

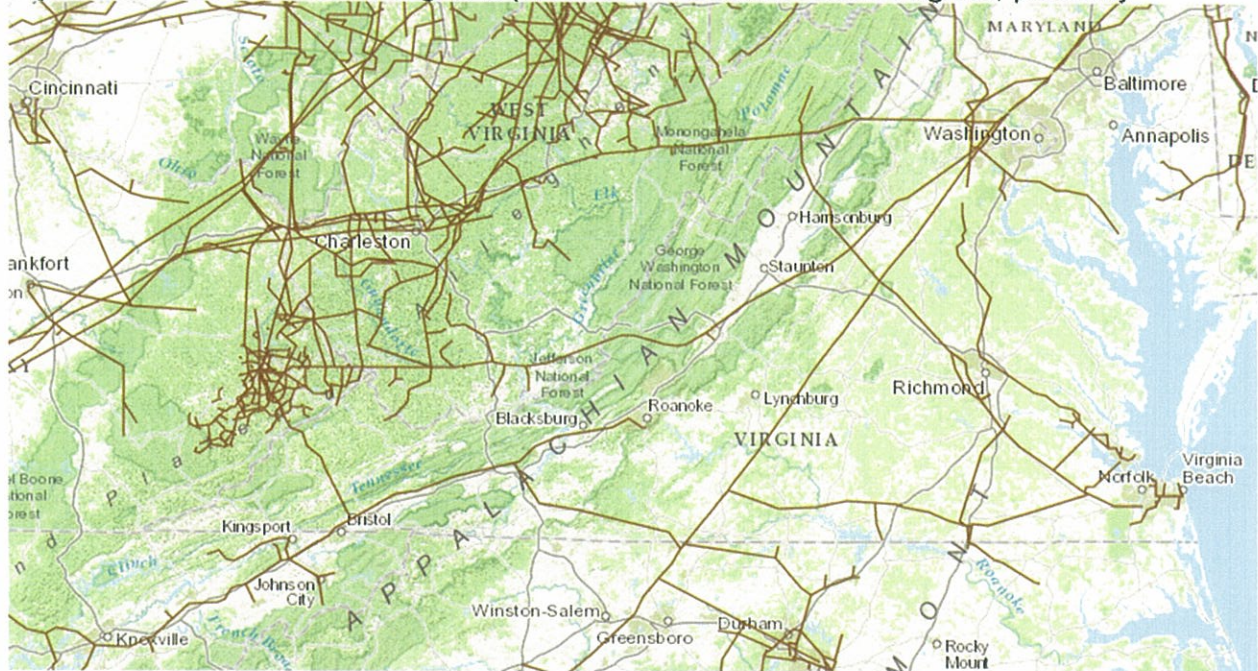
<http://www.virginiaplaces.org/transportation/gaspipeline.html>

## Natural Gas Pipelines in Virginia

natural gas pipelines bring natural gas from the Gulf Coast and West Virginia/Ohio/Pennsylvania into Virginia

Source: ESRI, [ArcGIS Online](#)

Virginia imports over 50% of its natural gas via pipeline from out-of-state sources. A significant amount of natural gas is produced in southwestern Virginia, primarily



