MACROMEDIA ACCESSIBILITY STARTER KIT

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Creating accessible Web sites or retrofitting existing Web sites is now easier than ever with the Macromedia Accessibility Starter Kit!

http://www.macromedia.com/accessibility

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what the web can be.

The Accessibility Quick Start Guide for Section 508 U.S. Federal Web site Compliance

Across the U.S., Federal Web site designers and developers are working to update U.S. government Web sites for implementing Federal standards set forth in Section 508 for accessibility compliance for persons with disabilities.

To help Web designers and developers meet this fast-approaching deadline, Macromedia is now offering a free Accessibility Starter Kit, which includes accessibility extensions such as the new 508 Accessibility Suite for Dreamweaver 4 and UltraDev 4"- developed by UsableNet. The Dreamweaver "Check for Accessibility" extension enables Web designers and developers using Dreamweaver 3 and higher to create accessible sites that meet the World Wide Web Consortium (W3C) standards for compliance.

And, since most Web designers do not have the time to build an entirely new site to comply with the 508 standards issued by the Access-Board (see http://www.access-board.gov), these new tools will help them retrofit their current sites.

The Starter Kit includes:

- **Dreamweaver and UltraDev Accessibility Kit:**
  - **Dreamweaver Guidelines**
  - **UltraDev Guidelines**
  - **Dreamweaver and UltraDev Accessibility Extension and W3C "Check for Accessibility Extension"** will run page-by-page evaluations of websites. (If you have Dreamweaver 3, you may need to install the Dreamweaver extension manager before you download the accessibility extension).
    Located within the **Dreamweaver/ UltraDev Extension folder.*

  - **New 508 Accessibility Suite Extension for Dreamweaver 4 and UltraDev 4**, developed by UsableNet™, will add greater functionality for checking and fixing a site:
    - Reviewing an entire site for 508 compliance
    - Alerting developers to the existence of accessibility problems
    - Giving directions to the location of those problems in the source code
    - Providing a referral to relevant W3C guidelines--along with a reminder of the top priority guidelines for subjective design decisions as issued by the (W3C)

    ** Located within the **508 Accessibility Suite Extension** folder.*

- **Macromedia Accessibility Templates**- Start building government, education and corporate Web sites that conform to Section 508 using the Macromedia Accessibility Templates. Visit our Accessibility Resource Center to see the latest variety of templates.
  * Located with the ***Accessibility Template*** folder

- **Macromedia Flash Accessibility Kit**:
  - Template for building a html page with Macromedia Flash assets
  - Movies that model audio, text, keyboard, and tabbing features in Macromedia Flash

- **30-day trial versions:**
  - Dreamweaver 4
  - UltraDev 4
  - Macromedia Flash 5

- **Tutorials:**
  - Dreamweaver tutorials (*find within kit's* ***Tutorial File****)*
  - Macromedia Flash training tutorials with example files

Designing Accessible Web Sites

Macromedia recommends the following steps for creating accessible Web sites:

1. Web Site Identification
2. Design and Techniques
    - The ALT Attribute
    - The LONGDESC Attribute
    - Segregation
    - Guidelines
3. Free Dreamweaver Extensions satisfy W3C and Section 508
4. Other Resources for web site designers and developers

1. Web Site Identification

Most full-time Web designers know what type of Web site they manage, but many Web masters work part-time or less and may need additional information to define their sites. There are three general types:

- **HTML-Only:** These are simple text-based sites written in Hyper-Text Markup Language. HTML is the most common of these Web-authoring languages. HTML-only Web sites are often called "text-only," because they are devoid of any multimedia or digital images.

- **HTML With Images:** These Web sites use a mix of HTML and digital images such as GIF, JPEG, and a host of other digital formats. These images are easily inserted into the HTML code, so viewers can download the images as part of the page. These sites tend to be "static" in nature (as opposed to dynamic or interactive sites with a database of images that can be readily customized to user preferences).

