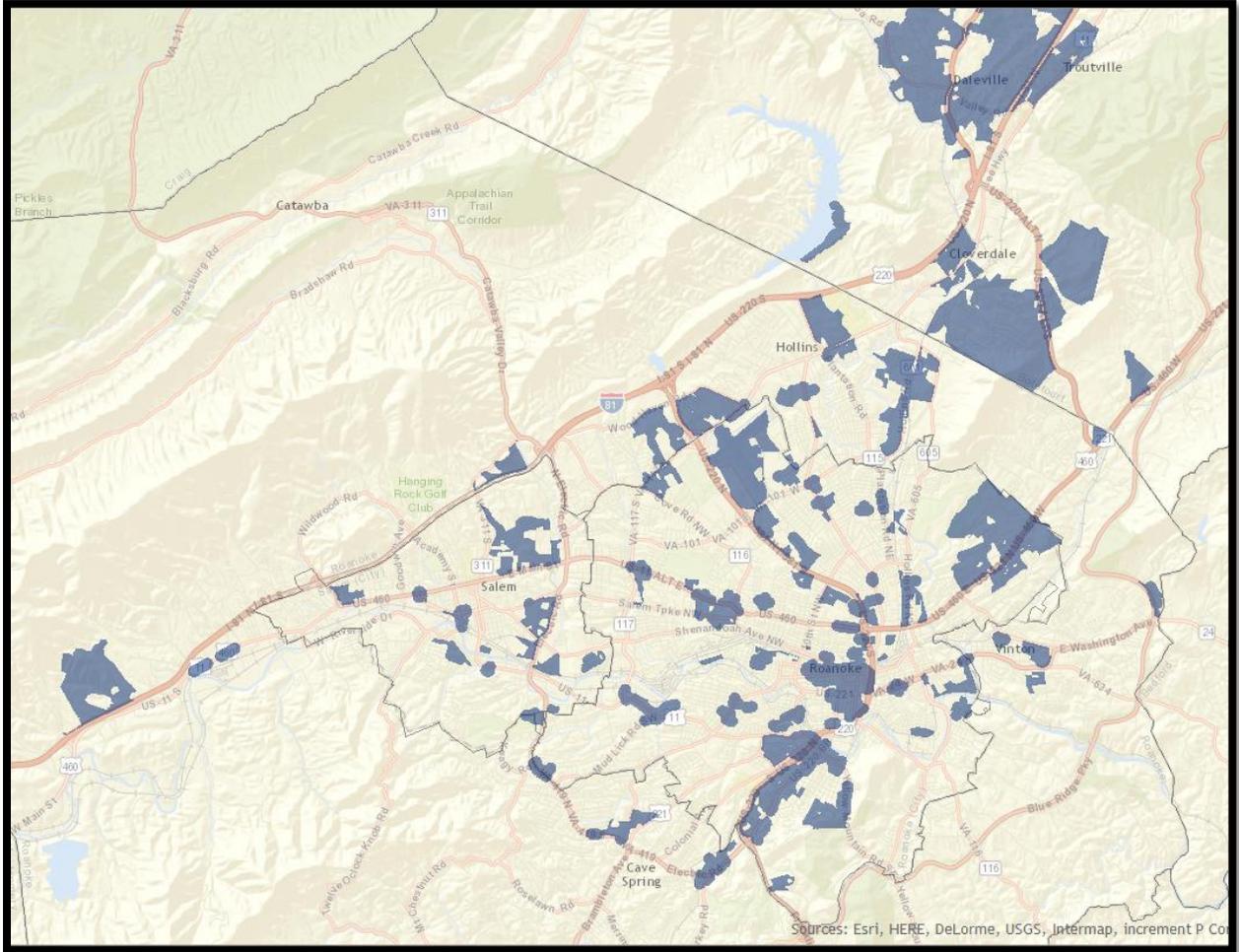# Roanoke Valley Broadband Data Summary

from the

National Broadband Map

Compiled for the Roanoke Valley Broadband Authority

by the Roanoke Valley-Alleghany Regional Commission

July 2014

Table of Contents

Data Summary

The following data is a product of the National Broadband Map (see page 6 for a complete description). In some cases, peer communities, as identified by the Roanoke Regional Partnership are used for comparison.

- About 8% of the population in the Roanoke MSA has access to fiber. Nationally, this number is 24%. Roanoke is well behind peer areas such as Fort Wayne, Indiana, Washington DC and Chattanooga. Nationally, this gives Roanoke a rank of 198 of 429 metro areas. In Virginia, Roanoke ranks 7 out 11 metro areas in access to fiber.
- The Roanoke Valley has about a half dozen private companies with fiber networks. In some cases these are duplicative networks. Providers cooperate and compete at the same time, and offer desirable services to customers. Some networks are only for large users, but most existing fiber networks focus only on business customers. Some providers will not publically share the location of the networks. Even with these duplicative private networks, only 8% of the region's population is served. This is because most fiber does not serve the residential market, there are few last mile solutions, and costs are prohibitive. This leaves a literal "fiber gap", considering the access to fiber nationally is three times greater.
- In basic access to the Internet, Roanoke ranks 409th among 429 metro areas. While the ranking sounds low, it still means almost all people can access the Internet, even if at a low speed such as DSL. In Virginia, Roanoke ranks 10 out of 11 metro areas.
- The Roanoke MSA has better than average access to speeds greater than 100Mbps (fast cable modems). The Roanoke Valley has improved in this area over that past few years as Cox and Comcast have updated their networks.
- Roanoke does not have good access to very high speeds (1Gbps). About 4.5% of the population has potential access to these speeds in the Roanoke Valley, which is below the national average of 6.7%. Peer metro areas like Fort Wayne and Chattanooga are at more than 50% because they have made significant investments in broadband.
- Provider choice is limited in the Roanoke Valley. Eighty-nine percent of Roanoke MSA residents have two or less providers to choose from. Nationally, this number is 45%. In other words, 55% of the nation has more than two providers to choose from, while only 11% of the Roanoke Valley has more than two providers to choose from. Lack of competition adversely affects price and service.
- Botetourt County seems to have high access to fiber (33.9% of the population), but whether it is actually utilized, affordable, or actually accessible to residents is unknown.
- Over 5,000 people work from home in the Roanoke Valley according to the 2010 Census, and telework has increased 80% since 2005.
- Other details can be found in the following tables and attached reports.

Select Metropolitan Statistical Areas
Technology Wireline Optical Carrier Fiber To The End User

MSA Area	Percent Access to Fiber
Fort Wayne	77.9%
Washington DC-NOVA-MD	72.8%
Chattanooga	66.6%
National Average	*24.3%*
Winston Salem	15.6%
Charlotte	13.8%
Roanoke	**8.0%**
Spartanburg	7.8%
Lynchburg	3.0%
Asheville	2.7%
Danville	2.0%
Blacksburg-Christiansburg-Radford	1.2%

Source: National Broadband Map (NTIA & FCC) 2013

Selected Metropolitan Statistical Areas in USA
Access to Wireline Optical Carrier Fiber to End User

MSA Area	National Rank
Fort Wayne	20
Washington DC-NOVA	29
Chattanooga	47
Winston-Salem	150
Charlotte	161
Roanoke	**198**
Spartanburg	202
Lynchburg	263
Asheville	269
Danville	295
Blacksburg-Christiansburg-Radford	330

Rank within 429 Metro Areas
Source: National Broadband Map (NTIA & FCC) 2013

Metropolitan Statistical Area Within Virginia
Technology Wireline Optical Carrier Fiber To The End User

Rank	MSA Area	Percent Access to Fiber
1	Washington Arlington Alexandria DC VA MD WV Metro Area	72.8%
2	Richmond VA Metro Area	54.0%
3	Virginia Beach Norfolk Newport News VA NC Metro Area	43.1%
4	Kingsport Bristol Bristol TN VA Metro Area	35.2%
5	Charlottesville VA Metro Area	11.8%
6	Winchester VA WV Metro Area	9.2%
7	**Roanoke VA Metro Area**	**8.0%**
8	Harrisonburg VA Metro Area	3.3%
9	Lynchburg VA Metro Area	3.0%
10	Danville VA Metro Area	2.0%
11	Blacksburg Christiansburg Radford VA Metro Area	1.2%

Note: Measure of Access to Fiber Cable

Source: National Broadband Map (NTIA & FCC) 2013

Selected Metropolitan Statistical Areas in USA
Speed Download Greater Than 3 Mbps Upload Greater Than 0.768 Mbps

MSA Area	National Rank
Fort Wayne	26
Spartanburg	98
Washington DC-NOVA-MD	133
Charlotte	216
Winston-Salem	226
Chattanooga	319
Blacksburg-Christiansburg-Radford	371
Asheville	397
Lynchburg	401
Danville	405
Roanoke	**409**

Notes: A measure of basic internet access

Rank within 429 Metro Areas

Source: National Broadband Map (NTIA & FCC) 2013

Metropolitan Statistical Area Within Virginia
Speed Download Greater Than 3 Mbps Upload Greater Than 0.768 Mbps

Rank	Geography	Speed Combo DL>3 UL>0.7
1	Washington Arlington Alexandria DC VA MD WV Metro Area	100.0%
2	Virginia Beach Norfolk Newport News VA NC Metro Area	99.8%
3	Richmond VA Metro Area	99.5%
4	Harrisonburg VA Metro Area	98.9%
5	Blacksburg Christiansburg Radford VA Metro Area	98.7%
6	Kingsport Bristol Bristol TN VA Metro Area	97.9%
7	Lynchburg VA Metro Area	97.4%
8	Danville VA Metro Area	97.1%
9	Charlottesville VA Metro Area	97.0%
10	**Roanoke VA Metro Area**	**96.9%**
11	Winchester VA WV Metro Area	96.2%

Note: Measure of basic Internet speeds.
Source: National Broadband Map (NTIA & FCC) 2013

Select Metropolitan Statistical Areas
Population with Access to Speeds Greater than 100Mbps

MSA Area	Download Greater than 100Mbps
Spartanburg	95.1%
Washington DC-NOVA-MD	94.4%
Chattanooga	93.0%
Asheville	88.8%
Fort Wayne	85.3%
Roanoke	**79.9%**
Lynchburg	73.5%
Blacksburg-Christiansburg-Radford	71.6%
National Average	*59.8%*
Charlotte	11.8%
Winston-Salem	5.8%
Danville	2.8%

Notes: A measure of fast internet.
10-25Mbps=Movie download takes 33 minutes
25-50Mbps=Movie download takes 16 minutes
50-100Mbps=Movie download takes 8 minutes
100Mbps-1Gbps=Movie download takes 1 minute
Source: National Broadband Map (NTIA & FCC) 2013

Select Metropolitan Statistical Areas
Population with Access to Speeds Greater than 1Gbps

MSA Area	Download Greater than 1Gbps
Chattanooga	61.0%
Fort Wayne	50.8%
Charlotte	10.2%
Spartanburg	7.7%
National Average	*6.7%*
Winston-Salem	5.8%
Washington DC-NOVA-MD	4.8%
Roanoke	**4.5%**
Lynchburg	2.6%
Asheville	2.1%
Danville	2.0%
Blacksburg-Christiansburg-Radford	1.2%

Notes: A measure of very fast Internet.

