

Application to DHCD Submitted through CAMS

County of Franklin

Franklin County Snow Creek Broadband Project

Application ID: 59811282018172655
Application Status: In Progress - DHCD
Program Name: Virginia Telecommunications Initiative 2019
Organization Name: County of Franklin
Organization Address: 1255 Franklin Street, Suite 103
Rocky Mount, VA 24151
Profile Manager Name: Lisa Cooper
Profile Manager Phone: (540) 483-3027
Profile Manager Email: lisa.cooper@franklincountyva.gov

Project Name: Franklin County Snow Creek Broadband Project
Project Contact Name: Steven Sandy
Project Contact Phone: (540) 483-3027
Project Contact Email: Steve.Sandy@franklincountyva.gov
Project Location: 6200 Snow Creek Road
Penhook, VA 24137-1406
Project Service Area: Franklin County

Total Requested Amount: \$465,000.00
Required Annual Audit Status: No Current Audits Found

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$465,000.00	\$269,451.00	\$734,451.00
Construction	\$465,000.00	\$6,951.00	\$471,951.00
Construction Related Soft Costs	\$0.00	\$122,500.00	\$122,500.00
Other: Project Engineering	\$0.00	\$43,000.00	\$43,000.00
Other: Project Management - Blue Ridg	\$0.00	\$50,000.00	\$50,000.00
Other: Grant/Project Mgmnt - FC	\$0.00	\$47,000.00	\$47,000.00
Total:	\$465,000.00	\$269,451.00	\$734,451.00

Budget Narrative:

The project to provide fixed wireless service to the Snow Creek area of Franklin County will consist of constructing a new 195-foot monopole tower structure and attaching two (2) wireless access points (WISP). The estimated cost for the tower construction is \$246,380 and attaching the access points is \$55,511. A fiber extension of approximately two (2) miles will be provided at an estimated cost of \$96,380 to allow for two (2) paths of microwave backhaul at a cost of \$73,680. Subscriber modules will be purchased for the first 350 subscribers at a cost of \$122,500. This will reduce the cost to the end user to get connected to the system. This is expected to increase the initial take rate for the system because cost of the service was identified as an issue in a recent survey. The administrative costs associated with the project will include engineering costs for the system and network design at an estimated cost of \$43,000 for activities including , but not limited to, SCIP, 2/c/Survey, FAA Filing, Geotech/Soils, Phase 1 environmental, NEPA/SHPO and Construction Drawings/Tower design/Order. Blue Ridge Towers and BRISCnet will manage the construction of the project at a cost of \$50,000. This cost includes the time and cost associated with staff personnel at Blue Ridge Towers & BRISCNET for the project management throughout the duration of this project. Franklin County and West Piedmont Planning District Commission will also provide grant and project oversight for an estimated \$47,000. The County has dedicated staff resources to the preparation of the grant application and to grant and project management. In addition, the County has secured the services of Andrew Cohill of Design Nine, Inc. as the County's Broadband Consultant. In addition to creating the Broadband Plan for the County, Mr. Cohill will be assisting with grant applications and providing technical project oversight. The County Attorney to review, draft, & approve documents related to the project.

Questions and Responses:

1. Project Area

Provide a map and description of the proposed geographic area including specific boundaries of the project area e.g.; street names, local and regional boundaries, etc. Explain why and how the project area(s) was selected. Attach a copy of your map(s).

Answer:

In rural southeastern Franklin County, the Snow Creek area is rich in agricultural farmlands, from gently rolling hills to mountainous terrain. The proposed project service area encompasses a 4-mile radius from the centroid

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point of the tower located at 6200 Snow Creek Road (VA Hwy 890) in Franklin County. In addition, the service area includes portions of the Mountain Valley community in northeastern Henry County as well as Turkeycock Mountain and Wildlife Management Area, along the border of Franklin and Henry counties. The northern boundary incorporates the intersection of Mount Carmel Road/Route 632 and Bowles Valley Road/Route 631, moving easterly to cross Snow Creek Road/VA Hwy 890, Truevine Road/Route 646, and south near the intersection of Circle Creek Road/Route 652 and Lawrence Road/Route 749. The boundary continues southward across Turkeycock Mountain and into northeastern Henry County where the southernmost tip of the service area falls approximately 575 feet north of Chatham Road (VA Hwy 57). Heading to the west in Henry County, the boundary would incorporate Kendall Road/Route 619 and portions of Fork Road/Routes 619/652 before turning northwest across Turkeycock Mountain and back into Franklin County, near Whittle Lane and Shady Grove Road/Route 882, then crossing Snow Creek Road/VA Hwy 890 near Lovell Lane. From there, the boundary continues in a northwest direction crossing Coopers Mountain Road/Route 632, approximately 3 miles from its intersection with Sontag Road/Route 619. Then the boundary follows a northeasterly direction toward Goode Mountain Lane where it intersects with Sontag Road, including Fireside Lane, Copperhead Lane, Amos Ridge Lane and circumnavigates back to the starting point on Mount Carmel Road/Route 632. Please see the attached map depicting the 4-mile buffer with road network and features.

The project area was identified by both Franklin County and the Center for Innovative Technology as an area that meets the eligibility criteria and locations where BRISCnet, Blue Ridge Towers, and the County received inquiries from citizens in the Snow Creek District regarding broadband availability. Additional maps of the project area are attached, showing the complete unserved area of Snow Creek. The maps also show the location of the proposed tower and the coverage it will provide to the southeastern area of Franklin County, in the Snow Creek community.

2.

Describe your outreach efforts to identify existing providers in the selected project area. Provide a map and list of all existing providers (fixed and wireless), and speeds offered within the project area. Provide a detailed explanation of how this information was compiled and the source(s).

Answer:

In May 2017, a study was conducted by the Center for Innovative Technology (CIT) in conjunction with Franklin County to analyze the current broadband coverage, demand, local assets, local policies and fees, and needs along with future capacity. A community survey was also done to assist in these efforts. In July 2017, the Broadband Needs Assessment Study was presented by CIT. The number and types of service providers within the County are detailed in the attached document (CIT Broadband Assessment May 2017). To summarize, there are 10 service providers currently in the County. However, in the Snow Creek community, there is minimal fixed wireless service available through B2X and some satellite service available. Most of the proposed Snow Creek service area is unserved, lacking insufficient coverage.

Additionally, in preparation of this opportunity, Blue Ridge Towers/BRISNET conducted a marketing campaign and customer outreach survey via a television marketing program through the local NBC affiliate (WSLS – Channel 10). In an effort to reach as many citizens as possible, BRISNET launched this TV campaign during the February 2018 Super Bowl game, and a continued heavy rotation campaign for an additional 2 months. Nearly 4,100 responses and requests for service were received, with about 1,200 of those requests from Franklin County residents. BRISNET continues to receive calls daily requesting services at a rate of nearly 30 calls per week, half of which come from Franklin County residents. BRISNET maintains a log of potential customers with addresses and contact information.

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The County has also established a broadband authority to identify community needs and help establish a broadband deployment plan and associated funding streams. The broadband authority has conducted five (5) public meetings, executed a Teaming Agreement with Roanoke Valley Broadband Authority, and had discussions with Mid-Atlantic Broadband, Shentel, Blue Ridge Towers and B2X about broadband service in the County. In addition, the Franklin County Broadband Authority has contracted with Design Nine, Inc. to provide a broadband plan and consulting services to the County.

3. Project Need/Description

To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds of 10 Mbps/1 Mbps or less, and with less than 10% service overlap within the project area. Describe the anticipated service overlap with current providers within the project area.

Answer:

The project area is shown on the National Broadband Map as unserved (see attached map). In addition, the CIT assessment and associated surveys also validated that this area is unserved. Funding for this project will help close the gap for much needed broadband service in Franklin County, expanding broadband connectivity, improving digital inclusion, and supporting local priorities established by the County. Furthermore, this initiative will serve to facilitate broadband access, capacity, and utilization in the proposed unserved area, providing stronger connectivity for community anchors such as the Snow Creek Elementary School and public safety facilities (Snow Creek Fire and Rescue), and increasing opportunities for education, home businesses, and telemedicine for seniors and disabled citizens in the rural community.

As previously mentioned, only sparse coverage is currently available in the Snow Creek community. There is minimal fixed wireless service available through B2X and also some satellite service available. However, most of the proposed Snow Creek area is unserved, with very limited coverage. Due to proprietary information, detailed information on levels of service were not available. When recently tested at the Snow Creek Fire and Rescue, the current level of service had broadband speeds of 4 Mbps for downloads and only 2 Mbps for upload speeds, well below the 10 Mbps download speed and slightly below the 3 Mbps upload speed defined in the VATI criteria.

4. Describe population both in terms of absolute numbers within the project area and the eligible users that will be served by the proposed project. Describe the basis for these projections.

Answer:

Within the unserved area of Snow Creek, there are approximately 628 households with an estimated 1,976 persons. In the proposed service area in the Mountain Valley community of Henry County, there are 55 households and approximately 363 people. Based on 2010 Census block data, a total of 683 households and a population of more than 2,300 are within the proposed broadband coverage area.

All are eligible users, but there is the potential for additional subscribers. There are a number of additional households outside of the proposed project area as depicted on the attached project area map that could receive service depending on topography. However, 350 households in Franklin County are estimated to subscribe to the broadband service, based on previous public outreach, advertising by Blue Ridge Towers/BRISNET, and citizen

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inquiries for broadband service.

In further analysis of the Franklin County population, there are 368 school-age children who could utilize the Internet to do homework, 1,123 working age adults who may have the opportunity to work from home, and 289 persons over the age of 65 who may utilize telemedicine services. These figures are based on 2010 Census block data for the targeted Snow Creek service area.

5. Indicate the numbers of businesses and community anchor institutions the proposed project will pass in the project area.

Answer:

As a result of the online survey conducted by CIT and Franklin County, there are some reported businesses (self-employed) in this particular area of Snow Creek. While an exact number within the proposed service area is not available, twelve percent of County residents expressed an interest in working from home if there were more broadband accessibility and capacity. As previously stated, there are 1,123 working age adults who may have the opportunity to work from home if reliable Internet service is provided. Further, it should be noted that more than one-third (34%) of business owners in the County reported dissatisfaction with their current business Internet service.

There are two community anchors which include the Snow Creek Elementary School and the Snow Creek Fire & Rescue facility. The school is connected via Mid-Atlantic Broadband. However, children have very limited access to perform online homework tasks at home.

6. Provide the anticipated take rate for the proposed service within one year of project completion and describe the basis for the estimate. Also provide all actions to be implemented to reach the identified potential customers within the project area.

Answer:

BRISCNET anticipates approximately 350 customers in the Snow Creek area within the next 9-12 months once the wireless network is deployed. This is based on the number of residents who have already contacted Blue Ridge Towers inquiring about broadband service and the broadband expansion plans. Based on the number of residents requesting the service to date, 45 customers per week x 4 = 180 monthly, and using the average of 3,200 homes (2010 Census) in the area, BRISCNET estimates to sign up an initial 15-20% of the population in that geographical area.

Blue Ridge Towers/BRISCNET conducted a marketing campaign and customer outreach survey via a television marketing program through the local NBC affiliate (WSLS – Channel 10). In an effort to reach as many citizens as possible, BRISCNET launched this TV campaign during the February 2018 Super Bowl game, and a continued heavy rotation campaign for an additional 2 months. Nearly 4,100 responses and requests for service were received, with about 1,200 of those requests from Franklin County residents. BRISCNET continues to receive calls daily requesting services at a rate of nearly 30 calls per week, half of which come from Franklin County residents. BRISCNET maintains a log of potential customers with addresses and contact information.

BRISCNET will maintain this television marketing presence over the Southwest Virginia region, with a focus on Franklin County. The service provider will also promote heavily through radio and conduct community outreach efforts in conjunction with the County, utilizing local publications to reach all citizens that are in need of broadband to reach the take rate of 67%.

BRISCNET has a 3-phase plan to capture a 67% total take rate of the County's unserved citizens. According to the survey conducted throughout Franklin County, currently 60% of the population in the Franklin County market are deemed unserved or underserved. This is especially true in the Snow Creek District where nearly 90% of the total

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population of 7,837 and 3,168 homes (2010 Census) are unserved.

In the initial 12-month plan, Phase I allows BRISCNET to attract a strong customer base, bringing critically needed broadband access to the total unserved population in the Snow Creek launch. Looking ahead, Phase II will allow BRISCNET to add additional coverage, enhancing remote repeater sites that will reach gaps in coverage to those citizens not accessed in the original launch of BRISCNET. Phase 3 of the BRISCNET 3-year plan allows for a continuous heavy marketing plan.

7. A statement whether the proposed project is targeting the “last mile,” “middle mile,” or “backbone” portion of the broadband infrastructure.

Answer:

This project is a combination of “last mile” and “backbone broadband infrastructure.” The last mile portion of the project will be achieved through the construction of the Snow Creek Tower and the deployment of fixed wireless internet equipment on the tower. The Backbone portion will be provided by installing nearly two (2) miles of new 48 pair Fiber that will be connected to a microwave backhaul system on the tower for other Franklin County owned towers such as Tom’s Knob and Grassy Hill.

8. For wireless projects only: Please explain the ownership of the proposed wireless infrastructure. Will the wireless co-applicant own or lease the radio mast, tower, or other raised structure onto which the wireless infrastructure will be installed?

Answer:

Blue Ridge Towers Inc. will own the newly constructed monopole in Snow Creek and BRISCNET as the co-applicant will lease space on the tower to provide initial wireless internet service. It is also anticipated that other providers will lease space on this tower from (Blue Ridge Towers) giving residents options for high speed internet service and extended wireless cellular coverage.

9. Provide a description of the broadband service to be provided, including estimated download and upload speeds, whether that speed is based on dedicated or shared bandwidth, and the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate.

Answer:

BRISCNET will provide broadband access through a fixed wireless system, utilizing a combination of unlicensed frequencies delivered by technology provided by Cambium Networks, (formerly Motorola) and using spectrum of both 900 MHZ and 5800 MHZ frequency to bring high speed Internet to the service area. The fixed wireless system works by placing access point antennas at the top rad center or mounting height of each tower, and connecting to customers via a near line of sight system directly to the subscribers. The end user will receive service through a subscriber module unit to be mounted to the home, with final delivery of service provided via a wireless modem. Each tower (AP unit) can propagate a 3-4 mile coverage radius depending on topography. Each Access Point provides a 90 degree coverage radius and can handle 500 to 600 subscribers depending upon total subscriber usage per 90 degrees. BRISCNET will deploy 4 AP’s per site on this tower to offer 360 degrees of coverage allowing coverage of up to 2,000 subscribers in the Snow Creek Area without interruptions.

Attached is a coverage map illustrating projected coverage.

BRISCNET will offer the following entry level service plans to all users:

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10x1 Mbps - \$73 The 10 Mbps service delivers more bandwidth for households that stream video, audio, download music or play online games.

25x2 Mbps - \$86 The 25 Mbps Internet service delivers even more bandwidth and data usage for households that spend a lot of time on the Internet and have multiple computers and mobile devices.

50x3 Mbps - \$108 The 50 Mbps Internet service delivers significantly more bandwidth and data usage at low latency ping times for those who depend on the Internet for work or want the most speed they can get - even during peak Internet usage times.

75x5 Mbps - \$145 The 75 Mbps service is for the business user who requires huge bandwidth and no data caps.

10. Provide a description of the network system design used to deliver broadband service from the network's primary Internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Also describe specific advantages of using this technology. Provide a detailed explanation on how this information was compiled and source(s). For wireless projects, provide a propagation map including the proposed project.

Answer:

BRISNET will utilize the completed tower design to implement and launch its fixed wireless network. This "last mile" design system saves the County the high cost of running fiber throughout the entire Snow Creek District, as Blue Ridge Towers (BRT) and BRISNET will install new fiber aurally from the existing POP (point of presence) at Snow Creek Elementary School, extending it approximately 2 miles to the proposed tower location to provide new service throughout the area. In addition, BRT will be able to connect the existing County-owned tower at Tom's Knob from this location, thus providing a Microwave backhaul design and connect the remaining County-owned sites, saving the cost of installing hundreds of miles of direct fiber to Tom's Knob and Grassy Hill. The complete design of the network and MW backhaul are attached separately.

11. Project Readiness

What is the current state of project development (i.e. planning, preliminary engineering, final design, etc.)? Prepare a detailed project timeline or construction schedule, which identifies specific tasks, staff, contractor responsible(s), collection of data, etc., and estimated start and completion dates. The timeline should include all activities being completed within 12 months of contract execution with DHCD.

Answer:

The current project is in the planning stage; however, all the design and engineering have been completed and a lease agreement has been secured for the tower site. Upon approval of grant funding, the project is shovel-ready and scheduled to start in April 2019 through June 2019 for tower construction and equipment installation. Fiber and testing will occur in July 2019, with an expected on-air/service provider date to end user customers starting in August 2019. Please see the attached Project Management Plan for more details.

12. Matching funds: Provide a description of the matching funds the applicant and co-applicant will invest in the proposed project, (VATI funding cannot exceed 80% of total project cost). The Funding Sources Table should be completed.

i. For each element of matching funds in the description, indicate the type of match (cash, salary expense, or in-kind contribution).

ii. Identify whether the applicant or co-applicant is responsible for providing each element of the proposed

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matching funds.

iii. Include copies of vendor quotes or documented cost estimates supporting the proposed budget.

Answer:

Franklin County is committed to providing matching funds for the VATI Snow Creek Broadband project through several methods as follows:

- Matching local funds – The County has appropriated \$75,000 in FY 18-19 in a capital spending account. Furthermore, the County is currently projecting \$1,005,000 of funding for broadband deployment over the next ten (10) years as shown on attached Capital Improvement Plan for FY 18-19.
- In-kind services - The County has dedicated staff resources to the preparation of the grant application and to grant and project management. This includes the Director of Planning & Community Development, Finance Director, GIS Coordinator, IT Director, and others to ensure that the project is successful and completed on time and on budget. In addition, the County has secured the services of Andrew Cohill of Design Nine, Inc. as the County’s Broadband Consultant. In addition to creating the Broadband Plan for the County, Mr. Cohill will be assisting with grant applications and providing technical project oversight. The County will also require the services of the County Attorney to review, draft, and approve documents related to the partnership between Franklin County and VA DHCD as well as Blue Ridge Towers and BRISCnet to implement the project.

Estimated Costs

	Rate	Hours	Cost
Franklin County Staff	\$70/hr	400	\$28,000
County Attorney	\$150/hr	60	\$9,000
Consultant	\$125/hr	80	\$10,000

Also, please see attached supporting documentation for cost estimates and letter provided by the co-applicant, Blue Ridge Towers/BRISCnet.

13. Identify key individuals, including name and title, who will be responsible for the management of the project. Describe their role and responsibilities for the project. Present this information in table format.

Answer:

Please see attached (13. FC Broadband Project - Key Individuals).

14. Applicant and Co-Applicant: A description of the public-private partnership involved in the project. Detail the local government assistance: Local government co-applicants should demonstrate assistance to project that will lower overall cost and further assist in the timely completion of construction, including assistance with permits, rights of way, easement and other issues that may hinder or delay timely construction and increase cost.

i. If the partnership is formalized in a written agreement provide a copy of that agreement.

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ii. If the partnership has not been formalized, provide a short description of the project management role, financial commitment, or other contribution to the project for the applicant and co-applicant and any additional partners.

Answer:

The Franklin County Broadband Authority and BRISNet have entered into a Memorandum of Understanding (MOU) to their intent to partner to provide fixed wireless internet services to the Snow Creek area of Franklin County. See attached MOU. The proposed project is located in a non-zoned area of the County, so there are no zoning reviews or approvals needed. The project will require comprehensive plan conformance review, building permits as well as erosion and sediment control and stormwater management plan approval from the County. The County is prepared to waive fees for this project and expedite reviews to ensure completion of this project on time and within budget.

15. Project Budget and Cost Appropriateness

Applicants shall provide a detailed budget as to how the grant funds will be utilized, including an itemization of equipment and construction costs and a justification of proposed expenses. Expenses should be substantiated by clear cost estimates.

Answer:

Please see attachments for supporting documentation for cost estimates and project budget for details.

16. The cost benefit index is comprised of three factors: (i) state share for the total project cost, (ii) state cost per unit passed, and (iii) the internet speed. From these statistics, individual cost benefit scores are calculated. Finally, the three component scores are averaged together and converted to a 30 point scale to form a composite score.

Answer:

The County and service provider are working in partnership to develop synergy and economies of scale that will help lower cost for customers.

i. \$465,000ii. \$746.39iii. 75 Mbps

17. A description of applicant and co-applicant's history or experience with managing grants and constructing broadband communications facilities in the Commonwealth of Virginia and elsewhere.

Answer:

Franklin County has experience with managing grants through various state and Federal programs such as Community Development Block Grants, VDOT's Smart Scale, Revenue Sharing, Economic Development Access and Recreation Access, Federal Transportation Enhancements and Federal Lands Access Program (FLAP) and Tobacco Region Revitalization Commission.

West Piedmont Planning District Commission has an experienced staff and a long history of managing numerous state and federal grants for various projects. On an annual basis, staff works with the U.S. Department of Commerce, Economic Development Administration; the Appalachian Regional Commission; the U.S. Federal Highway Administration; the Virginia Department of Transportation; and the Virginia Department of Housing and Community Development to administer and manage a variety of programs.

