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## WEB SITE POLICY, STANDARD, AND GUIDELINES
## EXECUTIVE SUMMARY

Virginia Governor Mark R. Warner and Secretary of Technology George C. Newstrom released "Virginia in The Global Digital Economy: Commonwealth of Virginia Strategic Plan for Technology" on September 25, 2002.   A central focus of Virginia's Strategic Plan for Technology is to create a customer focused, or "customer-centric," Web presence for the Commonwealth that makes state information and services as accessible and usable as possible for citizens.  This includes providing a common look and feel and uniform site navigation for all Executive Branch Web pages as well as requiring all sites to meet or exceed accessibility requirements for disabled users.  Virginia is the first state in the nation to implement such comprehensive and specific standards for government Web site accessibility, usability, and navigation.

The need for creating more accessible and usable government Web sites is clear: as many as 20% of all computer users have some level of disability, while the majority of government Web sites fail to meet basic sites accessibility guidelines.  Web sites that do not meet basic Web design accessibility standards are difficult if not impossible for those users to access.  Further, all computer users may have difficulty finding government information and services on Web sites that are poorly organized and lack standardized navigation.

Virginia has addressed those deficiencies and needs through the development and promulgation of statewide Web site template and Web design standards that all agencies are required to follow. That process represents the most extensive and comprehensive of effort towards improving Web site accessibility and usability of any state in the nation.

The template and Standards were developed by a Web design advisory committee composed of Web designers, agency CIO's and a cross-section of other agency staff members.  The Department of Technology Planning then reviewed and published the standards as official Virginia Policies, Standards, and Guidelines, binding all agencies to comply with the requirements.

The Standards make use of a wide body of research and studies on Web site accessibility and usability, including those guidelines established by the World Wide Web Consortium (W3C), the Web Access Initiative (WAI), as well as Section 508 guidelines from the Architectural and Transportation Barriers Compliance Board (Access Board) of the U.S. Federal Government.   The Virginia requirements meet or exceed the recommendations of the WAI for level A site accessibilty.

Combined with the new Web design template, the Standards allow agencies both large and small, resource rich and resource poor, to be on equal footing when it comes to accessibility, usability, and proper design practices.  Adequately quantifying the benefits of the improved Web site accessibility and usability is difficult: can the value of being able to access certain government Web sites for the first time be overstated for a disabled user?  However, agencies can substantiate a minimum of $1.3 million in annual savings just from the research and development efficiencies gained from following the standards.  Further, other Virginia government entities, from cities and counties to colleges and universities, are able to leverage the important body of knowledge and best practices represented in the Standards.

For more information about the Standards and template, see www.vipnet.org/templates/.  Additional resources for agencies implementing the Standards are available online via the Virginia Government Webmasters Group site at www.webmaster.vipnet.org.

**WEB SITE POLICY, STANDARD, AND GUIDELINES**

**PROJECT DESCRIPTION & LENGTH OF TIME IN OPERATION**

Governor Mark R. Warner and Secretary of Technology George C. Newstrom released "Virginia in The Global Digital Economy: Commonwealth of Virginia Strategic Plan for Technology" on September 25, 2002.  Virginia's first comprehensive strategic plan includes eight Secretarial initiatives and 13 agency projects designed to develop the role of the Chief Information Officer, ensure all of Virginia shares in the growth and success of our participation in the global market of the future, and help develop Virginia as a major entity in the global economic marketplace. Cited by Governor Warner and other IT experts and leaders as a bold step forward, Virginia's strategic plan has the potential to transform how government operates and to impact positively the lives of citizens and their local economies.

An important part of this Strategic Plan is to create a customer focused, or "customer-centric," Web presence for the Commonwealth.  This includes providing a common look and feel for all Executive Branch Web sites, through the enactment of Web Site Policy, Standards, and Guidelines and a Web site template that encompass accessibility, usability, and navigation issues.  Each of those requirements is designed to help make the Web site user's experience as efficient and effective as possible.  It also includes putting government services and content where citizens can easily find them, and in a manner that they can use.

The goal of government is to provide information and services to all citizens, regardless of income or disability.  Providing access to government online substantially furthers that goal but only to the extent that the users are able to find and use the content and services.  Studies have shown that approximately 20% of Internet users have some form of disability, and therefore have trouble reaching content on an inaccessible Web site. From the blind to the aged and all across the spectrum of physical and mental infirmities that inflict people, many Internet users face substantial hurdles in trying to access Web sites. Thus, government is under serving almost one fourth of the computer user population by not making Web sites accessible.