10-25Mbps=Movie download takes 33 minutes

25-50Mbps=Movie download takes 16 minutes

50-100Mbps=Movie download takes 8 minutes

100Mbps-1Gbps=Movie download takes 1 minute

Source: National Broadband Map (NTIA & FCC) 2013

National Broadband Map Data

The National Telecommunications and Information Administration (NTIA) created and maintains the National Broadband Map, an unprecedented, searchable, public database of information on broadband Internet availability in the United States. NTIA created the National Broadband Map in collaboration with the Federal Communications Commission, using data that each state, territory and the District of Columbia (or their designees) collected from broadband providers or other data sources. (Source: NTIA, 2014)

The website resulting from this Federal-state partnership includes more than 25 million searchable records showing where broadband Internet service is available, the technology used to provide the service, the maximum advertised speeds of the service, and the names of the service providers. The data, to be updated every six months, will support efforts to expand broadband access in communities at risk of being left behind in the 21st century economy and help businesses and consumers seeking information on their high-speed Internet options. (Source: NTIA, 2014)

Data may be 6-12 months old, and some data may be missing if not shared by private providers. Coverage may be also being over-estimated based on data collection methodology. Data does not take into account actual usage (it measures potential usage), nor the cost or affordability of the service.

Roanoke Valley Alleghany Regional Commission staff prepared the following tables. Peer cities, used by the Regional Partnership were included in some of the Metro Area comparisons. A few of these metro areas have had large investments in fiber infrastructure. The Roanoke Metropolitan Statistical Area includes the Counties of Botetourt, Craig, Franklin and Roanoke and the Cities of Salem and Roanoke. Other MSAs in the nation are defined by the same population density and commuting standards and are comparable according to the Office of Management and Budget (OMB).

National Broadband Map
How connected is my community?

Analyze » Summarize

State » Virginia
Metropolitan Statistical Area » Roanoke, VA Metro Area

Below is a summary of the broadband characteristics for the area listed above. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees. Click on the section headings to see more information.

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Wireline

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	89.8%		93.4%
Download > 3Mbps	90.3%		94.1%
Download > 6Mbps	85.8%		92.9%
Download > 10Mbps	82.6%		91.5%
Download > 25Mbps	80.1%		83.8%
Download > 50Mbps	79.9%		82.0%
Download > 100Mbps	79.9%		59.8%
Download > 1Gbps	4.5%		6.7%

Source   API Call

Wireless

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	94.9%		98.6%
Download > 3Mbps	94.9%		98.6%
Download > 6Mbps	93.5%		97.9%
Download > 10Mbps	93.5%		97.5%
Download > 25Mbps	0.0%		16.2%
Download > 50Mbps	0.0%		9.3%
Download > 100Mbps	0.0%		7.1%
Download > 1Gbps	0.0%		0.1%

Source   API Call

Technology	Percent Population		Nationwide
DSL	89.1%		88.6%
Fiber	8.0%		24.3%
Cable	80.2%		88.1%
Wireless	97.8%		99.1%

7

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Demographics

Total area (sq miles)	1,799
Population	314,659
Housing Units	152,199

Age	Area (%)		Nationwide
under 5	6.2%		7.0%
5 - 19	18.4%		20.4%
20 - 34	17.5%		19.2%
35 - 59	32.6%		32.5%
60+	25.3%		20.9%

Race	Area (%)		Nationwide
White	84.4%		70.0%
Black	12.0%		11.1%
Hispanic	2.7%		14.4%
Asian/Pacific Islander	0.9%		4.1%
Native American	0.1%		0.5%

Income	Area (%)		Nationwide
Median income	$52,386		$58,522
Poverty rate	13.9%		15.8%
Below $25k	23.8%		24.1%
$25k-$50k	33.6%		30.0%
$50k-$100k	32.6%		30.6%
$100k-$200k	12.8%		16.5%
$200k or more	2.6%		4.2%

Education	Area (%)		Nationwide
High School graduate	79.5%		80.0%
Bachelor's	21.3%		24.8%

Other	0.0%	0.0%

degree or higher

Number of Internet Providers

Wireline   Wireless

#	Percent Population		Nationwide
0	3.2%		3.3%
1	13.6%		9.0%
2	72.2%		32.5%
3	9.6%		37.0%
4	1.4%		13.1%
5	0.0%		3.4%
6	0.0%		1.2%
7	0.0%		0.4%
8+	0.0%		0.1%

Broadband Speed Test (Mbps)

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Location	Cumulative Tests	25ᵗ percentile median speed (Mbps) 75ᵗ percentile	
Home	846	1.5	14.2
Schools, Libraries, Community Centers	25	1.0	6.5
Medium/Large Business	32	5.1	33.9
Small Business	49	1.7	9.4
Mobile	1,903	1.0	7.5
Other	2	0.8	17.3

0   33.9

Community Anchor Institutions

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Institution	Total Number of Records	Subscribe to Broadband			Speeds Reported	
		Yes	No	Not Provided		
Schools K through 12	121	121	0	0	121	
University, College, other post-secondary	13	13	0	0	12	
Libraries	20	20	0	0	15	
Medical / Healthcare	11	11	0	0	8	
Public Safety	21	21	0	0	21	
Community Centers - Government support	96	96	0	0	84	
Community Centers - Non-Government support	2	2	0	0	2	

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posted by Anne Neville on July 17, 2014

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State » Virginia
County » Botetourt

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Wireline

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	80.0%		93.4%
Download > 3Mbps	80.0%		94.1%
Download > 6Mbps	74.5%		92.9%
Download > 10Mbps	60.8%		91.5%
Download > 25Mbps	60.2%		83.8%
Download > 50Mbps	60.2%		82.0%
Download > 100Mbps	60.2%		59.8%
Download > 1Gbps	0.8%		6.7%

Source   API Call

Wireless

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	90.9%		98.6%
Download > 3Mbps	90.9%		98.6%
Download > 6Mbps	88.3%		97.9%
Download > 10Mbps	88.2%		97.5%
Download > 25Mbps	0.0%		16.2%
Download > 50Mbps	0.0%		9.3%
Download > 100Mbps	0.0%		7.1%
Download > 1Gbps	0.0%		0.1%

Source   API Call

Technology	Percent Population		Nationwide
DSL	79.9%		88.6%
Fiber	33.9%		24.3%
Cable	60.1%		88.1%
Wireless	96.6%	9	99.1%

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![Map of Botetourt County area showing Covington, George Washington National Forest, Jefferson National Forest, Blacksburg, Roanoke, Lynchburg](map)
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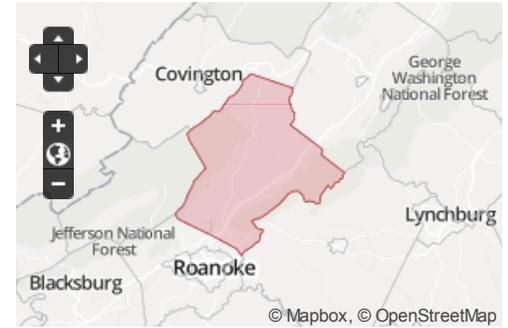
Demographics

Total area (sq miles)	521
Population	33,835
Housing Units	14,901

Age	Area (%)		Nationwide
under 5	4.1%		7.0%
5 - 19	18.7%		20.4%
20 - 34	16.4%		19.2%
35 - 59	31.7%		32.5%
60+	29.1%		20.9%

Race	Area (%)		Nationwide
White	97.8%		70.0%
Black	1.6%		11.1%
Hispanic	0.5%		14.4%
Asian/Pacific Islander	0.2%		4.1%
Native American	0.0%		0.5%

Income	Area (%)		Nationwide
Median income	$65,967		$58,522
Poverty rate	6.5%		15.8%
Below $25k	16.1%		24.1%
$25k-$50k	27.2%		30.0%
$50k-$100k	40.1%		30.6%
$100k-$200k	17.3%		16.5%
$200k or more	4.3%		4.2%

Education	Area (%)		Nationwide
High School graduate	82.7%		80.0%
Bachelor's	20.7%		24.8%
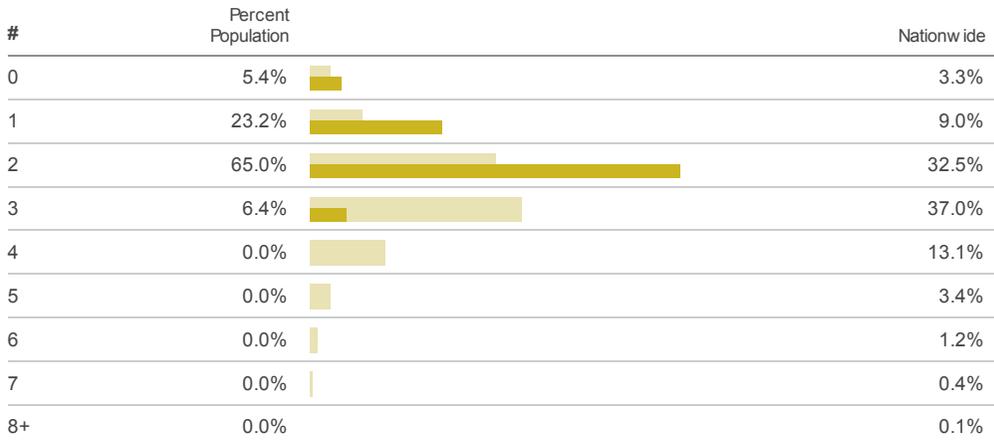
Other	0.0%	0.0%

degree or
higher

Number of Internet Providers

Wireline | Wireless

#	Percent Population		Nationwide
0	5.4%		3.3%
1	23.2%		9.0%
2	65.0%		32.5%
3	6.4%		37.0%
4	0.0%		13.1%
5	0.0%		3.4%
6	0.0%		1.2%
7	0.0%		0.4%
8+	0.0%		0.1%