- **HTML-With Multimedia or Macromedia Flash Sites:** These sites tend to be more complicated and may host a variety of digital assets. The assets will vary, depending on file formatting or authoring tools used to create the media, but most include a mix of video, audio, Macromedia Flash files, and visual presentation tools. Some Web designers choose to make Macromedia Flash-only Web sites, which are authored in Macromedia Flash and play on the Internet as a Macromedia Flash movie with embedded multimedia. Some data-driven Web sites also fall into this category -- sites that are created by using a template authored in one of many computer languages (such as HTML, XML, or Java) to interface with a set of digital assets that are tagged and placed in a database, then "served up" to the user on demand.

2. Design, Techniques, and Guidelines

Design

One of the greatest obstacles to more universal access to the Web is the lack of awareness on the part of Web designers and developers about how to implement a fully accessible site. Designers tend to build Web sites based on their own personal preferences and experience. A designer with a personal preference for visual learning may build a site with graphics and animation, while another designer with a preference for simple text may develop a site that is dense with words and minimal in graphics. Developers also tend to use products they have the greatest familiarity with, rather than those that could provide flexibility and inclusiveness in design for accessibility.

To build fully compliant sites, designers must be aware of their own personal design bias and the W3C guidelines, but, most importantly, they must develop an expertise with the tools essential for building accessible Web sites.

UsableNet™, a Macromedia partner, notes two key design elements for building accessible Web sites:

- Ensure graceful transformation: Web sites should remain accessible despite physical, sensory, and cognitive disabilities, work constraints and technological barriers.
- Make content understandable and navigable: A Web site should present its content in clear and simple language and should provide understandable mechanisms to navigate within and between pages. http://www.UsableNet.com/accessibility_usability/what_is_accessi.htm

An accessible Web site implies accessibility for all users, not just people with disabilities. Designing for and implementing accessibility incorporates the basics of good design theory: simplicity of design with ease of use. Designing for Web accessibility should include providing the multiple views essential for each information asset on a Web site.

Because many people using the Internet have varying degrees of visual ability, it is critical to build a Web site that includes alternative tags. "ALT tags" embedded in the html code can be used to provide descriptions of visuals presented in Web sites. As these tags are the only means for persons using electronic readers (such as Jaws) to glean meaning from the graphic, Macromedia Flash file, or other multimedia image, it is important to carefully name the ALT tags. Keep in mind that the person will be listening to the ALT tag as a means to understand the image. "Alt-tags" and long descriptions ("longdesc") are critical to persons who are visually impaired: these tags provide critical information needed to navigate the site and they ensure inclusiveness in the design and delivery of information.

Techniques

Michael Paciello, co-founder of Webable.com, offers the following critical examples of the importance of alt tags and longdesc:

The ALT Attribute

The ALT attribute is intended to provide an alternative text equivalent to the graphical information being presented. In some development circles, there has been a trend to place the file name and image size in the ALT attribute. While some users may find this helpful, it does not qualify as a text equivalent to the information being presented. Instead, use text that literally represents the image.

The HTML markup for this could look like the following:

```
‹IMG SRC="welcome.gif"
ALT="Welcome to TWA.com"›
```

Furthermore, ALT attributes aren't only applicable to individual images. They should also be applied to image maps and applets. Any graphics-based conveyance needs equivalent text for all users to have access to the same information.

The LONGDESC Attribute

Images, image maps, and applets all present significant information in a visual format. Consider how you might create a Web page discussing a new painting you just hung in your home. The description might include the following:

```
‹BODY›

 ‹P›I just found a fabulous new painting.
Here's a picture of it hanging on the wall in my living room.
‹IMG SRC="photo.jpg"›

‹/BODY›
```

Not very informative, is it?
The ALT attribute can be used with the IMG element to provide text that may be displayed, instead of the image, when a user agent isn't capable of rendering the actual graphic, or when a user has chosen to surf with images turned off in a visual browser. But, once again, the alternative text presented should be chosen carefully.

```
‹IMG SRC="photo.jpg"
ALT="My new masterpiece"›
```

This IMG element does indeed include alternative text, but it's almost as meaningless as not having any at all. The context provided with the original version already told the user that the image was of a new painting. The alternative text describing it as a "new masterpiece" does nothing to enhance the user's experience of the page. Consider using the new HTML 4.0 attribute LONGDESC and coding your Web page as follows:

```
‹IMG SRC="photo.jpg"
ALT="photograph of a painting"
LONGDESC="photo.html"›
```

where photo.html contains the text:

The image is a photo of “Water lilies” by Monet. Delicate, floating flowers produced in oil-based paint on canvas in a gilded frame.

