



A. OVERVIEW FOR ELECTRONIC & INFORMATION TECHNOLOGY – WEB SITE ACCESSIBILITY

There are several statutes that require public entities and local municipalities to provide accessible electronic and information technology, telecommunications, and assistive technology. The ADA requires public entities not to discriminate against persons with disabilities and to provide access to their programs and services, which includes communication of information in alternative methods, upon request. The City also has an obligation under section 504 of the Rehabilitation Act to accommodate the needs of persons with disabilities and provide effective communication.

There is no specific set of standards which a Charter City is required to follow in achieving accessibility in its web-based programs. However, there are several sets of standards that can serve as a guide for the City in determining how best to meet the requirements of the law:

1. The Federal Government has established standards under Section 508 of the Rehabilitation Act (“Section 508”), applicable to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. These standards are codified at 36 CFR Part 1194 and may be accessed through the U.S. Access Board’s web site at <http://www.access-board.gov/>, or at <http://www.section508.gov/>. The State of California, under California Government Code 11135(d)(2), has also adopted the Section 508 Federal standards to apply to state governmental entities in developing, procuring, maintaining, or using electronic or information technology, either directly or indirectly through the use of state funds by other entities.
2. The World Wide Web Consortium (W3C) develops common protocols for the evolution of the World Wide Web. “W3C” is an international industry consortium, a worldwide standard-setting body for web site accessibility, which has worked with a very large coalition of manufacturers and institutes in the US, Europe and Asia, and from which Section 508 has based some of its standards. W3C works in collaboration with the Web Accessibility Initiative (WAI) to develop access standards and protocols for the Web, including its “Web Content Accessibility



Guidelines 1.0". These guidelines are available at:
<http://www.w3.org/TR/WAI-WEBCONTENT/>

3. Telecommunications Act Accessibility Guidelines (TAAC). The Telecommunication Act Accessibility Guidelines (36 CFR Part 1193) deal mainly with the accessibility requirements and guidelines for manufacturers of telecommunication products.

The standards established by the U.S. Access Board, an independent Federal agency devoted to accessibility for people with disabilities under Section 508, and by W3C, can serve as guides for the City of Santa Barbara in its efforts to develop, procure, maintain and use electronic and information technology. In adapting the U.S. Access Board's Section 508 standards, however, it should be noted that these may not necessarily be equivalent to the City's obligations under Section 504 of the Rehabilitation Act, and under Titles I and II of the ADA. (For example: The Board's "undue burden" standard is a blend of interpretations of the similar concept under Section 504 and Title III of the ADA).

B. GUIDELINES FOR WEB SITE ACCESSIBILITY

Reviewing various standards from the sources discussed in Section A of this Chapter, certain guidelines can be established to evaluate the City's current web site accessibility, and to help the City continue to make its web site more accessible for all visitors.

B.1. Web site Accessibility Themes:

The W3C's Web Content Accessibility Guidelines 1.0 address two general themes for web site accessibility that should be incorporated into the City's guidelines: ensuring graceful transformation, and making content understandable and navigable.

B.1.1 Ensuring Graceful Transformation

By following the *Web Content Accessibility Guidelines 1.0*, content developers can create pages that transform gracefully. Pages that transform gracefully remain accessible despite any of the constraints described in the introduction to this document, including



physical, sensory, and cognitive disabilities, work constraints, and technological barriers.

B.1.2. Making Content Understandable and Navigable

Under the *Web Content Accessibility Guidelines 1.0*, content developers should make content understandable and navigable. This includes not only making the language clear and simple, but also providing understandable mechanisms for navigating within and between pages. Providing navigation tools and orientation information in pages will maximize accessibility and usability. Not all users can make use of visual clues such as image maps, proportional scroll bars, side-by-side frames, or graphics that guide sighted users of graphical desktop browsers. Users also lose contextual information when they can only view a portion of a page, either because they are accessing the page one word at a time (speech synthesis or *braille display*), or one section at a time (small display, or a magnified display). Without orientation information, users may not be able to understand very large tables, lists, menus, etc.

The Web page designer addressing universal design and accessibility should be as concerned with information dissemination for all as visual appeal for most. When designing the document, an attempt is made to make all the material displayed as accessible as possible, whether it is a menu item, graphic, or video clip. Creating accessible Web pages may not take additional money, just more time and consideration.

B.2 Section 508 Standards As A Guide

The proposed City guidelines use sixteen paragraphs established by the U.S. Access Board under Section §1194.22 of its Standards for Section 508 Compliance for web-based intranet and internet information and applications. These rules are useful to the City because they are well-established and accepted by other state and Federal agencies, and because they are subject to change to adapt to changing technology. The rules are as follows:

- (a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).
- (b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.



- (c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.
- (d) Documents shall be organized so they are readable without requiring an associated style sheet.
- (e) Redundant text links shall be provided for each active region of a server-side image map.
- (f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.
- (g) Row and column headers shall be identified for data tables.
- (h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.
- (i) Frames shall be titled with text that facilitates frame identification and navigation.
- (j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.
- (k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.
- (l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by assistive technology.
- (m) 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 §1194.21(a) through (l).
- (n) When electronic forms are designed to be completed on-line, the form shall allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.
- (o) A method shall be provided that permits users to skip repetitive navigation links.
- (p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.