Source   API Call

Broadband Speed Test (Mbps)

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Location	Cumulative Tests	25ᵗ percentile	median speed (Mbps)	75ᵗ percentile
Home	128	1.3		8.5
Schools, Libraries, Community Centers	0			
Medium/Large Business	2	58.0		78.9
Small Business	1		12.8 12.8	
Mobile	74	0.5		5.2
Other	0			

Source   API Call

0   78.9

Community Anchor Institutions

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Institution	Total Number of Records	Subscribe to Broadband			Speeds Reported	
		Yes	No	Not Provided		
Schools K through 12	17	17	0	0	17	
University, College, other post-secondary	1	1	0	0	1	
Libraries	4	4	0	0	4	
Medical / Healthcare	0	0	0	0	0	
Public Safety	1	1	0	0	1	
Community Centers - Government support	12	12	0	0	12	
Community Centers - Non-Government support	0	0	0	0	0	

Source   API Call

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County » Roanoke City

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Wireline

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	99.9%		93.4%
Download > 3Mbps	99.9%		94.1%
Download > 6Mbps	97.7%		92.9%
Download > 10Mbps	97.5%		91.5%
Download > 25Mbps	97.5%		83.8%
Download > 50Mbps	97.5%		82.0%
Download > 100Mbps	97.5%		59.8%
Download > 1Gbps	8.2%		6.7%

Source   API Call

Wireless

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	100.0%		98.6%
Download > 3Mbps	100.0%		98.6%
Download > 6Mbps	100.0%		97.9%
Download > 10Mbps	100.0%		97.5%
Download > 25Mbps	0.0%		16.2%
Download > 50Mbps	0.0%		9.3%
Download > 100Mbps	0.0%		7.1%
Download > 1Gbps	0.0%		0.1%

Source   API Call

Technology	Percent Population		Nationwide
DSL	98.5%		88.6%
Fiber	8.2%		24.3%
Cable	96.9%		88.1%
Wireless	100.0%	11	99.1%

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Demographics

Total area (sq miles)	38
Population	97,968
Housing Units	50,695

Age	Area (%)		Nationwide
under 5	8.8%		7.0%
5 - 19	19.1%		20.4%
20 - 34	17.5%		19.2%
35 - 59	34.0%		32.5%
60+	20.7%		20.9%

Race	Area (%)		Nationwide
White	65.7%		70.0%
Black	28.1%		11.1%
Hispanic	5.5%		14.4%
Asian/Pacific Islander	0.7%		4.1%
Native American	0.1%		0.5%

Income	Area (%)		Nationwide
Median income	$39,334		$58,522
Poverty rate	22.4%		15.8%
Below $25k	33.9%		24.1%
$25k-$50k	38.4%		30.0%
$50k-$100k	26.0%		30.6%
$100k-$200k	7.2%		16.5%
$200k or more	1.5%		4.2%

Education	Area (%)		Nationwide
High School graduate	75.0%		80.0%
Bachelor's	17.9%		24.8%

Other	0.0%		0.0%

degree or higher

Number of Internet Providers

Wireline   Wireless

#	Percent Population		Nationwide
0	0.1%		3.3%
1	3.8%		9.0%
2	85.0%		32.5%
3	9.0%		37.0%
4	2.2%		13.1%
5	0.0%		3.4%
6	0.0%		1.2%
7	0.0%		0.4%
8+	0.0%		0.1%

Broadband Speed Test (Mbps)

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Location	Cumulative Tests	25° percentile median speed (Mbps) 75° percentile	
Home	193	3.2	18.5
Schools, Libraries, Community Centers	3	1.2	21.2
Medium/Large Business	14	1.5	16.2
Small Business	26	2.1	9.4
Mobile	656	0.8	6.4
Other	1		17.3 17.3

0   21.2

Community Anchor Institutions

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Institution	Total Number of Records	Subscribe to Broadband				
		Yes	No	Not Provided	Speeds Reported	
Schools K through 12	38	38	0	0	38	
University, College, other post-secondary	6	6	0	0	6	
Libraries	7	7	0	0	6	
Medical / Healthcare	4	4	0	0	4	
Public Safety	5	5	0	0	5	
Community Centers - Government support	40	40	0	0	33	
Community Centers - Non-Government support	1	1	0	0	1	

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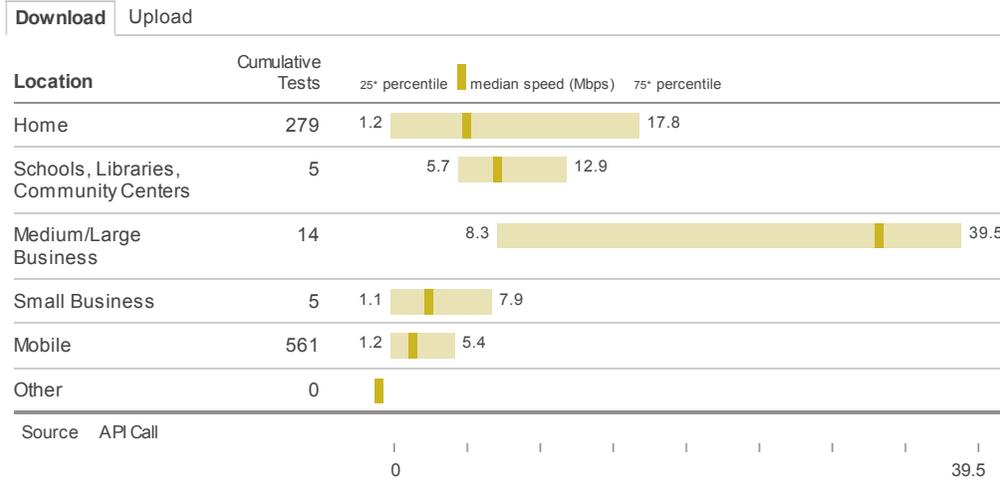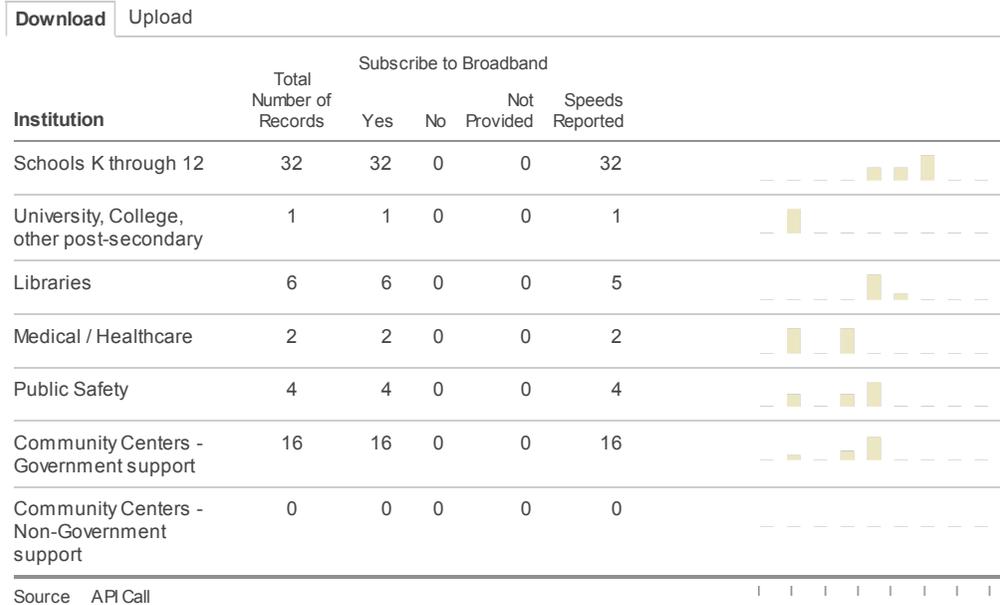Below is a summary of the broadband characteristics for the area listed above. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees. Click on the section headings to see more information.

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Wireline

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	91.8%		93.4%
Download > 3Mbps	91.8%		94.1%
Download > 6Mbps	83.6%		92.9%
Download > 10Mbps	79.3%		91.5%
Download > 25Mbps	79.3%		83.8%
Download > 50Mbps	79.3%		82.0%
Download > 100Mbps	79.3%		59.8%
Download > 1Gbps	3.6%		6.7%

Source   API Call

Wireless

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Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	98.5%		98.6%
Download > 3Mbps	98.5%		98.6%
Download > 6Mbps	97.4%		97.9%
Download > 10Mbps	97.4%		97.5%
Download > 25Mbps	0.0%		16.2%
Download > 50Mbps	0.0%		9.3%
Download > 100Mbps	0.0%		7.1%
Download > 1Gbps	0.0%		0.1%

Source   API Call

Technology	Percent Population		Nationwide
DSL	89.8%		88.6%
Fiber	3.6%		24.3%
Cable	79.1%		88.1%
Wireless	98.9%	13	99.1%

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Demographics

Total area (sq miles)	235
Population	94,066
Housing Units	41,347

Age	Area (%)		Nationwide
under 5	4.9%		7.0%
5 - 19	18.4%		20.4%
20 - 34	17.2%		19.2%
35 - 59	31.5%		32.5%
60+	28.0%		20.9%

Race	Area (%)		Nationwide
White	92.2%		70.0%
Black	4.4%		11.1%
Hispanic	1.3%		14.4%
Asian/Pacific Islander	2.1%		4.1%
Native American	0.0%		0.5%