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Franklin County's broadband consultant is Design Nine of Blacksburg, Virginia. Design Nine has extensive experience with both grant management and the construction of broadband networks in Virginia. Their work on grants has included assisting Virginia localities with the management and execution of DHCD-funded planning grants, CDBG grants, USDA grants, and Tobacco Commission grants. Their work with broadband network construction includes both broadband wireless facilities (design, construction, management) and aerial and underground fiber networks (design, construction, management). Design Nine has worked with more than forty Virginia counties, towns, and cities on broadband grant projects.

Blue Ridge Towers/BRISCnet is a new & innovative wireless Internet service provider based in Roanoke, VA serving the rural county areas of Bedford, Franklin, Botetourt, Roanoke, and surrounding SWVA. Blue Ridge Towers specializes in developing build-to-suit towers and has earned an outstanding reputation as a go to, turn-key resource for the major carriers in the service provider markets. Blue Ridge Towers has longstanding relationships with the municipalities they serve. The company is currently developing specific sites for Verizon and Sprint, and working with National Park Service to develop a coverage strategy for a 469-mile corridor from Asheville, NC to Charlottesville, VA.

18. Service

Describe the Internet service offerings to be provided after completion of this project and your price structure for these services. The service offerings should include all relevant tiers.

Answer:

BRISCNET is excited to bring fixed wireless technology in the proposed service area by providing the following service plan options:

10x1 Mbps - \$73 The 10 Mbps service delivers more bandwidth for households that stream video, audio, download music or play online games.

25x2 Mbps - \$86 The 25 Mbps Internet service delivers even more bandwidth and data usage for households that spend a lot of time on the Internet and have multiple computers and mobile devices.

50x3 Mbps - \$108 The 50 Mbps Internet service delivers significantly more bandwidth and data usage at low latency ping times for those who depend on the Internet for work or want the most speed they can get - even during peak Internet usage times.

75x5 Mbps - \$145 The 75 Mbps service is for the business user who requires huge bandwidth and no data caps.

19. Additional Information

Any other equitable factor that the applicant desires to include.

Answer:

In the fall of 2018, Franklin County competitively procured Design Nine as its broadband consultant, whose Scope of Work includes the development of a county-wide, comprehensive Broadband Plan that will include strategic recommendations for improved and affordable broadband access for residents and businesses in the County.

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Design Nine has reviewed this VATI application and provided comments and suggestions during its development. Design Nine will ensure that the Snow Creek project will be fully incorporated into the county-wide broadband plan. Snow Creek is a pilot project to provide service to this unserved area of the County.

Attachments:

Derivation of Cost (Project Budget)

FCDerivationofCostsWorksheet1214181214201842348.pdf

Project Management Plan

FCVATIProjectManagementPlan1214201824458.xlsx

Supporting documentation for costs estimates

VATIMatchingFunds1214181214201843433.pdf

Map(s) of project area, including proposed infrastructure

FCProjectMaps1214201895352.pdf

Map(s) or schematic of existing broadband providers (inventory of existing assets)

FranklinCoProviders12122018110245.pdf

Documentation of relationship between applicant and co-applicant (formal or informal)

FCBABRISNetMOU12131812142018101041.pdf

Two most recent Form 477 submitted to FCC

transmittalletterandformFCC1214201852819.pdf

Documentation for in-kind contributions, including value(s)

VATIMatchingFunds1214181214201842212.pdf

Documentation supporting project costs (i.e. vendor quotes)

FCVendorQuotes1214181214201841412.pdf

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Documentation of source of match funding

FCBAFundingdocs12141812142018124912.pdf

Documentation that proposed project area is unserved based on VATI criteria

FourMileSnowCreekSiteNatlBroadbandData0021214201814446.pdf

Documentation that proposed project area is not designated for Connect America Funding (CAF)

FCCAFIIDocumentation1214201812719.pdf

Funding Sources Table

FCVATIFundingSourcesTable1213181214201841023.pdf

(Optional) || CIT Broadband Assessment May 2017

FranklinCommunityBroadbandAssessment12142018124441.pdf

(Optional) || Franklin County Population Density Map

FranklinCoPopulationDensity12122018105728.pdf

(Optional) || Public Notice and Comments

VATIPublicNoticeFC12122018113227.pdf

CDBG Derivation of Cost

Product	Total	VATI	Non-VATI	Source of Estimate	Date
EXAMPLE					
<u>Construction</u>					
200 LF of fiber @\$150/LF	\$30,000	\$15,000	\$15,000	Company A	9/5/2016
Tower	\$100,000	\$80,000	\$20,000	Company B	9/5/2016
Engineering	\$20,000	\$0	\$20,000	ABC Engineering Firm	9/5/2016

30000

Product	Total	VATI	Non-VATI	Source of Estimate	Date
Monopole Tower Construction (195 Ft)	\$ 246,380	\$ 246,380	\$ -	Valmont quote	11/20/2018
Fiber Extension (1.5 miles)	\$ 96,380	\$ 96,380	\$ -	BRT estimate	12/9/2018
Wireless Internet Equipment Access Points	\$ 55,511	\$ 55,511	\$ -	BRT estimate	12/9/2018
Subscriber Modules (350 units)	\$ 122,500	\$ -	\$ 122,500	CORE Telecom Systems Quote	12/14/2018
Microwave Backhaul (2 path)	\$ 73,680	\$ 66,729	\$ 6,951	CORE Telecom Systems Quote	No date
Project Engineering	\$ 43,000	\$ -	\$ 43,000	BRT estimate	12/14/2018
Project Management by Blue Ridge Towers/BRISCnet	\$ 50,000	\$ -	\$ 50,000	BRT estimate	12/14/2018
Grant/Project Management by Franklin County and West Piedmont PDC	\$ 47,000	\$ -	\$ 47,000	Franklin County/WPPDC staff	12/13/2018
	\$ -	\$ -	\$ -		

CDBG Derivation of Cost

	\$ -	\$ -	\$ -		
	\$ -	\$ -	\$ -		
	\$ -	\$ -	\$ -		
	\$ -	\$ -	\$ -		
	\$ -	\$ -	\$ -		
	\$ -	\$ -	\$ -		

\$ 734,451 \$ 465,000 \$ 269,451



December 14, 2018

RE: Franklin County VATI Matching and In-kind Funds

To Whom It May Concern:

Franklin County is committed to providing matching funds for the VATI Snow Creek Broadband project through several methods as follows:

- Matching local funds – The County has appropriated \$75,000 in FY 18-19 in a capital spending account. Furthermore, the County is currently projecting \$1,005,000 of funding for broadband deployment over the next ten (10) years as shown on attached Capital Improvement Plan for FY 18-19.
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Estimated Costs

	<u>Rate</u>	<u>Hours</u>	<u>Cost</u>
Franklin County Staff	\$70/hr	400	\$28,000
County Attorney	\$150/hr	60	\$9,000
Consultant	\$125/hr	80	\$10,000

Sincerely,

Steven M. Sandy, AICP

Director



Transmittal Letter

**Blue Ridge Towers Inc
1125 1st Street
Roanoke, VA 24016**

Anthony Smith, President

540-595-7060

Dec 14, 2018

Snow Creek Project management

Re: Snow Creek Project Management

Steve Sandy
Franklin County
1255 Franklin St,
Rocky Mount, VA 24151

Dear Steve Sandy (Franklin County):

This letter is to provide you with the cost breakdown associated for the project management portion of this project:

\$43,000 includes:

- A-SCIP
- B-Lease
- C-2/c/Survey
- D-FAA Filing
- E-Geotech/Soils
- F-Phase 1 environmental
- G-NEPA/SHPO
- H-Construction Drawings/Tower design/Order

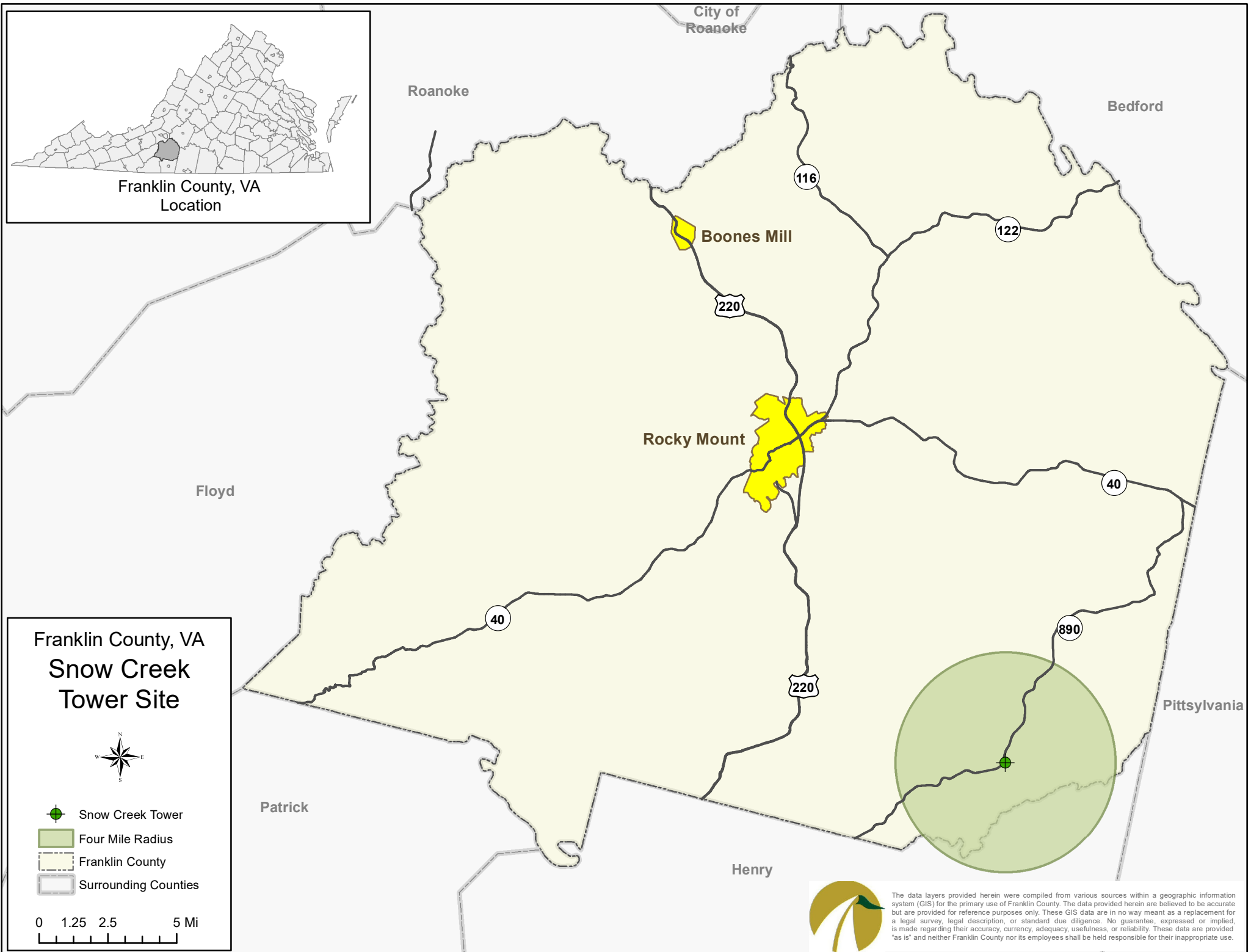
\$50,000 includes the time and cost associated with staff personnel at Blue Ridge Towers & BRISNET for the project management throughout the duration of this project.

As always, Blue Ridge Towers thanks you for working together on this project and we look forward to many more great endeavors in the near future. Please let me know if you require any additional information from our end.

Sincerely,

Sean Cai


Sean Cai, manager for BRT & BRISNET



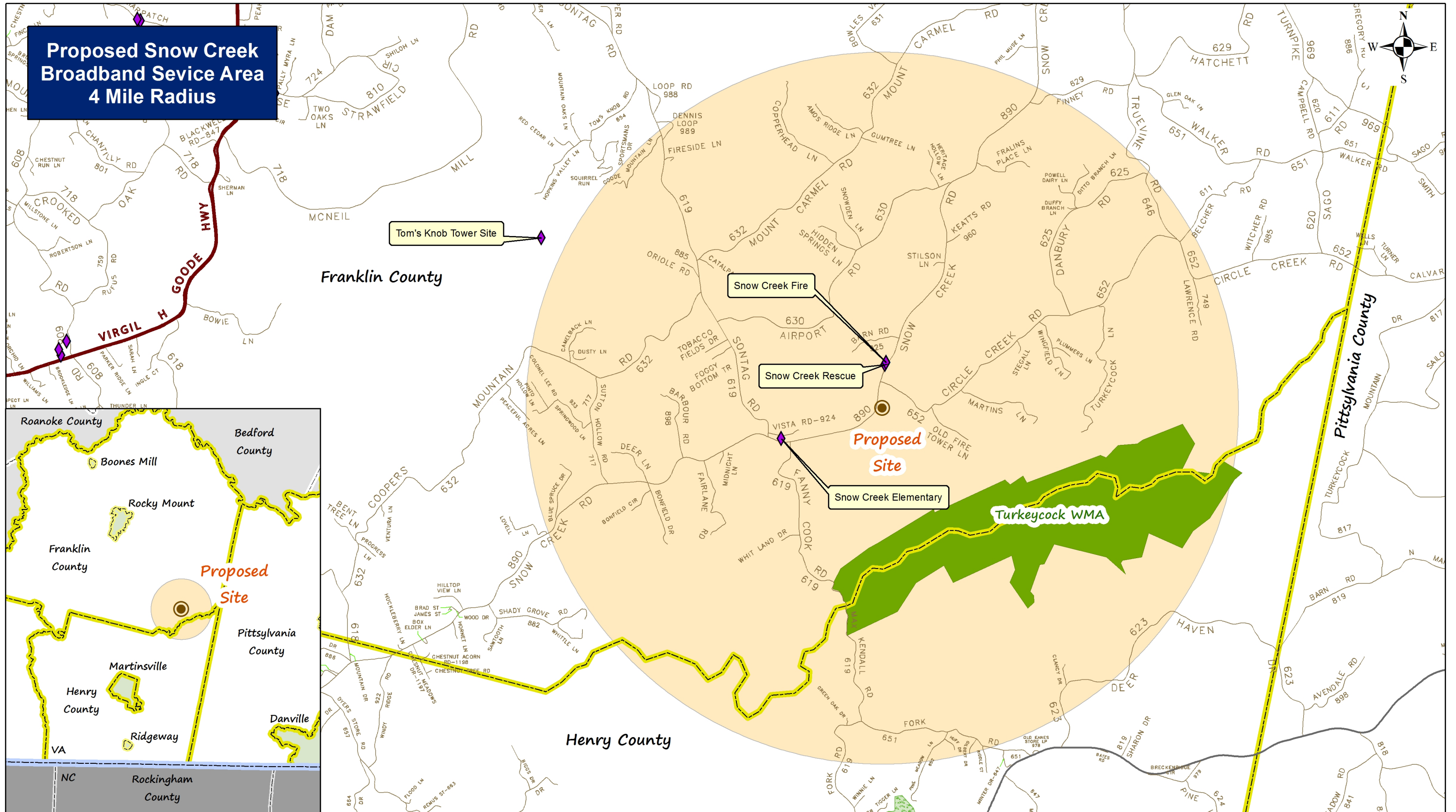
**Franklin County, VA
Snow Creek
Tower Site**



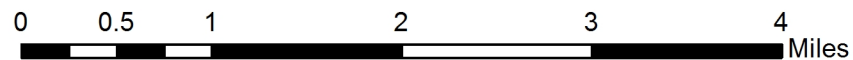
-  Snow Creek Tower
-  Four Mile Radius
-  Franklin County
-  Surrounding Counties

The data layers provided herein were compiled from various sources within a geographic information system (GIS) for the primary use of Franklin County. The data provided herein are believed to be accurate but are provided for reference purposes only. These GIS data are in no way meant as a replacement for a legal survey, legal description, or standard due diligence. No guarantee, expressed or implied, is made regarding their accuracy, currency, adequacy, usefulness, or reliability. These data are provided "as is" and neither Franklin County nor its employees shall be held responsible for their inappropriate use.

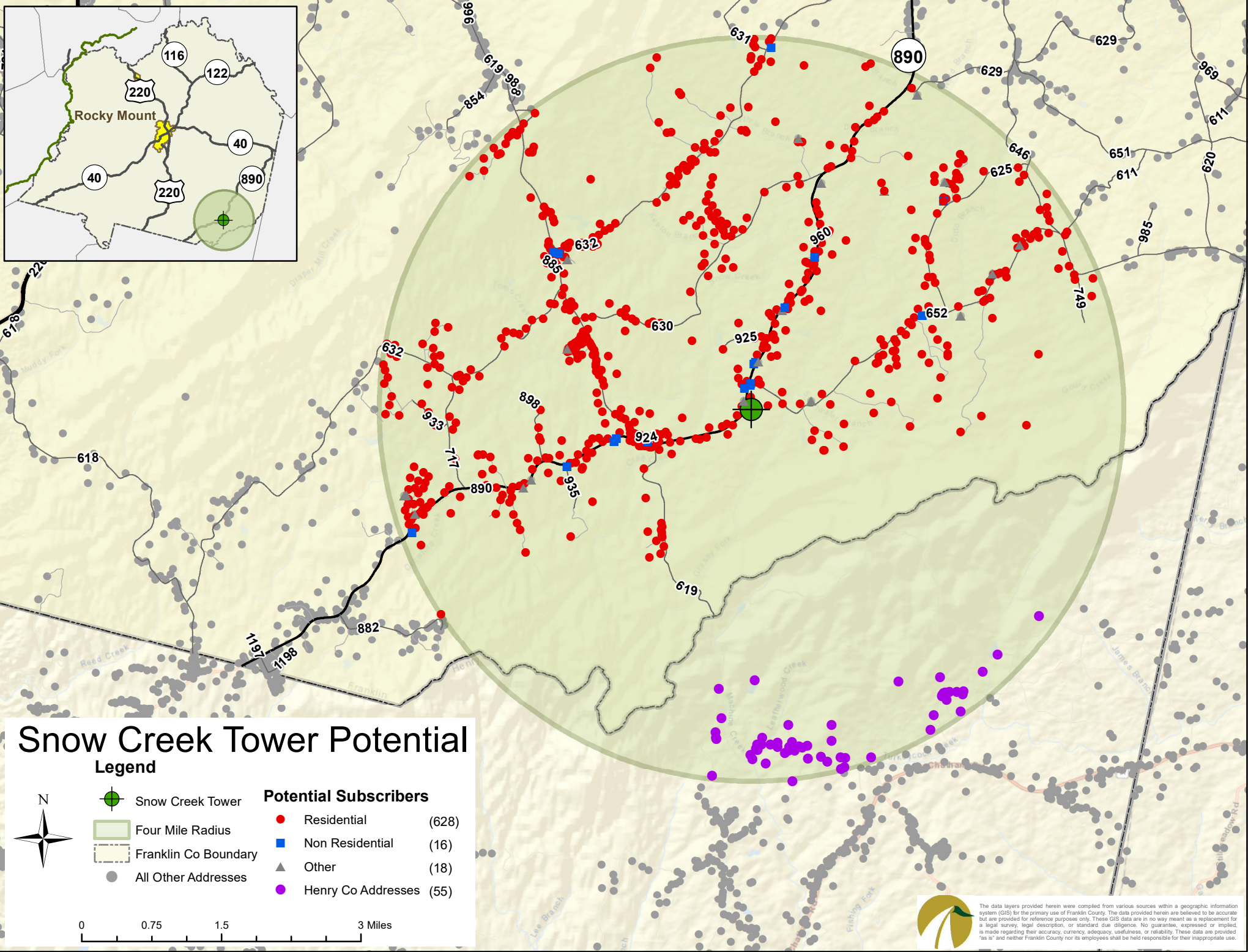
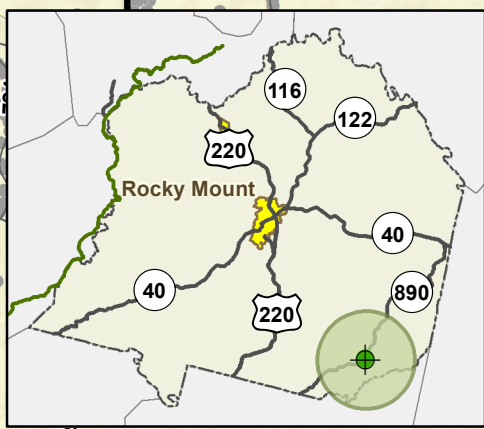


Source: Franklin County GIS;
 U.S. Census Bureau. TIGER Products;
 Virginia Geographic Information Network (VGIN).



Disclaimer: This map is for general illustrative reference and planning purposes only. The data utilized herein is derived from public records that are constantly undergoing change. Information shown does not replace a site survey and is not warranted for legal content or accuracy. The West Piedmont PDC cannot guarantee the accuracy or completeness of the data and does not assume any responsibility for its uses.

