broadbandnow

November 18, 2014

RE: Broadband Competition in Roanoke, VA

Dear Mayor Bowers,

As you know, broadband infrastructure is a key factor consumers and businesses use to evaluate where to live and do business, yet in many areas consumers are drastically under-served.

So much so, that in 2013 the FCC reported to Congress that "Broadband is not yet being deployed to all Americans in a reasonable and timely fashion."

With that in mind, below you will find a detailed report on the availability and competition within the local Roanoke broadband market.

This report is based on data collected by the FCC, NTIA, and other sources and is designed to help you and your team:

1. See a granular picture of broadband market in Roanoke (specifically Roanoke City).
2. See a broader picture of broadband competition in Virginia.
3. Understand what resources may be useful in bringing faster broadband to Roanoke.

Our company originally collected this data to create a guide to help consumers find the best broadband in Roanoke but we hope you also find it useful in your endeavors.

You can see the consumer facing guide here: http://broadbandnow.com/Virginia/Roanoke

On behalf of the citizens of Roanoke, thank you for all you do to make Roanoke a wonderful place to live.

Best Regards,

Nick Reese

BroadbandNow: Dedicated to helping you find the best broadband in your neighborhood.
BroadbandNow.com/mission

Broadband competition in Roanoke at a glance:

- Average broadband speed: 25.2 MBPS
- Broadband speeds compared to state average: 18% slower
- Broadband speeds compared to National average: 3% slower
- Overall wired broadband coverage (Roanoke City): 97.5%
- Population under-served (Roanoke City): 3,733 (estimated) †

Coverage by speeds	Roanoke City	Virginia	U.S.
10+ mbps coverage	97.5%	87.4%	91.5%
50+ mbps coverage	97.5%	78.5%	82.0%
100+ mbps coverage	97.5%	76.0%	59.8%

Coverage By Tech	Roanoke City	Virginia	U.S.
Wired (all types)	99.9%	93.4%	95.1%
Fiber Optic	8.2%	45.9%	24.3%
Cable	96.9%	82.8%	88.1%
DSL	98.5%	83.3%	88.6%
Fixed Wireless	98.7%	12.1%	49.3%
Mobile Broadband	100.0%	98.4%	99.0%

† **Note from Nick:** The most important number in the list above is the "population under-served" metric. This is the number of people that only have access to 0 or 1 wired broadband provider leaving them without a competitive market and no option to switch if they are dissatisfied with their service.

Roanoke's Broadband Competition in Detail

Large Providers:

- Verizon High Speed Internet: offering DSL to 98.5% of Roanoke City with 24% of customers saying they would recommend their service to a friend.
- Cox Communications: offering cable to 95.8% of Roanoke City with 31% of customers saying they would recommend their service to a friend.
- Comcast: offering cable to 3.8% of Roanoke City with 21% of customers saying they would recommend their service to a friend.
- Lumos Networks: offering DSL to 3.3% of Roanoke City with 40% of customers saying they would recommend their service to a friend.

Alternative Providers

Alternative providers are smaller providers, wireless providers, business only providers, or providers covering only a small percentage of Roanoke City.

- B2X Online: offering fixed wireless to 98.7% of Roanoke City.
- NRV UNWIRED: offering fixed wireless to 3.1% of Roanoke City.

Note from Nick: For consumers looking to compare providers, we've done a detailed comparison of each at http://broadbandnow.com/Virginia/Roanoke

An Overview of Virginia's Broadband

- Virginia is the 33rd most connected state
- Average statewide speed: 30.9 MBPS
- 10+ MBPS coverage: 87.4%

Government Funding for Virginia:

Since 2010, Wired Virginia has been awarded $8,099,979 in federal grants for Virginia's Broadband Initiative.

Another $92,995,941, accounting for 2.7% of all federal infrastructure grants, was awarded to broadband infrastructure projects in Virginia.

Since 2011, access to a wired connection of at least 10mbps has improved from 76.9% to 87.4% of Virginians.

Legal Barriers to Municipal Broadband

Many mayors and city representatives ask us what they can do to bring faster broadband to their area.

The unfortunate reality is that many municipalities have few options besides asking the local providers to expand/upgrade their network or building their own infrastructure if it is allowed by the state legislature.

To make the situation more complex, Virginia is one of the 19 states that have passed statues limiting municipalities from offering competitive broadband Internet or fiber optic services to their constituents.

For more details on the limitations see:

- VA Code § 15.2-2108.6: Franchises; Sale and Lease of Certain Municipal Public Property; Public Utilities
  http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+TOC15020000021000000000000
- VA Code § 56-265.4:456-484.7:1: PUBLIC SERVICE COMPANIES
  http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+TOC56000000010000010000000
- VA Code § 56-484.7:1: Offering of communications services
  http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+56-484.7C1

If you're interested in the process of bringing municipal broadband to Roanoke, here are a few case studies. We have no relation to any of them and don't endorse them, they are just provided as a resource:

- Broadband at the Speed of Light: A 75 page report from the Institute for Local Self-Reliance dissecting how Chattanooga, TN, Bristol, VA, and Lafayette, LA built robust municipal networks.
  - Found at: http://www.ilsr.org/wp-content/uploads/2012/04/muni-bb-speed-light.pdf
- Fast Internet Is Chattanooga's New Locomotive: A recent article in the NYT about Chattanooga's municipal broadband.
  - Found at: http://www.nytimes.com/2014/02/04/technology/fast-internet-service-speeds-business-development-in-chattanooga.html

As you're probably already aware, a resolution was introduced at the U.S. Conference of Mayors in June that calls for the FCC to preempt state barriers to municipal broadband service. For more information on this resolution, see http://muninetworks.org/content/us-conference-mayors-passes-resolution-end-state-barriers.

Resources

Below is a quick list of resources and organizations that may be relevant to bringing faster broadband to Roanoke.

Wired Virginia

Wired Virginia is the state broadband initiative (as setup by the NTIA) who's purpose is to assist states in gathering data twice a year on the availability, speed, and location of broadband services, as well as the broadband services that community institutions use.
http://www.wired.virginia.gov/broadband.shtml

Overview of Broadband Grants in Virginia

Here is a list of all of the grants awarded in state as maintained by the NTIA.
http://www2.ntia.doc.gov/virginia

Other Resources in Virginia

This guide by the FTTH Council is also a great resource for all things broadband in Virginia.
http://www.ftthcouncil.org/p/cm/ld/fid=159