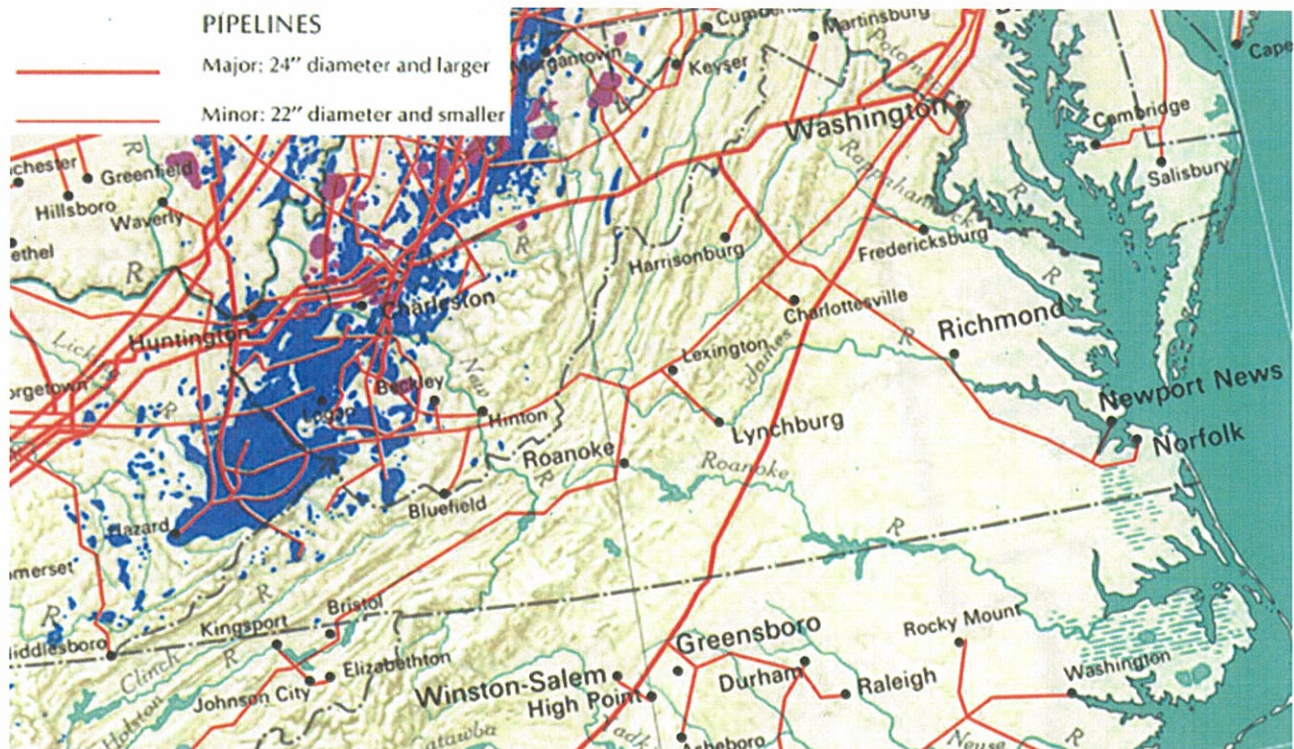
methane from coal beds in the Appalachian Plateau. A tiny amount of methane is captured at landfills and even at wastewater treatment plants. In production, transport, and storage, some natural gas escapes and increases greenhouse gases in the atmosphere.

In Virginia, two commercial oil fields produce natural gas as well as fluids. When natural gas is brought to the surface and the pressure is lowered, some hydrocarbon molecules condense from their gaseous state into liquid. Oil fields produce some gas, and gas fields produce some oil.

The condensates (natural gas liquids) extracted from the Marcellus Shale gas in West Virginia/Ohio provide raw material for refineries around Pittsburgh and Philadelphia. The natural gas produced from the Appalachian fields provides energy for refinery operations, but much is now shipped by pipeline to customers on the East Coast. Distribution by pipeline in the area has a long history. The first hydrocarbon pipelines in the United States were developed in western Pennsylvania, after Colonel Edwin Drake drilled the first oil well at Titusville in 1859.

new pipeline along the eastern side of the mountains, Transco had an advantage - it had no existing customers. Transco signed contracts with some customers in Virginia such as Danville, but reserved enough volume so Transco could become the dominant supplier in New York and earn higher profits.<sup>3</sup>

The Transco pipeline today is owned by Williams Companies. It is still the primary trunk pipeline that carries natural gas from the Gulf of Mexico and adjacent states to Virginia, but the direction of flow is being reversed.



much of Southside Virginia had no large pipeline providing natural gas in 1970, limiting the region's ability to recruit new manufacturing facilities

Source: Library of Congress, "The national atlas of the United States of America," [Natural Gas Pipelines](#)