Map prepared by West Piedmont PDC, December 2018... D.W. Rakes



Snow Creek Tower Potential

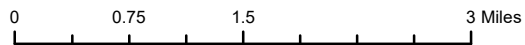
Legend



- Snow Creek Tower
- Four Mile Radius
- Franklin Co Boundary
- All Other Addresses

Potential Subscribers





- Residential (628)
- Non Residential (16)
- Other (18)
- Henry Co Addresses (55)

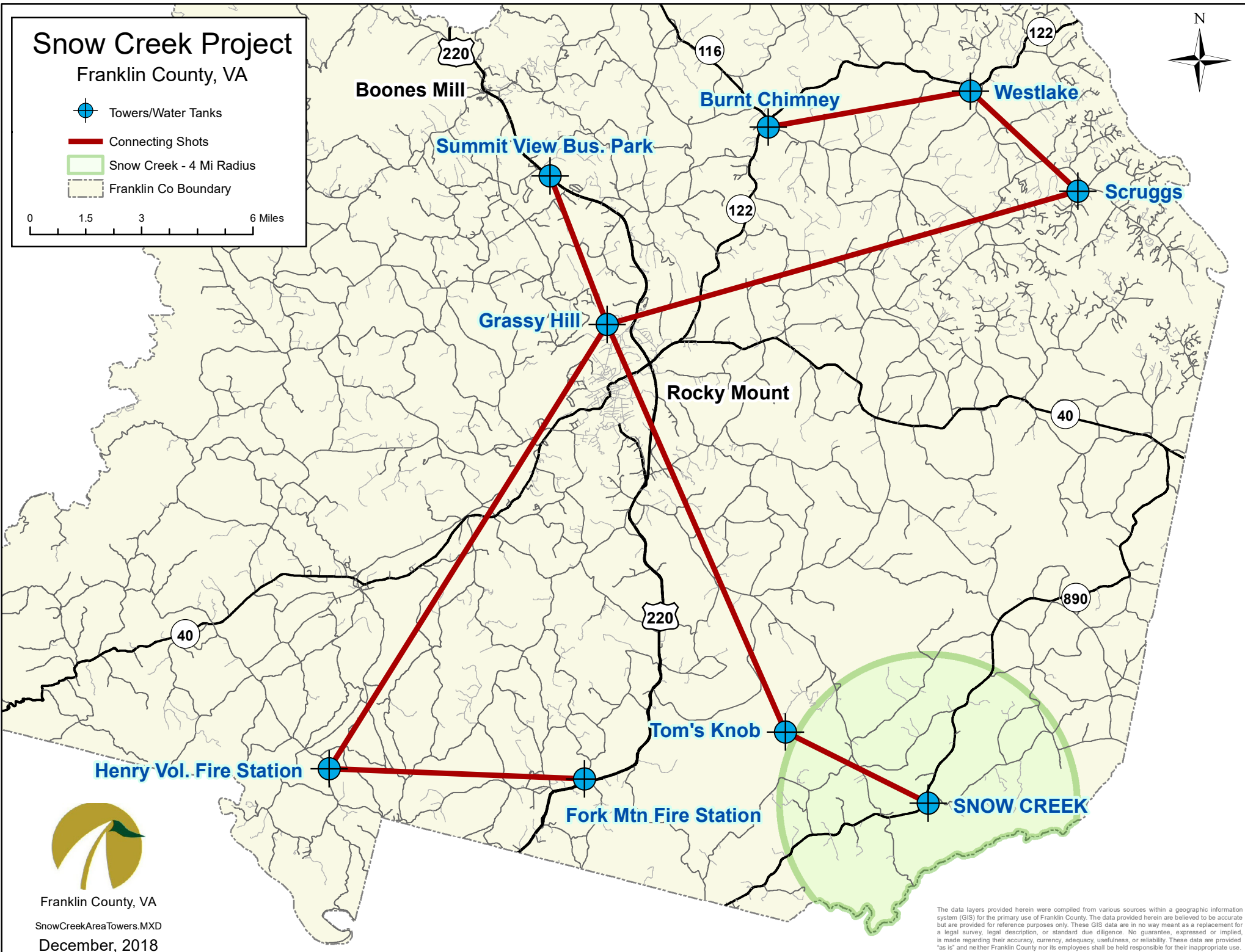


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Snow Creek Project

Franklin County, VA

-  Towers/Water Tanks
-  Connecting Shots
-  Snow Creek - 4 Mi Radius
-  Franklin Co Boundary













Franklin County, VA
SnowCreekAreaTowers.MXD
December, 2018

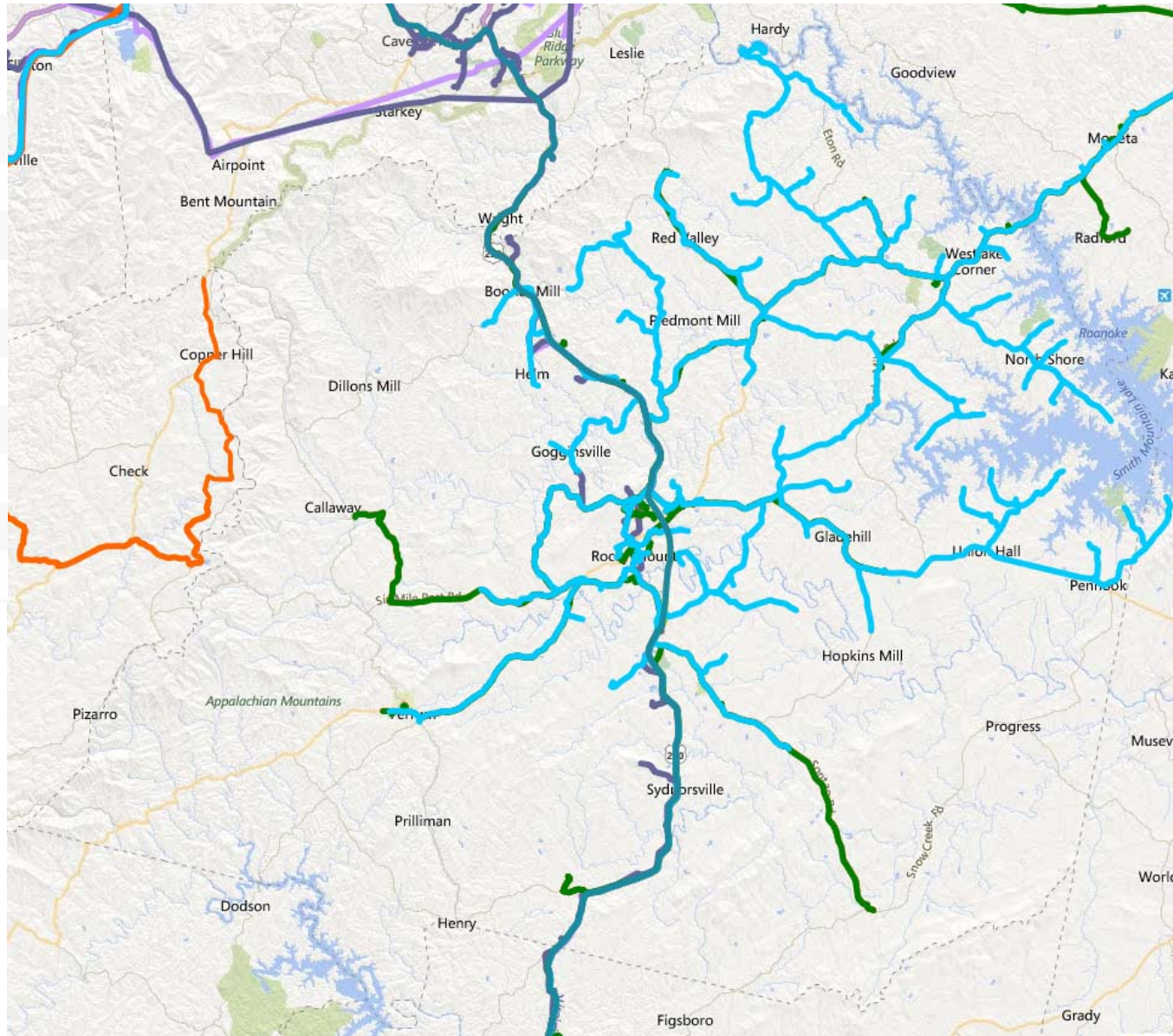
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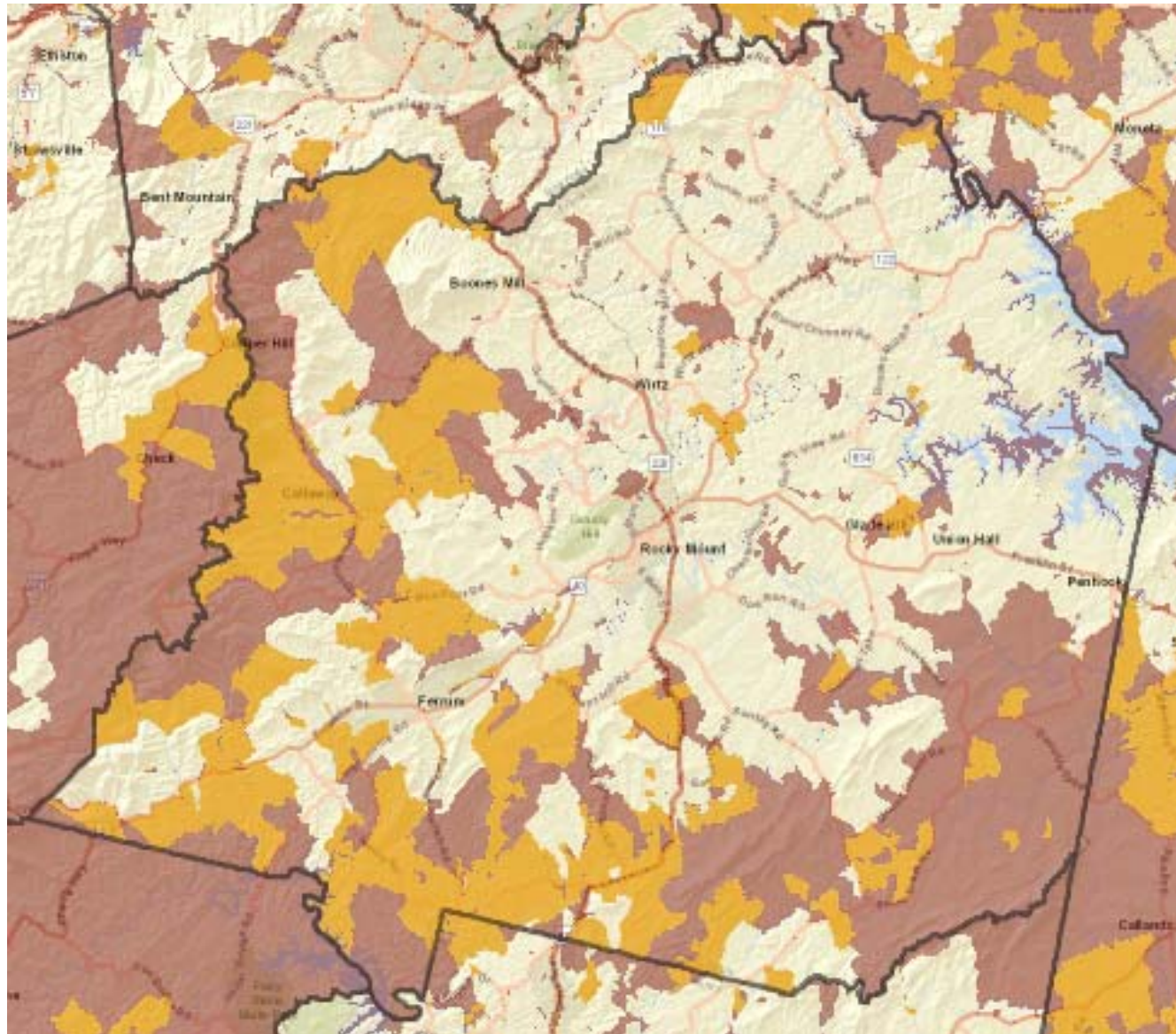
Franklin County Service Providers That Report to the FCC

Business Name	Technology	Number of Blocks	Maximum Download Speed	Maximum Upload Speed
B2X ONLINE	Fixed Wireless	136	20	20
CENTURYLINK	DSL	1,121	25	3
CENTURYLINK	DSL	232	80	40
CITIZENS TELEPHONE COOPERATIVE	DSL	5	6	0.768
COMCAST	Cable	11	150	10
FAIRPOINT COMMUNICATIONS	DSL	11	25	1.5
KINEX TELECOM, INC.	DSL	1	1000	1000
KINEX TELECOM, INC.	Fiber	1	1000	1000
LIGHTOWER	Fiber	107	1000	1000
MCI	Copper Wireline	1	6	6
SHENTEL	Cable	1,377	101	10
SHENTEL	Fiber	628	1000	1000
VERIZON VIRGINIA LLC	DSL	47	15	1

Commercial Metro Networks Fiber

-  [Conterra](#)
-  [Level3 Metro](#)
-  [Lighttower](#)
-  [LIT Networks](#)
-  [Lumos](#)
-  [Mid-Atlantic Broadband](#)
-  [Shentel](#)
-  [Sunset Digital Com.](#)
-  [Uniti Fiber](#)
-  [Windstream](#)





FCC Consumer Fixed BB Download Stats

- **>= 4 Mb 93.1%***
- **>= 10 < 25 83.3%***
- **>= 25 Mb 82.4%***

Source: FCC 477 data
Spring 2016

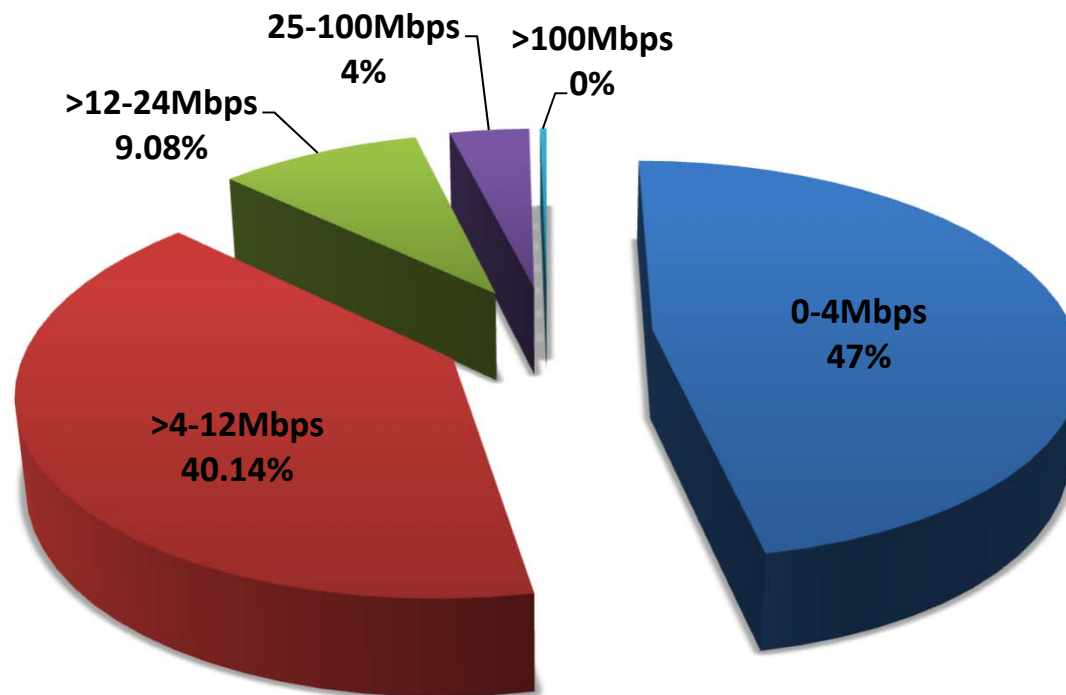
*Percent of total households

- Underserved = Broadband speed below 10 Mbps Download speed
- Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed

Franklin County Internet Speeds

only valid for online surveys

Download Speeds



Take away: The majority of speed tests (47%) registered download speeds between 0-4 Mbps, DSL speeds.

**MEMORANDUM OF
UNDERSTANDING BETWEEN
FRANKLIN COUNTY BROADBAND AUTHORITY
AND BRISCnet
FOR APPLYING FOR VIRGINIA TELECOMMUNICATIONS
INITIATIVE FUNDING FOR PROVIDING BROADBAND
SERVICES**

I. PARTIES AND PURPOSE

This Memorandum of Understanding (MOU) is made and entered into this 13th day of December, 2018 by and between the Franklin County Broadband Authority (FCBA), a political subdivision of the Commonwealth of Virginia under the Wireless Service Authorities Act, hereinafter referred to as the "FCBA", and BRISCnet, a wireless internet service provider, for the purpose of creating a partnership to prepare and submit an application for grant funding through the Virginia Telecommunications Initiative (VATI) Funding Program managed by the Virginia Department of Housing and Community Development (DHCD) in an effort to expand and improve broadband services to the citizens of Franklin County, Virginia..

The FCBA recognizes that in order to attain and maintain a high-quality level of broadband service to the citizens of Franklin County, a close working relationship with the private internet providers is desirable and will be made possible in large part through state and Federal grant funding opportunities.

II. SCOPE OF WORK

The FCBA and BRISCnet desire to cooperatively work together to prepare and submit an application for grant funding through the Virginia Telecommunications Initiative (VATI) Funding Program managed by the Virginia Department of Housing and Community Development (DHCD) to provide fixed wireless broadband service in the Snow Creek area of the County by construction of wireless service facilities and associated microwave or fiber optic backhaul. The application for funding anticipates wireless service coverage to be made available to approximately 450 households and businesses in the Snow Creek area of the County, which is currently unserved. Service is envisioned to be provided through the following infrastructure improvements:

- Installation of approximately 1.5 miles of new fiber in Snow Creek area
- Installation of one (1) 195-foot monopole tower
- Installation of two (2) microwave backhauls
- Installation of fixed wireless internet equipment for access points
- Purchase of 350 subscriber modules for customer access

FCBA and BRISCnet agree to provide the necessary funding to purchase the above equipment, construct the above items, manage the fixed wireless network and other work necessary to deliver a fully functional fixed wireless service in Snow Creek area providing minimum average wireless speeds of 25 Mbps/3 Mbps. The total cost of this project is estimated at \$688,000.

FCBA agrees to complete a grant funding application, with assistance from the FCBA consultant and BRISCnet through the VATI Program requesting \$465,000 on or before December 14, 2018.

Both parties confirm that a detailed agreement shall be executed if funding is approved to outline all the obligations of the FCBA and BRISCnet and provide performance guarantees for service delivery and maintenance. If funding is approved from VATI, both parties confirm and understand that the parties will be responsible for providing the remaining of the funding necessary to complete the project for which VATI funding was received.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Understanding on the day, month, and year indicated:

FOR FRANKLIN COUNTY BROADBAND AUTHORITY:

Approved as to Form: FRANKLIN COUNTY
BROADBAND AUTHORITY,
VIRGINIA

Michael W.S. Nockaby for
Michael W.S. Nockaby
County Attorney

By: *Robert Camicia*
Robert Camicia
FCBA Chairman

STATE OF VIRGINIA
COUNTY OF FRANKLIN, to wit:

The foregoing instrument was acknowledged before me this 13th day of December, 2018, by Robert Camicia, FCBA Chairman on behalf of the Franklin County Broadband Authority.

Registration #: 7705113
My Commission expires: 10/31/2020

Hannah Long Powell
Notary Public

HANNAH LONG POWELL
NOTARY PUBLIC
REG. #7705113
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES OCT. 31, 2020

FOR BRISCnet:

B
R
I
S
C
n
e
t

y: *Anthony Smith*
Anthony Smith
President

STATE OF VIRGINIA
COUNTY OF FRANKLIN, to wit:

The foregoing instrument was acknowledged before me this 12 day of December, 2018, by Anthony Smith, President of BRISCnet.

Registration #: 7781233
My Commission expires: May 31, 2022

Shaquanna Bruce
Notary Public

SHAQUANNA BRUCE
NOTARY PUBLIC
REGISTRATION # 7781233
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES
MAY 31, 2022



Transmittal Letter

**Blue Ridge Towers Inc
1125 1st Street
Roanoke, VA 24016**

Anthony Smith, President

540-595-7060

Dec 13, 2018

BRISNET-Snow Creek

Re: Franklin County VATI Application

Steve Sandy
Franklin County
1255 Franklin St,
Rocky Mount, VA 24151

Dear Steve Sandy (Franklin County):

This letter is to justify why Blue Ridge Internet Service Company, LLC DBA as BRISNET has only filed one (1) form 477 with the FCC this year, the reason being is that BRISNET will be a brand new Wireless Internet Service Provider in your county in the upcoming year of 2019, and the company has not started selling service in the county during the fiscal year of 2018 nor 2017, therefore, no prior FCC forms 477 were filed nor required.

As always, Blue Ridge Towers thanks you for working together on this project and we look forward to many more great endeavors in the near future. Please let me know if you require any additional information from our end.

