ACCESS DENIED:
IMPROVING FEDERAL POLICY ON WEB ACCESSIBILITY

JOHN L. BROBST
Florida State University
Tallahassee, FL 32311 USA
Johnbrobst2009@gmail.com

ABSTRACT
This paper presents initial findings related to the dissertation study by the author. The problem addressed is the observed low levels of compliance with federal policy on Web site accessibility. The study examines the two key federal policies that promote Web site accessibility, using a side-by-side policy analysis technique. The Americans with Disabilities Act of 1990 and Section 508 of the Rehabilitation Act of 1973 together have the intent of establishing a legal mandate for equality regarding accessibility. In comparing key aspects of these two policies, the findings indicate several areas were the policies were inconsistent or unclear in providing guidance on attaining accessible Web sites. Recommendations call for the establishment of federal programs that would provide federal Web managers with additional training in Web site accessibility, and provide support for ongoing research towards developing guidance and tools that would serve to promote more accessible Web sites.

Keywords
Accessibility, Web, Section 508, usability, disability.

INTRODUCTION
This paper presents a policy analysis of the current United States federal policy on Web site accessibility. The method of evaluation was a side-by-side analysis of the two legislative acts that most closely relate to federal Web accessibility policy. Web accessibility refers to providing equal access and equal opportunity to the Internet for people with disabilities. Web accessibility means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web (W3C, 2008). The information policies examined are the Americans with Disabilities Act of 1990 (ADA, Pub. L. No. 101-336. 104 Stat. 328 [1990]) and the Rehabilitation Act of 1973, as amended by Section 508 in 1990 (29 U.S.C. § 794d.). Using a side-by-side policy analysis of the two federal acts, the findings revealed significant differences in the way these acts attempt assure fair and equal Internet access.

The selection of these two legislative acts lies in their relevance to Web site accessibility. The Americans with Disabilities Act of 1990 and Section 508 of the Rehabilitation Act of 1973 together have the intent of establishing a legal mandate for equality regarding accessibility. The two acts are the most comprehensive federal civil rights statutes that address the rights of people with disability within the context of online services. The provisions provided by these legislative acts apply to federal Web sites and other Internet based services.

Section 508 has been in existence since 1988, but studies show a poor level of accessibility for federal Web sites (Jaeger, 2006; Olalere & Lazar, 2011; West, 2002, 2004). As an information policy with the intent to attain Web site accessibility, this policy has fallen short (Jaeger, 2006). The most important factors that contribute to the poor success of this policy are: failure to enforce, lack of central oversight, government inaction, and the need for new standards and definitions (Jaeger, 2006; McKean, 2007; Paciello, 2007):

METHODOLOGY
The research question posed in this study was: “What policy related factors affect the federal mandate for compliance with the Web accessibility standards provided within Section 508.” To address that question, this study performs a side-by-side analysis of the two legislative acts that establish federal policy on Web site accessibility. Those two acts are the Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973. In analyzing the Rehabilitation Act there will be a focus on the Web accessibility provisions established by the 1998 Amendment of Section 508. This side-by-side policy analysis examines both acts, using criteria that will reveal how the acts are similar, and how they differ in areas related to Web accessibility.

McClure, Moen and Bertot (1999) demonstrated the usefulness of performing a descriptive assessment of an
information policy initiative by using side-by-side analysis. This technique for information policy analysis provides a powerful means to assess policy initiatives. In this study, the side-by-side policy analysis provided a descriptive assessment of the content of information policies, to include a detailed comparison between specific sections or criteria that are common to both policy instruments. McClure, Moen, and Bertot (1999) state that this side-by-side method of analysis offers an excellent shorthand and summary technique to descriptively assess and compare policy initiatives.

This side-by-side policy analysis examined key criteria identified in the study’s literature review and discussed how each policy attempts to assure Web site accessibility. Those criteria included:

- Legislative intent;
- Means used to accomplish or promote the intent;
- Underlying objectives of the legislation;
- Scope of application; and
- Determination of financial burden.

These criteria derive from a thematic analysis of the factors and issues identified in the literature review and from evaluative factors that are commonly employed to analyze legislative acts (Huberman, & Miles, 2002).