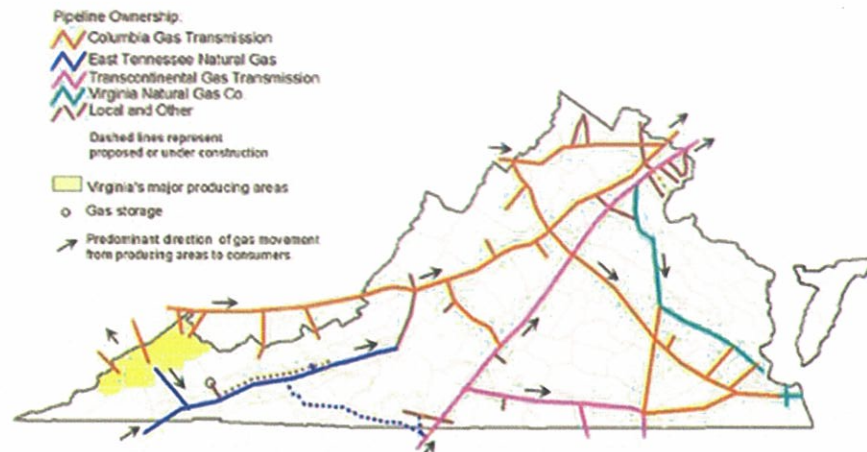
After development of the Ohio, Marcellus, and Utica shale gas fields through fracking, that pipeline can now bring gas from West Virginia, Ohio, and Pennsylvania south to Virginia. The company will expand pipeline capacity across Pennsylvania (the Atlantic Sunrise Project) and push gas in the main pipeline towards the south. The company's proposed Appalachian Connector project would provide a new link bringing Appalachian gas to the existing Transco pipeline in Virginia, joining at the Transco Station 165 compressor station in Pittsylvania County.

Two other companies, Enbridge (which acquired Spectra in 2017) and Columbia Gas (now part of NiSource), own the other two major *interstate* pipelines bringing natural gas into Virginia. Both of those trunk lines bring Gulf Coast and Appalachian gas eastward into Virginia. In 1950, the Roanoke Gas Company built a 30-mile pipeline to Gala in



the first Transco natural gas pipeline connected the Gulf Coast with the Northeast, but now can bring gas from Pennsylvania/Ohio south to Virginia  
 Source: Williams Company, [Gas Pipeline Asset Map](#)

In addition to Transco (Williams) and the East Tennessee Natural Gas pipeline (Spectra Energy), Virginia receives large supplies of natural gas from two other interstate pipeline companies. Columbia Gas Transmission has two major pipelines that cross into Virginia from its western border to supply both Northern Virginia and Hampton Roads.



Transco, Spectra and Columbia Gas own the major interstate trunk pipelines bringing natural gas to Virginia

Source: 2010 Virginia Energy Plan, [Section 5 - Natural Gas](#)