Sincerely,

Sean Cai

Sean Cai, manager for BRT & BRISNET

(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0028068567 | Data as of: Jun 30, 2018 | Operations: Non-ILEC | Submission Status: Original - Submitted | Last Updated: Dec 14, 2018 16:08:53

Filer Identification

Section	Question	Response
Filer Information	Provider Name	blue ridge internet service company
	Holding Company Name	blue ridge internet service company
	SAC ID	
	499 ID	
Data Contact Information	Data Contact Name	anthony smith
	Data Contact Phone Number	(540) 595-7060
	Data Contact E-mail	sean.cai@blueridgetowers.com
Emergency Operations Contact Information	Emergency Operations Name	anthony smith
	Emergency Operations Phone Number	(540) 596-7060
	Emergency Operations E-mail	sean.cai@blueridgetowers.com
Certifying Official Contact Information	Certifying Official Name	anthony smith
	Certifying Official Phone Number	(540) 397-6628
	Certifying Official E-mail	asmith@blueridgetowers.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	excel_template_fbd.csv	Dec 13, 2018 19:39:52	152
Fixed Broadband Subscription	Interactive data entry		26
Mobile Broadband Deployment	SnowCreek_FranklinCoVA_ServiceRadius.zip	Dec 14, 2018 16:07:01	-
Mobile Broadband Service Availability	excel_template_fbd - Copy - Copy.csv	Dec 13, 2018 20:50:45	26
Mobile Broadband Subscription	Interactive data entry		1

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	BRISNET	Terrestrial Fixed Wireless	152
Total			152

**Fixed
Broadband
Subscription**

Fixed Broadband Subscriptions by State, Technology and End-user Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Terrestrial Fixed Wireless	26	78	0	78
Total		26	78	0	78

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
25.000	3.000	78	0	78
Total		78	0	78

Fixed Broadband Subscriptions by Technology, Bandwidths and End-user Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Terrestrial Fixed Wireless	25.000	3.000	78	0	78
Total			78	0	78

**Mobile
Broadband
Service
Availability**

Census Tract Counts by State and DBA Name

State	DBA Name	Tracts
Virginia	BRISNET	26
Total		26

**Mobile
Broadband
Subscription**

Mobile Broadband Subscriptions by State and End-user Type

State	Consumer	Non-Consumer	Total
Virginia	0	1	1
Total	0	1	1

Mobile Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Non-Consumer	Total
25.000	3.000	0	1	1
Total		0	1	1



December 14, 2018

RE: Franklin County VATI Matching and In-kind Funds

To Whom It May Concern:

Franklin County is committed to providing matching funds for the VATI Snow Creek Broadband project through several methods as follows:

- Matching local funds – The County has appropriated \$75,000 in FY 18-19 in a capital spending account. Furthermore, the County is currently projecting \$1,005,000 of funding for broadband deployment over the next ten (10) years as shown on attached Capital Improvement Plan for FY 18-19.
- In-kind services - The County has dedicated staff resources to the preparation of the grant application and to grant and project management. This includes the Director of Planning & Community Development, Finance Director, GIS Coordinator, IT Director, and others to ensure that the project is successful and completed on time and on budget. In addition, the County has secured the services of Andrew Cohill of Design Nine, Inc. as the County’s Broadband Consultant. In addition to creating the Broadband Plan for the County, Mr. Cohill will be assisting with grant applications and providing technical project oversight. The County will also require the services of the County Attorney to review, draft, and approve documents related to the partnership between Franklin County and VA DHCD as well as Blue Ridge Towers and BRISNet to implement the project.

Estimated Costs

	<u>Rate</u>	<u>Hours</u>	<u>Cost</u>
Franklin County Staff	\$70/hr	400	\$28,000
County Attorney	\$150/hr	60	\$9,000
Consultant	\$125/hr	80	\$10,000

Sincerely,

Steven M. Sandy, AICP

Director



Franklin County

A Natural Setting for Opportunity



Snow Creek Construction Costs

**Blue Ridge Towers Inc
1125 1st Street
Roanoke, VA 24016**

Anthony Smith, President

540-595-7060

Dec 9, 2018

VA024 Snow Creek Tower

For Franklin County VATI Application

The cost breakdown for the construction of the Snow Creek Tower is as follows:

- A- Monopole cost \$57460.00
- B- Foundation cost \$89200.00
- C- Civil/ Complete Site Construction (all inclusive) \$99720.00
- D- Total \$246,380.00

The cost of designing and completion of 1.5 miles of new 48 strands(pairs) of fiber from Snow Creek Elementary school to the site, and back to BRISNET NOC is \$96,380.00

The cost breakdown for the Access Points (infrastructure/equipment) for BRISNET on the tower is as follows:

- A-Cost of equipment: \$29511.00
- B-Labor/(installation /site turn up/testing) \$26000.00
- C-Total \$55,511.00

The cost to install and design the Microwave backhaul from Snow Creek to Tom's Knob is as follows:

- A-2Microwave equipment systems, \$21,275.00 per system (\$42550.00)
- B-labor (installation/testing) \$31,330.00
- C-Total \$73,680.00

As always, Blue Ridge Towers thanks you for working together on this project and we look forward to many more great endeavors in the near future. Please let me know if you require any additional information from our end.

Sincerely,

Sean Cai
Sean Cai, Site Acquisition Manager



QUOTATION

Valmont Industries, Inc.
28800 Ida Street

Quote Number: 432075-01
Created: 11/20/2018 3:57:53 PM
Revised: 11/20/2018 3:58:12 PM

Valley, NE 68064

Prepared for: **Blue Ridge Towers**
Attention: **Sean Cai**
Address1: **1125 1st Street**
Address2:
City: **Roanoke**
State: **VA**
Zip: **24016**
Phone: **(540) 595-7060**
Email: **sean.cai@blueridgetowers.com**

Budgetary: No

RFQ: **Project: Blue Ridge Towers - Snow Creek (Franklin County), VA - 195' Monopole - 3 Carrier**

NOTICE

Quoted prices will be held firm for 15 days. Prices are subject to change if product is not shipped within 2 months of Purchase Order receipt.

ITEM	DESCRIPTION	QTY	UNIT PRICE
1	195' MONOPOLE - 194' POLE WITH 1' FOUNDATION PROJECTION	1	\$52,700
	Price Includes: - Steel templates and anchor bolts. - Pole sections and accessories to be hot dipped galvanized. - Transmission line entry ports at the base of the pole. - Transmission line exit ports at each specified antenna level. - Pole assembly hardware. - Removable climbing steps with galvanized Tuf-Tug cable type safety climb system (less harness). - Includes TIA-G standard grounding provisions welded to pole. - Includes 4'-7' adjustable lightning rod		
2	STRUCTURAL ANALYSIS	1	\$400
	Engineering drawings per design, to be P.E. sealed by a Registered Professional Engineer. A pdf copy of the drawing is supplied, if hard copies are required please indicate on order. Additional charges may apply for hard copies larger than 8-1/2" x 11".		
3	FOUNDATION DESIGN PER CUSTOMER FURNISHED SOIL REPORT	1	\$600
	Custom foundation (unit base or drilled caisson) if soil report is supplied. A pdf copy of the drawing is supplied, if hard copies are required please indicate on order. Rock foundations may incur additional charges. Price is for one site. Soils report to be provided by the customer.		
		3	\$53,700

NOTES

MONOPOLE
For pole weight, base reactions and design/antenna loads, please refer to Valmont Permit



QUOTATION

Valmont Industries, Inc.
28800 Ida Street

Quote Number: 432075-01
Created: 11/20/2018 3:57:53 PM
Revised: 11/20/2018 3:58:12 PM

Valley, NE 68064

Drawing File ID 432075R0.

Pole sizes are preliminary only and may change slightly at time of order entry.

Foundation build and tower erection are by others.

Estimated lead time 7-9 weeks; lead time starts after release and receipt of approved production drawings from the customer. Please note that lead times are estimated and can fluctuate due to production capacity. Please contact customer service to verify current lead times or if better delivery is needed when placing an order.

**** PLEASE NOTE THAT LEAD TIMES ARE ESTIMATED AND DUE TO PRODUCTION CAPACITY LEAD TIMES MIGHT FLUCTUATE. PLEASE ALWAYS CONTACT CUSTOMER SERVICE TO VERIFY CURRENT LEAD TIMES WHEN PLACING AN ORDER. ****

Products may be foreign built - if this is not acceptable please request a revised quote.

FREIGHT

Estimated Cost, with unloading of truck by others to Franklin County, VA nearest access point to the site, via flat bed tractor trailer. Any special handling by other. (1 truck required) \$3,560

Estimated anchor steel freight shipped direct from our supplier. Average anchor steel lead time is 3 to 4 weeks. \$400

MATERIAL PRICE

Due to material price fluctuations, Valmont reserves the right to review all material pricing prior to accepting any order. Any order placed on hold is subject to a price review at the time of its release.

Valmont may be required by state law to collect Sales/Use Tax at the time of shipment. If required, this tax will appear as a separate item on the invoice. If you have a tax exempt certificate, submit it at the time of order.

- * Valmont reserves the right to apply storage charges of three-hundred and fifty dollars (\$350.00) per month for structures kept in our yard beginning 60 days after original ship date.
- * Quote is subject to Valmont's standard terms and conditions. See attached copy.
- * All quotations subject to acceptance by Valmont at time of order placement.
- * F.O.B Valmont Factory
- * Terms: NET 30 Days (upon approved credit)
- * Prepared by David Schoenecker | Project Administrator
Valmont Industries, Inc. | www.valmont-towers.com

**COMMUNICATIONS
STANDARD TERMS AND CONDITIONS OF SALE**

AGREEMENT: This document ("Document") contains the standard terms and conditions of sale by Valmont Industries, Inc. ("Supplier"), to Purchaser, of products, materials, other goods, equipment, operations, or services ("Product"). If this Document is a quotation, then the offer contained herein shall remain open for thirty (30) days from the date it was issued, unless otherwise specified, and Purchaser shall be deemed to have accepted the offer and terms and conditions contained herein upon the earlier of: (1) Purchaser's signature and return of this Document to Supplier by fax or any other means; (2) Supplier's receipt of any order or any other writing from Purchaser indicating Purchaser's acceptance and agreement to the terms hereof; or (3) Purchaser's acceptance of any shipment of Product. Whether this Document is a quote, an invoice, or otherwise, the terms and conditions of the parties' agreement shall consist solely of the terms and conditions contained in this Document, together with any separate written agreement previously executed by both Purchaser and Supplier, any invoices generated in connection herewith, and any written addenda to the foregoing that are signed by Purchaser and Supplier (all of which are hereinafter collectively referred to as the "Agreement"). Any additional or different terms contained in any order or other document submitted by Purchaser to Supplier shall be deemed rejected, unless expressly accepted in writing by Supplier. In no event shall Supplier's silence or failure to respond to any such additional or different terms be deemed to constitute acceptance or approval thereof. If this Document is a quotation, then failure of the Purchaser to reject these terms and conditions in writing upon the first to occur of the receipt of this or any other document from or on behalf of the Supplier containing these terms and conditions or the delivery of Product pursuant to the Agreement shall constitute final acceptance of the terms and conditions hereof. To the extent this invoice is in any way deemed to be an acceptance of an offer of the Purchaser, any such acceptance of the Supplier is expressly conditioned upon the consent of the Purchaser to the terms and conditions of the Agreement.

MODIFICATIONS, RESCISSION & CANCELLATION: The Agreement may be modified or rescinded only in writing signed by duly authorized representatives of the parties. For any changes requested by Purchaser to the specification, style, or quantity of the Product, Purchaser shall pay the Supplier a charge equal to the actual additional cost incurred by the Supplier as a result of such change plus a reasonable percentage of such actual cost for overhead and profit. Orders may be canceled only with Supplier's written consent and upon terms which will save Supplier from loss, including all out-of-pocket costs and lost profits.

LIMITED WARRANTY: Supplier warrants the Product to be free of material and workmanship defects for a period of two years from the date of shipment, but said warranty is limited to material and workmanship of Product designed and manufactured by the Supplier. For any product manufactured using items supplied by Purchaser or Purchaser's designee, Supplier makes no warranty concerning the design, fabrication, or manufacture of the items supplied. Such items shall carry only the respective designer's, fabricator's, or manufacturer's warranty, if any. For product manufactured or fabricated by Supplier according to specifications or designs provided by Purchaser or Purchaser's designee, Supplier makes no warranty concerning the adequacy or sufficiency of the specifications or designs themselves. All warranty claims alleging defects of materials or workmanship must be submitted in writing within seven (7) days after the discovery of the defect or such claim shall be considered waived. Supplier will not accept Product returned to it for repair or replacement, unless Supplier is previously notified of the defect in writing and the return or correction is authorized by Supplier in writing. Any Product deemed by Supplier, in its sole discretion, to be defective in material or workmanship will be repaired or replaced, at Supplier's option, F.O.B. Supplier's plant. Supplier's obligation to repair or replace any defective Product shall not include any obligation to reimburse the Purchaser for transportation, installation, removal, unauthorized repairs, or any other expenses that may be incurred by the Purchaser or others in relation to any Product defect. **THIS WARRANTY EXCLUDES (I) FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT. FURTHER, LABOR REQUIRED TO REMOVE AND/OR REINSTALL ORIGINAL OR REPLACEMENT PARTS SHALL BE THE RESPONSIBILITY OF THE CUSTOMER; (II) DAMAGE CAUSED BY IMPROPER INSTALLATION, OVERLOADING, MISUSE, ABUSE, ACCIDENT OR NEGLIGENCE.** In addition, this warranty does not cover alterations, modifications, or additions unless the change is acknowledged and accepted, in advance in writing, by Valmont; and (iii) if the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

THE FOREGOING WARRANTIES ARE THE ONLY WARRANTIES GIVEN BY SUPPLIER, AND SUPPLIER HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHETHER ARISING FROM STATUTE, COMMON LAW, CUSTOM, COURSE OF DEALING, USAGE OF TRADE, OR OTHERWISE. THE REMEDY OF REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT SET FORTH IN THE FOREGOING WARRANTIES SHALL BE THE EXCLUSIVE REMEDY AVAILABLE TO ANY PERSON. SUPPLIER SHALL NOT BE LIABLE FOR ANY LOSS, INJURY, EXPENSE, OR DAMAGE, WHETHER DIRECT, CONSEQUENTIAL, INCIDENTAL, OR OTHERWISE (INCLUDING LOST PROFITS, LOSS OF CONSTRUCTION BONUS OR INCENTIVES), RESULTING FROM THE POSSESSION, INSTALLATION, ERECTION, START-UP, USE, MAINTENANCE, OPERATION, REMOVAL, OR RESALE OF SUPPLIER'S PRODUCT OR CAUSED BY ANY DEFECT, FAILURE, OR MALFUNCTION OF ANY PRODUCT, WHETHER A CLAIM FOR SUCH DAMAGES IS BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, OR OTHERWISE. NO PERSON HAS THE AUTHORITY TO BIND THE SUPPLIER TO ANY REPRESENTATION OR WARRANTY OTHER THAN THE FOREGOING LIMITED WARRANTIES AS DISCLAIMED.

DELIVERY, FREIGHT & RISK OF LOSS: All products are sold F.O.B. factory, full freight allowed within the continental United States, consisting of the lower 48 contiguous states, unless otherwise specified in writing. For shipment destinations outside the continental U.S., freight charges will be prepaid to the nearest port of exit with all other applicable charges from said point of delivery being the responsibility of the customer, unless otherwise noted. The method of shipment will be solely determined by Valmont, using a common carrier of Valmont's choice and delivered to the nearest destination. The customer assumes and will pay all charges for special services such as cartage, airfreight, express deliveries, parcel post and multiple deliveries on one order. For orders less than \$1,500, freight may not be included and may be prepaid and charged to the customer. Orders below \$500 may incur a processing fee. Freight charges for anchor bolts or accessories shipped independent of the structures (at the customer's request) may be billed separately and paid by the customer, unless otherwise specified in writing. Risk of Loss, including transportation delays and losses, shall pass to Purchaser upon the earlier of (i) completion of the Product's manufacture, if shipment is delayed by Purchaser, (ii) delivery of the Product to the Purchaser in cases where shipment is F.O.B. destination, or (iii) delivery of the Product to the carrier in cases where shipment is collect or is F.O.B. point of shipment.

PRICING: All prices and discounts are subject to change without advance notice except those shown on a specific quotation indicating the prices to be firm for thirty (30) days from the date of the quotation. For quotations accepted by Purchaser, Purchaser agrees that if the contract documents or designs or the prices of raw materials change from that contained in the quotation, Supplier has a right to charge additional compensation for increased costs, including, without limitation, costs related to freight and raw materials, as well as for increased margin associated therewith. Orders delayed or put on customer hold may not be price protected beyond the date of a general price increase announcement.

RETURNS & CLAIMS FOR SHORTAGES: Supplier will not accept returns for custom-made Product for any reason, provided that Supplier will accept returns made solely for repair or replacement under the foregoing express warranties, but only if Supplier has previously authorized said returns in writing. Standard (non-custom) Product may not be returned without the written consent of Supplier obtained within thirty (30) days after shipment, and only upon the following conditions: (i) all returned Product must be in excellent and merchantable condition and in the original packaging; (ii) the outbound and return freight must be pre-paid; and (iv) the return is subject to certain charges depending on current pricing and product. All claims for shortages must be made in writing within 30 days of receipt of shipment at destination.

PRODUCT SHIPPED WITH PROTECTIVE COVERING: Product received at the point of destination with protective covering should be unwrapped immediately and inspected. Any exposure to moisture during transportation or storage may cause the wrapping materials to stain the Product. Product is wrapped for protection during shipment.

INSTALLATION: Purchaser shall be solely responsible at its cost for the installation and erection of the Product purchased. Although Supplier may, in some cases, provide data, manuals, instructions, designs, drawings or specifications to aid Purchaser with installation or start-up, **SUPPLIER ASSUMES NO RESPONSIBILITY FOR PROPER INSTALLATION OR SUPPORT OF THE PRODUCT WHEN ERECTED AND DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO SUCH INSTALLATION OR SUPPORT, WHETHER OR NOT DATA, MANUALS, INSTRUCTIONS, DESIGNS, DRAWINGS OR SPECIFICATIONS ARE PROVIDED.**

DELAYS: Supplier will deliver or ship with reasonable promptness, but shall not be liable for delays for any reason beyond the Supplier's reasonable control, including, but not limited to, delays caused by acts of God, war, riot, embargoes, acts of civil or military authorities, fires, floods, accidents, quarantine restrictions, mill conditions, strikes, differences with workmen, delays in transportation, shortages of cars, fuel, labor or materials. **IN ANY SUCH EVENT, SUPPLIER SHALL HAVE SUCH ADDITIONAL TIME WITHIN WHICH TO PERFORM AS MAY BE REASONABLE AND NECESSARY UNDER THE CIRCUMSTANCES, AND SUPPLIER SHALL NOT BE LIABLE TO PURCHASER FOR ANY DAMAGES ARISING FROM SUCH DELAYS, LOSS OF USE OR FOR OTHER DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND WHATSOEVER. IN NO EVENT SHALL SUPPLIER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR CLAIMS FOR LABOR RESULTING FROM FAILURE OR DELAY IN DELIVERY.**



CREDIT APPROVAL & SECURITY FOR PAYMENT: Acceptance of any offer of Supplier is subject to Supplier's approval of Purchaser's credit, and Supplier may at any time decline to make any shipment or delivery, or to perform any services, except upon receipt of payment or security, or upon such other terms as may be satisfactory to Supplier. To secure the payment of any and all amounts due Supplier under this Agreement or any other contract between the parties, Supplier retains and the Purchaser grants to Supplier a security interest in the Product purchased hereunder and agrees to execute and deliver to Supplier such financing statements or to take any other action necessary to perfect Supplier's security interest as Supplier may reasonably request.

TERMS, INVOICES, PAYMENT, LATE CHARGE & TAXES: Payment terms are NET thirty (30) days from the date of Supplier's invoice, unless otherwise specified and approved in advance in writing from the Valmont Credit Department. Invoices will be rendered upon delivery of each order to Purchaser. All payments shall be made to the "remit to" location as stated on the Supplier's invoice. Supplier reserves the right to invoice, and Purchaser agrees to pay for, any or all Product ready for shipment, together with expenses, costs, and losses associated therewith, whenever shipment is delayed pursuant to Purchaser's written instructions or for other reasons beyond Supplier's control. Invoices for anchor bolts shipped in advance of the structures may be billed at the time of such anchor bolt shipment. A monthly late charge of 1.5% of the invoice amount or \$50, whichever is greater, will be assessed on all past-due amounts. Any tax or other charge imposed by law on the sale of goods or the performance of services shall be paid by the Purchaser, unless the law specifically provides that such payment must be absorbed by Supplier. Purchaser shall inform the Supplier, in advance in writing, of such taxes or other charges imposed by state, municipal, or other law that are to be paid by the Supplier.

DEFAULT OF PURCHASER: In the event that (i) Purchaser fails to pay any invoice when due; (ii) Purchaser breaches this Agreement or any other contract with Supplier or any of its affiliated companies; or (iii) Purchaser's financial strength becomes unsatisfactory, Purchaser shall thereby be in default, and Supplier reserves the right, in its sole discretion, to do any one or more of the following: (i) cancel this Agreement and any work in progress, shipments, and pending orders without further notice; (ii) declare all sums owing from Purchaser to Supplier to be due and payable; (iii) require payment in advance of performance, in certified funds; (iv) foreclose any security interest; (v) require other security satisfactory to Supplier. Purchaser shall be liable to Supplier for any and all damages, whether direct, indirect, consequential, special or any other kind of damages, caused by or arising out of any breach of this agreement, provided that the exercise of any rights under this contract shall not bar Supplier from exercising its rights under the UCC or any other applicable law. The Purchaser waives any applicable statutory exemptions and shall pay all expenses incurred by Supplier in the collection of the amounts due under the Agreement, including attorneys' fees.