This version provides a concise description of the content of the image, enabling all users to appreciate the new addition to your art collection.

As previously noted, not all browsers support strict HTML 4.0 and the LONGDESC attribute is one of the key constructs not supported by any commercial browser. However, there is a way of coding your HTML to assimilate the function of LONGDESC, which commercial browsers do support. This is accomplished by creating a description link near the graphic. Continuing with the example above, here is how you would code your Web page to create the descriptive link:

```
‹IMG SRC="photo.jpg"
ALT="photograph of a painting"
LONGDESC="photo.html"›
‹A href="photo.html"
title="Description of Painting"›[D]‹/A›
```

Subsequently, when the Web page is rendered in your browser, an uppercase letter D is displayed near the graphic, functioning as a hyperlink to the file photo.html. The default color of the hyperlink is blue, but it may be different depending on the settings of your Web browser or the color properties established by the Web page author.

Segregation

For many Web designers, site segregation is a quick solution. This is a method where Web designers provide accessible Web sites by creating a text-only companion site. The text-based site is generally a stripped down version of the full Web site and lacks such descriptive elements as visually interactive videos, graphics, combination text and graphic charts and tabular or framed information which may be provided in the full Web site. But, designers can move beyond this commonly used – and less imaginative -- practice of segregated sites to provide high quality and accessible design. They can create fully integrated Web sites that provide all people with descriptive information about each element (in text and/or audio as appropriate) through the use of alt tags, d tags, and longdesc tags.

Guidelines

W3C offers the most comprehensive set of guidelines for creating a fully accessible Web site. They are available at: ‹ http://www.w3.org›

3. Dreamweaver Extensions for W3C and Section 508 Compliance

Available free via the Macromedia Accessibility Starter Kit, Web developers can now utilize both the Dreamweaver "Check Page for Accessibility" Extension and the new 508 Accessibility Suite for Dreamweaver 4 and UltraDev 4 from UsableNet™ to retrofit current Web sites. Macromedia has partnered with UsableNet™ and others to assist designers with the tools, training, and support needed to evaluate current sites for compliance and to retrofit existing Web sites.

The Dreamweaver "Check Page for Accessibility" Extension, alerts developers to accessibility problems and their location in the source code, and to relevant W3C guidelines. The report also reminds developers of the W3C's top priority guidelines for subjective design decisions. Open the Dreamweaver or UltraDev extension, read the relevant guidelines, and fix as needed. As new pages are developed, create a list of usability rules, based on the 508 guidelines, and use the extension to check each page for compliance as the Web site is edited

The 508 Accessibility Suite for Dreamweaver 4 and UltraDev 4 from UsableNet™ adds new features to ease 508 Web site evaluations. Available in partnership with UsableNet™, this tool provides a host of new features to streamline assessment of Web sites for 508 accessibility compliance. It will:

- Allow Web pages to be accessibility-checked in much in the same way as you spell-check a word document
- Provide tools to view found problems by page or by problem type to help organize the retrofitting process
- Create reports for one page, a complete Web site, selected section, or any folder.
- Allow users to select sub-groups of the 508 guidelines and run customized tests on different Web pages.
- Automatically open problems at the html code line in the Dreamweaver editor.

4. Other Resources for Web Site Designers and Developers

For more information, the following excellent references provide a comprehensive review of Web site design and evaluation for accessibility.

Web Design for Accessibility
http://www.usdoj.gov/crt/508/web2.htm This is a comprehensive listing of questions that will act as a guide to evaluate Web sites for 508 compliance.
http://www.cast.org/ This center for universal design offers a wealth of examples and supporting materials on accessible Web design.
http://www.tracecenter.org/world/web/ This site, part of the University of Wisconsin Madison, College of Engineering, provides a vast set of links and information to accessibility issues for design and for issues related to accessibility.

