flickering elements, must allow users to turn off
- 5.3 – Use of blink element prohibited

Standard 6: Timed Responses

- 6.1 – When programmed timed response used, must include notice identifying time limits and providing option to remove or extend
- 6.2 – Client-side auto-refresh or client-side auto-redirect will not be used without a mechanism in place to first alert the user

Standard 7: Tables

- 7.1 – All tables require summary attribute
- 7.2 – Tables used for formatting will say so in summary attribute (e.g., `summary="for layout only"`)
- 7.3 – Tabular data will use scope attribute to ID both horizontal and vertical headings:
 - `<th scope="col">`
 - `<th scope="row">`

Standard 7: Tables

- 7.4 – Row and column headers will be identified for data tables (i.e., tables not used solely for layout)
 - Use id attribute with th
 - Use headers attribute with cells

Standard 7 - Tables

```
<table summary="Salaries by grade and length of service in grade, 2003-2004">
<caption>Salary Schedule, 2003-2004</caption>
  <tr>
    <th scope="col" id="c1">Salary Grade</th>
    <th scope="col" id="c2">Year 1</th>
    <th scope="col" id="c3">Year 2</th>
    <th scope="col" id="c4">Year 3</th>
    <th scope="col" id="c5">Year 4</th>
    <th scope="col" id="c6">Year 5</th>
  </tr>
  <tr>
    <th scope="row" id="r1" headers="c1">SG01</th>
    <td headers="r1 c2">$15,000</td>
    <td headers="r1 c3">$20,000</td>
    <td headers="r1 c4">$25,000</td>
    <td headers="r1 c5">$30,000</td>
  </tr>
  <tr>
    <th scope="row" id="r2" headers="c1">SG02</th>
    <td headers="r2 c2">$17,500</td>
    <td headers="r2 c3">$22,500</td>
    <td headers="r2 c4">$27,500</td>
    <td headers="r2 c5">$32,500</td>
  </tr>
  <tr>
    <th scope="row" id="r3" headers="c1">SG03</th>
    <td headers="r3 c2">$17,500</td>
    <td headers="r3 c3">$22,500</td>
    <td headers="r3 c4">$27,500</td>
    <td headers="r3 c5">$32,500</td>
  </tr>
</table>
```

Standard 8: Frames, Context and Orientation

- 8.1 – If using frames, must provide noframes alternative
- 8.2 – If frames are used
 - 8.2.1 – Each frame must include descriptive title attribute that describes purpose of frame and relationship to other frames
 - 8.2.2 – If title > 150 characters, use longdesc attribute

Standard 9: Image Mapping

- 9.1 – Image mapping will be client-side
- 9.2 – Redundant text links will be provided for each active region of client-side image map

Standard 10: Audio Only

- 10.1 – Information will not be conveyed by single audio alone (e.g., instructions, warnings, other information, etc.)

Standard 11: Multimedia

- 11.1 – Audio – Must provide synchronized text captions for multimedia containing speech or other audio necessary to understand content (implementation schedule provided; 50% must be captioned by 1/1/2009)
- 11.2 – Video/Visual – Must provide video description for multimedia containing video content or other visual information (implementation schedule provided; 50% must be described by 1/1/2009)

Standard 11 (cont'd)

- 11.3 – Web Cast – Must have synchronized captioning of speech or other audio content (implementation schedule provided; 50% must be captioned by 1/1/2009)

Standard 12: Scripting

- 12.1 – If pages use scripting to display content or create interface elements, information provided by scripts will be identified with functional text that can be read by AT devices
- 12.2 – Event handlers used in any script will be device independent (e.g., “onFocus” v. “onClick”)
- 12.3 – Use of onDBLClick not allowed

Standard 12 (cont'd)

- 12.4 – Must provide notice to alert user before opening an additional browser session, pop-up window or redirect that disables user's browser's back button
- 12.5 – Documents with client-side scripting will provide equivalent content or functionality via noscript element

Standard 13: Forms

- 13.1 – Online forms must allow people to use AT devices to access all information and functionality
- 13.2 – Label element will be used for all form controls without implicit labels
- 13.3 – Form elements will be in logical tab order

Standard 14: Downloadable/ Embedded Objects

- 14.1 – When downloadable documents (e.g., word processing documents, spreadsheets, Portable Document Format [PDF] files, java applets) are used, a link to an accessible HTML or text version will be made available
- 14.2 – When hardware, software, and AT devices are controlled by a state agency, downloadable documents (e.g., word processing documents, spreadsheets, Portable Document Format [PDF] files) available through an intranet or extranet will be allowed.

Resources

- NYS FORUM – IT Accessibility Committee’s Resource web site (including policy/standard explanations and code samples):
(<http://www.nysforum.org/accessibility/resources>)
- WebAIM – (<http://webaim.org>)
- W3C – (<http://www.w3.org>)
- WASP – (<http://wasp.org>)