

Website Development – A Cooperative Approach

Summary

The County of Roanoke used a cooperative procurement approach, as outlined in the Virginia State Code (§ 2.2-4304), to leverage a negotiated contract with its website vendor to provide web redesign and hosting services to *several* local agencies, provide a higher level of consistent online services across multiple agencies, and achieve *cost savings* for each agency by using a shared contract, project managers, and combined training resources.

Goals and Objectives

Prior to this *regional* web development initiative, the residents of Roanoke County, Virginia used five separate websites to access services from the County of Roanoke, the Town of Vinton (located within Roanoke County), Roanoke County's Department of Economic Development, Roanoke Valley Television (government cable access television), and the Roanoke Valley Resource Authority (solid waste disposal).

Roanoke County's Communications and Information Technology Department served as the website host for these agencies for several years, and each site was built using different technologies that offered varied and minimal levels of interactive services to their respective audiences. In addition, most of these sites did not offer the most popular web services such as calendaring, notifications, frequently asked questions (FAQs), and online forms. The available services were all built by third party vendors, and lacked a consistent look, feel and function from site to site.

Faced with an aging content management system no longer supported by the vendor, Roanoke County signed an agreement in 2010 with CivicPlus to redesign the County's website.

Roanoke County's goals for the redesign project included:

- Replacing the web content management software that was out of support,
- Utilizing a hosted solution to reduce the hardware maintained by the Communications and Information Technology Department,
- Providing more ways for site visitors to get information and incorporate integration with publicly-popular social media outlets,
- Offering consistent online services for residents,
- Raising the level of online services, and adding more ways to interact with citizens,
- Making it easier and more flexible for the agencies to maintain information on the web.

With its new content management system, Roanoke County also sought to maximize the usability of its site while providing a consistent platform for the delivery of common services to other agencies previously hosted by the County.

By using the Cooperative Purchasing language available to localities under Virginia State Code (§ 2.2-4304), Roanoke County was able to leverage the same service levels with a consistent look and feel across multiple agencies, and realize substantial cost savings to each agency in staff development time, contract implementation, and ongoing training and support. The County's contract with CivicPlus allowed each of these agencies to create an "advanced sub-site" within its agreement. Each agency received a comprehensive site "makeover" driven by the agencies' stakeholders, content review, and technical set up from the vendor. It was important that each agency offer a consistent user experience while maintaining a separate visual identity. As an "advanced sub-site," each agency would have the opportunity to implement the same web-based services as Roanoke County, or choose not, depending on their respective audience and agency needs.

Using the "advanced sub-sites," Roanoke County was able to establish and launch four complete and separate municipal agency websites within 18 months, with the last partner agency in progress and scheduled for launch in September 2012. Initial work on the regional website

redevelopment began in fall 2010 with the release of the Town of Vinton's site on November 12, 2010, and continued with the public release of sites for Roanoke County on March 11, 2011, the Roanoke County Economic Development Department on April 29, 2011, and Roanoke Valley Television just a few months later on January 5, 2012.

The most popular common public services now available to residents from each agency include Calendar, video hosting capability, online forms, citizen opt-in services for notifications and news flashes, and social media integration. While the vendor has many online service modules to choose from, each agency has the option of turning on (or shutting down) any online service offered at any time without incurring additional development costs. This approach allows each agency to focus on offering core online services important to their distinct audiences without unnecessary clutter of unused services that can impede visitor navigation and impact citizen satisfaction. (*See Appendix for examples.*)

Since these services are based on a shared platform, the separate agencies can now offer online services with similar functionality and usability, and the regional approach has greatly improved the quality and appeal of each agency's site. Collectively, the agencies involved have achieved a new level of access to services and information for residents and website visitors.

Implementation

Two staff members from Roanoke County, the web analyst and web content manager, have played key parts in bringing the regional web development program to completion. As the local project lead, the County's web analyst served as the technical contact and information architect for each of the sites, ensuring that all technical specifications for the vendor, functional requirements for each agency, domain names, meetings, and project milestones remained on schedule. During each agency's redesign, the County's web content manager assisted each

organization with content development, editing, and migration, as requested. After the launch of each site, the web content manager continued to serve each agency as a local support contact and training resource.