Macromedia also provides an Accessibility Discussion Group to give developers a place to share with other extension users and developers their ideas, opinions, and experiences regarding accessibility issues. Developers can respond to an existing thread, by using the reply section of a thread page, or start a new discussion thread. This discussion is not moderated, but Macromedia reserves the right to delete any irrelevant or obscene postings.

Retrofitting Your Web Site for Accessibility Compliance

Macromedia recommends the following steps for retrofitting your Web site:

1. Identify the Type of Web Site
2. Evaluate the Site
   - The W3C Guidelines
   - The 508 Standards
   - Designer Awareness
   - Design
   - Web Segregation vs. Designing for Accessibility
3. 508 Standards Retrofit Checklist
4. Resources for Web Site Designers and Developers

1. Identify the Type of Web Site

Most full-time Web designers know the type of Web site they manage, but many Web masters work part-time or less, and may need additional information to define their site. There are three general types:

- **HTML-Only:** These are simple text-based sites written in Hyper-Text Markup Language. HTML is the most common Web-authoring language and HTML-only sites are often called "text-only," because they are devoid of any multimedia or digital images.

- **HTML with Images**: These Web sites use a mix of HTML and digital images such as GIF, JPEG, and a host of other digital formats. These images are easily inserted into the HTML code, so viewers can download the images as part of the page. These sites tend to be "static" in nature (as opposed to dynamic or interactive sites with a database in which images can be customized to user preferences).

- **HTML-with Multimedia or Macromedia Flash Sites:** These sites tend to be more complicated and may host a variety of digital assets. The assets will vary, depending on file formatting or authoring tools used to create the media, but most include a mix of video, audio, Macromedia Flash files, and visual presentation tools. Some Web designers choose to make Macromedia Flash-only Web sites that are authored in Macromedia Flash and played on the Internet as a Macromedia Flash movie with embedded multimedia. Some data-driven Web sites also fall into this category -- sites that are created by using a template authored in one of many computer languages (such as HTML, XML, or Java) to interface with a set of digital assets that are tagged and placed in a database, then "served up" to the user on demand.

The majority of Web sites managed by the U.S. Government and educational institutions fall into the first two categories. However, many Web sites are increasingly sophisticated, and the strong market trend toward data-driven Web delivery via uniform standards is raising the complexity of Web site design and development.

2. Evaluate the Site

The road to 508 compliance is not as difficult as it may first appear. There are a host of resources and tools available to both evaluate Web sites for compliance and guide developers through the essential steps necessary to retrofit Web sites. There are three key steps developers need to take in order to adequately retrofit their Web sites for accessibility:

- Develop an understanding of the top World Wide Web Consortium (W3C) priorities and 508 standards and the necessary skill to implement accessibility techniques;
- Utilize tools available to review the Web site for accessibility compliance.
- Adequately evaluate the Web site for the quality of its accessibility design and appropriately describe and tag of its all digital assets;

The W3C Guidelines

The W3C established a Web Accessibility Initiative (WAI) to set priorities to serve as a guide for Web developers who are evaluating and retrofitting Web sites for accessibility. These guidelines were divided into three priority levels. Each priority has attached checkpoints that contain technical information and documentation to meet the standards of the assigned priority.

The intent of the priorities is to establish implementation of guidelines in rank order to accommodate the greatest need among persons with disabilities. If developers retrofit Web sites to comply with all of the Priority 1 checkpoints most people with disabilities will be able to access the Web site. Here are some examples of Priority 1 checkpoints:

