

Target Audience - Virginia Studies, Grade 4,5

Time required – 15 minutes

Activity	Explore the population of counties, independent cities through time.
Virginia Standards of Learning	VS.9 – Describe the economic and social transition from a rural agricultural society to a more urban industrialized society.
Learning Outcomes	Students will be able to - Distinguish between a county, independent city, and town. - Describe how population in Virginia has changed over time.

MAP URL: bit.ly/VAGeo2

Ask

How does population vary across Virginia?

- Click the link above to launch the map.
- ? Examine the legend. What is the highest value in the legend? (1,081,726)
- ? Where are areas of high population located? (*in eastern and northern Virginia*)
- Search for Highland County, Virginia, the county with the lowest population. (See *ToolTip* on p. 2)
- ? What is the population of Highland County in 2010? (2,321). Hint: Click on the county.
- ? Search for your county or city. How does its population compare with the others you examined? (*answers will vary*)

Acquire

How did Virginia's county population change over time?

- Click on several counties throughout the state. Examine the pop-ups. (See *Tooltip*)
- ? Describe the population trend over time. (*population has increased*)
- Search for Richmond County, Virginia. Open the popup. When was its population the greatest? (1800)
- ? Search for Bath County. How did its population change from 1800 to the present? (*population lower today than it was in 1800*)
- ? What could be some reasons for the trends in these counties? (*changes in transportation, rural-urban pull*)
- With the Details button underlined, click the button Show Contents of Map. (Content)

Explore

How are towns related to counties?

- The 191 towns in Virginia are incorporated municipalities **within** a county. The state issues charters that define powers granted to a town such as collecting taxes and providing for public safety.
- Turn on the Towns layer, then select the legend. Zoom in or out as needed.
- ? What do you observe? (*many towns have under 16,000 people*)
- ? Which counties have towns with populations over 31,900? Hint: Click on the county. (*Montgomery, Fairfax counties*)
Zoom in and out as needed.
- Select the Bookmarks button next to the Search window. Select the Bookmark for the Eastern Shore.
- ? What do you notice about how the points are arranged? (*form a straight line*)
- ? Can you think of any features that may influence the pattern you observed? (*roads*)



Analyze

What is unique about Virginia's independent cities?

- Each of Virginia's 38 independent cities is an incorporated municipality that is **not part** of the nearby county. In most of the United States, a city is part of the county.
- ➔ Turn off the Virginia 2010 and the Towns layers. Turn on the Independent Cities layer.
- ? Where are the cities with the largest land area located? (*southeastern Virginia.*) Zoom in and out as needed.
- ? When were most of the cities established? (1902, 1963) Hint: Click on several large and small cities and examine their pop-ups.
- ? Turn on the City Notes layer. Click the symbols for the large cities, read the notes, and examine the images.
- ? Why were independent cities created? (*In 1902 the state constitution changed and in the 1960s counties merged with an existing city to prevent another city from annexing or taking its land.*)



Act

Why does where you live matter?

- ? In which type of place do you live? (*answers will vary*)
- ? What do you think are benefits to having counties, towns, and independent cities? (*ability of local areas to provide services for its people*)
- ? What challenges might the variety of communities pose? (*duplication of services, taxes*)

SEARCH BOX	IDENTIFY A MAP FEATURE
• In the place name search box, type the place's name. • Click the magnifying glass. • The map will zoom to the location (you can zoom in and out as needed)	• Click a feature on the map, and a pop-up window will open with information. • Links and images in the pop-up are often clickable. • An arrow icon in the upper right of the window indicates that multiple features are available. • Click the arrow to scroll through the features.

Next Steps

EXTEND LEARNING . . .

- In 1634 Virginia only had 8 counties Use the First Counties layer to determine if your county was among the first 8. How did the counties in 1634 differ from those today?
- Turn on the Census Designated Places layer. Which is the predominant type in your community? How are the census designated places related to counties? Independent cities?

DID YOU KNOW? ArcGIS Online is a mapping platform freely available to U.S. public, private, and home schools as a part of the White House ConnectED Initiative. A school subscription provides additional security, privacy, and content features. Learn more about ArcGIS Online and how to get a school subscription at <http://connected.esri.com>.

THEN TRY THIS . . .

- Use the County layer and the Summarize Within analysis tool to count the number of features in an area and calculate the population within that cluster.
- Log in to your ArcGIS organization account and Filter for your county or independent city. Use the Data Enrichment Analysis Tool to select demographic and economic variables for your area.

Send feedback to: vageoinquiries@gmail.com

Additional materials at <https://php/radford.edu/~vga>

Learn more about Virginia's people and places in *An Atlas of Virginia*

Virginia GeoInquiries are available to the public at no cost, and were made possible with support from the Virginia Geographic Alliance and Esri.



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