



## SUBMISSION FORM

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: July 1, 2025.** Please include this submission form as the first page of your 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: Demographics Web Application Solution  
Program Category: Technology

### CONTACT INFORMATION

Name: David Wray  
Title: GIS Manager  
Department: Information Technology  
Telephone: 540.777.8564 Website: <https://demographics.roanokecountyva.gov/>  
Email: dwwray@roanokecountyva.gov

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

Name: Richard Caywood  
Title: County Administrator  
Signature: 

## **EXECUTIVE SUMMARY**

The Roanoke County Demographic Hub Site is a modern, interactive platform built on Esri's HUB technology, designed to make Roanoke County's demographic data more accessible and engaging. Previously, Roanoke County's demographic data was shared using static PDF reports. In contrast, the new Hub site utilizes dynamic, interactive dashboards and maps. This allows users to explore a variety of data—including unemployment statistics, election results, and demographic comparisons—from a GIS perspective, enabling deeper insight and greater engagement.

By integrating Esri's GIS applications such as Map Viewer, Experience Builder, and Dashboards, the Roanoke County Demographics Hub Site allows residents, County staff, prospective businesses, and other stakeholders to interact with demographic content. As the site is linked to trusted and professionally managed data sources, the site will remain a useful tool for those seeking demographic information in Roanoke County for years to come.

The Hub site was created by Rachel Lockwood, a GIS intern for Roanoke County, with guidance and assistance from the Roanoke County GIS Team. Since its public release in December 2024, the site has had over 3,600 page views.

.....

## **Description of the Program**

We are excited to introduce you to Roanoke County Demographic HUB Site, a modern leap into the 21st century. Built on Esri's HUB platform, an advanced community engagement solution that seamlessly integrates with GIS applications, this site presents demographic data in an interactive, accessible, and visually engaging format. This modernized tool empowers residents, stakeholders, and decision-makers with easy access to vital demographic insights for Roanoke County and seeks to provide an engaging and interactive platform for interested parties to view the County's demographic data.

Utilizing GIS, the site seeks to provide an interface which allows users to explore demographic data in a spatial context, promoting engagement and a better understanding of the data. For example, users can interact with digital maps showcasing American Community Survey (ACS) data at various scales, from state level all the way down to individual census tracts. They can also view local voting data on an interactive map, showcasing the County's politics, or explore comparative dashboards that permit users to select a subset of demographic data and a geography to compare to Roanoke County. This GIS-centric approach makes the site a valuable resource for those seeking Roanoke County demographic information.

The Roanoke County Demographics Hub Site incorporates elements made by applications released by Esri, including Map Viewer, Experience Builder, and Dashboards. The site itself was built using Hub, Esri's community engagement platform, which seamlessly meshes with GIS applications to connect interested parties with demographic data.

The site contains several tabs for users to explore. Some highlights include:

- A dashboard of current unemployment statistics, utilizing feature layers which are updated and maintained by the Esri Demographics Team.
- An interactive map of Roanoke County's voting and election data from the November 2024 election, providing insight for the public into local politics.
- A "Comparative Statistics" section, which compares Roanoke County's demographics to several other geographies that are used for comparison by the Roanoke Regional Partnership.

The GIS-centric design is ideal for demonstrating demographic data. Users can view demographic data in a spatial context, with the ability to pan around the map or click on individual census tracts to view data specific to that location. This approach allows for a better understanding of the demographic data and how it relates to location, as well as engaging users in a way that a static PDF cannot.

### **The Problem or Need for the Program**

Previously, the County's demographic data was available only in PDFs posted to the County website. One PDF document contained statistics from the 2020 United States census and two additional documents derived information from a 2023 analysis performed by MGT of America Consulting, LLC (MGT). Unfortunately, this format contained limitations: it wasn't interactive, there was an inability to update data without doing so manually, and it restricted users to viewing only a limited amount of curated data.

The Roanoke County Demographics Hub Site overcomes these issues by utilizing GIS. It features dashboards and interactive maps drawing from data sources maintained by Esri. In particular, the Application uses data from the American Community Survey (ACS). An advantage of ACS data is that it is updated more frequently than the decennial census and thus provides a

more current perspective. Esri updates its feature layers within days of the release of new data, meaning that the site keeps itself up to date without having to rely on County employees to do so.

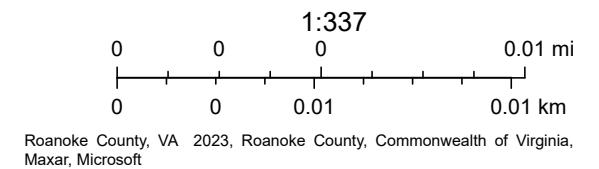
The site was met with warm reception when presented at Roanoke County's GIS User Group Meeting on March 19, 2025, particularly by the Planning Department, which found the demographic maps to be useful and relevant to County planning. It has received over 3,600 page views from December 2024 through June 2025.



# VaCo 2025 Achievement Awards Map



6/27/2025, 2:59:03 PM



David Wray  
County of Roanoke 2025