Income	Area (%)		Nationwide
Median income	$63,933		$58,522
Poverty rate	7.0%		15.8%
Below $25k	14.8%		24.1%
$25k-$50k	29.2%		30.0%
$50k-$100k	37.3%		30.6%
$100k-$200k	19.0%		16.5%
$200k or more	3.2%		4.2%

Education	Area (%)		Nationwide
High School graduate	86.5%		80.0%
Bachelor's	29.5%		24.8%

Other	0.0%		0.0%

degree or higher

Source   API Call

Source   API Call

Number of Internet Providers

Wireline Wireless

#	Percent Population		Nationwide
0	2.7%		3.3%
1	15.4%		9.0%
2	67.7%		32.5%
3	13.0%		37.0%
4	1.3%		13.1%
5	0.0%		3.4%
6	0.0%		1.2%
7	0.0%		0.4%
8+	0.0%		0.1%

Source   API Call

Broadband Speed Test (Mbps)

Download Upload

Location	Cumulative Tests	25ᵗ percentile median speed (Mbps) 75ᵗ percentile	
Home	279	1.2	17.8
Schools, Libraries, Community Centers	5	5.7	12.9
Medium/Large Business	14	8.3	39.5
Small Business	5	1.1	7.9
Mobile	561	1.2	5.4
Other	0		

Source   API Call

0   39.5

Community Anchor Institutions

Download Upload

Institution	Total Number of Records	Subscribe to Broadband			Speeds Reported	
		Yes	No	Not Provided		
Schools K through 12	32	32	0	0	32	
University, College, other post-secondary	1	1	0	0	1	
Libraries	6	6	0	0	5	
Medical / Healthcare	2	2	0	0	2	
Public Safety	4	4	0	0	4	
Community Centers - Government support	16	16	0	0	16	
Community Centers - Non-Government support	0	0	0	0	0	

Source   API Call

Download Community Anchor Institutions data on the download page

Map »
Map my community

Rank »
Rank my community

Provider »
View statistics about providers

Broadband Classroom »
Learn more about broadband

Engage »
Build a better map for my community

Blog »
Faster Broadband, Reaching More
posted by Anne Neville on July 17, 2014

Updates »
Sign up and receive updates about the National Broadband Map

14

Analyze » Summarize

State » Virginia
County » Salem

Below is a summary of the broadband characteristics for the area listed above. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees. Click on the section headings to see more information.

Print this page • Export Data

Wireline

Download Upload

Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	97.7%		93.4%
Download > 3Mbps	97.7%		94.1%
Download > 6Mbps	94.5%		92.9%
Download > 10Mbps	94.5%		91.5%
Download > 25Mbps	94.5%		83.8%
Download > 50Mbps	94.5%		82.0%
Download > 100Mbps	94.5%		59.8%
Download > 1Gbps	5.7%		6.7%

Source   API Call

Wireless

Download Upload

Speed	Percent Population		Nationwide
Dn>3Mbps Up>768kbps	100.0%		98.6%
Download > 3Mbps	100.0%		98.6%
Download > 6Mbps	100.0%		97.9%
Download > 10Mbps	100.0%		97.5%
Download > 25Mbps	0.0%		16.2%
Download > 50Mbps	0.0%		9.3%
Download > 100Mbps	0.0%		7.1%
Download > 1Gbps	0.0%		0.1%

Source   API Call

Technology	Percent Population		Nationwide
DSL	97.4%		88.6%
Fiber	5.7%		24.3%
Cable	94.5%		88.1%
Wireless	100.0%	15	99.1%

Share »

Share this page with my community

🖨   🔗 Short URL »

Tweet

Like   0

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Demographics

Total area (sq miles)	13
Population	24,851
Housing Units	11,379

Age	Area (%)		Nationwide
under 5	4.4%		7.0%
5 - 19	16.4%		20.4%
20 - 34	20.4%		19.2%
35 - 59	33.4%		32.5%
60+	25.4%		20.9%

Race	Area (%)		Nationwide
White	91.3%		70.0%
Black	6.0%		11.1%
Hispanic	1.9%		14.4%
Asian/Pacific Islander	0.8%		4.1%
Native American	0.0%		0.5%

Income	Area (%)		Nationwide
Median income	$53,793		$58,522
Poverty rate	9.7%		15.8%
Below $25k	20.2%		24.1%
$25k-$50k	35.5%		30.0%
$50k-$100k	33.5%		30.6%
$100k-$200k	11.9%		16.5%
$200k or more	3.8%		4.2%

Education	Area (%)		Nationwide
High School graduate	83.0%		80.0%
Bachelor's	21.3%		24.8%

Other	0.0%		0.0%

degree or higher

Number of Internet Providers

Wireline Wireless

#	Percent Population		Nationwide
0	2.3%		3.3%
1	3.6%		9.0%
2	75.2%		32.5%
3	15.6%		37.0%
4	3.4%		13.1%
5	0.0%		3.4%
6	0.0%		1.2%
7	0.0%		0.4%
8+	0.0%		0.1%

Broadband Speed Test (Mbps)

Download Upload

Location	Cumulative Tests	25ᵗ percentile median speed (Mbps) 75ᵗ percentile	
Home	60	1.3	13.1
Schools, Libraries, Community Centers	2	2.9	26.3
Medium/Large Business	2	3.6	9.4
Small Business	9	1.4	4.1
Mobile	93	0.6	2.7
Other	1	0.8	0.8

0   26.3

Community Anchor Institutions

Download Upload

Institution	Total Number of Records	Subscribe to Broadband			Speeds Reported	
		Yes	No	Not Provided		
Schools K through 12	12	12	0	0	12	
University, College, other post-secondary	3	3	0	0	2	
Libraries	1	1	0	0	0	
Medical / Healthcare	4	4	0	0	1	
Public Safety	5	5	0	0	5	
Community Centers - Government support	12	12	0	0	8	
Community Centers - Non-Government support	0	0	0	0	0	

Download Community Anchor Institutions data on the download page

About Provider

Metropolitan Statistical Area
Roanoke, VA Metro Area

This page provides an overview of the percent of population with access to broadband, technology, and maximum advertised speeds for any given provider. The information is displayed according to the unit of geography (nation, state, county, etc.) selected on the previous page. Broadband data are collected by SBI grantees and are current as of December 31, 2013.

Methodology and Source · Export · API

Comcast Corporation

Coverage Map

This provider offers Cable Modem - DOCSIS 3.0 broadband technologies to an approximate population of 64,094 (out of a total population of 314,659).

States/Territories where this provider offers service: 40 (click to expand).

Display Provider Relationships »

Availability Overview

Population	
64,094	

Highest advertised download speed

100 - 1 Gbps
20.0% of population served

Housing Units
29,314

Total area (sq miles)
100

Highest advertised upload speed

100 - 1 Gbps
20.0% of population served

Population Density
(people per sq mile)
385

Coverage Map

WIRELINE
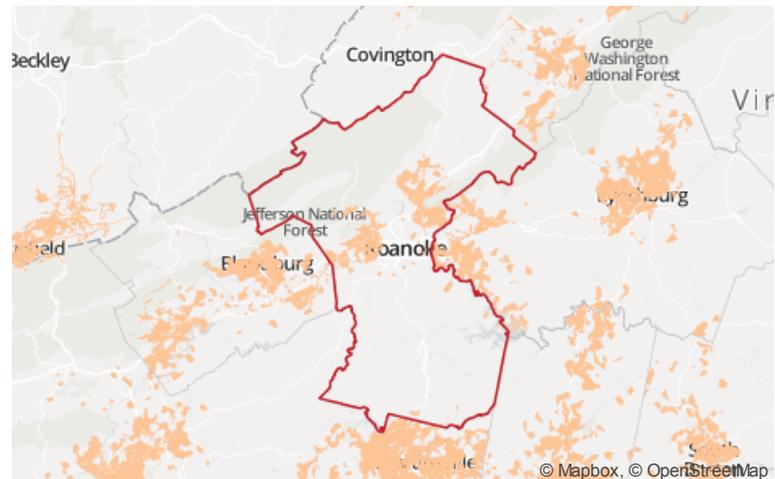
© Mapbox, © OpenStreetMap

Methodology & Source

Technology Summary

Description: The column on the left summarizes the percent of the population, for this provider and in this geography, with access to each type of broadband technology. The percentages on the right-hand column indicate the total percentage of the population with access to each technology within the geography.

Wireline	Percent Population	MSA
Any Technology	20.4%	98%
Any Wireline	20.4%	92%
DSL	0.0%	89%

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Asymmetric xDSL	0.0%	89%
Symmetric xDSL	0.0%	0%
Other Copper Wireline	0.0%	0%
Cable Modem	20.4%	80%
Cable - Other	0.0%	0%
Cable - DOCSIS 3	20.4%	80%
Fiber	0.0%	8%
Electric Power Line	0.0%	0%

<div align="right">Source · API Call</div>

Maximum Advertised Speed Summary

Description: The column on the left summarizes the percent of the population, for this provider and in this geography, with access to each maximum advertised download and upload speed tier. The percentages on the right-hand column indicate the total percentage of the population with access to these speeds within the geography.

Wireline Download	Percent Population	MSA
Down >768k Up >200k	20.4%	92%
Down >3M Up >768k	20.4%	90%
Download > 768k	20.4%	92%
Download > 1.5M	20.4%	91%
Download > 3M	20.4%	90%
Download > 6M	20.4%	86%
Download > 10M	20.4%	83%
Download > 25M	20.0%	80%
Download > 50M	20.0%	80%
Download > 100M	20.0%	80%
Download > 1G	0.0%	4%

<div align="right">Source · API Call</div>

Wireline Upload	Percent Population	MSA
Upload > 200k	20.4%	92%
Upload > 768k	20.4%	90%
Upload > 1.5M	20.4%	83%
Upload > 3M	20.0%	80%
Upload > 6M	20.0%	80%
Upload > 10M	20.0%	80%
Upload > 25M	20.0%	24%
Upload > 50M	20.0%	24%
Upload > 100M	20.0%	24%
Upload > 1G	0.0%	4%

<div align="right">Source · API Call</div>

Demographics

About Provider

Metropolitan Statistical Area
Roanoke, VA Metro Area

This page provides an overview of the percent of population with access to broadband, technology, and maximum advertised speeds for any given provider. The information is displayed according to the unit of geography (nation, state, county, etc.) selected on the previous page. Broadband data are collected by SBI grantees and are current as of December 31, 2013.