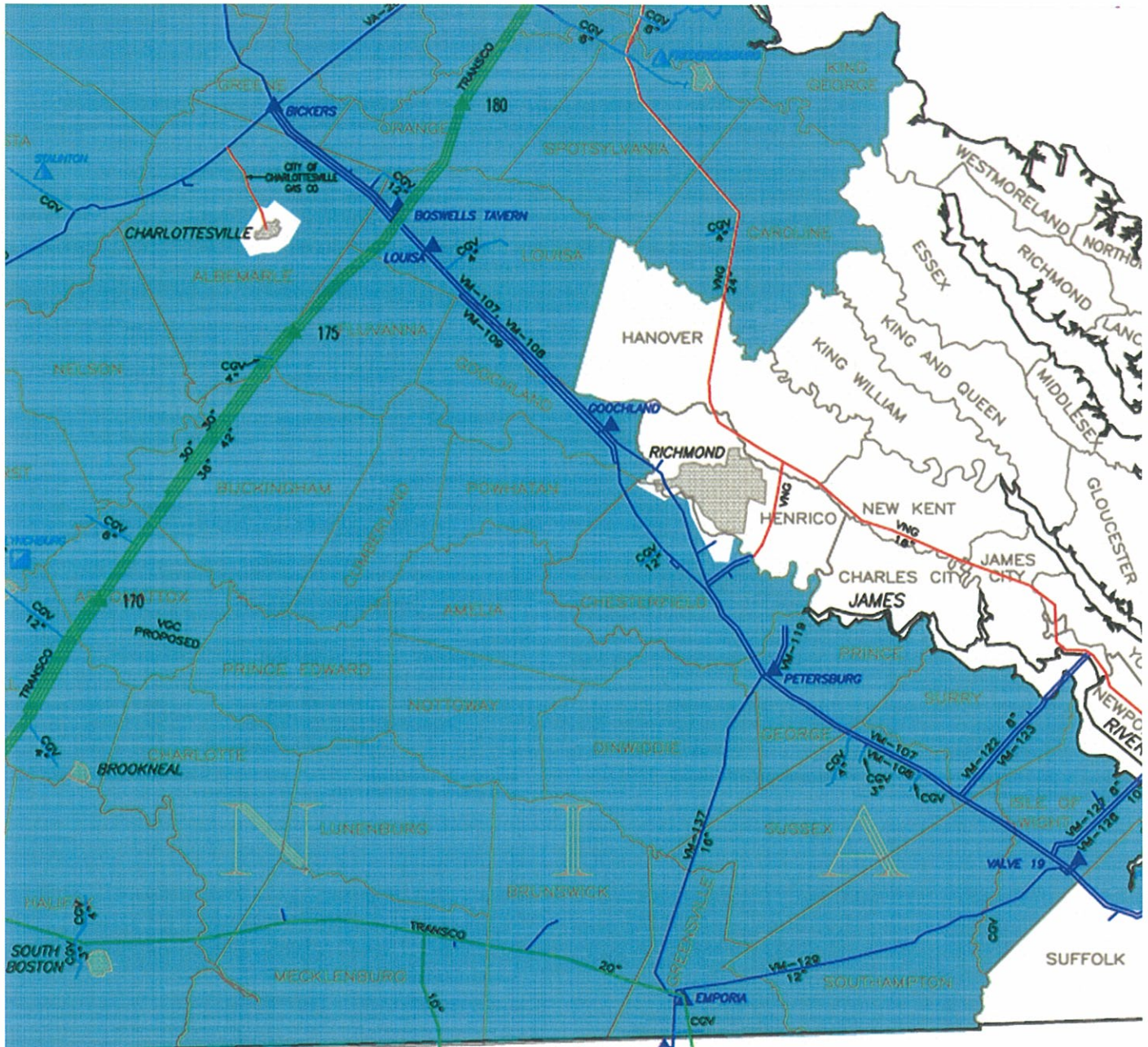
Dominion Transmission, a subsidiary of the same company that dominates the electricity market in Virginia, built a pipeline to carry natural gas from Maryland to the Possum Point electricity generating plant in Prince William County. That pipeline was planned to carry gas from the Cove Point Liquefied Natural Gas (LNG) terminal in Maryland to Possum Point.

After the success of fracking in the Appalachian Basin, Dominion decided to reconfigure the Cove Point terminal to export, rather than import, Liquefied Natural Gas. The primary supply for Possum Point became gas from Appalachian shale basins, delivered via pipeline from Pennsylvania, Ohio, and West Virginia. In 2018, Dominion planned to add a third compressor station to the pipeline to increase its capacity.

