Virginia Association of Counties
ACHIEVEMENT AWARDS

APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2018.** Please include this application form with electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact Gage Harter.

PROGRAM INFORMATION

County: **Roanoke**

Program Title: **Interactive Property Report Application**

Program Category: **Information Technology**

CONTACT INFORMATION

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SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

Name: **Thomas C. Gates**

Title: **County Administrator**

Signature:

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EXECUTIVE SUMMARY

Property Report offers an original, innovative, unique and interactive report of tax parcel information that enables supporting agencies, organizations and the general public to locate an area of interest and review common information stored in the County's real property assessment and tax databases. Users can generate a PDF report of the selected information, and include interactive elements from commercial services such as Google StreetView, Pictometry imagery, Roanoke County zoning and overlay districts, flood zone data, building sketches, government services with hyperlinks, schools, broadband providers, tax map, and official aerial imagery.

This innovative and interactive reporting tool can be accessed by smart phones, tablets, and all major operating systems and browsers. Consolidating this detailed information in one convenient report saves citizens' time and allows access to data at any time of day or night, on many types of devices. In addition, County staff can quickly generate comprehensive property reports for stakeholders that previously took several days or weeks to create.

THE PROBLEM OR CHALLENGE

The original, innovative and interactive Property Report was developed to meet users' demands for a comprehensive source of real property information combined with custom mapping options.

Some of the major project goals for development of the Property Report included:

- Allowing users to easily access GIS and quickly view the information they need,
- Making data accessible from any place and at any time a citizen chooses, available on a variety of common devices and platforms
- Empowering end users with data to make decisions more efficiently, and allowing users to easily self-select only the information they need

- Using technology to integrate common features such as Auto Complete Search, Geo-location services, integration with other Roanoke County apps and leveraging third party commercial services such as Google StreetView and 3-D imagery (Pictometry)
- Configurable application and easy ongoing maintenance utilizing existing staff resources

The Communications and Information Technology Department partnered with the Real Estate Valuation and Community Development Departments to create this innovative one-of-a-kind Property Report. By leveraging technology to provide more services with less staff and declining budgets, the enterprise level interactive Property Report improves operational efficiencies and enhances customer service while providing added value directly to our citizens by making information accessible through a variety of platforms. The Property Report allows easy access to a comprehensive data set about real estate, including sales, land records, planning and zoning, schools, government services, environmental, utility information, and more.

This Property Report allows users to quickly create a PDF document of all pertinent information for any property in Roanoke County. The app can be accessed using the most modern technologies, including smart phones, tablets, and most common operating systems. Residents are able to access this service at any time of day or night, on the devices and platform they choose, which has greatly reduced customer service calls for staff during business hours.

County staff members use the Property Report to quickly access data including real estate sales, land records, planning and zoning, schools, government services, and environmental and utilities information. Improved operational efficiency extends to the field where staff save many hours on data collection. The Property Report can be accessed at http://gisweb.roanokeCountyva.gov/PropertyReport/.

TECHNOLOGY

Use of innovative and modern technology was obtained by incorporating the following into the application: Autocomplete Search, Geo-location Services, Google StreetView, Pictometry/3-D pictures and integrated links between apps. By using current technology practices such as a configurable application and requiring JavaScript and HTML based technology allows us to easily maintain the application with current resources. The Property Report also provides the capability of sharing this application with other localities and entities to adopt and use this application as a model for their business purposes using their authoritative data.

An enterprise level Property Report improves operational efficiencies, improves customer service and provides valuable information directly to our citizens, whenever and wherever they want it. The County's staff members also use the Property Report to quickly access data including real estate sales, land records, planning and zoning, schools, government services, and environmental and utilities information.

County of Roanoke has a Small Government Enterprise License Agreement with Esri. This gives the County the ability to fast track GIS. The ELA provides unlimited access to ArcGIS software along with timely and professional assistance from Esri. Microsoft SQL Server 2012 is the Enterprise Database providing a consistent programming model and common tools across the Enterprise. The County has established a web presence that caters to a broad user base with diverse needs and technological capability. The Property Report is designed with an interactive singular focus, which creates a comfortable environment that doesn't require instruction or training. To achieve this, the application was developed with contemporary methods and designed according to the asynchronous module definition (AMD) and Model View View Model (MVVM) patterns leveraging Knockout JS and Twitter Bootstrap libraries. This creative approach produces a solution that is easily maintained in-house while taking advantage of other commercial technologies that already exist. As a result, the County can deliver rich content based on Esri's ArcGIS for Server and ArcGIS Online offerings, combined with Google Streetview and Pictometry to allow users to explore the County from every angle. The Property Report

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COST OF THE PROGRAM

The biggest investment is in personnel time to development of the application. A total of 650 personnel hours were used to complete this project for a cost of approximately $19,500. The hours were used to support the enterprise approach and design, develop, and maintain the enterprise GIS resources. Also, an estimated 40 hours of professional Services was used from our partner GIS Inc. for a cost of $23,000 for a total cost of $42,500.

RESULTS

The Property Report has successfully met the goals defined at the outset of the project. The first goal of "Sharing GIS" enabled users to easily access GIS data and quickly select the information they need through an intuitive interface focused on real estate information.

The second goal to "Empower the End User" has been met allowing users to self-select the data needed to create custom reports. Citizens can quickly select what information to include in the report, ranging from sales information, land records, planning and zoning, schools, government services, environmental condition, utility information, and more.

Residents can find the details they need any time of day or night on many types of devices anywhere the internet is available. This accomplishes our third goal of "Accessible from Anywhere" by providing 24/7 access to information via a variety of devices, from desktop applications to mobile-connected tablets and smartphones.

The County accomplished its fourth goal, "Use Modern Technology," by incorporating commercial features and technology into the application, including sharing features, Autocomplete Search, Geo-location Services, Google StreetView, Pictometry 3-D Pictures, and integrated links between other Roanoke County Apps, websites, services and data stores.

The last goal, "Easily Maintained" was accomplished by using current technology practices such as configurable applications built on JavaScript and HTML technology that can be maintained by existing staff resources. The Property Report also provides the capability of sharing this application with other localities and entities to adopt and use this application as a model for their business purposes using their authoritative data.

The success of the Property Report can also be measured by the overwhelming adoption by citizen users who use the application for self service, at their leisure, rather than making telephone calls or visit to the Roanoke County Real Estate Valuation offices.

OVERVIEW

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SUMMARY

In summary, on a daily basis the County is better serving the needs of its constituents. Giving the public one place to find detailed information on County services saves citizens' time. Residents can find the details they need any time of day or night on many types of devices. The Real Estate Valuation Office alone has seen a 79% reduction in calls to the customer service department.

This project exceeded expectations and delivered information faster to our citizens enabling them to make better decisions. The Property Report met all users' needs and demands for Real Property Information. Now, Property Report is the most innovative and interactive report available, with dynamic content control available to both citizens and staff alike.

The Property Report can be accessed at http://gisweb.roanokeCountyva.gov/PropertyReport/.