INDEMNIFICATION & GOVERNING LAW: Purchaser shall indemnify and hold Supplier harmless from all expenses (including attorneys' fees), claims, demands, suits, judgments, actions, costs, and liabilities (including without limitation those alleging Supplier's own negligence) which may arise from, relate to, or be connected with the Purchaser's possession, installation, erection, start-up, use, maintenance, operation, removal, or resale of the Product described herein and any manuals, instructions, designs, drawings or specifications related thereto. All disputes relating to the execution, interpretation, construction or enforcement of the rights and obligations of the parties hereto shall be governed by the laws of, and resolved in the State and Federal courts in the State of Nebraska, and the parties hereby consent to venue in Omaha, Nebraska. **THE PURCHASER AND SUPPLIER EACH HEREBY WAIVE THEIR RIGHT TO A TRIAL BY JURY ON ANY CLAIM (INCLUDING COUNTERCLAIMS) ARISING WITH RESPECT TO THE GOODS PURCHASED HEREUNDER.** Any lawsuit based on or related in any way to the Agreement or the Product described therein must be commenced within two (2) years after delivery of the Product or other goods to the Purchaser or it shall be barred.

Quote



CORE TELECOM SYSTEMS, INC.
 1131 NORTH WARSON ROAD
 ST. LOUIS, MO 63132
 3143720240

Order Number: 0050322

Order Date: 12/14/2018

Salesperson: JAMES SHELL

Customer Number: 30-BLU540

Sold To:

BLUE RIDGE TOWERS
 1125 1ST STREET
 ROANOKE, VA 24016

Ship To:

BLUE RIDGE TOWERS
 1125 1ST STREET
 ROANOKE, VA 24016

Confirm To:

Fax No.

Customer P.O.	Ship VIA	F.O.B.	Terms			
	UPS GROUND	ORIGIN	NET 30			
Item Number	Unit	Ordered	Shipped	Back Order	Price	Amount
C009045C001A	EACH	1.00	0.00	0.00	227.2400	227.24
900 MHZ PMP 450I CONNECTORIZED SUBSCRIBER MODULE..				Whse: 011		
C050045H012A	EACH	1.00	0.00	0.00	1,060.9600	1,060.96
PMP450B 5GHZ SM, 4-PACK INTEGRATED 25DBI HIGH-GAIN ANTENNA WIDE BAND SUBSCRIBER MODULE, 4900-5925MHZ, UNCAPPED THROUGHPUT				Whse: 011		

Net Order: 1,288.20
 Less Discount: 0.00
 Freight: 0.00
 Sales Tax: 68.27
Order Total: 1,356.47



1131 North Warson Road
St. Louis, MO 63132

Quote

Valid Till:

Quote Number : 502397000016613110

Bill to:

Blue Ridge Towers
1125 1st Street
Roanoke, VA 24016

Ship To:

Blue Ridge Towers
PMP Snow Creek ,

Quoted by: **Janessa Meeks**
Contact email: jmeeks@coretelecom.net

Contact phone: **1-888-375-8826**

S.No.	Product Details	Part Number	Qty	Unit Price	Total
1.	900 MHZ PMP 450I CONNECTORIZED ACCESS POINT.	C009045A001A	1	\$2,200.20	\$2,200.20
2.	CAM PTP650/670 LPU AND GROUNDING KIT	C000065L007B	5	\$320.00	\$1,600.00
3.	900 MHZ 60 DEGREE SECTOR ANTENNA (DUAL SLANT) - ACCESS POINT	N009045D001A	1	\$300.20	\$300.20
4.	CAMBIUM N-TO-N CABLE, 16"	30009406002	2	\$19.20	\$38.40
5.	CAM POWER SUPPLY, 30W, 56V-GBPS SUPPORT	N000000L034A	1	\$20.00	\$20.00
6.	CAM AC LINE CORD - US	N000900L007A	1	\$4.00	\$4.00
7.	900 MHZ PMP 450I CONNECTORIZED SUBSCRIBER MODULE.	C009045C001A	5	\$227.24	\$1,136.20
8.	SURGE SUPPRESSOR	600SSH	9	\$28.00	\$252.00
9.	900 MHZ 12 DBI GAIN DIRECTIONAL ANTENNA (DUAL SLANT) - SUBSCRIBER MODULE	N009045D003A	5	\$67.64	\$338.20
10.	CMM5 CONTROLLER	C000000L500A	1	\$796.00	\$796.00
11.	CMM5 POWER AND SYNC INJECTOR 56V	C000000L556A	2	\$1,036.00	\$2,072.00
12.	UNIVERSAL GPS MODULE	1096J	1	\$279.20	\$279.20

S.No.	Product Details	Part Number	Qty	Unit Price	Total
13.	N000000L054B		2	\$160.00	\$320.00
	POWER SUPPLY, AC, 56V, 240W				
14.	N000000L103A		1	\$111.20	\$111.20
	CMM5 TO UGPS SHIELDED CABLE (20 METERS)				
15.	C050045A006B		4	\$2,428.20	\$9,712.80
	5GHZ PMP 450I INTEGRATED ACCESS POINT, 90 DEGREE, US				
16.	C050045H012A		1	\$1,060.96	\$1,060.96
	PMP450B 5GHZ SM, 4-PACK INTEGRATED 25DBI HIGH-GAIN ANTENNA WIDE BAND SUBSCRIBER MODULE, 4900-5925MHZ, UNCAPPED THROUGHPUT				
17.	C000000L030A		9	\$103.07	\$927.63
	CNPILOT R201P, US, 802.11AC DUAL BAND GIGABIT WLAN ROUTER WITH ATA AND POE				
18.	01010419001		22	\$21.00	\$462.00
	Coaxial Cable Grounding Kits for 1/4" and 3/8" Cable				
19.	WB3175A		2	\$940.00	\$1,880.00
	Description: Cable reel - 1000 ft. bulk clad CAT5e cable (BBDGe - Copper-clad steel armor)				
20.	/ONSITE SERVICES		4	\$1,500.00	\$6,000.00
	LABOR				
21.	/TRAVEL		1	\$0.00	\$0.00
	TRAVEL				
				Sub Total	\$29,510.99
				Tax	\$0.00
				Freight	\$0.00
				Grand Total	\$29,510.99

Terms and Conditions

Net 30 days with approved credit. Taxes and Freight not included unless specified. All Pricing in USD.

TERMS:

50% due on PO. 50% net 30 from delivery. Services Net 30.

There may be miscellaneous items that need to be added to complete the project. Travel costs will be figured in after travel has been completed.



1131 North Warson Road
St. Louis, MO 63132

Quote

Valid Till:

Quote Number : 502397000016787027

Bill to:

Blue Ridge Towers
1125 1st Street
Roanoke, VA 24016

Ship To:

Blue Ridge Towers
PTP Snow Creek to
Tom;s Knob ,

Quoted by: **Janessa Meeks**
Contact email: jmeeks@coretelecom.net

Contact phone: **1-888-375-8826**

S.No.	Product Details	Part Number	Qty	Unit Price	Total
1.	C000000L033A GIGABIT SURGE SUPPRESSOR 56V		4	\$40.00	\$160.00
2.	C180082B011A PTP 820S RADIO TR 1560 HI 19260-19710 MHz		1	\$3,298.00	\$3,298.00
3.	C180082B012A PTP 820S RADIO TR 1560 LO 17700-18150 MHz		1	\$3,298.00	\$3,298.00
4.	N000065L001B 56 VDC, 60W POWER SUPPLY		2	\$64.00	\$128.00
5.	N000065L003A PTP650 US LINE CORD		2	\$16.00	\$32.00
6.	N000082L014A GLANDS X5 KIT		2	\$25.60	\$51.20
7.	N000082L016A CAT5E OUTDOOR 100M DRUM		2	\$236.00	\$472.00
8.	N000082L017A GROUNDING KIT FOR CAT5E F/UTP CABLE		7	\$12.80	\$89.60
9.	N000082L034A PTP820S CAPACITY KEY 650M, ACM ENABLED		2	\$1,358.00	\$2,716.00
10.	N000082L073A GBE CONNECTOR KIT		2	\$20.80	\$41.60
11.	N000082L116A GROUND CABLE FOR POE AND ODU		2	\$12.80	\$25.60
12.	N180082D031A 1' ANTENNA, SP, 18 GHZ, RFU-C & STD, UBR320		2	\$381.90	\$763.80

S.No.	Product Details	Part Number	Qty	Unit Price	Total
13.	/ONSITE SERVICES		4	\$1,500.00	\$6,000.00
	LABOR				
14.	/TRAVEL		1	\$0.00	\$0.00
	TRAVEL				
15.	POFE159N		2	\$1,050.00	\$2,100.00
	FCC Filing per terminal				
16.	WB3659		2	\$1,050.00	\$2,100.00
	FCC Microwave Frequency Coordination Service per link				
				Sub Total	\$21,275.80
				Tax	\$0.00
				Freight	\$0.00
				Grand Total	\$21,275.80

Terms and Conditions

Net 30 days with approved credit. Taxes and Freight not included unless specified. All Pricing in USD.

TERMS: 50% due on PO. 50% net 30 from delivery. Services Net 30.

There may be miscellaneous items that need to be added to complete the project. Travel costs will be figured in after travel has been completed. ***FCC Filing and Coordination Service is subject to change!***

Quote



CORE TELECOM SYSTEMS, INC.
 1131 NORTH WARSON ROAD
 ST. LOUIS, MO 63132
 3143720240

Order Number: 0050322

Order Date: 12/14/2018

Salesperson: JAMES SHELL

Customer Number: 30-BLU540

Sold To:

BLUE RIDGE TOWERS
 1125 1ST STREET
 ROANOKE, VA 24016

Ship To:

BLUE RIDGE TOWERS
 1125 1ST STREET
 ROANOKE, VA 24016

Confirm To:

Fax No.

Customer P.O.	Ship VIA	F.O.B.	Terms			
	UPS GROUND	ORIGIN	NET 30			
Item Number	Unit	Ordered	Shipped	Back Order	Price	Amount
C009045C001A	EACH	1.00	0.00	0.00	227.2400	227.24
900 MHZ PMP 450I CONNECTORIZED SUBSCRIBER MODULE..				Whse: 011		
C000000L030A	EACH	1.00	0.00	0.00	115.0000	115.00
CNPILOT R201P, US, 802.11AC DUAL BAND GIGABIT WLAN ROUTER WITH ATA AND POE				Whse: 011		

Net Order: 342.24
 Less Discount: 0.00
 Freight: 0.00
 Sales Tax: 18.14
Order Total: 360.38



Transmittal Letter

**Blue Ridge Towers Inc
1125 1st Street
Roanoke, VA 24016**

Anthony Smith, President

540-595-7060

Dec 14, 2018

Snow Creek Fiber Project

Re: Snow Creek Fiber Run

Steve Sandy
Franklin County
1255 Franklin St,
Rocky Mount, VA 24151

Dear Steve Sandy (Franklin County):

This letter is to provide you with the cost associated with the fiber pull in the Snow Creek Area. Blue Ridge Towers Inc, which also owns Blue Ridge Internet Service Company, LLC DBA as BRISNET will be installing new aerial fiber from the Point of Presence at Snow Creek Elementary school to the proposed tower location at 6200 Snow Creek Road for a distance of approximate 1.51 miles. The cost associated with this installation of new 144 Strand of open fiber per mile is \$64250.00 all inclusive. The total project cost for the new fiber installation is \$96375.00. This cost is all inclusive of labor and materials from design to installation complete.

As always, Blue Ridge Towers thanks you for working together on this project and we look forward to many more great endeavors in the near future. Please let me know if you require any additional information from our end.

Sincerely,

Sean Cai

Sean Cai, manager for BRT & BRISNET



Franklin County
A Natural Setting for Opportunity

THE FRANKLIN COUNTY BROADBAND AUTHORITY HELD A MEETING ON TUESDAY, NOVEMBER 20, 2018, AT 12:00 P.M., IN THE BOARD OF SUPERVISORS MEETING ROOM LOCATED IN THE GOVERNMENT CENTER, 1255 FRANKLIN STREET, SUITE 104, ROCKY MOUNT, VIRGINIA.

THERE WERE PRESENT: Bob Camicia, Chairman
Leland Mitchell, Vice Chairman
Cline Brubaker
Tommy Cundiff
Mike Carter
Tim Tatum
Ronnie Thompson

OTHERS PRESENT: Brent Robertson, Co. Administrator
Christopher Whitlow, Deputy Co. Administrator
Jim Guynn, County Attorney
Sharon K. Tudor, MMC, Clerk

(RESOLUTION #02-11-2018)

BE IT THEREFORE RESOLVED, by the Authority to authorize staff to submit VATI grant application seeking \$465,000 of state funding. The FCBA understands that a 20% local match of County funds and/or funds from private partner(s) will be required if funding is awarded by VATI.

MOTION BY: Ronnie Thompson

SECONDED BY: Leland Mitchell

VOTING ON THE MOTION WAS AS FOLLOWS:

AYES: Mitchell, Thompson, Brubaker, Cundiff, Carter, Tatum & Camicia

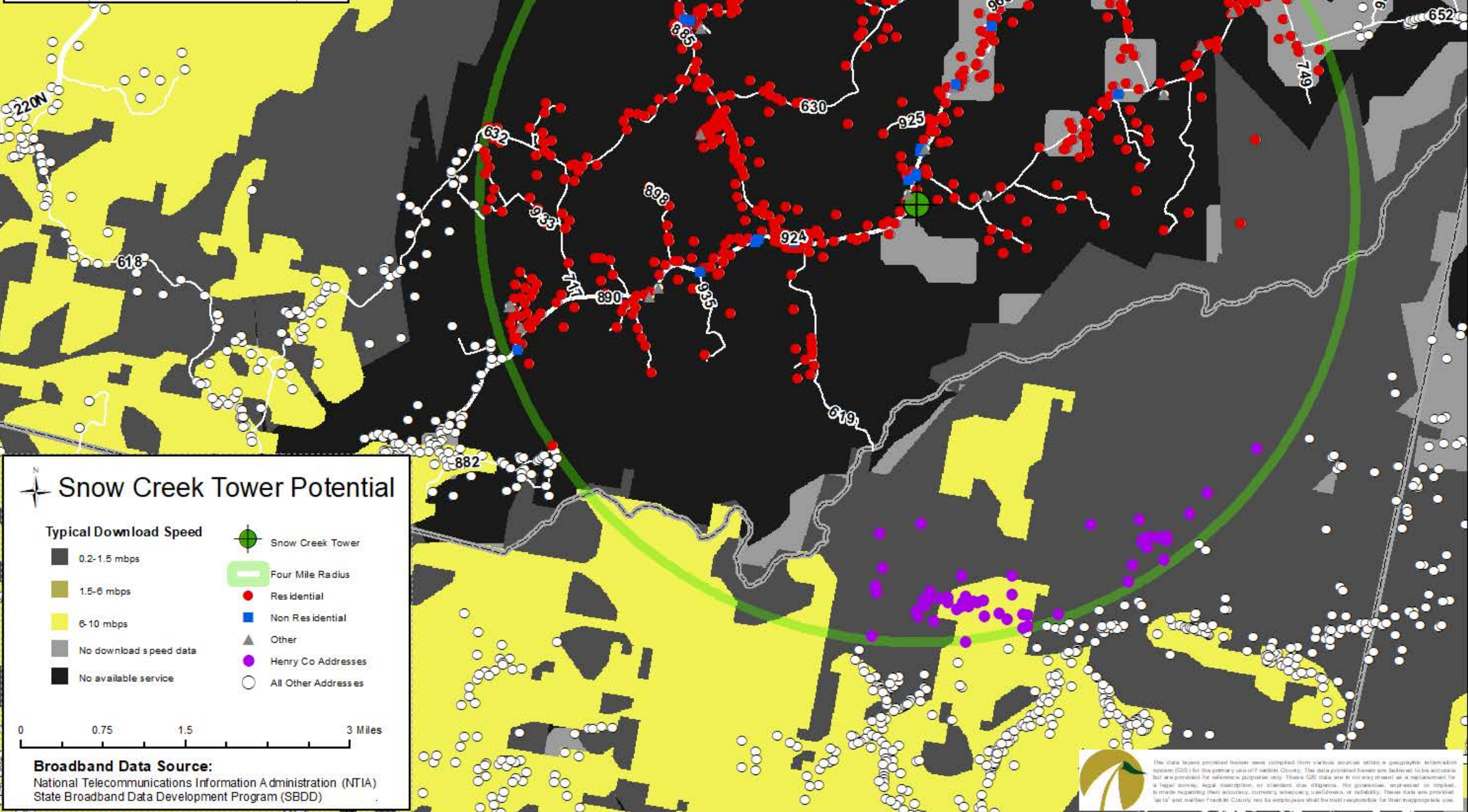
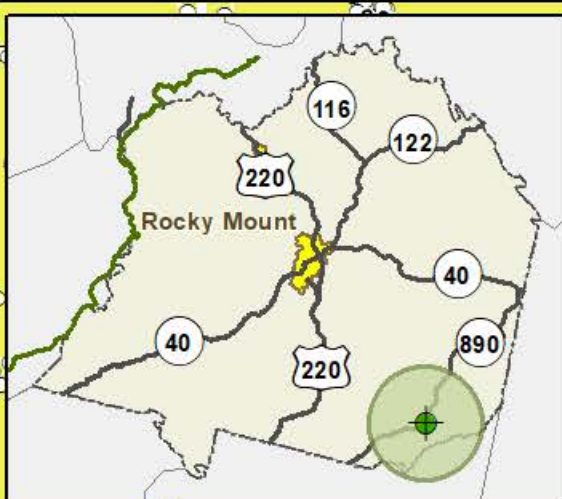
Sharon K. Tudor, MMC
Clerk
Franklin County Broadband Authority



**Franklin County
Capital Improvement Projects by Department
FY 18-19**

County Revenue Sources																		
Funding Source	FY19-20 Requested	Local	Debt	Grant	Rollover	Fund Balance	FY 19-20 Proposed	FY20-21 Proposed	FY21-22 Proposed	FY22-23 Proposed	FY23-24 Proposed	5 Year Subtotal	FY24-25 Proposed	FY25-26 Proposed	FY26-27 Proposed	FY27-28 Proposed	FY28-29 Proposed	Ten Year Total Requested
Transfer from General Fund - General Government Projects	2,236,775	2,236,775					2,236,775	2,015,501	2,015,501	2,015,501	2,015,501	10,298,779	2,015,501	2,015,501	2,015,501	2,015,501		18,360,783
FY20-21 Borrowing (Landfill, Southway, Commerce Public Safety Station)							-					-						-
Other Carryover Funds							-					-						-
Fund Balance Reserves						438,073	438,073					-						-
Unfunded							-					-						-
Community Services Revenues																		
Ferrum Bridge Project - VDOT Funds							-					-						-
Ferrum Bridge Project - Ferrum College Donation							-					-						-
Village Improvements	200,000						-	200,000			200,000	600,000		200,000			200,000	1,000,000
Westlake Trails - Federal Land Access Program Grant (FLAP)				311,000			311,000					-						-
Westlake Trails - Local Contributions				50,000			50,000					-						-
Revenue Sharing Projects - Gold Finch	15,000						-	450,000		450,000		915,000	450,000		450,000			1,815,000
Gold Finch Project Citizen Contributions	15,000						-					15,000						15,000
Broadband Deployment				450,000			450,000					-						-
Economic Development - Summit View Bus Park Borrowed	402,500		9,524,563				9,524,563	1,800,000				2,202,500						2,202,500
Economic Development - Summit View Bus Park Revenue Sharing				1,000,000			1,000,000					-						-
Economic Development - Summit View Bus Park VDOT E	650,000						-					650,000						650,000
Economic Development - Summit View Bus Park TICRC	400,000						-					400,000						400,000
Economic Development - Summit View Bus Park CDBG Grant				700,000			700,000					-						-
Parks and Rec Summit View Equipment			180,000				180,000					-						-
Economic Development - Summit View Bus Park WVVA				75,000			75,000	600,000				600,000						600,000
Landfill - Equipment	400,000		685,000				685,000					400,000						400,000
Landfill - Borrowed Funds for Closure							-	3,000,000				3,000,000						3,000,000
Human Services Revenues																		
Parks and Rec Grants for New Park Develop/Expansion	425,000						-					425,000						425,000
Public Safety Revenues																		
Fire Apparatus Replacement Fire Program Funds	165,894			165,894			165,894	165,894	165,894	165,894	165,894	829,470	165,894	165,894	165,894	165,894	165,894	1,493,046
EMS Vehicle Replacement Grant Funds	98,000						-	98,000	98,000	98,000	98,000	490,000	98,000	98,000	98,000	98,000	98,000	882,000
EMS Equipment Defibrillators/EKG Monitors Grants							-					-						-
Burn Training Building Maintenance Grants							-					-						-
Public Safety Borrowed Funds for Glade Hill Station							-					-						-
Animal Shelter Carryover Funds							-					-						-
Total Revenues	5,008,169	2,236,775	10,389,563	2,751,894	0	438,073	15,816,305	8,129,395	2,479,395	2,729,395	2,479,395	20,825,749	2,729,395	2,479,395	2,729,395	2,479,395	0	31,243,329

