WEB ACCESSIBILITY
It is the law – not an option

All content delivered using the Internet must be accessible.

Visual – Blindness, Blindness, low vision, color-blindness
Hearing - Deafness and hard-of-hearing
Motor - Inability to use a mouse, slow response time, limited fine motor control
Cognitive - Learning disabilities, distractibility, inability to remember or focus on large amounts of information
United States Laws

• American with Disabilities Act (ADA)
• Rehabilitation Act of 1973
  – Sections 504
  – Sections 508
• Individuals with Disabilities Education Act (IDEA), 1997 (K-12)
• Telecommunications Act of 1996
  – Section 255
American with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA), passed in 1990, is civil rights legislation governed by the Department of Justice. The goal of this law is to make sure that people with disabilities can have an equal opportunity to participate in programs, services, and activities. It is important to note that the ADA does not deal directly with the accessibility of the Internet. This may be due to the fact that the Internet was just emerging as a widespread tool around the same time as the passage of the ADA. There are, however, two major sections in the ADA that may apply to web accessibility. These are:

• **Title II**, which states that communications with persons with disabilities must be "as effective as communications with others" [28 C.F.R. ss 35.160 (a)] and

• **Title III**, which deals with public accommodation of people with disabilities.
Rehabilitation Act of 1973 (Sections 504 and 508)

• The Rehabilitation Act of 1973 was the first major legislative effort to secure an equal playing field for individuals with disabilities. This legislation provides a wide range of services for persons with physical and cognitive disabilities. Those disabilities can create significant barriers to full and continued employment, the pursuit of independent living, self-determination, and inclusion in American society. The Rehabilitation Act has been amended twice since its inception, once in 1993 and again in 1998. The Rehabilitation Services Administration (RSA) administers the Act. Two sections within the Rehabilitation Act, as amended, have impact on accessible web design. These are Sections 504 and 508.

• Section 508 of the act, as now amended, provides for us a blueprint of just what is intended in Section 504. Thus, Section 504 provides the context of the law and Section 508 provides the direction.
Section 504

Section 504 of the Rehabilitation Act is a civil rights law. It was the first civil rights legislation in the United States designed to protect individuals with disabilities from discrimination based on their disability status. The nondiscrimination requirements of the law apply to employers and organizations that receive federal financial assistance. This statute was intended to prevent intentional or unintentional discrimination based on a person's disability. Included as an amendment to the Rehabilitation Act of 1973, the message of this section is concise; Section 504, 29 U.S.C.§794, states:

No otherwise qualified individual with a disability in the United States... shall, solely by reason of her or his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Therefore, programs receiving federal funds may not discriminate against those with disabilities based on their disability status. All government agencies, federally-funded projects, K-12 schools, postsecondary entities (state colleges, universities, and vocational training schools, including Victor Valley College) fall into this category.
Section 508

So, why is Section 508 such a big deal? Although limited to federal agencies, Section 508 is an extremely influential piece of legislation. There are at least 4 reasons why this is so.

• **Section 508 provided the first-ever US federal accessibility standard for the Internet.** The Web Content Accessibility Guidelines existed prior to this; however, these guidelines created by the Web Accessibility Initiative (WAI) were not intended to be written as standards. Plus, these guidelines came from a voluntary international body with no regulatory power.

• **This section provides compliance language that could be monitored at a distance.** As stated earlier, guidelines did exist, but not in statutory language. Section 508 outlines binding, enforceable standards that must be adhered to in order for E&IT products to be accessible to persons with disabilities. A list of the Section 508 standards that apply to web accessibility is provided in the [WebAIM Section 508 Checklist](#).

• **State governments may be held accountable for complying with Section 508.** All states receive funding under the Assistive Technology Act of 1998. To gain access to this funding, each state must assure the federal government they will implement all conditions of Section 508 within their state entities (including higher education). Many states have codified Section 508 to be state law (e.g., Arizona, Nebraska, and Wisconsin), which requires state institutions to comply with these requirements. View some [examples of state accessibility laws and policies](#).