As part of the ongoing training, Roanoke County has developed shared training materials and common training curriculum that can be shared among the various agencies. The materials include guidance for agency web governance, basic operations manuals, best practices for content management and development, and generic resources to assist in digital photo editing and writing for the web. Shared training sessions hosted by Roanoke County also help build a consistent approach to web development across the agencies, from governance to graphic standards, and saves each partner agency time and budget dollars in related support and ongoing training.

Cost Savings & Shared Services

By using Roanoke County's existing negotiated contract, the Town of Vinton, Roanoke County Economic Development Department, and Roanoke Valley Television all received many of the same services and features as Roanoke County, at a fraction of the cost in terms of staff time and actual dollars. A fifth organization, the Roanoke Valley Resource Authority, is scheduled for launch in September 2012, is expected to see a similar savings and expansion of online services as the other agencies.

Under Roanoke County's umbrella contract with the vendor, set up costs for "advanced sub-sites" were assessed at a fraction of the cost each agency would have incurred for similar services on their own. Each agency paid the cost of its initial setup, and is also responsible for paying annual maintenance, support and web hosting fees as outlined in Roanoke County's

agreement with the vendor. Each agency remits payment to Roanoke County annually, and the County acts as the fiscal agent for the contracted services and payment.

In addition, by sharing a common platform, each agency also shares in local staff training and knowledge based resources, including local support and assistance from Roanoke County's web content manager when needed.

Outcomes

Each of the agencies involved in the regional web redesign project has received praise from citizens and stakeholders, and each agency has seen increases in website visits and interaction with their audiences via the online forms, social media integration and site feedback channels.

In its first year, Roanoke County's website received more than 4,700 citizen requests for service via its online forms, with each request routed to the appropriate department for action. The Town of Vinton has received hundreds of requests and work orders online for its Code Enforcement, Public Works, and Special Programs divisions. The newly launched Roanoke Valley Television site has become an online video portal for the multiple jurisdictions it serves, offering monthly half-hour television episodes, feature videos, and public service announcements. In the first five months since the site's launch, the television station's online videos have been viewed more than 2,000 times. In addition, Roanoke Valley Television site's online calendar allows the public to receive notifications when upcoming public meetings are broadcast. Across the four agencies, more than 7,000 subscribers are now signed up to receive notifications about calendar events, bids and proposals, emergency notifications, news flash announcements, and more.

Social media integration has also contributed to each site's success, expanding the reach of each organization to new audiences. By using site tools to automate posts to social media sites, each agency has reduced the staff time it takes to update Facebook, Twitter and other popular social media outlets, while ensuring that each social media channel receives frequent updates pushed from their respective sites. Cross posting of status updates drives increased traffic to the agencies pages, or to targeted, time-sensitive pages within their site (for example, special event pages, calendar events, deadlines, or public meeting notices). Other common site features offer visitors the option to "Share" or "Email" specific web pages of interest with their families and friends. *(See Appendix for examples.)*

While total visits are one indicator of site improvement, the average page views per visit is another indicator of a site's overall success. Since their respective launch dates, each agency has seen increases in the average page views per visit, and fewer abandoned or exit pages, which is an indicator that site visitors are finding the information they seek, and returning to the site more often than previously.

Below is a summary of total unique visits and average page views per visit for each agency site from its launch date until May 1, 2012, as compared to fiscal year 2009-2010.

Agency and Launch Date	FY2009-2010 Unique Visits	Fy 2009-2010 Avg Page Views per Visit	New Site Unique Visits	New Site Avg Page Views per Visit	% Increase in Page Views per Visit
Roanoke County (March 11, 2011)	909,335	2.1	1,368,088	2.52	20%
Roanoke County Economic Development (April 29, 2011)	18,223	1.4	14,279	2.36	68%
Town of Vinton (November 12, 2012)	72,846	1.2	88,889	2.71	126%
Roanoke Valley Television (January 10, 2012)	NA*	NA*	2,030	2.05	NA*

**Statistics for Roanoke Valley Television's prior website are not available.*

Recognitions

Each of the agency websites launched to date has received recognition outside the local community, including national, state and international association awards for content, usability, and overall design. Below is a list of recognitions received by each agency:

Roanoke County (www.roanokecountyva.gov)

- 2011 Best of the Web by the Center for Digital Government
- 2011 Virginia Governor's Technology Award
- 2011 MarCom Award – Honorable Mention, Government Website

Roanoke County Economic Development (www.yesroanoke.org)

