

2007 NASCIO Award Submission
Category: Cross-Boundary Collaboration and Partnerships

Project:
Searching for citizen access: Virginia Web usability initiatives
Commonwealth of Virginia Webmasters, Virginia.gov, Google

Executive Summary

As citizen use of internet search tools for research and online services expanded, Virginia's Web portal and state Web sites needed to improve their ability to feed content to search engines. Further, even though Virginia had taken steps in late 2005 to standardize agency Web site architecture and look and feel through adoption of official Web Site Standards (WSS), most sites still operated independently with little relation to other sites or to the state portal.

Significant progress toward resolving these related problems was made by partnering with Google and Virginia.gov in early 2007 to pilot two ground-breaking projects designed specifically to improve citizen access to state Web content: sitemaps and a Custom Search Engine (CSE). Virginia extended the sitemap project to all state Web sites, making it the first Web initiative ever to be shared by agencies, independent entities, and even higher education and museums.

In conjunction with the Google project, Virginia introduced a new generation state Web banner to provide expanded functionality and common navigation. It features a new logo that echoes established tourism branding. Links are provided to online services, Web sites and a prominent invitation to ask for "Help." Most importantly, the new banner contains an enterprise search box that provides results leveraging the new CSE.

The benefits of this partnership are significant and advance the two top goals of Virginia's Strategic Plan for Information Technology: improve citizen access to government and facilitate IT collaboration and partnerships. The projects also greatly boost transparency in government, a top goal of Governor Timothy M. Kaine.

These extraordinary initiatives to improve citizen access to government via the Commonwealth's Web sites are the result of extensive and unprecedented collaboration, not expenditure. There are no hard costs associated with these projects. The soft costs of staff time were minimized through the use of automated tools, expert guidance, and delivery of complete and tested code for the new banner to all Webmasters.

As citizens find and access more Virginia government information and services by searching the Web, the portal or an agency site, they will be increasing the return on investment in digital government previously and yet to be made by every participant in these projects.

Most importantly, however, citizens will be finding and using the information and services they need ever more efficiently and intuitively. That is exactly the type of benefit desired by a Commonwealth that continually strives to be better than a "best managed state."

Concise description of the problem and the solution

Virginia's Web portal and state Web sites contain a vast quantity of information and many helpful citizen services. However, several types of this valuable content were difficult for search engines, and therefore citizens, to access, particularly interactive forms, dynamic content and database-driven information. This limitation existed for the state portal's search feature and all commercial search engines, such as Google and Ask. A citizen searching for specific content would need to have knowledge of the structure of Virginia government such as the providing agency or other entity in order to most effectively locate information.

Even though Virginia had taken steps to standardize agency Web site architecture and look and feel through adoption of official Web Site Standards (WSS) in late 2005, most sites still operated independently with little relation to other sites or to the state portal. "In-scope" sites, limited to executive branch agencies, posted a common top banner with text links to the portal and the Governor's site to improve citizen access to that content.

However, this common banner was small in size and limited in functionality; it lacked a focal point for citizen use. Its narrow implementation made little sense to a citizen with limited knowledge of the difference between an executive branch agency and an independent state entity or other branch of government. Most importantly, the banner did not include an enterprise capability for the citizen user to search all Web-based Commonwealth of Virginia information at one time.

Virginia partnered with Google and Virginia.gov in early 2007 to pilot two ground-breaking projects designed specifically to improve citizen access to state Web content: sitemaps and a Custom Search Engine (CSE). Google created a group site for posting and managing sitemaps as well as analysis tools, help for common problems and other resources. Webmasters exposed previously hard-to-find content by creating and posting sitemaps. The state portal implemented the new CSE search capability that provided greater weight to Web content relevant to the Commonwealth. The states of Arizona, California and Utah also participated in one or both of these pilots with Google.

Virginia, however, recognized an opportunity to further extend these projects across the enterprise of state government Web sites. First, the sitemap project was opened to every state entity, making it the first Web initiative ever to be shared by agencies, independent entities, and even higher education and museums. The invitation to participate will be expanded even further this summer to Virginia localities.

Second, a new generation of a state Web banner was designed to provide vastly expanded functionality and common navigation. Through the efforts of a work group of state Webmasters in partnership with the portal, Virginia.gov, a new "Commonwealth banner" was created. It features a new logo for the portal that echoes the branding of the well-known state tourism slogan, "Virginia is for lovers." Links are provided to state online services and Web sites. Users also see a prominent invitation to ask for "Help," which links to the wide array of assistive information and services available through the portal, including "Live Help" and frequently requested directories. Most importantly, the new banner contains an enterprise search box inviting the user to "Search Virginia.gov" and obtain results leveraging the new CSE.

The new Commonwealth banner was officially incorporated into Virginia's Web Site Standard following endorsement by the CIO and the Information Technology Investment Board. Though only executive branch agencies are required to adhere to the WSS, state entities across the Commonwealth have seen the benefit of adopting this new banner and many have voluntarily posted it above their Web content.