**KEY FINDINGS**

The Rehabilitation Act of 1973 (as amended in 1992 and again in 1998 with Section 508), and the Americans with Disabilities Act of 1990 are civil rights laws that have the intent to protect individuals with disabilities from discrimination (Leuchovius & Parker, 2008). An examination of the two laws in a side-by-side analysis shows how these laws serve to support one another (or work against one another), providing an indication of how separately and together they serve to establish information policy in the area of Web site accessibility.

The intent of the ADA was to prevent discrimination against individuals with disabilities and did so with broad coverage. By comparison, the Rehabilitation Act had much narrower protections and subsequent court interpretations were also drawn narrowly. The two Acts are in conflict. The conflict does not stem from intent, but from the protections afforded and the scope of those protections.

The original Rehabilitation Act (prior to subsequent amendments) initially indicated a case-by-case-approach to assuring equity and accessibility. The ADA employed the “mainstreaming” approach, which was the integration of individuals with disabilities as fully as possible into society, regardless of the costs involved. The *means to intent* has another aspect, relating to the enforcement of the provisions within the Acts. Neither Act provided for an independent central authority with strong legislative and financial powers to appropriately study, audit, and enforce these laws.

The Rehabilitation Act applies to federal agencies and to federally funded programs. The ADA has the same application scope as the Rehabilitation Act, but includes a provision that extends its applicability to the private sector. Increasingly the courts interpret this provision to include Web based applications, as electronic commerce and information resources (Klein, 2007). This incongruity has led to inconsistent court interpretations as to whether private sector Web sites are required to be fully accessible.

The ADA did not place limits or restrictions on the costs that resulted from making the necessary modifications that would ensure achieving accessibility. When looking specifically at the topic of Web site accessibility, the Rehabilitation Act does address a limitation on such costs by including an “undue burden” clause. However, this clause proved to be an all too easy escape mechanism that entities could use to defer from complying with the intent of the law.

This analysis identified significant gaps in policy coverage and areas of conflict that may suggest options that could strengthen or better align overall information policy environment. Overall, the ADA and the Rehabilitation Act had the intent of eliminating discrimination against individuals with disabilities; however their respective approaches and concepts of implementation differed significantly.

**DISCUSSION**

From a high level policy perspective, combining the relevant portions of the two Acts and retaining the broader language and coverage found in the ADA could rectify the narrow and inconsistent provisions found within the Rehabilitation Act. While the two Acts closely align in intent and objectives, combining the relevant sections that relate to Web accessibility would accessibility a mandate that applies to a greater scope of Web site providers (effectively extending accessibility requirements to the private sector).

This misalignment of application coverage directly impacts Web accessibility. As the Rehabilitation Act explicitly addresses Web site accessibility, amending the Rehabilitation Act could provide the same application coverage as the ADA. By extending the application coverage in this way, the mandate for accessible Web sites would more clearly extend to federal and state governmental agencies, and to the private sector.

When Section 508 became part of the Rehabilitation Act, it used the approach of “mainstreaming accessibility,” requiring that Web managers employ universal design when developing Web sites. This effectively aligned the two acts, and strengthened their ability to accomplish the intent of ensuring equal access to Web sites. To enhance the effectiveness of these two legislative Acts, a recommendation is made for the establishment of a federal
entity that would serve as a central authority for the administration of Web accessibility policy. This federal entity would need to possess full authority to administer and enforce the statutory requirements for accessible. Other government agencies that have similarly been structured to enforce policy compliance have proven to be very successful, attaining high levels of compliance with federal policies (GAO, 2009). However, the feasibility of this recommendation is in question, given the current political and economic crises facing the nation.

As currently written the undue burden clause does not clearly convey the intent of Congress regarding the desire to assure fully accessible web sites. The recommendation is that the Access Board issue clarifying guidance that accurately captures the intent of Congress. Studies repeatedly identify the lack of understanding surrounding this clause as a major stumbling block towards assuring Web site accessibility (McKean, 2007; Paciello, 2007; Yukins, 2004).

At the time when Section 508 was written the “state of the art” for Web development efforts required significant resources, investment, and talented manpower to create, modify, and maintain a Web site. It may be that such a costly scenario no longer exists, and similarly the “excuse” of an undue burden is no longer a valid argument. This recommendation supports conducting research into determining if it is appropriate to delete the “undue burden” clause in its entirety. Should that research indicate that providing accessible Web sites can be costly, then more specific guidance is needed that more clearly defines the criteria for an “undue burden.”