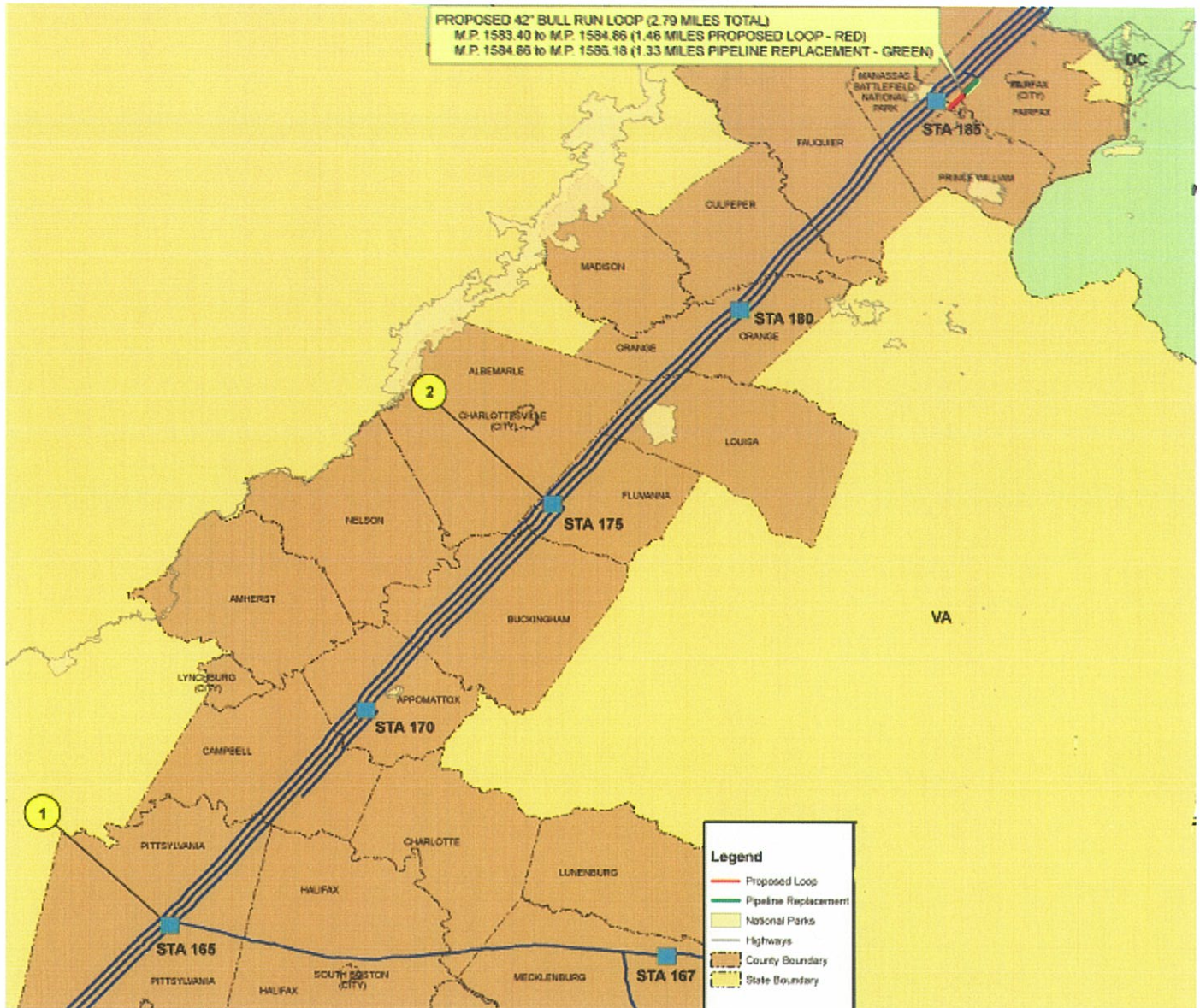
The initial site planned for the compressor station was in Charles County, Maryland, across the Potomac River from Mount Vernon. The historical view from George Washington's home would be affected if the two exhaust stacks were visible. Piscataway Park had been created to protect that view in the 1960's, when sewage treatment plants and oil storage facilities were proposed near the Maryland shoreline.

Though Dominion claimed the stacks would be screened by trees, the company later agreed to find another location.<sup>5</sup>

The exclusive service areas are easy to see when examining maps of service areas in Tidewater Virginia for Virginia Natural Gas (a subsidiary of Southern Company) and Columbia Gas of Virginia (a subsidiary of NiSource), especially in the cities of Suffolk, Chesapeake, and Virginia Beach in Hampton Roads:



Columbia Gas distribution service area  
Source: [Columbia Gas of Virginia](#)



Transco natural gas pipeline route through a portion of Virginia  
 (replacement pipe through Manassas Battlefield was installed in 2012, after Civil War  
 Sesquicentennial events had concluded)

Source: Transcontinental Gas Pipe Line Company, [Mid-Atlantic Connector Expansion Project](#)

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