- 2011 Southern Economic Development Council Award, Superior Website: Local, State or Regional Economic Development Organizations

Roanoke Valley Television (www.rvtv.org)

- 2011 Gold AVA Award for Best Design/Website

Town of Vinton (www.vintonva.gov)

- 2011 Communicator Award of Distinction, Website Structure and Navigation

Conclusion

Roanoke County's regional approach to website development has enhanced the usability for thousands of website visitors across the community and beyond, by offering a consistent and improved level of online services, similar information architecture, and new integration with social media channels that expand the reach of each agency beyond its own website. The improvements in service levels and designs have resulted in increased local citizen satisfaction and outside recognition by state, national and international associations. Enhanced usability has also generated more interaction with citizens and either increased unique visits or increased retention of site visitors as shown by the percentage increase in page views per visit, both of which are key indicators of successful web design.

By using a hosted website solution, Roanoke County and its partners have eliminated the costs of expensive in-house servers and technical staff to maintain equipment, security patches and software upgrades. The vendor's technology also made it easier for each agency to update their pages and online services without having to know "html" or other web programming languages. This ease of use also translates into each agency being able to make web updates faster and post more timely for site visitors. The same "back-end" allows each site to push information to social media channels without having to duplicate their effort with a "write once-publish everywhere" workflow.

By utilizing the "advanced sub-sites," each agency under Roanoke County's agreement has the flexibility to choose which online services to offer, and each has the ability to add future functionality if desired or requested by citizens or stakeholders.

The Cooperative Procurement language in the Virginia State Code enabled Roanoke County to offer improved web services to Roanoke County Economic Development Department, Roanoke Valley Television, and the Town of Vinton at a greatly decreased cost both in up-front costs and ongoing support and training alternatives. The end result is a regional foundation of enhanced website services and new levels of usability and citizen interaction that has earned Roanoke County, the Town of Vinton, Roanoke County Economic Development Department, and Roanoke Valley Television accolades from local audiences and state government, along with national and international associations.

Appendix

Calendar

Calendars are an expected feature on municipal websites and offer notice of public meetings, upcoming events and important deadlines. Each agency has the flexibility to post its own calendar events, while a similar look, feel and function helps site visitors find what they seek easily from agency to agency. Each agency can push calendar reminders to site visitors that subscribe for notification. While municipal sites may focus on public meetings and special events, Roanoke County Television uses the calendar and push notifications to remind viewers of live broadcasts, rebroadcasts and upcoming projects.

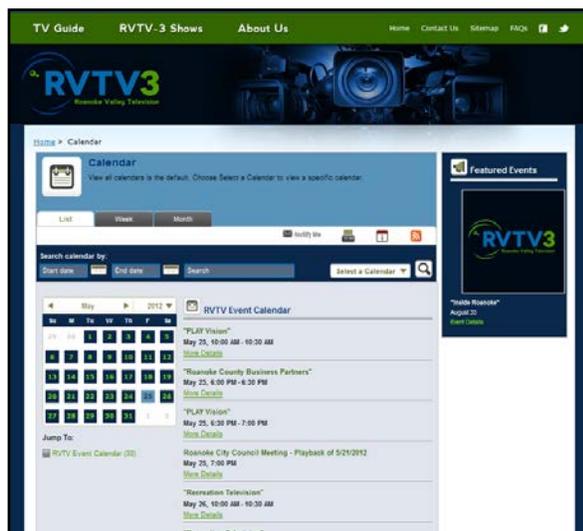
Roanoke County



Town of Vinton



Roanoke Valley Television



Notify Me

Notify Me is a common service among each of the four agencies launched to date. Notify Me enables residents to subscribe to various categories of notifications pushed by the website. Categories range from bid opportunities, to calendar reminders, to new flashes, and emergency notifications. Each site has a similar look and feel and identical sign-up processes and verification processes, while each agency has the flexibility to set up and customize notification categories important to their audience.