IMPLEMENTING ISSUES/RECOMMENDATIONS
While the side-by-side policy analysis reveals several key initial recommendations for improvement in federal policy on Web site accessibility, there is a need to consider the feasibility of these recommendations and to determine how these recommendations could be effectively implemented. This section proposes programs that could embrace these recommendations in a way that would easily integrate into the federal government infrastructure. The information gathered during the literature review, combined with the findings from the side by side analysis, lead to two integrated programs that could improve the existing federal legislative environment that promotes Web site accessibility. These two recommended options are:

- Mandating certification for Web site managers
- Making a ongoing commitment to research

These two options offer significant potential for strengthening federal policy on Web site accessibility and address the initial recommendations that arose from the side by side policy analysis.

Certification for web managers
A key approach to assuring a higher level of compliance with the Web accessibility policy is to better train our federal Web managers. By requiring each Web manager to complete a comprehensive training course on Web accessibility policy and resources, this action should result in improved levels of compliance. Training would appear to be a strong necessity, as most agencies’ Web sites have poor levels of accessibility, and display an utter misunderstanding of accessibility law (Section 508) and what those laws require (Robb, 2001; Jaeger, 2006; Olalere & Lazar, 2011; West, 2002, 2004). Further, the federal training centers for government information technology managers has failed to offer significant training in the legal requirements and the technical requirements regarding Web accessibility (Tang, 2001; Yukins, 2004).

Conducting professional training courses is a successful method for modifying the attitudes and behaviors of professionals (Fender, Prentice, Gorst, et al., 1999). This type of behavioral modification approach has also been determined to be cost effective (Mason, Freemantle, Nazareth, et al., 2001; Raker & Boyd, 2007), and generates the greatest amount of desired residual change (Balas, Boren, Brown, et al., 1996).

Ongoing commitment to research
Research has the potential to offer great benefits towards improving Web accessibility. A two-phase research effort could provide a current focus and a continuing focus on achieving accessible Web sites. Research efforts could address current accessibility concerns, while also staying abreast of the technological developments that will continue to impact Web accessibility. The existing governmental organization that currently has the responsibility for Internet oversight (the Access Board) could administer these new research efforts. An Executive Directive to this Board from the Administration could initiate the activities required to accomplish these research efforts.

To effectively administer these programs, the federal agency would need to have funding earmarked for conducting this ongoing research. The research itself could be conducted either internally or through the use of grant programs. These two approaches offer strengths and weaknesses that would need further evaluation before choosing one approach over the other. The optimal solution may even involve using a blend of internal (office staff) and external research activities (grant funded programs).

Research projects could be immediately launched to identify success stories and best practices that are currently used to make Web sites accessible. The longer term research efforts would serve to ensure Web accessibility in the emergent and emerging Internet technologies. One readily identifiable research effort would be the creation or identification of Web development tools that “build-in” accessibility features during Web site design, programming, and testing processes. Once discovered by the research effort, these tools and processes could integrate into the Web Manager.
Certification training programs to rapidly disseminate the information for immediate field application.

CONCLUSION
Section 508 of the Rehabilitation Act identifies specific criteria for promoting the accessibility of federal Web sites. Compliance is mandatory, yet studies of federal Web sites indicate relatively poor levels of accessibility. This study analyzed the two key legislative acts that promote Web accessibility to see if the low levels of compliance may relate to policies that are unclear or inconsistent. The findings indicate several areas where policy could be improved and clarified, with recommendations made that address the major issues.

The analysis effort then discussed programs that could effectively address the weaknesses identified in the side-by-side policy analysis. These programs derived from several possible options that were evaluated using a composite set of criteria that included effectiveness, feasibility, cost, and political impact. The recommendations focused on mandating Web accessibility training program for federal Web managers and sponsoring ongoing research on this topic. The research could serve to effectively monitor Web accessibility and develop key tools and guidance that would aid in attaining Web accessibility.

These recommended policy programs would help the federal government to better comply with the intent of the existing legislation and to ensure fully accessible federal government Web sites. While the federal government has been progressing toward equal participation in its government for individuals with disabilities for three decades, the federal government must now focus on assuring that all individuals can have fair and equal participation in the new frontier of cyberspace.

REFERENCES