Significance of the project to the improvement of the operation of government

Virginia's companion Web initiatives each significantly advance the two top goals of its Strategic Plan for Information Technology: improve citizen access to government and facilitate IT collaboration and partnerships. The projects also greatly boost transparency in government, a top goal of Governor Timothy M. Kaine.

The many benefits identified with digital, or e-Government, revolve around opportunity: opportunity to access needed services 24/7; opportunity to democratize information; opportunity to engage citizens in their government. Much time, money and creative thinking have been devoted to moving government to the Web. However, as with all government, operation within silos inhibits access and usage.

The search initiatives and their prominent positioning within the new Commonwealth banner effectively break down old silos and for the first time present a unified access tool to the rich content and service offerings developed across the enterprise.

Virginia is not the first state to implement a common banner for its agency Web sites, nor the only participant in the sitemap and Custom Search Engine pilots. However, it is believed that the state is unique in its implementation of these projects as companion pioneers to most effectively improve citizen access to state government. Particularly relevant to this claim is the significant collaboration that has occurred across many levels of government.

The initiatives were championed at the Cabinet level by Secretary of Technology Aneesh P. Chopra and Deputy Secretary Judy Napier and by CIO Lem Stewart; communication of anticipated benefits began and continued at the executive level. Through the Governor's weekly Leadership Communique, discussion at Cabinet meetings and personal Q&A sessions, leaders across the Commonwealth were introduced to both the existing problems with access and the payback of improvement. This approach helped eliminate resistance, encouraged participation and opened new lines of executive communication with and support of Webmasters.

State Webmasters, too, entered a new era of partnership – and obtained a new sense of belonging to the Commonwealth rather than just their specific agency. Through workgroup meetings, Google webinars and listserv postings, these hard-working individuals shared ideas, problems and solutions as they implemented sitemaps and the new banner. Larger agencies mentored smaller agencies. Many spent time researching the approaches of other states and private sector interests for insight. Governor Kaine furthered the buy-in when he invited state Webmasters to be special guests for the Google partnership announcement. An invaluable dialogue was begun that continues actively today, setting the stage for future successful initiatives to improve citizen access and usability of state Web sites.

The creation of sitemaps also became, for many, an opportunity to review existing Web content, leading to the jettisoning of some outdated information and repositioning of newer, more relevant offerings. The sitemap project also prompted a review of adherence to the Commonwealth's security procedures, particularly as they relate to posting of personally identifiable information.

Public value of the project

Governor Kaine personally announced the Google partnership on April 30, 2007 (listen to the podcast: www.technology.virginia.gov/media/podcast.cfm). At that time, there were 27 state agency participants in the sitemap project, representing over 80,000 URLs made more available or newly available. It should be noted that content discovered by sitemaps is now searchable by all search engines, not just Google.

In just a month's time, following the invitation to all state entities to participate, the number of entities has almost doubled, to 48 and growing daily. Participants include many who had not formerly participated in state Web standards, including universities, community colleges, museums and independent boards and authorities.

The range of information included in the initiative is vast. The Virginia Tourism Corporation (www.virginia.org) added its immense store of local information and events; Virginia Performs (www.vaperforms.virginia.gov) included its ground-breaking government performance and accountability measures; the Library of Virginia (LVA) (www.lva.virginia.gov) produced access to vast genealogical databases. Inclusion of a million Virginia URLs is easily foreseeable within the year.

The implementation of the CSE on the state portal and across state Web sites creates a new generation of relevant search results. Prior to the CSE, the portal had to depend upon an index of Commonwealth sites, solely based on traditional search indexing techniques such as meta tagging. Some important agency content did not communicate with the existing portal Google search tool. For example, a search for "Driver's license" prior to the CSE failed to provide a link to the state Department of Motor Vehicles (DMV) through three pages of results. Today, that same search immediately points to DMV content. More search examples are available online, http://vita.virginia.gov/common_banner/googleSearchScreenShots.pdf.

Most importantly, this improved technology now is available to users on many state Web sites, not just executive branch agencies. Virginia's new WSS called for installation of the Commonwealth banner by June 1, 2007, and all but a few agencies (which are in the midst of site redesign or personnel change) now have completed the switch. Significantly, the Commonwealth banner, too, is being adopted by entities out of scope to the WSS, from the Attorney General to the Office of Commonwealth Preparedness to the State Council on Higher Education for Virginia and the Virginia Commission for the Arts.

These extraordinary initiatives to improve citizen access to government via the Commonwealth's Web sites are the result of extensive and unprecedented collaboration, not expenditure. There are no hard costs associated with these projects. The soft costs of staff time were minimized through the use of automated tools, expert guidance, and delivery of complete and tested code for the new banner to all Webmasters (www.vita.virginia.gov/common_banner/index.html).

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Most importantly, however, citizens will be finding and using the information and services they need ever more efficiently and intuitively. That is exactly the type of benefit desired by a Commonwealth that continually strives to be a "best managed state."