Methodology and Source · Export · API

Cox Communications, Inc.

Coverage Map

This provider offers Cable Modem - DOCSIS 3.0 broadband technologies to an approximate population of 157,431 (out of a total population of 314,659).

States/Territories where this provider offers service: 18 (click to expand).

Display Provider Relationships »

Availability Overview

Coverage Map

WIRELINE

Population	**Highest advertised download speed**
157,431	
	## 100 - 1 Gbps
	50.0% of population served
Housing Units	
77,952	

© Mapbox, © OpenStreetMap

Total area (sq miles)	
63	**Highest advertised upload speed**
	## 10 - 25
	50.0% of population served
Population Density (people per sq mile)	
1,816	
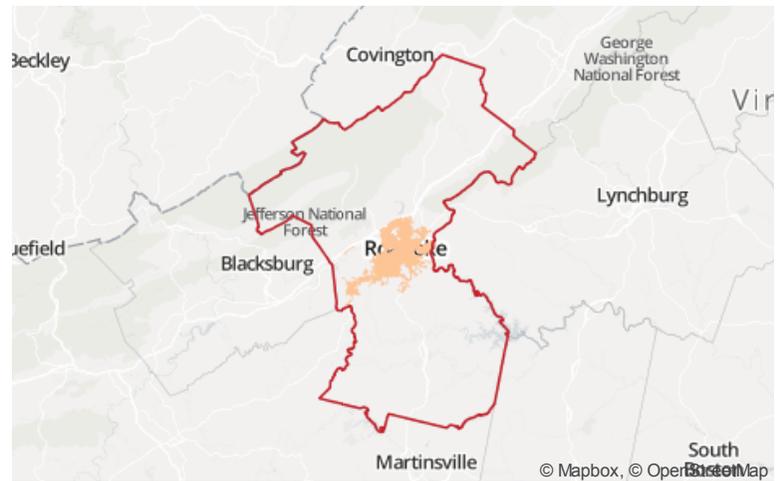
Methodology & Source

Technology Summary

Description: The column on the left summarizes the percent of the population, for this provider and in this geography, with access to each type of broadband technology. The percentages on the right-hand column indicate the total percentage of the population with access to each technology within the geography.

Wireline	Percent Population	MSA
Any Technology	50.0%	98%
Any Wireline	50.0%	92%
DSL	0.0%	89%

Asymmetric xDSL	0.0%	89%
Symmetric xDSL	0.0%	0%
Other Copper Wireline	0.0%	0%
Cable Modem	50.0%	80%
Cable - Other	0.0%	0%
Cable - DOCSIS 3	50.0%	80%
Fiber	0.0%	8%
Electric Power Line	0.0%	0%

Maximum Advertised Speed Summary

Description: The column on the left summarizes the percent of the population, for this provider and in this geography, with access to each maximum advertised download and upload speed tier. The percentages on the right-hand column indicate the total percentage of the population with access to these speeds within the geography.

Wireline Download	Percent Population	MSA
Down >768k Up >200k	50.0%	92%
Down >3M Up >768k	50.0%	90%
Download > 768k	50.0%	92%
Download > 1.5M	50.0%	91%
Download > 3M	50.0%	90%
Download > 6M	50.0%	86%
Download > 10M	50.0%	83%
Download > 25M	50.0%	80%
Download > 50M	50.0%	80%
Download > 100M	50.0%	80%
Download > 1G	0.0%	4%

Wireline Upload	Percent Population	MSA
Upload > 200k	50.0%	92%
Upload > 768k	50.0%	90%
Upload > 1.5M	50.0%	83%
Upload > 3M	50.0%	80%
Upload > 6M	50.0%	80%
Upload > 10M	50.0%	80%
Upload > 25M	0.0%	24%
Upload > 50M	0.0%	24%
Upload > 100M	0.0%	24%
Upload > 1G	0.0%	4%

Demographics

National Broadband Map
How connected is my community?

About Provider

Metropolitan Statistical Area
Roanoke, VA Metro Area

This page provides an overview of the percent of population with access to broadband, technology, and maximum advertised speeds for any given provider. The information is displayed according to the unit of geography (nation, state, county, etc.) selected on the previous page. Broadband data are collected by SBI grantees and are current as of December 31, 2013.

Methodology and Source · Export · API

Verizon Communications Inc.

Coverage Map

This provider offers Asymmetric xDSL, Terrestrial Mobile Wireless - Licensed broadband technologies to an approximate population of 301,721 (out of a total population of 314,659).

States/Territories where this provider offers service: 51 (click to expand).

Display Provider Relationships »

Availability Overview

Population
301,721

Housing Units
145,590

Total area (sq miles)
1,141

Population Density
(people per sq mile)
195

Most common advertised download speed

768 - 1.5

95.9% of population served

Most common advertised upload speed

200 - 768

95.9% of population served
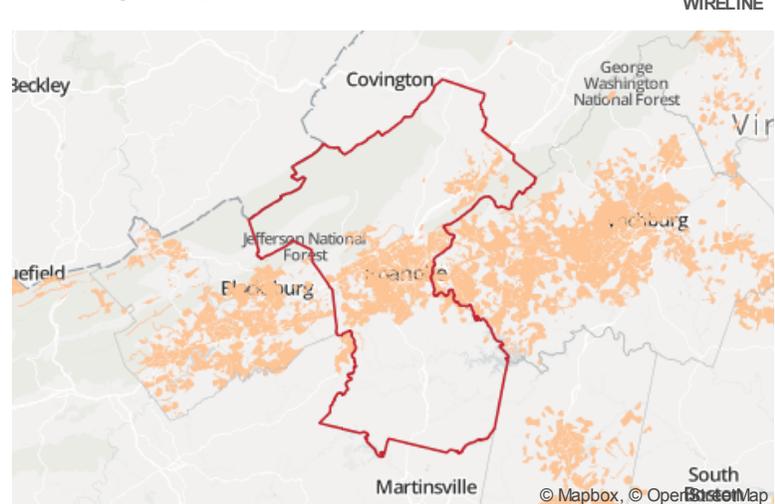
Coverage Map

WIRELINE

© Mapbox, © OpenStreetMap

Methodology & Source

Technology Summary

Description: The column on the left summarizes the percent of the population, for this provider and in this geography, with access to each type of broadband technology. The percentages on the right-hand column indicate the total percentage of the population with access to each technology within the geography.

Wireline	Percent Population	MSA	Wireless	Percent Population	MSA
Any Technology	95.9%	98%	Any Technology	95.9%	98%
Any Wireline	69.3%	92%	Any Wireless	95.8%	98%

21

DSL	69.3%	89%
Asymmetric xDSL	69.3%	89%
Symmetric xDSL	0.0%	0%
Other Copper Wireline	0.0%	0%
Cable Modem	0.0%	80%
Cable - Other	0.0%	0%
Cable - DOCSIS 3	0.0%	80%
Fiber	0.0%	8%
Electric Power Line	0.0%	0%

<div align="right">Source · API Call</div>

Fixed Wireless	0.0%	85%
Fixed Wireless (L)	0.0%	0%
Fixed Wireless (unL)	0.0%	85%
Mobile Wireless (L)	95.8%	97%

<div align="right">Source · API Call</div>

Maximum Advertised Speed Summary

Description: The column on the left summarizes the percent of the population, for this provider and in this geography, with access to each maximum advertised download and upload speed tier. The percentages on the right-hand column indicate the total percentage of the population with access to these speeds within the geography.

Wireline Download	Percent Population	MSA
Down >768k Up >200k	69.3%	92%
Down >3M Up >768k	62.3%	90%
Download > 768k	69.3%	92%
Download > 1.5M	69.3%	91%
Download > 3M	62.3%	90%
Download > 6M	19.2%	86%
Download > 10M	0.0%	83%
Download > 25M	0.0%	80%
Download > 50M	0.0%	80%
Download > 100M	0.0%	80%
Download > 1G	0.0%	4%

<div align="right">Source · API Call</div>

Wireless Download	Percent Population	MSA
Down 768k Up 200k	95.8%	98%
Down 3M Up 768k	91.5%	95%
Download > 768k	95.8%	98%
Download > 1.5M	91.5%	95%
Download > 3M	91.5%	95%
Download > 6M	91.5%	94%
Download > 10M	91.5%	94%
Download > 25M	0.0%	0%
Download > 50M	0.0%	0%
Download > 100M	0.0%	0%
Download > 1G	0.0%	0%

<div align="right">Source · API Call</div>

Wireline Upload	Percent Population	MSA
Upload > 200k	69.3%	92%
Upload > 768k	62.3%	90%
Upload > 1.5M	0.0%	83%
Upload > 3M	0.0%	80%
Upload > 6M	0.0%	80%
Upload > 10M	0.0%	80%
Upload > 25M	0.0%	24%
Upload > 50M	0.0%	24%
Upload > 100M	0.0%	24%
Upload > 1G	0.0%	4%

<div align="right">Source · API Call</div>

Wireless Upload	Percent Population	MSA
Upload > 200k	95.8%	98%
Upload > 768k	91.5%	95%
Upload > 1.5M	91.5%	95%
Upload > 3M	91.5%	94%
Upload > 6M	0.0%	75%
Upload > 10M	0.0%	0%
Upload > 25M	0.0%	0%
Upload > 50M	0.0%	0%
Upload > 100M	0.0%	0%
Upload > 1G	0.0%	0%