County Expenditures																		
Department/Project	FY19-20 Proposed	Local	Debt	Grant	Rollover	Fund Balance	FY 19-20 Proposed	FY20-21 Proposed	FY21-22 Proposed	FY22-23 Proposed	FY23-24 Proposed	5 Year Subtotal	FY24-25 Proposed	FY25-26 Proposed	FY26-27 Proposed	FY27-28 Proposed	FY28-29 Proposed	Ten Year Total Requested
Franklin County Government Expenditures																		
Community Services																		
Community Development																		
Revenue Sharing (Transportation Matching Funds)	4,400,000			4,400,000			4,400,000	100,000	100,000	100,000	100,000	4,800,000	100,000	100,000	100,000	100,000	100,000	5,200,000
Revenue Sharing - Gold Finch	30,000						-					30,000						30,000
Village Improvements	50,000						-	60,000	60,000	60,000	60,000	290,000	60,000	60,000	60,000	60,000		530,000
Westlake Trails - FLAP	386,000			361,000			361,000	397,559				783,559						783,559
Broadband Deployment	525,000			450,000			450,000	60,000	60,000	60,000	60,000	765,000	60,000	60,000	60,000	60,000		1,005,000
Total	5,391,000	-	-	5,211,000	-	-	5,211,000	617,559	220,000	220,000	220,000	6,668,559	220,000	220,000	220,000	220,000	-	7,548,559
Economic Development																		
Summit View Business Park	11,202,719	From 1st and 2nd borrowing			11,202,719		11,202,719	2,096,564	14,691,771	2,018,250	1,433,928	31,443,232	50,000	500,000	50,000	500,000	50,000	32,593,232
Job Creation Fund	200,000						-	200,000	200,000	200,000	200,000	1,000,000	200,000	200,000	200,000	200,000		1,800,000
Infrastructure Development Fund	100,000						-	100,000	100,000	100,000	100,000	500,000	100,000	100,000	100,000	100,000		900,000
Total	11,502,719	-	-	-	11,202,719	-	11,202,719	2,396,564	14,991,771	2,318,250	1,733,928	32,943,232	350,000	800,000	350,000	800,000	50,000	35,293,232
Solid Waste																		
Cell 3 New Construction										100,000	100,000	200,000	150,000	3,000,000				3,350,000
Leachate Tank Repair/Replace										300,000		300,000						300,000
Vehicle Replacement	50,000							25,000				75,000						75,000
Collection Sites	150,000											150,000		400,000				550,000
Landfill Closure	50,000							3,500,000				3,550,000						3,550,000
Landfill Equipment	400,000						-		400,000			800,000					800,000	1,600,000
Landfill Engineering / Compliance / Groundwater	140,000						-	130,000	170,000	135,000	170,000	745,000	150,000	140,000	175,000	150,000	150,000	1,510,000
Landfill Gas Control	30,000						-					30,000						30,000
Total	820,000	-	-	-	-	-	-	3,655,000	570,000	535,000	270,000	5,850,000	300,000	3,540,000	175,000	150,000	950,000	10,965,000



Snow Creek Tower Potential

Typical Download Speed		Snow Creek Tower
0.2-1.5 mbps	1.5-6 mbps	Four Mile Radius
6-10 mbps	No download speed data	Residential
No available service	Non Residential	Other
	Henry Co Addresses	All Other Addresses

0 0.75 1.5 3 Miles

Broadband Data Source:
National Telecommunications Information Administration (NTIA)
State Broadband Data Development Program (SBDD)

The data layers provided herein were compiled from various sources within a geographic information system (GIS) for the primary use of Franklin County. The data provided herein are believed to be accurate but are provided for reference purposes only. These GIS data are to not be used as a replacement for a legal survey, legal description, or standard state of records. No guarantee, expressed or implied, is made regarding their accuracy, currency, adequacy, usefulness, or reliability. These data are provided "as is" and neither Franklin County nor its employees shall be held responsible for their inappropriate use.

Department of Planning & Community Development



December 14, 2018

RE: Documentation that proposed project area is not designated for Connect America Funding (CAF)

To Whom it May Concern:

Review of the National Broadband Maps and Connect America information did not show any designated CAF funding for the project area (See copy of map from website). Furthermore, Franklin County is not aware of any Connect America funding that has been designated for this project area.

Connect America Fund Phase II: Auction 903 Results



Source: <https://www.fcc.gov/reports-research/maps/caf2-auction903-results/>

Steven M. Sandy, AICP
Director of Planning & Community Development
Franklin County

VATI FUNDING SOURCES TABLE

Please fill in the chart below with a description of the project funding source (local, federal, state, private, other), the amount from that source, the percentage of total project funding that source represents, and a description of the current status of the funds (pending, secured, etc.).

Source	Amount	%	Status
REQUESTED VATI	\$ 465,000	63.3	Pending
LOCAL/PRIVATE	\$269,451	36.7	Committed
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 734,451	100 %	

The Path Forward

A Community Broadband Assessment for Franklin County Virginia

May 2017



Topics

- Community Profile
- Current Reported Coverage
- Broadband Demand
- Local Assets
- Review of local policies & fees
- Needs, Future Capacity
- Next Steps



Before We Begin

Positive impacts of broadband on household income:

- gaining 4 Mbps of broadband increases household income by \$2,100 per year
- re-employment 25 percent faster than traditional searches
- higher employment rates in rural counties

Positive impacts of broadband on healthcare

- enables solutions that help manage chronic diseases, like diabetes and obesity.
- connecting health and broadband sectors is a path to a more connected, healthier locality.

Reasons for positive impacts

- boosts personal productivity,
- enables more flexible work arrangements
- enables home-based businesses as a replacement, or complement to an ordinary job.
- enables people to be more informed,
- better educated and socially and culturally enriched – fueling a faster career path.
- improves access to health and care

Source: The Appalachian Regional Commission (ARC) Broadband Planning Primer Toolkit
<https://www.arc.gov/images/programs/telecom/ARCBroadbandPlanningPrimerToolkit.pdf>

Connect2HealthFCC: <https://www.fcc.gov.edgekey.net/health/maps>

Why broadband matters: http://www2.ntia.doc.gov/files/broadbandmatters_021417.pdf





The Economics of Broadband Deployment

From the provider perspective:

$$\text{Profit/Sustainability} = \text{Revenue} - \text{CapEx} + \text{OpEx}$$

How do we make the math work for sustainability & future upgrades?

How do we entice the private sector to invest?

INCREASE REVENUES 	LOWER COSTS 
Adoption and Demand	Local Assets/Infrastructure What you have that might be shared
Population Density	Policies & Fees Reduce or eliminate fees for partners Streamline permitting
Community Anchor Institutions Residents, businesses, government facilities, healthcare	Funding Options Public & Private Investments

***Red indicates variables local governments can affect**

Broadband Perspective

COMMUNITY PROFILE

SOURCE: AMERICAN COMMUNITY SURVEY

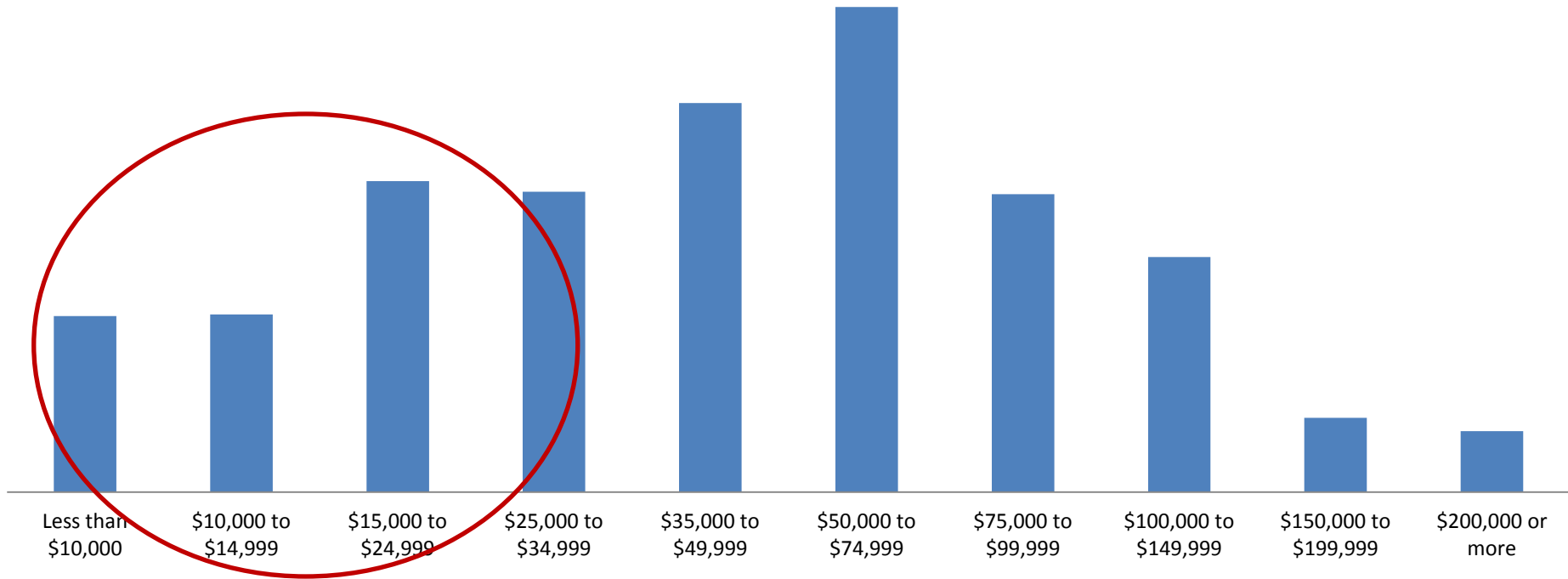
[HTTPS://WWW.CENSUS.GOV/ACS/WWW/DATA/DATA-TABLES-AND-TOOLS/DATA-PROFILES/2014/](https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2014/)



Franklin County Household Income

Median Household Income: \$44,827

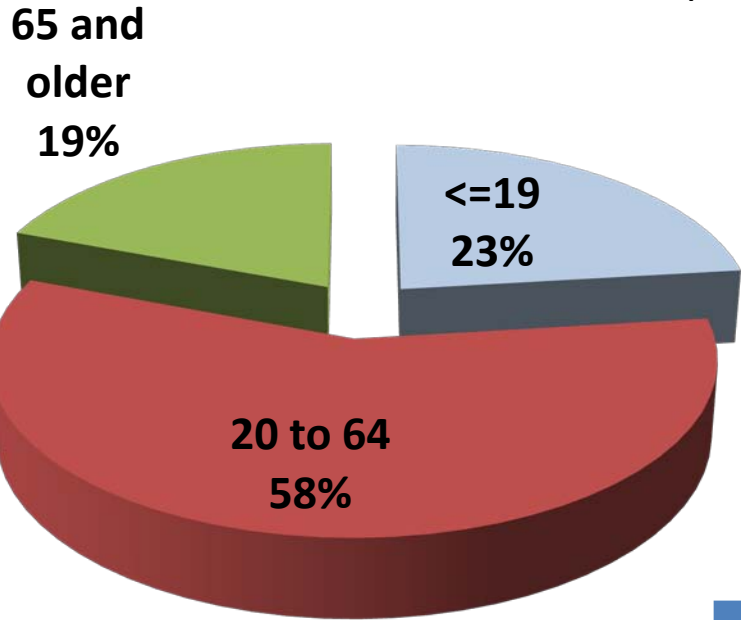
Total Occupied Housing Units: 23,248



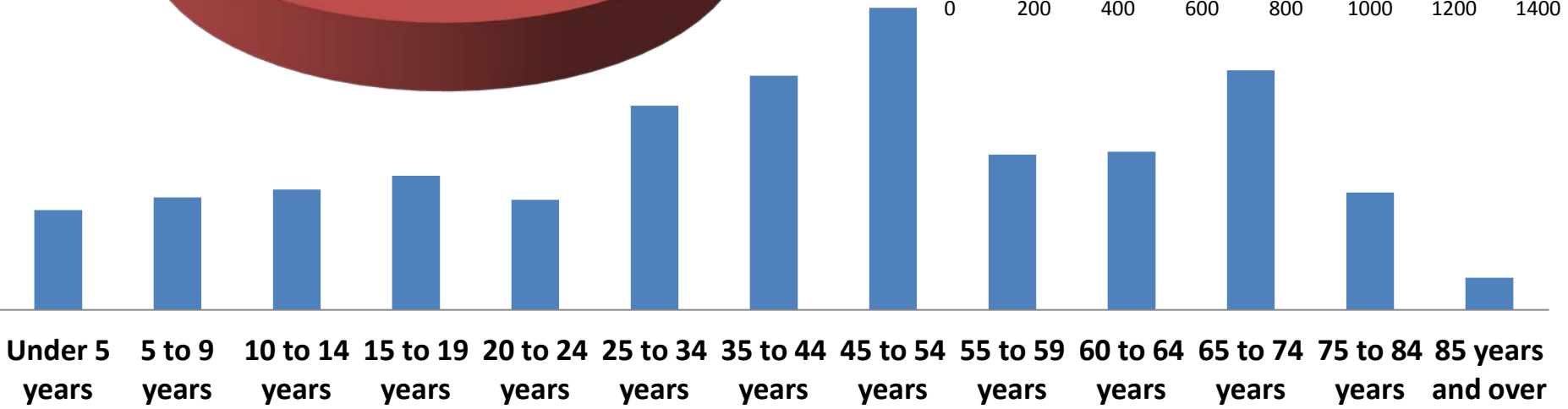
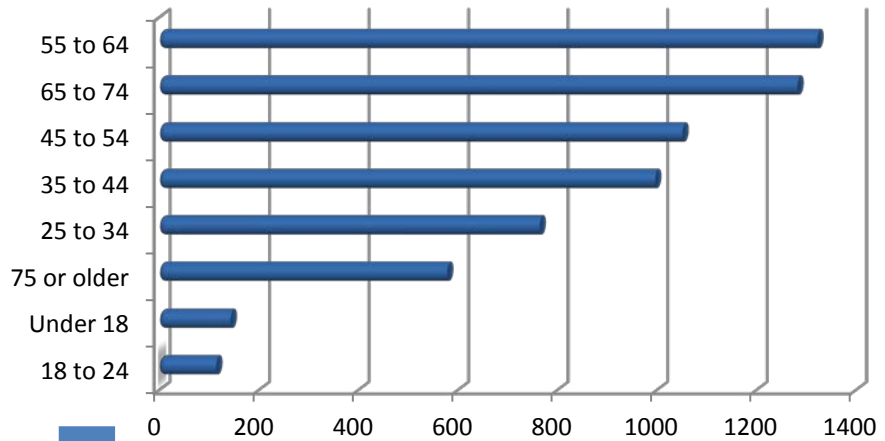
Take Away: ~30% of households may have affordability challenges.

Franklin County Age and Population Groups

Total Population: 56,360

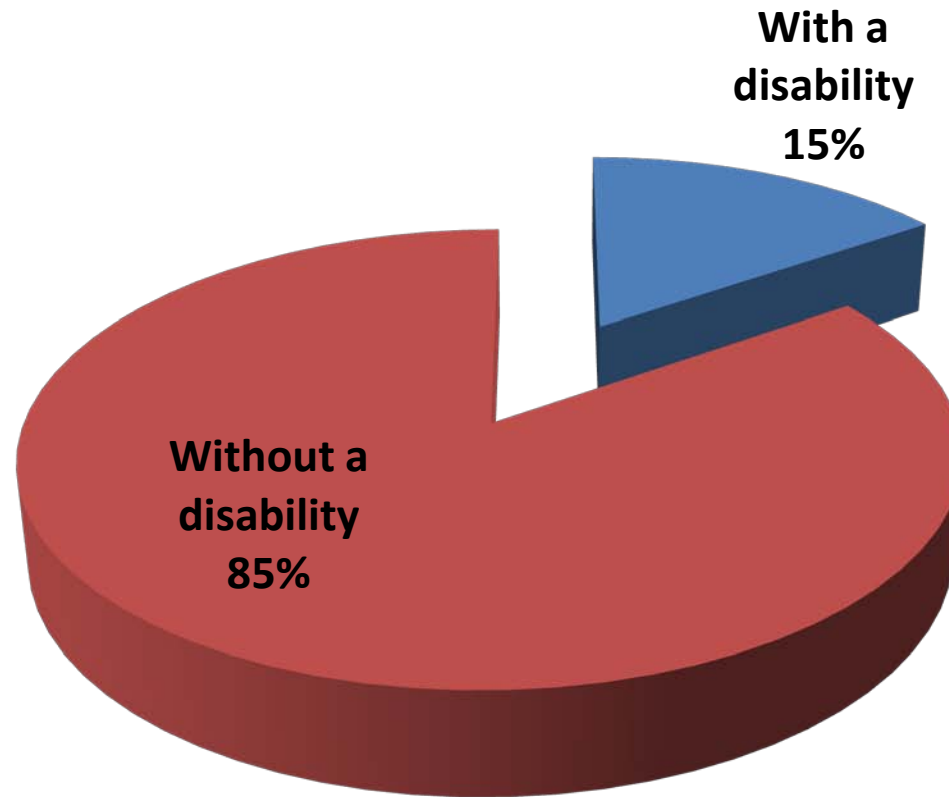


Age of County Survey Respondents



Take away: Good News: Most of the population - 81% - considered technology adopters

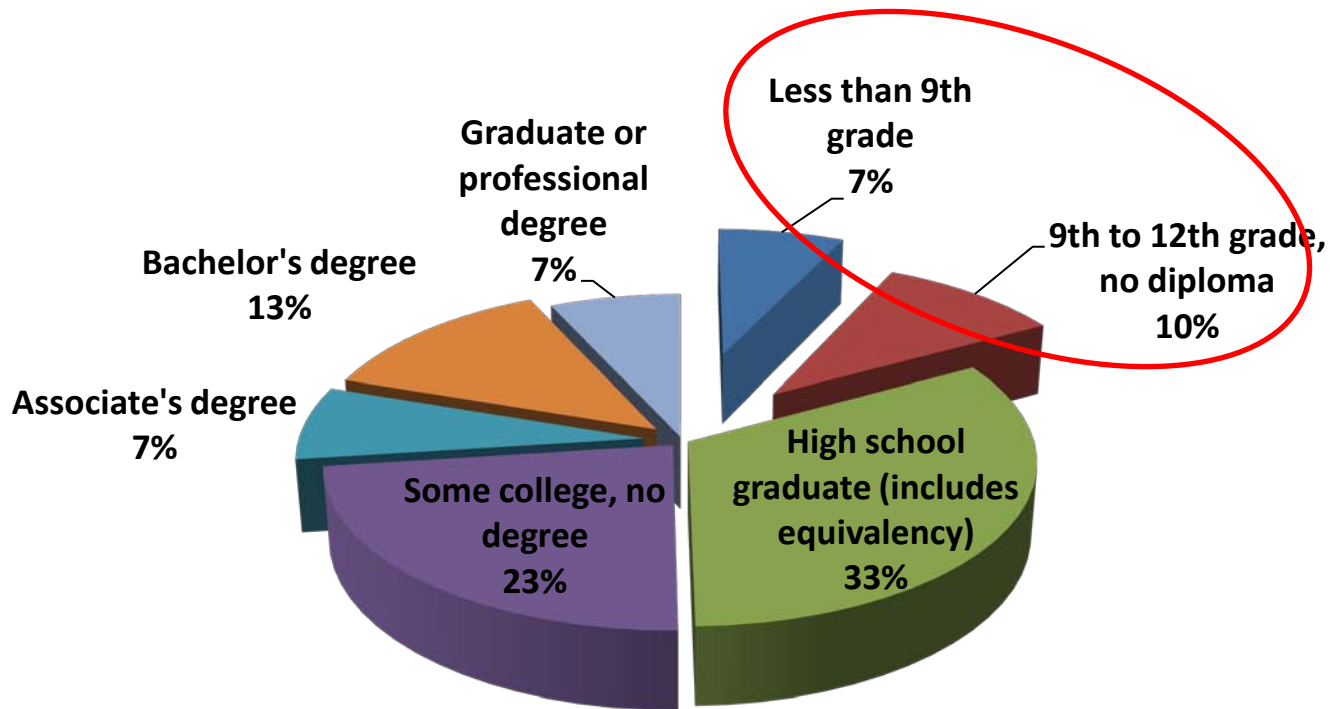
Franklin County Populations with Special Broadband Needs



Take Away: 15% may be slow to adopt technology or need special equipment

Franklin County Educational Attainment Profile

Franklin Population over 25 years: 40,264

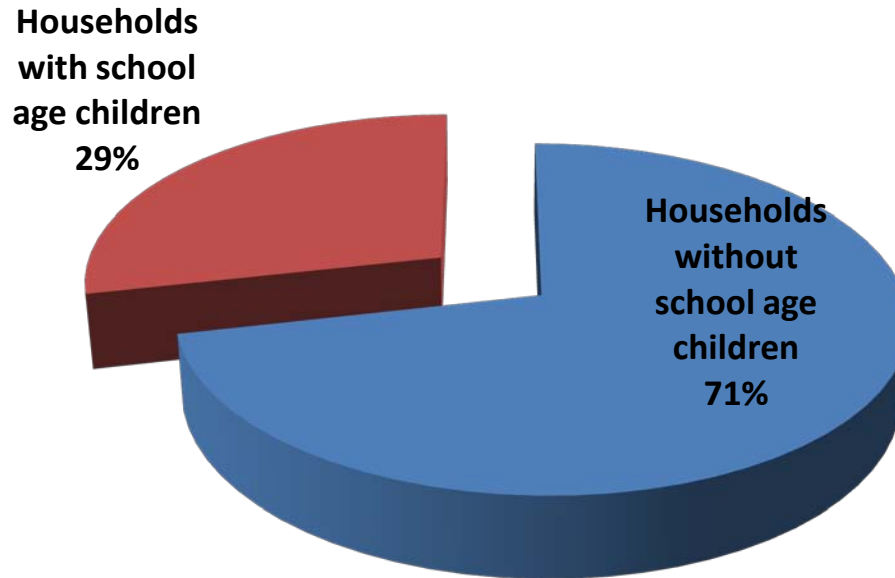


Take Away

17% of adult population may be slow to adopt and/or less likely to subscribe to new services.