Further, all computer users may have difficulty finding government information and services on Web sites that are poorly organized and lack standardized navigation.  A poorly designed Web site may be brimming over with valuable information but the value of that online service is wasted if users cannot find the information quickly and easily.

In order to address those deficiencies and meet the tasks outlined by the Virginia Strategic Plan for Technology, a Web Design Advisory Committee was created in

October 2002.  By January 2003, the Web Design Advisory Committee had created a Web site template and a set of standards for all Executive Branch agencies to implement that are accessible and usable, establish specific content and update requirements, and move Virginia government from the "stovepipe" designs of the last decade to a truly unified "one government" of the 21st century.  The Department of Technology Planning is now responsible for promulgating the Committee's recommendations as official Virginia Policies, Standards, and Guidelines, which are binding requirements upon all state agencies.

Virginia's Standards reflect a wide body of research and studies, including those guidelines established by the World Wide Web Consortium (W3C), the Web Access Initiative (WAI), as well as Section 508 guidelines from the Architectural and Transportation Barriers Compliance Board (Access Board) of the U.S. Federal Government.  Research into usablity is also included to assist Virginia Webmasters in making the most effective sites possible.  The Virginia requirements meet or exceed the recommendations of the WAI for level A site accessibilty.

The Standards allow agencies both large and small, resource rich and resource poor, to be on equal footing when it comes to accessibility, usability, and proper design practices. Additional resources for agencies implementing the Standards are available online via the existing Virginia Government Webmasters Group site at www.webmaster.vipnet.org and a new site created solely for the Standards and template information at www.vipnet.org/templates/

A description of the Web Site Policy, Standard, and Guideline documents are available at (http://www.vipnet.org/cmsportal/vipnet_987/services_1145/information_1962/downloads_1970/index.html).  Those documents outline for the Executive Branch agencies all of the requirements and suggestions needed to create a truly customer-centric, fully accessible Web presence.  The Policy document outlines the overall goal of the Web site standardization effort.  The Standards document outlines the specifics of what each Executive Branch agency will be required to and held accountable for implementing. The Guidelines are not required but more 'best practices' to assist agencies who want to strive closer to perfection.

Although several states have Web design standards, Virginia is the first state to take such extensive and encompassing steps in the direction of improving government Web site accessibility.  The Standards require at a minimum Web Accessibility Initiative (WAI) level A compliance, plus several additional requirements that improve usability.  These standards will make Web sites more accessible and usable to all users, thereby putting valuable content closer to the people who need it.  Combined with the Guidelines document of the PSGs, the Commonwealth of Virginia is taking unprecedented leaps in improving the delivery of government services and information on the Internet.

The standardized template for Executive Branch Web sites is available at (http://www.vipnet.org/cmsportal/vipnet_987/services_1145/information_1962/information_1968/index.html).  Government Web sites have an almost unlimited variety of design styles, ranging from first class to unfathomable.  Although from an artistic perspective variety is the spice of life, from a government service perspective that variety is a hindrance.  Visitors to different Virginia government sites must relearn navigation, information structure, and, sometimes, even puzzle through link and category names to

find the content that they need.  Most users tolerate this as a necessary evil, but it does a disservice to citizens and can be corrected by the government Web sites providing a common look-and-feel and standard navigational structure.

The Virginia Web design template addresses that very issue.  Navigation structure and information location have been standardized, as has content layout.  Individual agencies have the option of customizing certain elements, within limits, in order to make the site agency specific, but users will always know where to find the main elements of the state navigational system.  The link to the home page will always be in the same spot, as will contact information, search feature, Governor's link, and main navigation.  Preliminary studies have confirmed prior research that those changes will increase the effectiveness of Virginia government Web sites by almost 200%.

The Virginia Standards also outline the Web site features and information services that the government Web sites must provide.  Each agency's Web site shall have links to citizen and/or business services that include, but are not limited to:

- Services offered by the government entity
- Public-related forms available by the government entity
- Email distribution lists
- Newsletters
- Promotions
- Notifications
- Press releases
- Announcements

## SIGNIFICANCE TO THE IMPROVEMENT OF THE OPERATION OF GOVERNMENT

By following the Web Site Policy, Standard, and Guidelines, Virginia government entities will realize multiple levels of cost savings.  Formerly, Web site design or redesign efforts were very expensive, took months to complete, and still could not meet basic level compliance.  Use of the new Web site template and PSGs has cut that cost in half, while also addressing and resolving accessibility compliance issues.  Agencies with limited resources can reduce their costs even more by opting to use one of the default site design templates, and forgo any design costs, allowing them to focus on content and information architecture exclusively.