- 1.1 Provide a text equivalent for every non-text element (e.g., via "alt", "longdesc", or in element content). This includes: images, graphical representations of text (including symbols), image map regions, animations (e.g., animated GIFs), applets and programmatic objects, ascii art, frames, scripts, images used as list bullets, spacers, graphical buttons, sounds (played with or without user interaction), stand-alone audio files, audio tracks of video, and video.
- 2.1 Ensure that all information conveyed with color is also available without color, for example from context or markup.
- 4.1 Clearly identify changes in the natural language of a document's text and any text equivalents (e.g., captions).
- 6.1 Organize documents so they may be read without style sheets. For example, when an HTML document is rendered without associated style sheets, it must still be possible to read the document.
- 6.2 Ensure that equivalents for dynamic content are updated when the dynamic content changes.
- 7.1 Until user agents allow users to control flickering, avoid causing the screen to flicker. ‹ http://www.w3.org/WAI/›

For persons new to Web accessibility issues, the W3C guidelines can be a bit overwhelming. Jakob Nielsen, in his article on "Disabled Accessibility, The Pragmatic Approach", June 1999, offered many tips for retrofitting a Web site noted below are a few key of his key points:

“The official standard tells you what ought to be done. In practice, it is necessary to prioritize standard-compliance on large sites and plan a staged roll out of accessibility:

- The home page and high-traffic pages should be redesigned to follow the high-priority accessibility rules immediately. The same is true for any pages on the critical path to successful completion of e-commerce purchases or other important

- All new pages should follow the high-priority and medium-priority rules, and checking for compliance should be made part of the organization's verification procedures for new content.

- Medium-traffic pages should be gradually redesigned to follow the high-priority accessibility rules.
‹http://www.useit.com/alertbox/990613.html›

The 508 Standards

The U. S. Access-Board drew upon the W3C guidelines to create the 508 Standards for the Federal Rehabilitation Act [508-29 U.S.C. § 794d] that requires:

"[I]ndividuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities, unless an undue burden would be imposed on the agency." ‹http://www.access-board.gov/sec508/508standards.htm#SUMMARY›

Designer Awareness

The challenge for Federal Web designers and developers is how to create access that is "comparable to the access available to others." While many want to skim over these key words, they do play a critical role in understanding how to create and implement a site that is equitable for those who are blind, or have low vision or other varying abilities. The Internet is a strongly visual medium based mostly on html coding hidden behind the graphic interfaces or, more commonly termed, Web pages. Many developers readily assume that everyone accesses the Web with similar skill sets and abilities and may have little awareness of how persons with disabilities access the web. A general understanding of assistive technology tools (such as screen readers), and how they interface with html is a good first step toward creating technical awareness of the issues. It is also useful for developers to have a general familiarity with the range of abilities of persons with disabilities. The W3C serves as a good resource to glean a better understanding of both assistive technology tools and the varying skill sets of persons with disabilities. ‹ http://www.w3.org/TR/2001/WD-UAAG10-20010409/ ›

Once developers have gleaned a greater awareness of assistive tools and how persons with disabilities interact with these tools it becomes evident to developers why it is important to follow universal design principals when retrofitting Web sites.

Design

Designers tend to build Web sites based on their own personal preference and experience. A designer with a personal preference for visual learning may build a site with graphics and animation, while another designer with a preference for simple text may develop a site that is dense with words and has minimal graphics. Developers also tend to use products they have the most familiarity with, rather than those products that could provide flexibility and inclusiveness in design for accessibility.

To build fully compliant sites, designers must be aware of their own personal design bias and the W3C guidelines, but, most importantly, they must develop an expertise with the tools essential for building accessible Web sites.

UsableNet™ notes two key design elements for building accessible Web sites:

- Ensure graceful transformation: Web sites should remain accessible despite physical, sensory, and cognitive disabilities, work constraints, and technological barriers.
- Make content understandable and navigable: A Web site should present its content in clear and simple language, and should provide understandable mechanisms to navigate within and between pages. http://www.UsableNet.com/accessibility_usability/what_is_accessi.htm

Web Segregation vs. Designing for Accessibility

For many Web designers, site segregation is a quick solution. This is a method by which Web designers provide accessible Web sites by creating text-only companion site. This text-based site is generally a stripped down version of the full Web site and lacks such descriptive elements as visually interactive videos, graphics, combination text and graphic charts and tabular or framed information which may be provided in the full Web site.

