



## APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 3, 2019.** 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](#).

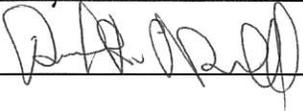
### PROGRAM INFORMATION

County: Roanoke County  
Program Title: TriView Web Mapping Application  
Program Category: Information Technology

### CONTACT INFORMATION

Name: David Wray  
Title: GIS Manager  
Department: Communications and Information Technology  
Telephone: 540-777-8564 Website: gis.roanokecountyva.gov  
Email: dwwray@roanokecountyva.gov

### SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

Name: Dan O'Donnell  
Title: County Administrator  
Signature: 

## **THE PROBLEM OR CHALLENGE**

Comprehensive information about properties utilizing one interface did not exist. The objective was to create a web mapping service that utilizes the County of Roanoke's authoritative data while also leveraging existing third party technologies to help users make more informed decisions while discovering an enhanced common operational picture. Fulfilling public or staff requests about property characteristics, historic market assessments, legal descriptions, zoning restrictions, and other vital information required several days and coordination of staff in various departments. This approach created a barrier to citizen and staff access of important information necessary for daily decision-making in Roanoke County.

The County sought a way to offer comprehensive Pictometry aerial photography and oblique imagery, Google Street View and Google Maps, through a simple, easy-to-use web mapping service that allowed users to find information with the most commonly used search methods. A key objective in the project was to make all aerial photography, oblique imagery and other GIS data accessible quickly, across a variety of platforms and technologies, including today's current mobile devices.

GIS Services in Information Technology maintains aerial photography, oblique imagery, parcel outlines, address data, street centerlines and zoning data to create the foundation of the Enterprise GIS in the County of Roanoke. This approach ensures data consistency across the County's various departments and assorted applications. GIS Services was able to leverage the Integrated Pictometry Application for web integration and ArcGIS Desktop Python scripting technologies

to integrate the Enterprise GIS foundation data with data from the Eagleview Pictometry Image Cloud Service and other third party commercial services to provide a one-stop-shop for all Roanoke County Enterprise GIS data.

TriView offers an easy-to-use web mapping service of comprehensive Pictometry aerial photography and oblique imagery, Google Street View, Google Maps and Enterprise GIS data services that consolidates various other data sources. Using Microsoft SQL Server, the ArcGIS platform and Python, GIS Services was able to integrate the data into its GIS platform, providing community facilities, mile markers, trails, park sites, water features, appraiser zones, address points, streets, zoning, flood zones, building footprints, jurisdictions, hydrants, fire response areas, and law districts information in a web mapping service application.

Imagery location discovery is made simple by using a custom auto-complete search engine that allows discovery based on the most commonly used labels, including street address, owner name, or tax ID's number.

This level of integration into a common GIS platform also enabled staff to enhance the County's application with third party services such as Google Street View, Google Maps and Pictometry, and also combining these services to create the unique TriView web mapping service of any selected address or tax parcel.

TriView offers the same functionality when accessed on a desktop PC, mobile phone or tablet device. Designed as a mobile application from the ground-up, TriView offers comprehensive situational awareness and a common operational picture in the palm of a user's hand. In addition, location-based services allow real

estate professionals, citizens, and staff this same information on parcels as they travel through neighborhoods.

Now the County's citizens and staff members use the application, to quickly access data including Pictometry aerial photography, Pictometry imagery oblique's, Google Maps, Google Street View, real estate assessments, land records, economic development sites, police activity, planning and zoning, schools, government services, and environmental and utilities information. The improved operational efficiency extends to the field where staff save many hours on data collection.

The overall goal of developing the TriView app was to minimize the administrative overhead of delivering staff and public requests to make more informed decisions while maximizing access to public data delivery in the most convenient and accessible formats for staff and the public alike. With TriView, all citizens, staff and commercial stakeholders can access the comprehensive information they need on any device, at any time, and anywhere.