<div align="right">Source · API Call</div>
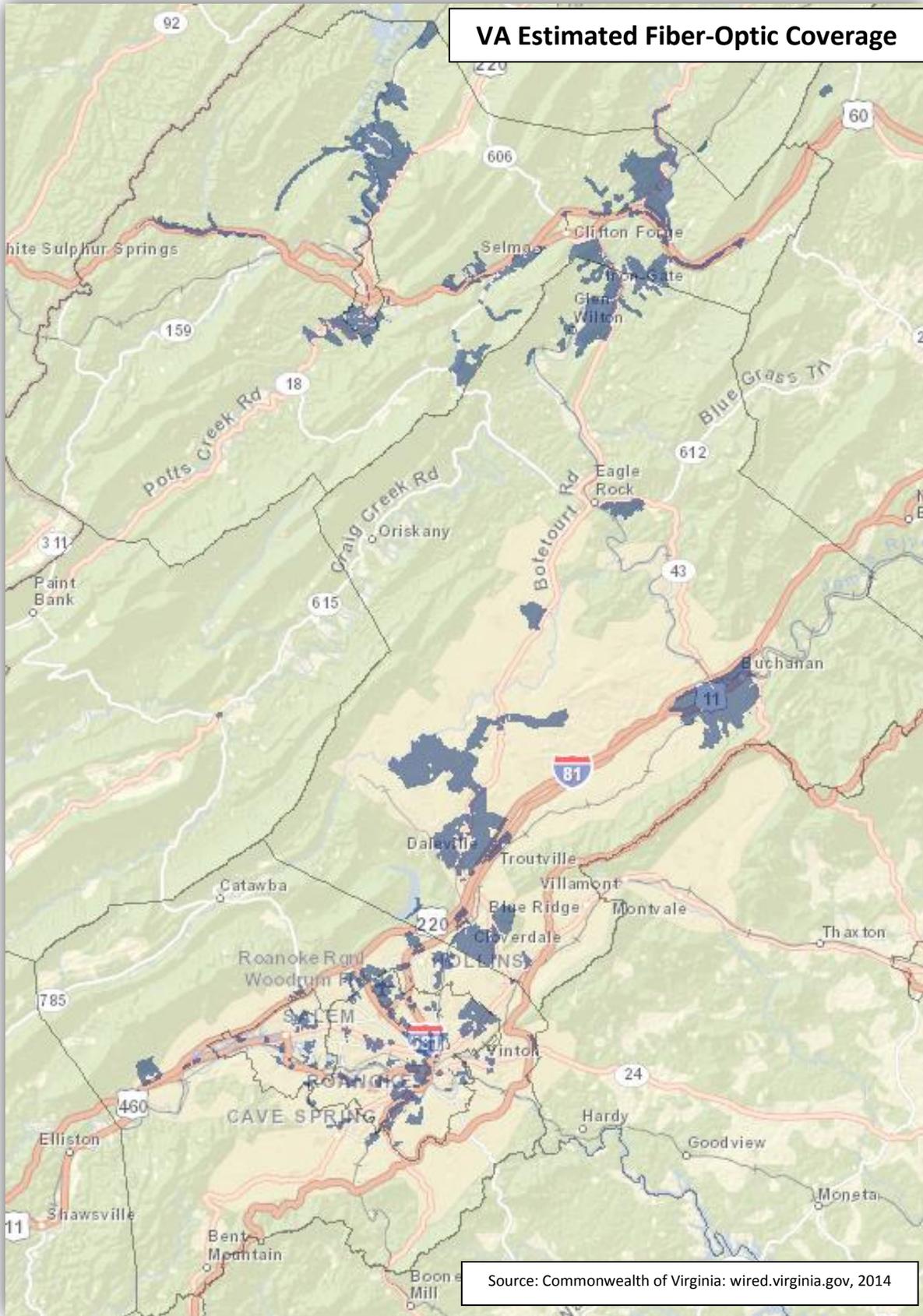
VA Estimated Fiber-Optic Coverage
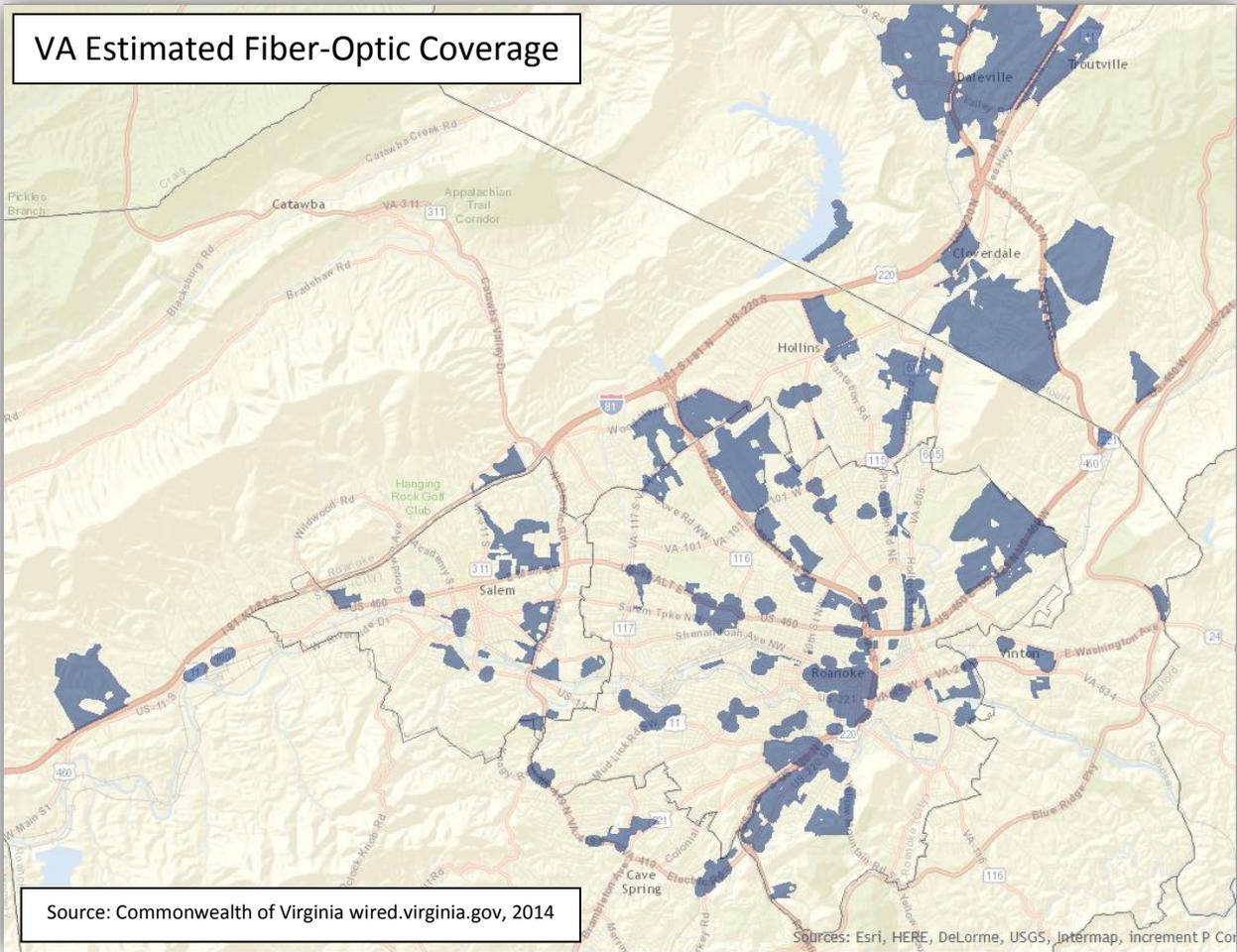
Source: Commonwealth of Virginia: wired.virginia.gov, 2014