Franklin County Households with K-12 Children

Total Family Households: 16,480

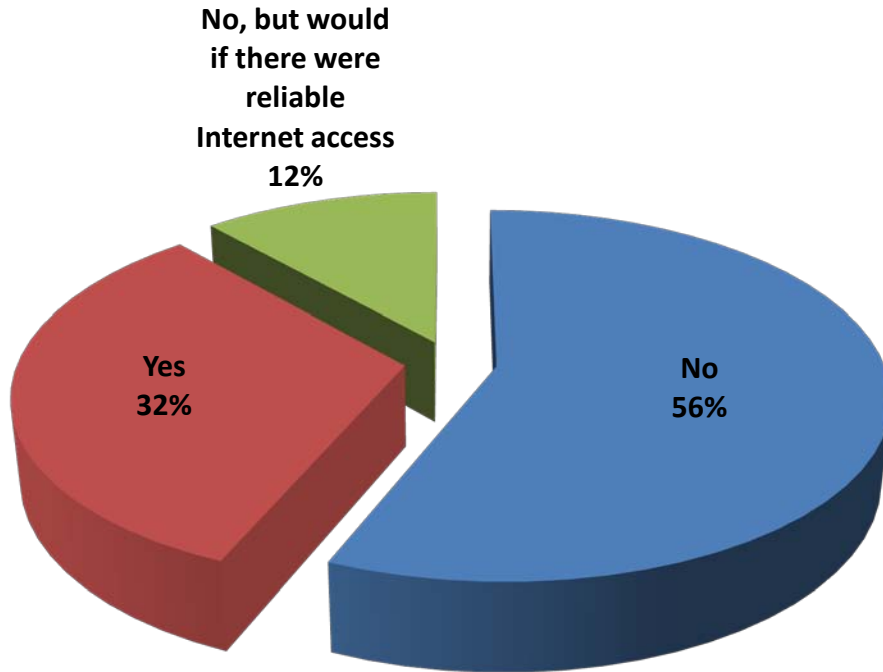


Take Away: According to census, 29% of households need broadband at home to support K-12 education

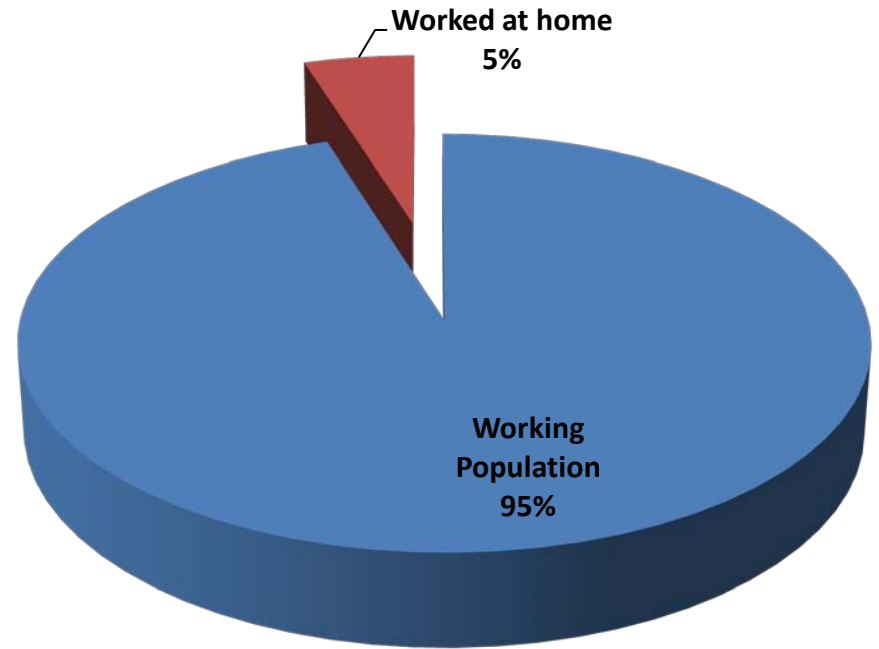
From Survey: 22% of respondents reported school aged children.
6% of those do not have Internet at home.

Franklin County Work from Home

County Survey - Telework



2014 ACS Data



Take away: 12% of respondents would work from home if they could.

Franklin County Housing

**Vacant*
housing
units
21%**

Franklin Housing Occupancy
Total housing units: 29,386

**Occupied
housing
units
79%**

Take away: ~1/5 of housing units are vacant or represent seasonal/weekend homes

**Renter-
occupied
22%**

Franklin Housing Tenure
Occupied Housing Units: 23,248

**Owner-
occupied
78%**

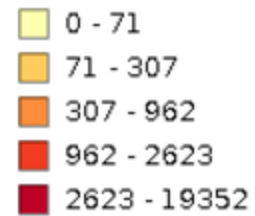
*a vacant unit may be one which is entirely occupied by persons who have a usual residence elsewhere.

Source:

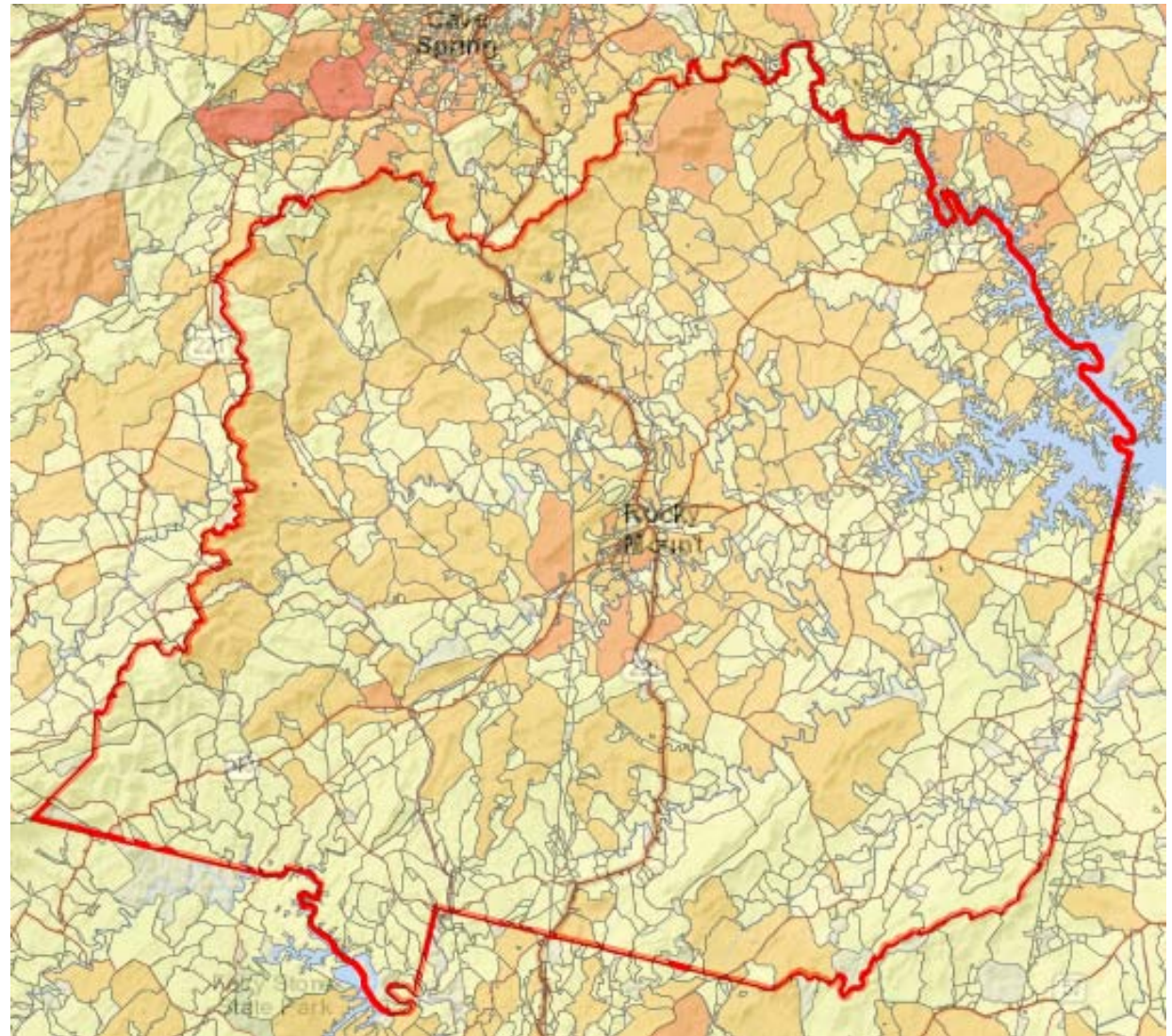
<https://www.census.gov/housing/hvs/definitions.pdf>

Population Density

2015 Census Population Estimates



NOTE: denser areas in the south and west as those will correlate with unserved areas – to note there is population in those areas albeit limited areas.



FCC Provider Reported Data

REPORTED CURRENT COVERAGE

Seriously Important note about FCC reported coverage

All facilities-based broadband providers* **are required** to file data with the FCC twice a year (Form 477) on where they offer Internet access service at speeds exceeding 200 kbps in at least one direction.

Fixed providers file lists of census blocks in which they can or do offer service to at least one location, ...

Mobile providers file maps of their coverage areas for each broadband technology (e.g., EV-DO, HSPA, LTE).

Block-Level Deployment and Competition

A provider that reports deployment of a particular technology and bandwidth in a particular census block may not necessarily offer that particular service everywhere in the census block.

Accordingly, a list of providers deployed in a census block does not necessarily reflect the number of choices available to any particular household or business location in that block, and the number of such providers in the census block does not purport to measure competition.

Source: <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>

***A Facilities-based Broadband Provider** is an entity that provides broadband services over facilities it owns, provisions and/or equips.

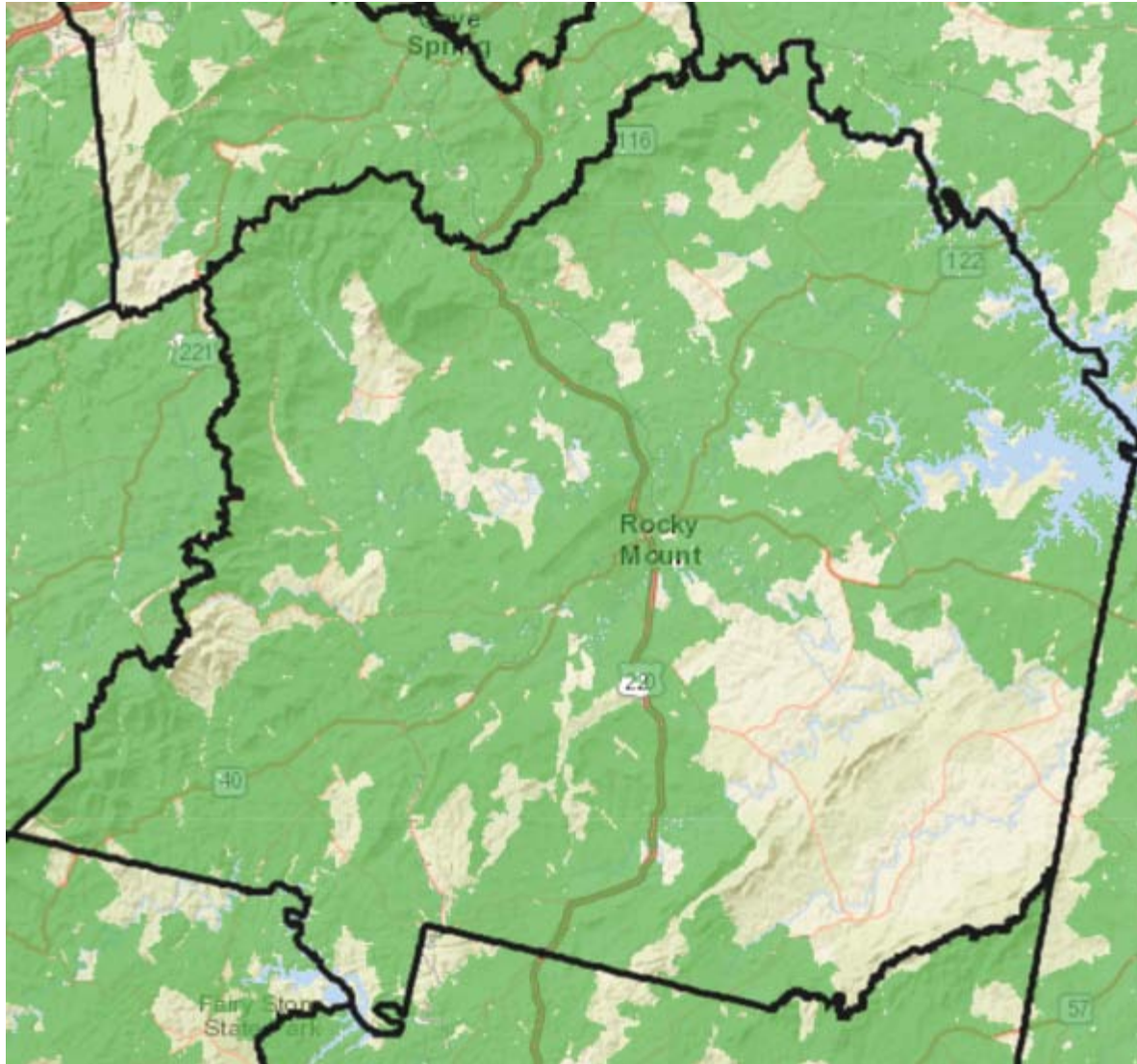
Take away - Coverage maps are generally overstated due to federal reporting rules!

Franklin County Service Providers That Report to the FCC

Business Name	Technology	Number of Blocks	Maximum Download Speed	Maximum Upload Speed
B2X ONLINE	Fixed Wireless	136	20	20
CENTURYLINK	DSL	1,121	25	3
CENTURYLINK	DSL	232	80	40
CITIZENS TELEPHONE COOPERATIVE	DSL	5	6	0.768
COMCAST	Cable	11	150	10
FAIRPOINT COMMUNICATIONS	DSL	11	25	1.5
KINEX TELECOM, INC.	DSL	1	1000	1000
KINEX TELECOM, INC.	Fiber	1	1000	1000
LIGHTOWER	Fiber	107	1000	1000
MCI	Copper Wireline	1	6	6
SHENTEL	Cable	1,377	101	10
SHENTEL	Fiber	628	1000	1000
VERIZON VIRGINIA LLC	DSL	47	15	1

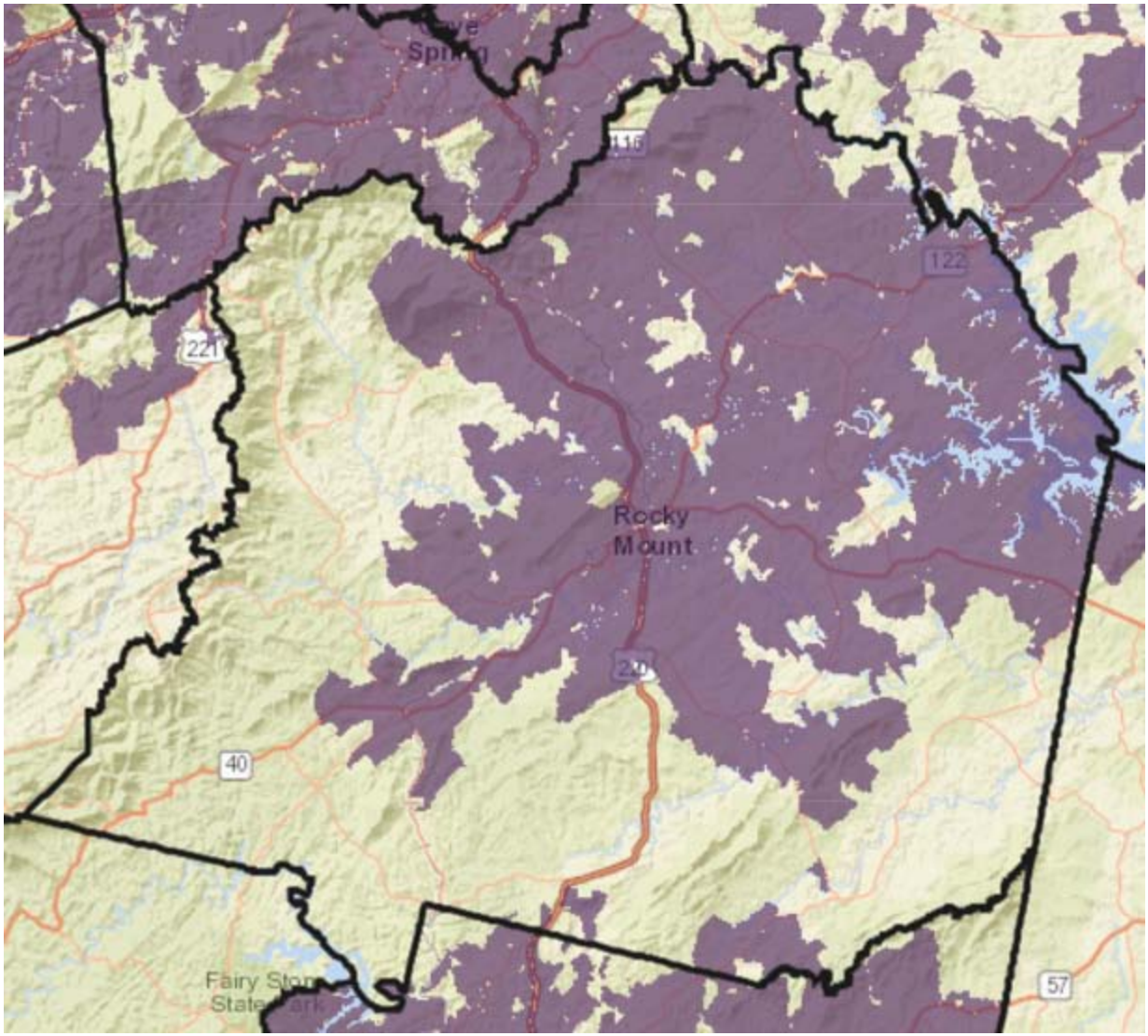


DSL Coverage (CenturyLink)



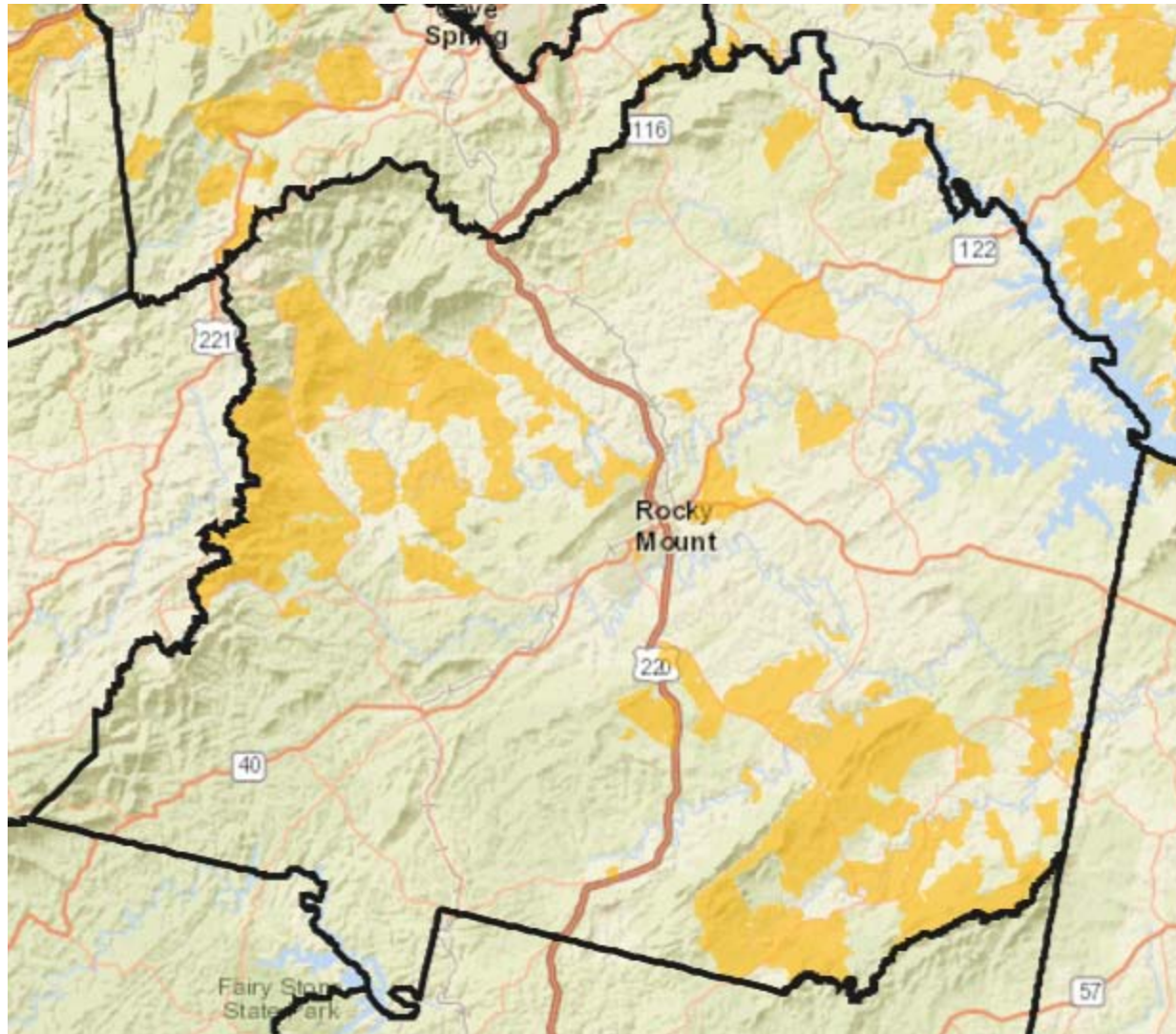


Cable Coverage (Shentel)