• **Businesses must comply with Section 508 when supplying Electronic and Information Technology goods and services to the federal government.** The influence of web accessibility on business and industry is more significant when the demands of a client, or potential client, like the US federal government, must be met.
Section 508 enforcement

The U.S. Department of Justice Office of Civil Rights is charged with enforcing Section 508. When complaints arise, members of the public, students, and employees with disabilities may:

• File an administrative complaint with agencies they believe to be in violation of Section 508.
• They may file a private lawsuit in federal district court, or
• They can file a formal complaint through the US Department of Justice Office of Civil Rights.
California Web Accessibility

- Cal.Gov.Code §11135(d)(1)(2)
  - Violations warrant curtailing funding to contractor, grantee, or local agency (Cal.Gov.Code §11136, 11137, and 11139)
- 4833: Information Technology Accessibility Policy (9/08)

"As directed by Executive Order D-17-00 issued on September 8, 2000, a comprehensive eGovernment initiative was launched that requires every agency and department to adhere to technical standards for accessible Web design and compatibility. The Accessibility Guide enables the State to utilize the best tools and design available to ensure that the content of the new My California portal can be reached by the widest possible audience regardless of disability, limitations of computer equipment or use of alternate Internet access devices. In addition, State accessibility guidelines enable agencies to meet State and Federal statutory requirements prohibiting discrimination against people with disabilities in the design of both Internet and Intranet web sites. For example, California Government Code Section 11135 et seq. prohibits discrimination by entities receiving funding from the State of California"
Section 508 Checklist
(portion only)

(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) (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.
Principles of Accessible Design

• **Provide appropriate alternative text**
  – Alternative text provides a textual alternative to non-text content in web pages. It is especially helpful for people who are blind and rely on a screen reader to have the content of the website read to them.

• **Provide appropriate document structure**
  Headings, lists, and other structural elements provide meaning and structure to web pages. They can also facilitate keyboard navigation within the page.

• **Provide headers for data tables**
  Tables are used online for layout and to organize data. Tables that are used to organize tabular data should have appropriate table headers (the `<th>` element). Data cells should be associated with their appropriate headers, making it easier for screen reader users to navigate and understand the data table.

• **Ensure users can complete and submit all forms**
  Ensure that every form element (text field, checkbox, dropdown list, etc.) has a label and make sure that label is associated to the correct form element using the `<label>` element. Also make sure the user can submit the form and recover from any errors, such as the failure to fill in all required fields.
Principles of Accessible Design

• **Ensure links make sense out of context**
  Every link should make sense if the link text is read by itself. Screen reader users may choose to read only the links on a web page. Certain phrases like "click here" and "more" must be avoided.

• **Caption and/or provide transcripts for media**
  Videos and live audio must have captions and a transcript. With archived audio, a transcription may be sufficient.

• **Ensure accessibility of non-HTML content, including PDF files, Microsoft Word documents, PowerPoint presentations and Adobe Flash content.**
  In addition to all of the other principles listed here, PDF documents and other non-HTML content must be as accessible as possible. If you cannot make it accessible, consider using HTML instead or, at the very least, provide an accessible alternative. PDF documents should also include a series of tags to make it more accessible. A tagged PDF file looks the same, but it is almost always more accessible to a person using a screen reader.

• **Allow users to skip repetitive elements on the page**
  You should provide a method that allows users to skip navigation or other elements that repeat on every page. This is usually accomplished by providing a "Skip to Main Content," or "Skip Navigation" link at the top of the page which jumps to the main content of the page.
Conclusion

The web offers many opportunities to people with disabilities that are unavailable through any other medium. It offers independence and freedom. However, if a web site is not created with web accessibility in mind, it may exclude a segment of the population that stands to gain the most from the internet. Most people do not intend to exclude people with disabilities. As organizations and designers become aware of and implement accessibility, they will ensure that their content can be accessed by a broader population.
Principles of Accessible Design - 2

- **Do not rely on color alone to convey meaning**
  The use of color can enhance comprehension, but do not use color alone to convey information. That information may not be available to a person who is colorblind and will be unavailable to screen reader users.

- **Make sure content is clearly written and easy to read**
  There are many ways to make your content easier to understand. Write clearly, use clear fonts, and use headings and lists appropriately.

- **Make JavaScript accessible**
  Ensure that JavaScript event handlers are device independent (e.g., they do not require the use of a mouse) and make sure that your page does not rely on JavaScript to function. Design to standards HTML compliant and accessible pages are more robust and provide better search engine optimization. **Cascading Style Sheets** (CSS) allow you to separate content from presentation. This provides more flexibility and accessibility of your content.