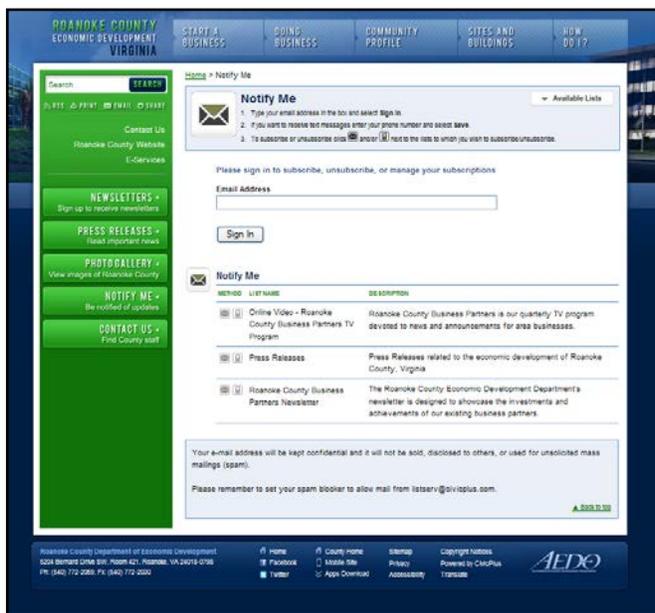
Roanoke County



Town of Vinton



Roanoke County Economic Development



Roanoke Valley Television



Media Center

The Media Center component allows agencies to host both streaming video and recorded video on their website. While Roanoke County’s municipal site focuses on offering Board of Supervisors’ meetings, Roanoke Valley Television uses the Media Center to showcase its monthly video projects for its municipal clients. Like other services, the Media Center’s flexibility allows each agency to focus on offerings to its core audience, while common navigation and structure make it easy for visitors to remember functions and navigation from site to site.

Roanoke County



Roanoke Valley Television



I Want To/How Do I..?

Common architecture also plays a part in enhancing usability between agencies. Both Roanoke County and the Town of Vinton offer service menus, named “I Want To” and “How Do I..?” Each area provides plain language solutions for the most requested services by citizens.

Roanoke County



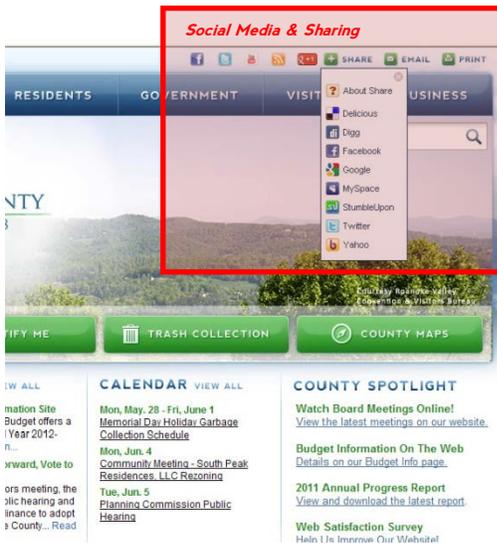
Town of Vinton



Social Media Integration and Share/Email Features

With the advent of social media, local government agencies are increasingly trying to be included in the same digital space as their constituents. Common social media integration features on each website allow agencies to automatically populate social media updates driven by updates to their sites. This approach enables agencies to “write once, post everywhere” and saves both staff time and effort to maintain this type of public outreach. Share and Email features allow site visitors to send pages of interest with friends and family via email or a variety of social media sites. These features are site-wide, and enable visitors to share any site content at any time.

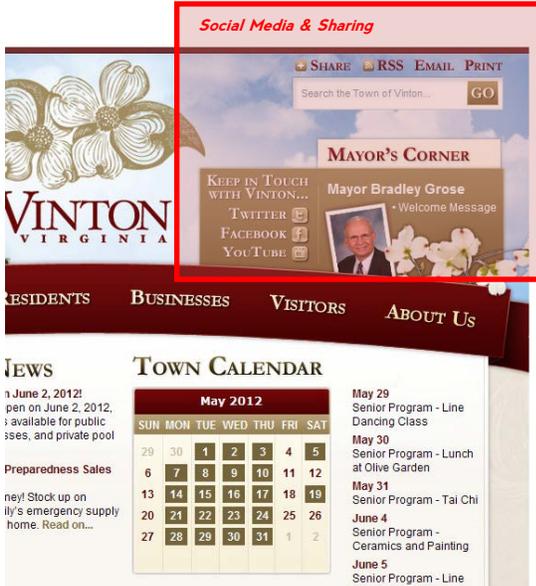
Roanoke County



Roanoke County Economic Development



Town of Vinton



Roanoke Valley Television