VA Estimated Fiber-Optic Coverage

Source: Commonwealth of Virginia wired.virginia.gov, 2014

Citizens Telephone Fiber Coverage
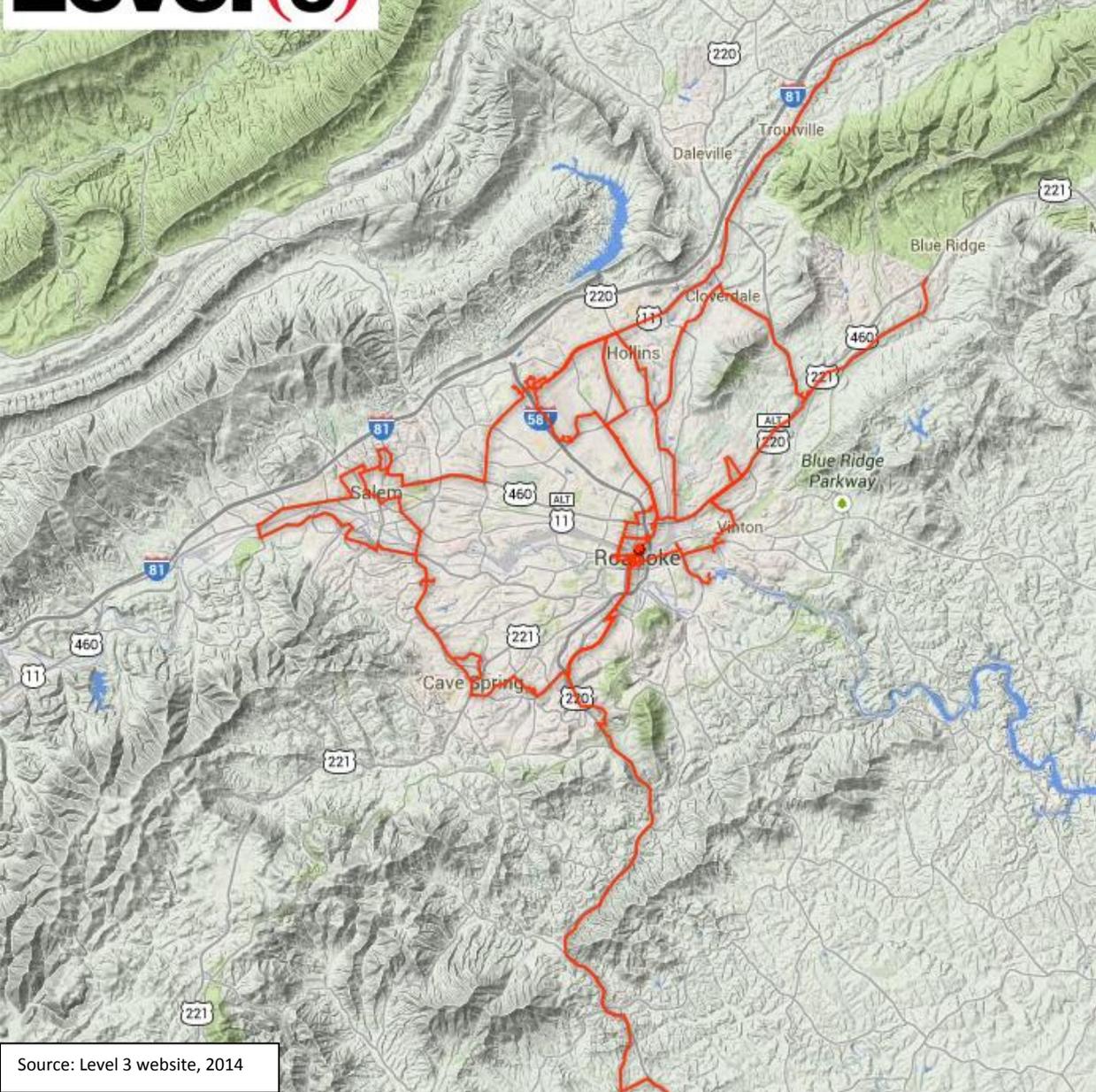
Source: Citizens Telephone website, 2014
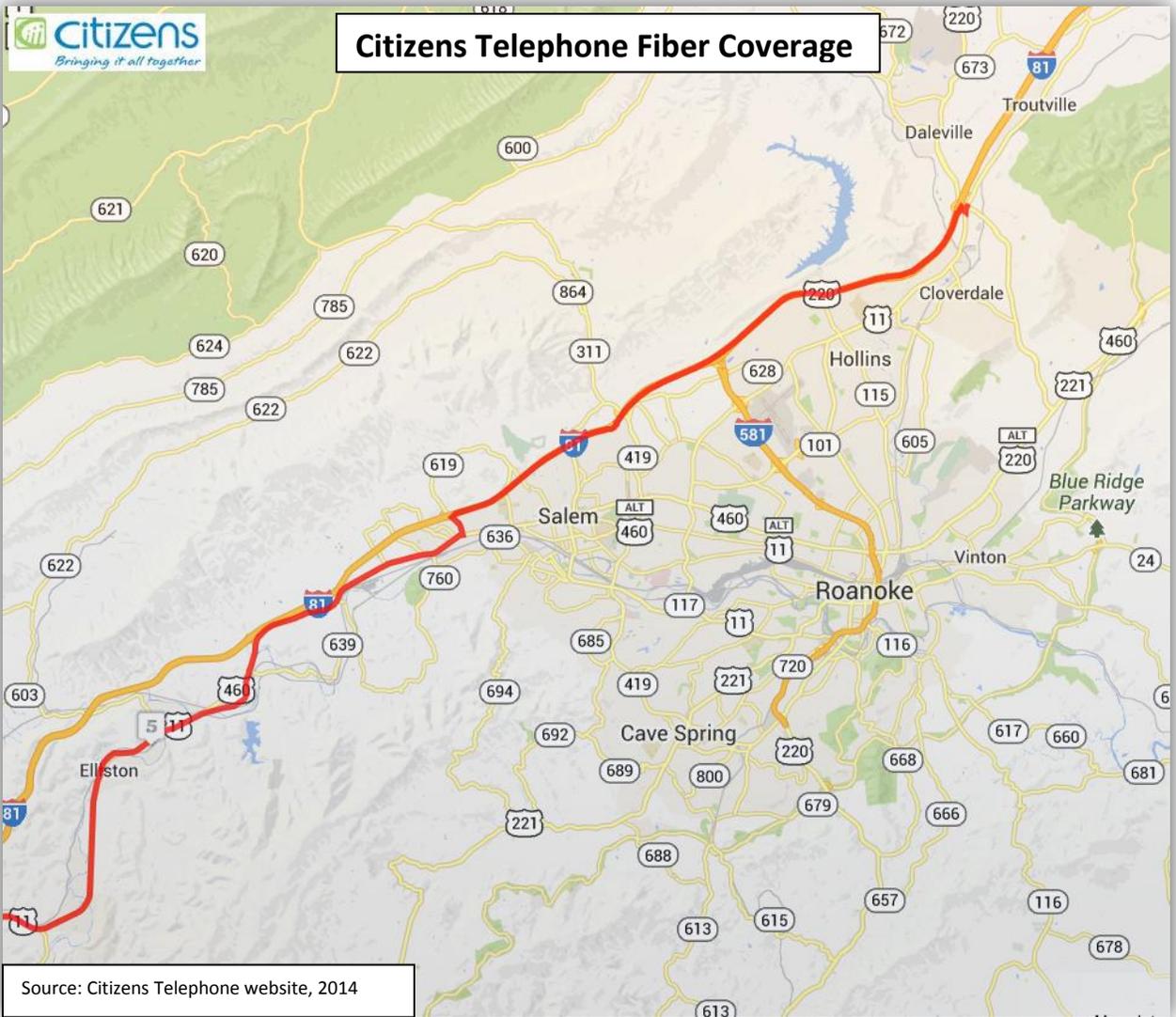
Mid-Atlantic Broadband Fiber Coverage
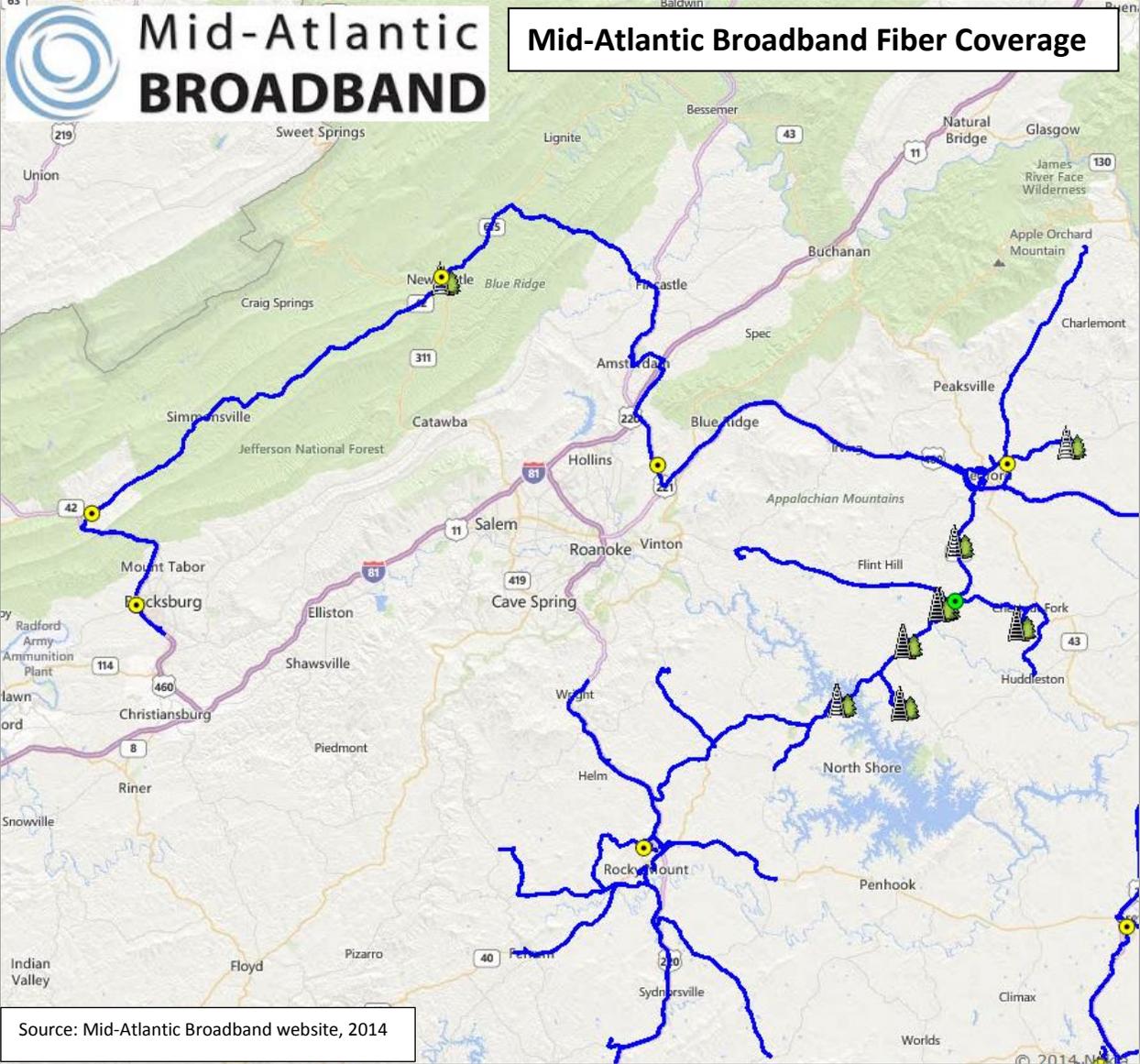
Source: Mid-Atlantic Broadband website, 2014
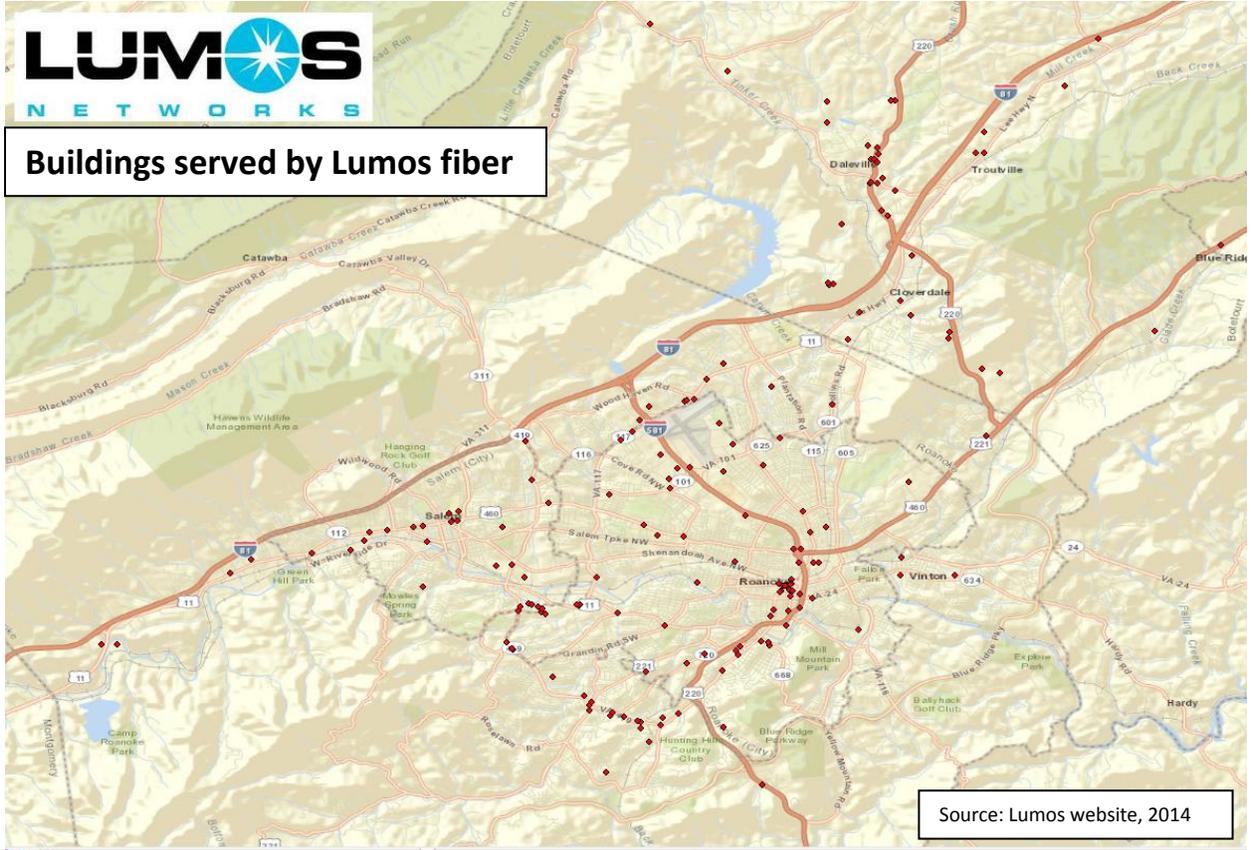
Level 3 Fiber Coverage Map