But, designers can move beyond this commonly used – and less imaginative - practice of segregated sites to provide high quality and accessible design. They can create fully integrated Web sites that provide all people with descriptive information about each element (in text and/or audio as appropriate) through the use of alt tags, d tags, and longdesc tags.

An accessible site not only provides full access for people with disabilities, but also provides comprehensive access to all users. Designing for and implementing accessibility incorporates the basics of good design theory: simplicity of design with ease of use. Designing for Web accessibility should include providing the multiple views essential for each information asset on a Web site.

3. 508 Standards Retrofit Checklist

Once developers run the Dreamweaver 508 Accessibility Extension it will highlight areas in the Website that will need to be retrofitted in order to comply with the 508 standards. The 508 standards noted below serve as a final checklist for Web developers when retrofitting Web sites.

§ 1194.22 Web-Based Intranet and Internet Information Applications

(a) Text Equivalent
Provide text equivalent for every non-text element (e.g., via "alt," "longdesc," or in element content.

(b) Multimedia presentation
Synchronize equivalent alternatives for multimedia presentation with presentation.

(c) Color
Design web pages so that all information conveyed with color is also available without color (e.g., from contrast or markup).

(d) Organization
Organize documents to be readable without requiring an associated style sheet.

(e) Server-side image maps
Provide redundant text links for each active region of server-side image maps.

(f) Client-side image maps
Provide client-side image maps instead of server side image maps, except where regions cannot be defined with available geometric shape.

(g) Data tables
Identify row and column headers for data tables.

(h) Multi-logic row or column headers

Use markup to associate data cells and header cells for data tables with two or more logical levels of row or column headers.

(i) Frames

Title frames with text that facilitates identification and navigation.

(j) Flicker

Design pages to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.

(k) Text-only equivalent pages

Provide text-only page, with equivalent information or functionality, to comply with standards when compliance cannot be accomplished in any other way. Update content of text-only page whenever primary page changes.

(l) Scripting language

Identify information provided by the script with functional text readable by assistive technology when pages utilize scripting languages to display content or to create interface elements.

(m) Applets and plug-ins

Provide a link to a plug-in or applet that complies with § 1194.21 (Software Applications and Operating Systems) when web page requires applet, plug-in, or other application to be present on the client system to interpret page content.

(n) Electronic forms

Provide a form that allows access via assistive technology to information, field elements, and functionality required for completion and submission of the form, including directions and cues.

(o) Content tracking

Provide method that permits users to skip repetitive navigation links.

(p) Timed response

Alert user when timed response is required and give sufficient time to indicate more time is required.

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http://www.cast.org/ This center for universal design offers a wealth of examples and supporting materials on accessible Web design.
http://www.tracecenter.org/world/web/ This site, part of the University of Wisconsin Madison, College of Engineering, provides a vast set of links and information to accessibility issues for design and for issues related to accessibility.

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Accessibility Discussion Group

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ideas, opinions, and experiences regarding accessibility issues. Developers can respond to an existing thread, by using the reply section of a thread page, or start a new discussion thread. This discussion is not moderated, but Macromedia reserves the right to delete any irrelevant or obscene postings.

The Federal Mandate: Section 508 Standards

Today, there are more than 750 million people with disabilities worldwide. Of these, 54 million reside in the United States. While there have been recent advances in assistive technologies, both in hardware and software design to enable people with disabilities to access the Internet, serious barriers remain.

Section 508 of the U.S. Rehabilitation Act prohibits federal agencies from buying, developing, maintaining, or using electronic and information technology that is inaccessible to people with disabilities. Although enacted more than 14 years ago, little progress was made under Section 508, until 1998, when Congress passed the Workforce Investment Act, amending the law to give members of the public and government employees with disabilities the right to sue agencies in federal court and file administrative complaints for noncompliance.

The deadline for full compliance of Federal Web sites with Section 508 has been extended to June 21, 2001. (It does not apply to Web pages of private industry).

Specifically, the law directs all Federal agencies that develop, procure, maintain, or use electronic and information technology, to ensure that this technology is accessible to employees and members of the public. The amended Section 508 requires that:

> "...electronic and information technology allows Federal employees with disabilities to have access to and use of information and data that is comparable to the access to and use of information and data by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency.