The Web Site PSGs provide agencies a plan for how to go about constructing their sites.  Further, each agency no longer must spend resources researching information on usability, accessibility, and best practices in Web design.  All of that work has been done.

Most agencies lack technical staff with sufficient training in the areas of accessibility, usability, and human engineering.  This lack of knowledge typically equates to the creation of non-compliant sites.  The Web Site PSGs remove the need for agency staffs to be well versed in those areas.  Rather, those technical staffs may now focus on bringing more government services online.  The individuals who were responsible for

creating the Web pages and maintaining them will be more efficient at their jobs, allowing them to take on new responsibilities.

A new focus will be placed on the information architecture of a Web site, and less on the visual aspect of a site. With a template in place, there will be less time spent on how to design a site, allowing for that time to allocate in focusing on the important information architecture and content of the Web site.

As Virginia Web sites begin to follow the Web Site PSGs and organize their sites in familiar patterns, both users and content providers will find their tasks far easier. With an almost 200% improvement in efficiency in site utilization by users who can now. Government staff members who respond to Web-related, customer service inquiries will have fewer requests. Webmasters will have less email regarding unfound information. Information will be "on demand" at an unprecedented level.

As an additional benefit of the Web site PSGs, all branches and levels of Virginia government, including localities and colleges and universities, may leverage the research and information represented in the Standards. In order to facilitate those efforts, a user association with representatives from all of those branches and levels of government are developing a modified version of the PSGs that can be more customized to their specific needs.


## BENEFITS REALIZED BY SERVICE RECIPIENTS

Citizens should not have to know government to interact with government. Formerly, users would need to relearn different navigation formats and information architecture with each Virginia government Web site that they visited. Under the new Web site PSGs, navigation and site organization is standardized. Once a user is familiar with how to find information on one agency Web site, she will be able to find information on any other agency site. That standardized navigation will substantially reduce the amount of time a user must be on Web sites before finding the information for which the user is searching and significantly enhance the users' experience, providing greater customer satisfaction.

With WAI level A accessibility standards being required as a minimum, Virginia agency sites and services will be available to a larger segment of the population who, in turn, will significantly benefit from the information and services provided online. Formerly, individuals using assistive technology in order to access the Internet were unable to access certain government sites and services.

The specificity of the template design and Standards also will significantly improve site access for users with older browsers or with poor Internet connectivity. The new sites are designed for quick download on older browsers and dial-up modems, assisting in overcoming the digital divide issues that face government.

## RETURN ON INVESTMENT, SHORT-TERM/LONG-TERM PAYBACK

The Commonwealth anticipates an annual minimum cost avoidance of $1.3 million dollars from the implementation of the Web Site Policy, Standards, and Guidelines. This

comes from being able to leverage all of the accessibility and usability research and development that went into the Standards across all levels of government. Small agencies and localities could never afford to invest the resources to create such a product, but they can take advantage of and implement these same standards.

Formerly, state agencies alone were estimated to be spending $500,000 per year on site designs and redesigns, many of which do not meet basic level compliance standards. With the Web Site PSGs there will be little, if any need for total site redesigns, saving those dollars that can be reallocated toward other efforts.

For agencies that do invest in a site redesign, reliance upon the Standards will reduce the amount of time and effort required by at least one third, according to industry analysis of the redesign process. The Standards provide the essential Web page structure and only a small banner area can be customized in the design. Agencies, therefore, are placing a greater focus on the actual content of their Web sites and information architecture, which in turn provides better service to citizens.

One state entity is responsible for researching changes in the accessibility and usability standards, recommending modifications to the Virginia Standards, and then notifying all agencies of those changes. That coordinated effort alleviates the need for individual agencies to monitor the evolution of those requirements. Further, Web design changes are reflected in the agency site template, allowing for fairly seamless changes to both large and small Web sites.

The long-term reality of this effort is that Virginia government is now focusing on making government accessible not only anytime and anywhere, but also by everyone. Virginia government has realized that making a Web site accessible, usable, and efficient is just as important as making a government office facility accessible, usable, and efficient. This is creating a better solution for all.

From the perspective of the users, it is difficult to substantiate fully the significant benefits that they are realizing from the design of agency Web sites in compliance with the PSGs. Disabled users will now be able to access government information and services online. Any user will be able to find that information and services more quickly and efficiently. For many of those users, such access to government in invaluable.