Source: Level 3 website, 2014

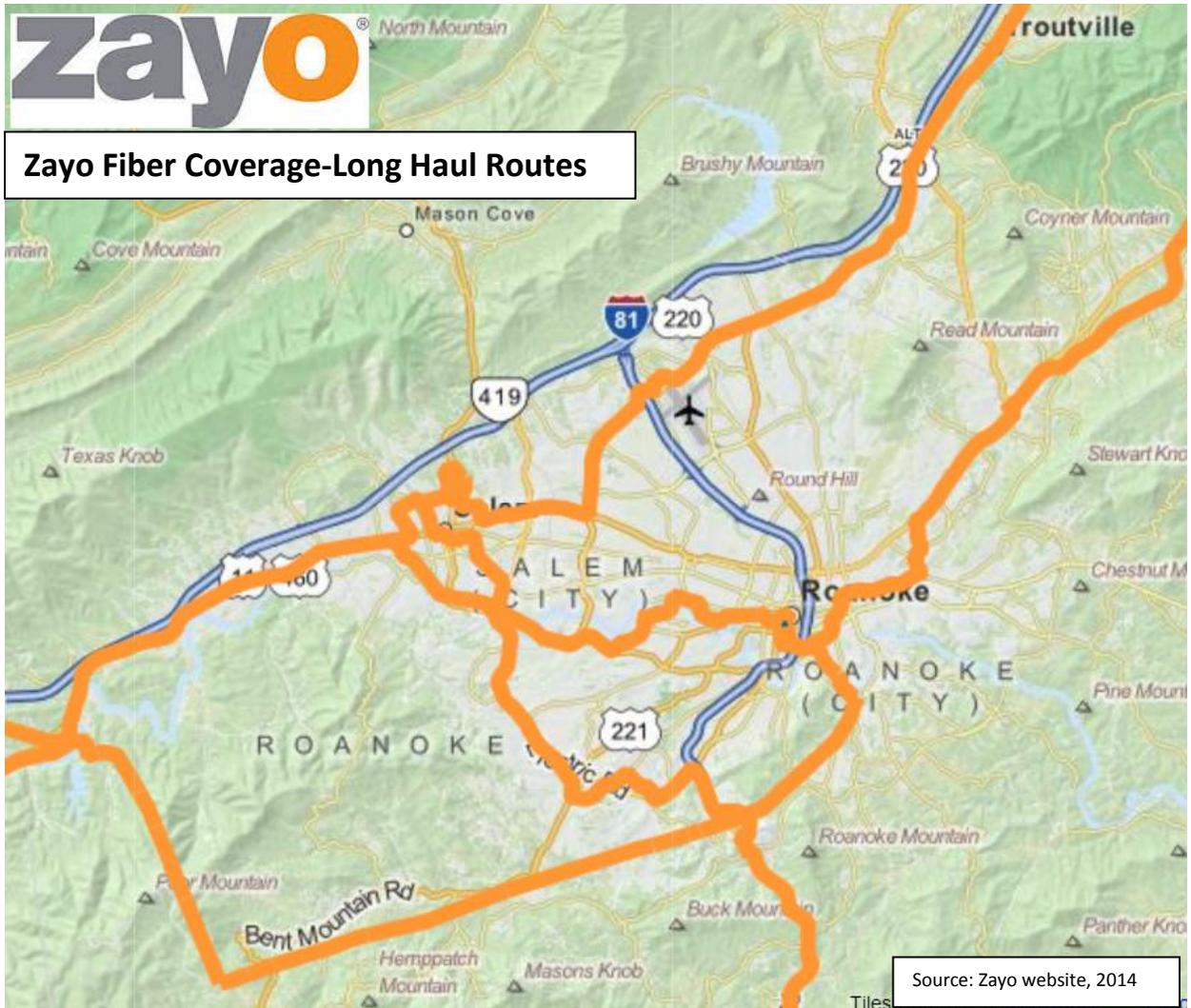**Lumos Networks Fiber Coverage**
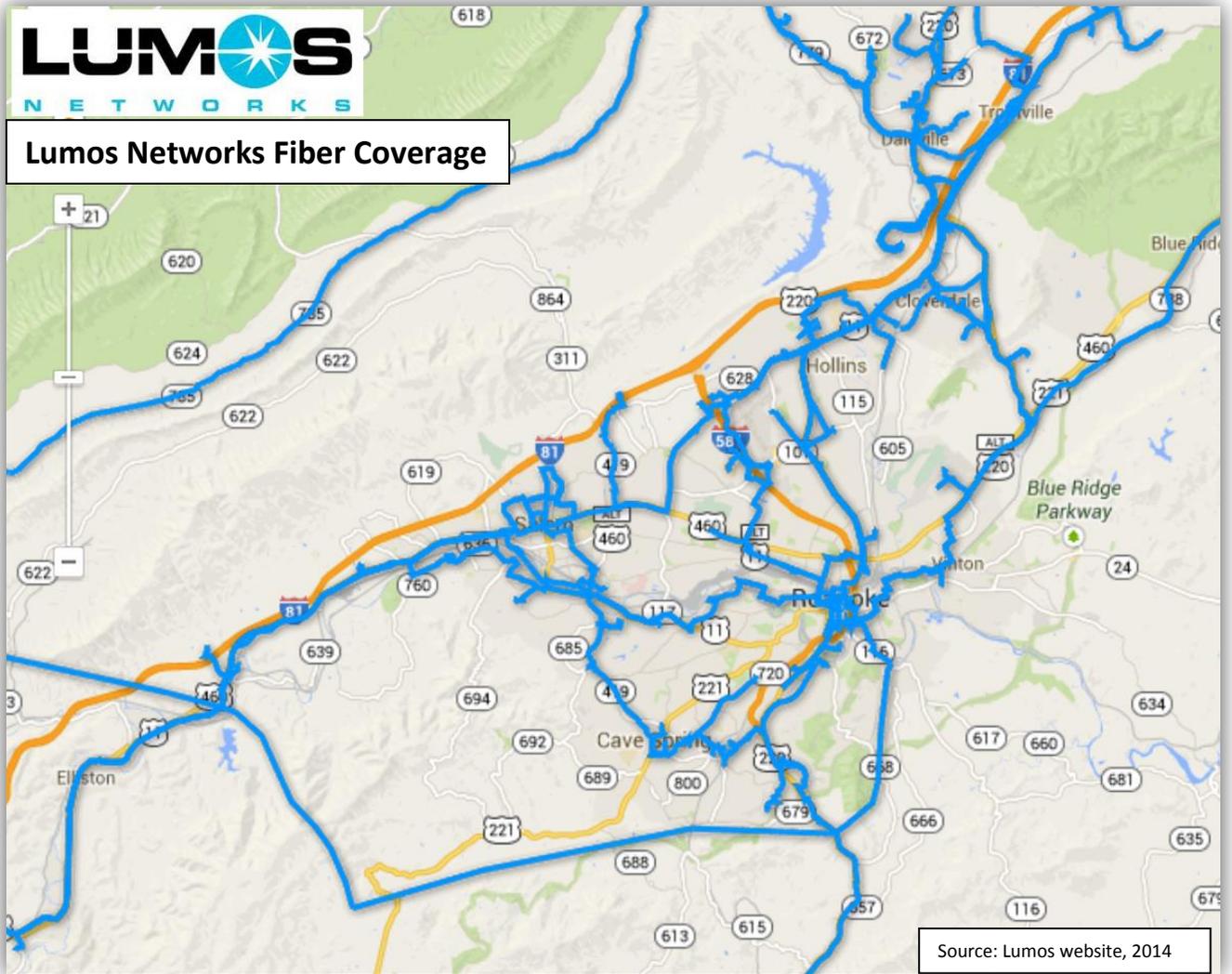
Source: Lumos website, 2014

Buildings served by Lumos fiber

Source: Lumos website, 2014

Zayo Fiber Coverage-Long Haul Routes

Source: Zayo website, 2014

City of Salem-Fiber Coverage