Section 508 also requires that individuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities, unless an undue burden would be imposed on the agency."

http://www.accessboard.gov/sec508/508standards.htm#SUMMARY

The full regulation can be viewed at:

http://www.usdoj.gov/crt/508/508law.html.

While applying legal leverage to agencies, Section 508 also uses government buying power to pressure companies to produce accessible products. Section 508 standards will become part of the Federal Acquisition Regulation and other federal laws that govern agency buying. Simply put, companies will no longer be able to sell federal agencies any software or hardware that fails to meet accessibility standards.

For more than two years, Federal agencies have been working together to realize the goal of fully accessible Federal Web sites. To coordinate training and offer technical assistance regarding Section 508, the Federal Access-Board and the General Services Administration created The Federal Information Technology Accessibility Initiative. FITAI's website is a gateway for information regarding this topic.) Noted below are FITIA's interpretations of the portions of Section 508 that are relative to Web accessibility:

- **Web-Based Intranet and Internet Information and Applications (1194.22)**
  The criteria for Web-based technology and information are based on access guidelines developed by the Web Accessibility Initiative of the World Wide Web Consortium. [The W3C website is at http://www.w3.org/WAI/.] Many of these provisions ensure access for people with vision impairments who rely on various assistive products (such as screen readers, which translate what's on a computer screen into automated audible output, and refreshable Braille displays) to access computer-based information. Certain conventions, such as verbal tags or identification of graphics and format devices, like frames, are necessary so that these devices can "read" them for the user in a sensible way.

The standards do not prohibit the use of Web site graphics or animation. Instead, the standards aim to ensure that such information is also available in an accessible format. Generally, this means use of text labels or descriptors for graphics and certain format elements. (HTML code already provides an "Alt Text" tag for graphics that can serve as a verbal descriptor for graphics). This section also addresses the usability of multimedia presentations, image maps, style sheets, scripting languages, applets and plug-ins, and electronic forms.

- **Video or Multimedia Products (1194.24)**
  Multimedia products involve more than one media and include, but are not limited to, video programs, narrated slide production, and computer-generated presentations. Provisions address caption decoder circuitry (for any system with a screen larger than 13 inches) and secondary audio channels for television tuners, including tuner cards for use in computers. The standards also require captioning and audio description for certain training and informational multimedia productions developed or procured by Federal agencies. The standards also provide that viewers be able to turn captioning or video description features on or off.
  http://www.section508.gov/final_summary.html#web

The U.S Government provides a comprehensive listing of Section 508 information regarding general, technical, functional and informational standards at: http://www.section508.gov/final_summary.html#general.

Accessibility Resources

A Brief Webliography of Resources for Designing and Developing Accessible Websites	
Site Location	***Brief Notes Re: Each Site***
http://www.tracecenter.org/world/web/	One of the most authoritative and comprehensive listings of accessible design materials -- part of the University of Wisconsin-Madison, Trace Center.
http://www.access-board.gov/	Federal agency designated to monitor and implement accessibility standards.
http://www.webable.com/	A good resource from a company focused on Internet accessibility. Excellent Web Review articles by the company's co-founder, Michael G. Paciello, can be found on the site.
http://www.UsableNet.com/	UsableNet™ partnered with Macromedia in designing the Section 508 Dreamweaver 4 Accessibility Extension.
http://www.cast.org/	This nonprofit organization focuses on universal design and tools for evaluating accessible website design. The site is host to the html website accessibility tool "Bobby".
http://www.section508.gov/	The Federal Information Technology Initiative site that provides Federal agencies with Section 508 compliance information
http://www.useit.com/alertbox/990613.html	Jakob Nielsen's article on Pragmatics: Get the Top Priorities Fixed First, along with a review of W3C Web Accessibility Standards.
http://www.w3.org/	The consortium that developed the common protocols for interoperability, and the Web Accessibility Initiative. This site is a key resource on how to build accessible sites with detailed examples for web developers. http://www.w3.org/WAI/.