To streamline requests for more informed decisions from both staff and citizens, Roanoke County sought to create a solution for staff and citizens to access information using any desktop and mobile devices. The TriView web mapping service was designed from the ground up to offer a consistent experience on a PC, mobile phone or tablet.

Questions that required input from staff in several departments can now be answered independently and quickly through the integrated services offered in the TriView app, which creates efficiencies for staff and public users alike.

Now staff and citizens can use the TriView Application to quickly access data for community facilities, mile markers, trails, park sites, water features, appraiser zones, address points, streets, zoning, and flood zones, building footprints, jurisdictions, hydrants, fire response areas, and law districts information in a web mapping service application. The County's Real Estate Valuation Office currently uses the new app to improve the regularity, volume and accuracy of annual assessments that previously consumed hours of staff time and coordination.

Giving citizens easy access to aerial photography and oblique imagery and related information, available in the palm of their hands at all times, has reduced citizen calls for information, while overall customer satisfaction has increased. Citizen and staff adoption of the new TriView app is the strongest indicator of the app's ongoing success. The TriView app has served 11,306 pageviews with 88 percent new users.

With the TriView app, Roanoke County has achieved its goal of offering staff and citizen a new level of access to the tax parcel data they need on any device, at any time, and anywhere it is needed.

## EXECUTIVE SUMMARY

Roanoke County, Virginia's TriView web mapping service is a customized solution that combine Google Maps, Google Street View Eagleview's Pictometry imagery into one embeddable control that utilizes a simple and easy to use interface. The TriView app was created from the ground up with accessibility in mind, and an emphasis was placed on integrating the latest technologies to ensure mobile compatibility and the use of location services.

The TriView app offers a new level of government transparency to its citizens, by including a vast array of acquired public data in an easy-to-use and mobile solution. Citizens and staff are no longer tied to desktop computers, as the TriView app can be used on a variety of mobile devices, from any location.

This increased ease-of-use helps streamline the day-to-day operation of staff while giving citizens access to County data whenever, and wherever, they choose. Please click on the following link to launch the TriView application:

<https://triview.roanokecountyva.gov/?lng=-79.9872606&lat=37.22257456&deg=279.56770829>.

Now staff and citizens can use the TriView Application to quickly access data for community facilities, mile markers, trails, park sites, water features, appraiser zones, address points, streets, zoning, and flood zones, building footprints, jurisdictions, hydrants, fire response areas and law districts information in a web mapping service application. The County's Real Estate Valuation Office currently uses the new app to improve the regularity, volume and accuracy of annual assessments that previously consumed hours of staff time and coordination.

Giving citizens easy access to aerial photography and oblique imagery and related information, available in the palm of their hands at all times, has reduced citizen calls for information, while overall customer satisfaction has increased. Citizen and staff adoption of

the new TriView app is the strongest indicator of the app's ongoing success. The TriView app has served 11,306 pageviews with 88 percent new users.

With the TriView app, Roanoke County has achieved its goal of offering staff and citizen a new level of access to the tax parcel data they need on any device, at any time, and anywhere it is needed.

## **BRIEF OVERVIEW**

Roanoke County, Virginia's TriView web mapping service is a customized solution that combine Google Maps, Google Street View Eagleview's Pictometry imagery into one embeddable control that utilizes a simple and easy to use interface. The TriView app was created from the ground up with accessibility in mind, and an emphasis was placed on integrating the latest technologies to ensure mobile compatibility and the use of location services.

The TriView app offers a new level of government transparency to its citizens, by including a vast array of acquired public data in an easy-to-use and mobile solution. Citizens and staff are no longer tied to desktop computers, as the TriView app can be used on a variety of mobile devices, from any location.

This increased ease-of-use helps streamline the day-to-day operation of staff while giving citizens access to County data whenever, and wherever, they choose.

Please click on the following link to launch the TriView application

[https://triview.roanokecountyva.gov/?lng=-79.9872606&lat=37.22257456&deg=279.56770829.](https://triview.roanokecountyva.gov/?lng=-79.9872606&lat=37.22257456&deg=279.56770829)