The U.S. Access Board interprets rules (a) through (k), above, as consistent with the following Priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0).



Section 1194.22 Rule	WCAG 1.0 Checkpoint
(a)	1.1
(b)	1.4
(c)	2.1
(d)	6.1
(e)	1.2
(f)	9.1
(g)	5.1
(h)	5.2
(i)	12.1
(j)	7.1
(k)	11.4

Rules (l), (m), (n), (o), and (p) of this section, however, are different from WCAG 1.0. Even Federal web pages that conform to WCAG 1.0 Priority 1 Checkpoints must comply with rules (l), (m), (n), (o), and (p) in order to comply with the U.S. Access Board’s Standards.

C. SUMMARY OF FINDINGS AND RECOMMENDATIONS

C.1 Web Site Evaluation Process:

There are several Web Site accessibility testing methods provided by private companies and the “W3C” World Wide Web Consortium. One of the accessibility compliant testing methods applied to evaluate City of Santa Barbara status of compliance regarding their web site accessibility was running the “Cynthia Says” Report for 508 Standards, Section 1194.22. **See Appendix C.2.**

The HiSoftware “Cynthia Says” portal is a web content accessibility validation solution. It is designed to identify errors in web content related to Section 508 standards and/or the WCAG guidelines. It is a free online test, meant for educational purposes, also designed to expose the user to the underlying technology and the benefits of using HiSoftware’s products.



A separate accessibility evaluation report for compliance with the Web Content Accessibility Guidelines 1.0 - WACG priorities 1 (which is required for agencies that are subject to Section 508) and also priorities 2 and 3 (which contain only recommendations) was also applied to the City's Web Site using the same Cynthia Says reporting method. See **Appendix C.3** for test Verification Checklist results.

C.2 Findings:

C.2.1 Web site Accessibility Status of Compliance:

Most pages on the City's Web Site meet all of the 508 paragraphs under Section 1194.22, and WACG Priority 1 accessibility priorities.

The City's web site does meet some of the WACG priorities 2 and 3 accessibility recommendations.

The City's Information Systems Division has established a policy to ensure that new content added through the main web site is accessible and in compliance with Section 508 standards and Priority 1 of the "W3C" World Wide Web Consortium's Web Content Accessibility Guidelines

The maintenance of the City's web site and responsibility to insure that new content added to the web site meets the accessibility requirements rests with the Administrative Services Director, with the assistance of the Information Systems Manager and the City's Web Master. The addition to new content for the "Accessibility" section of the web site should go through the ADA Coordinator.

C.3 Recommendations:

- In making the City's web site accessible, the City will endeavor to comply with both U.S. Access Board's Section 508 Standards and Priority 1 of the "W3C" World Wide Web Consortium's Web Content Accessibility Guidelines.

Beyond this compliance, it is recommended to incorporate as much as possible the "W3C" guidelines (Priorities 2-3). The advantages of achieving compliance with Priority 2 of the WCAG guidelines include maximizing the web site flexibility, to enable other devices to access the City's web site. Some of the level 3 WCAG priorities may be really difficult if not impossible to comply



with at this time, but should be monitored for possible integration with future City web systems.

- The City should make every effort to ensure that new equipment purchases have built-in accessibility features and are compatible with accessible auxiliary aids. Equipment purchased should also comply with the *Telecommunications Act Accessibility Guidelines*.
- The City should continue to provide interim solutions and accommodation upon request from disabled citizens in areas that are not fully accessible. The City should work with individuals requesting accommodation, and possibly with members of the Accessibility Advisory Committee to Staff (AACS), to establish interim solutions.
- Based on GPPA recommendation the City of Santa Barbara has created a special section at the City's home page Web Site that is dedicated exclusively to provide "Disabled Access" related information available to staff and to the general public. This section of the Web Site can grow over time as more pertinent information is developed or available. Some of the basic information that this section of the web site should contain is:
 1. Notice of Compliance
 2. Grievance Procedures and Forms
 3. Contact Information:
 - ADA Coordinator
 - AACS Accessibility Advisory Committee to Staff
 - ADA Department Liaisons
 4. Information regarding the Accessible City Programs, Services and Activities, including for instance maps like the parks and recreation facilities, including information about the accessibility of the facility, whether it has accessible restrooms, etc.
 5. Emergency preparedness for individuals with special needs.
- The City should stay informed about new technological developments, in order to take positive steps towards improving the accessibility to different means of communication, assistive technology, telecommunications and electronic and information technology that the City uses in its daily interaction with the general public.



- The City should make sure that staff members or information technology consultants that deal with the purchase and implementation of communications systems are aware of the requirements of the following guidelines and standards:
 1. Americans with Disabilities Act, Title II provisions for Effective Communication
 2. Americans with Disabilities Act, Title IV provisions for Effective Communication
 3. The Telecommunications Act Accessibility Guidelines of 1998
 4. The Electronic and Information Technology Accessibility Standards (Section 508), published in the Federal Register on December 21, 2000
 5. Web Content Accessibility Guidelines 1.0 (WCAG)
 6. World Wide Web Consortium (W3C) guidelines