Fixed Wireless Coverage

B2X

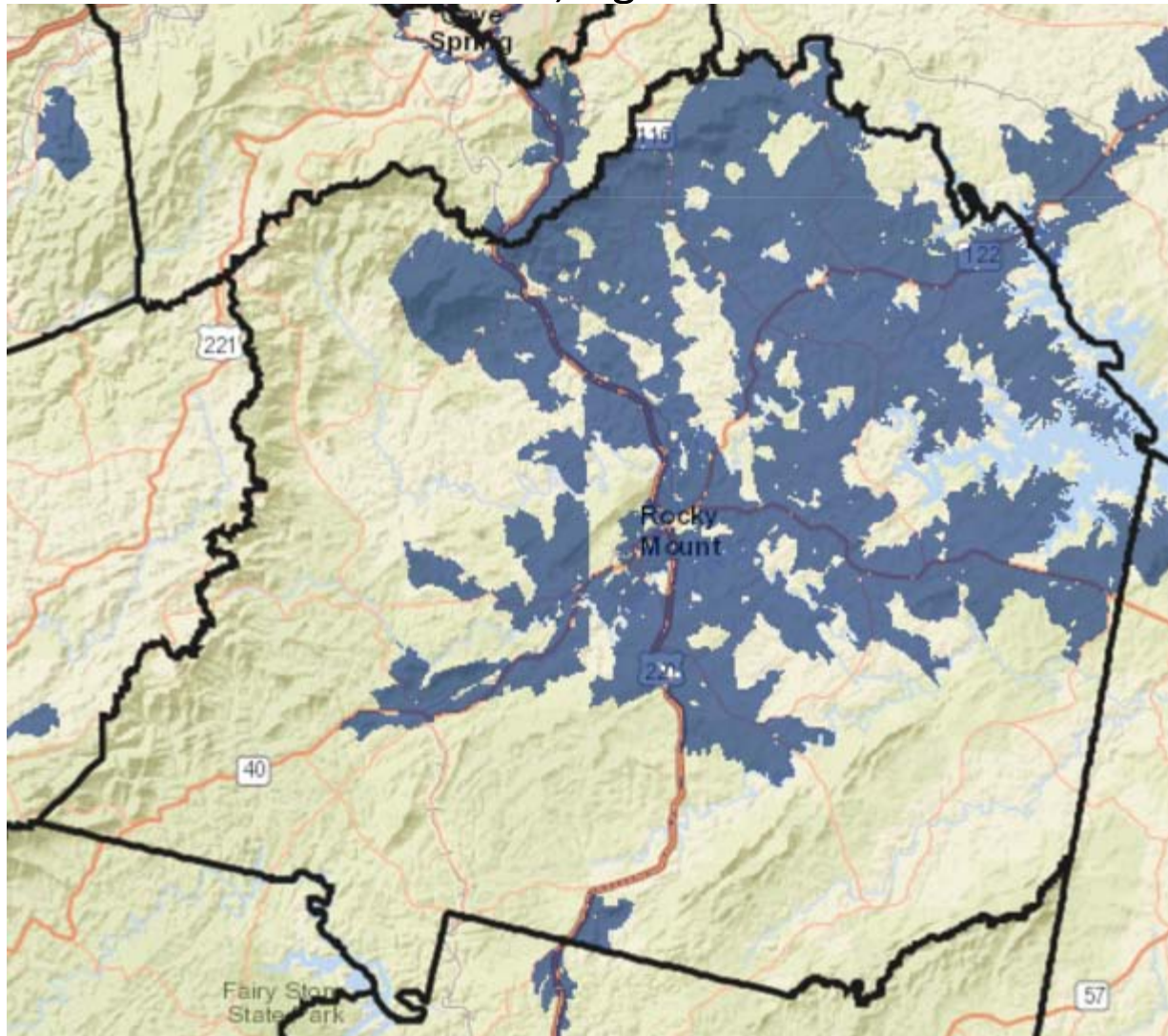


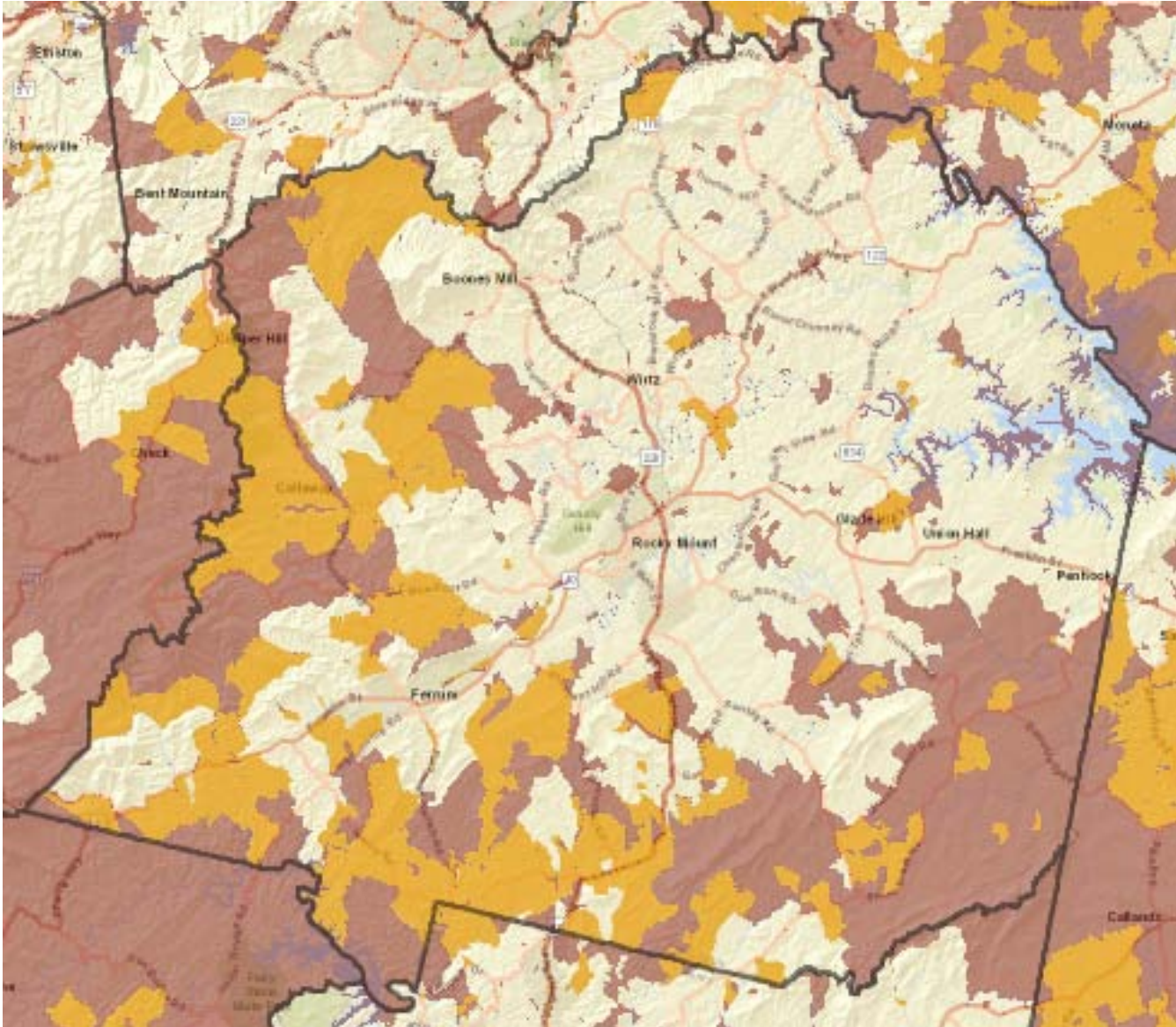


Fiber Service

(Not Commercial Fiber Routes)

Shentel, Lightower





FCC Consumer Fixed BB Download Stats

- **>= 4 Mb 93.1%***
- **>= 10 < 25 83.3%***
- **>= 25 Mb 82.4%***

Source: FCC 477 data
Spring 2016

*Percent of total households


- Unserved = Broadband speed below 10 Mbps Download speed
- Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed

Public Safety

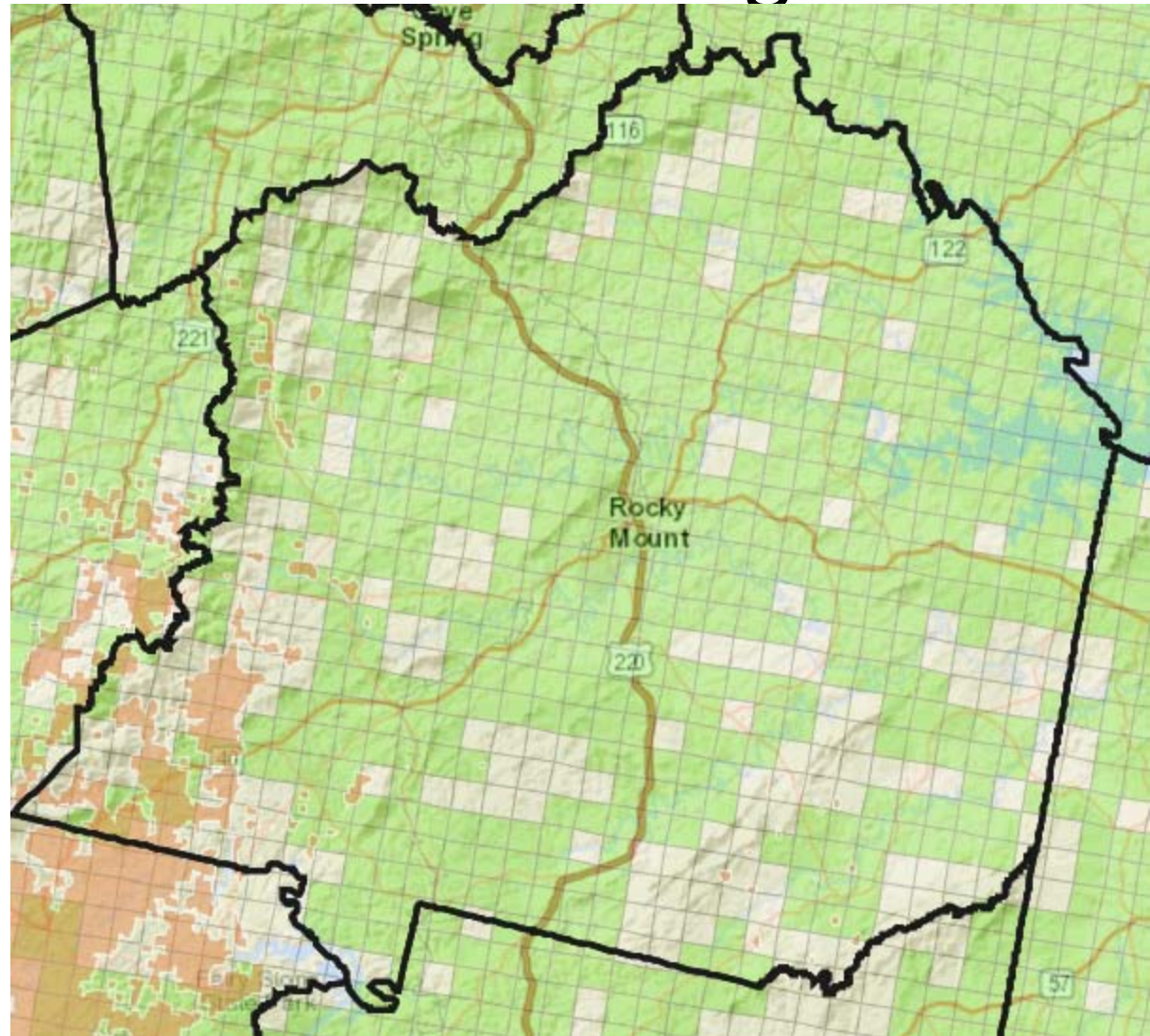
FirstNet & No-LTE Coverage

FirstNet 1x1 mile grids.

 Proposed terrestrial coverage

 Proposed non-terrestrial coverage

 No LTE Coverage



Now and Into the Future

BROADBAND DEMAND

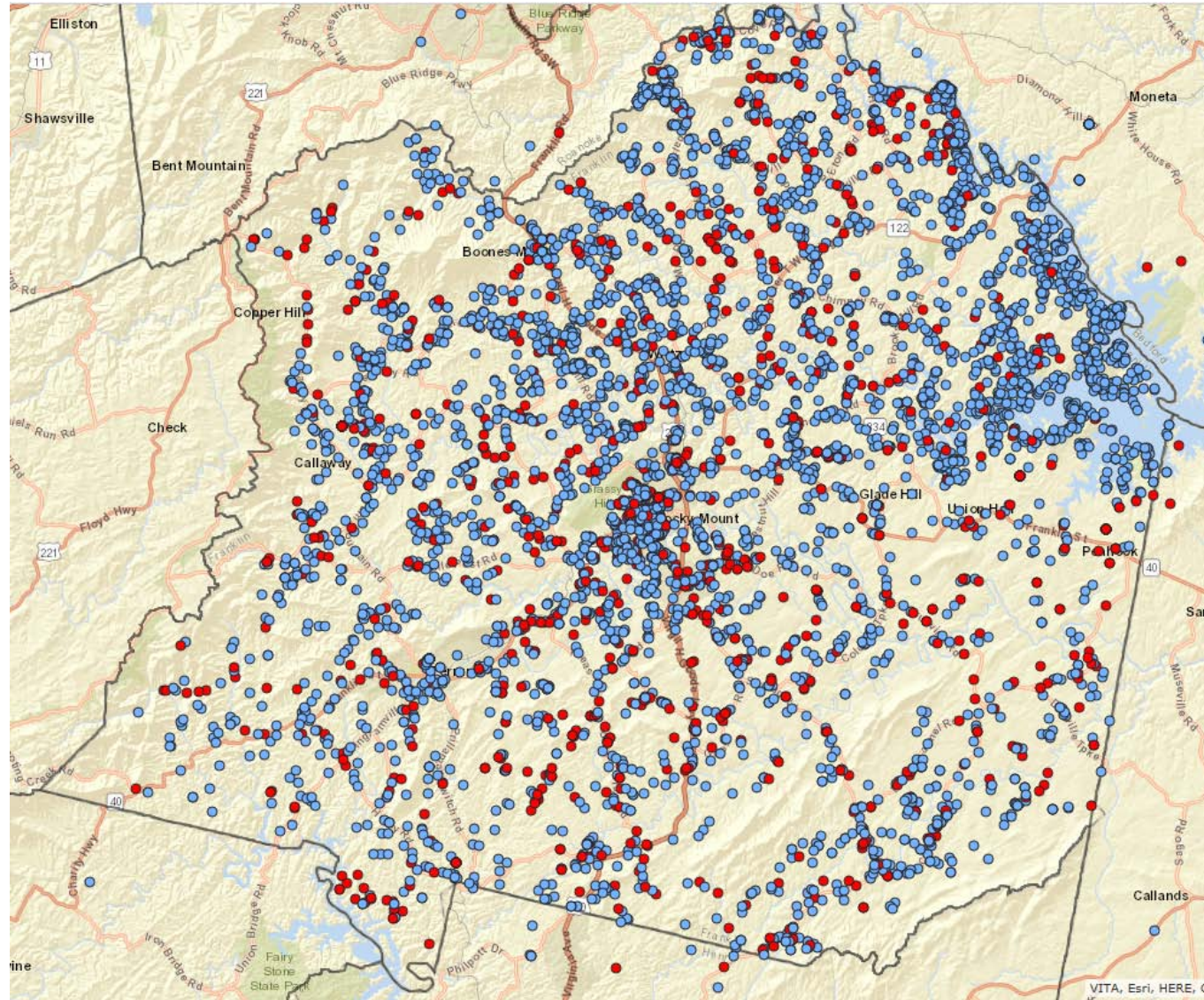
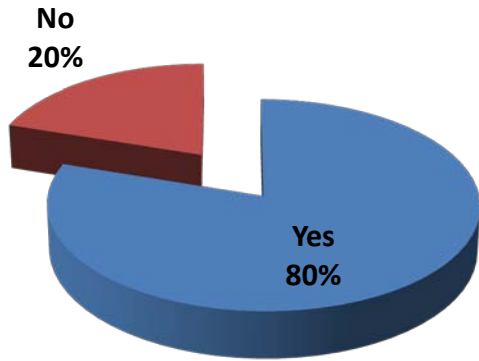
FRANKLIN COUNTY'S BROADBAND SURVEY RESULTS

Franklin County Citizen's Survey

6258 Responses

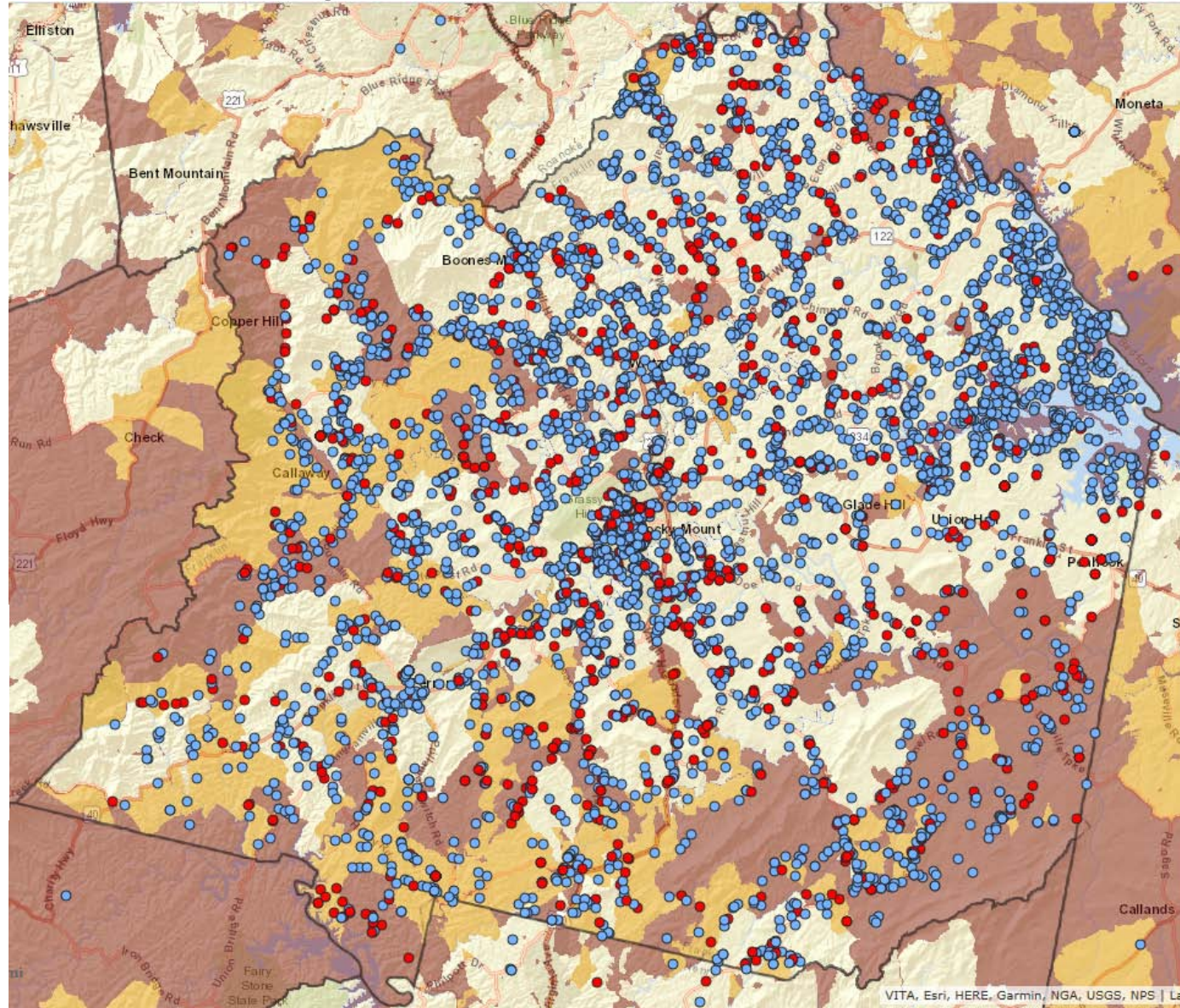
99% +/- 1.39
based on occupied
housing units (23,248)

Do you have Internet
service at home?



Over 90% of respondents feel
the Internet is important.

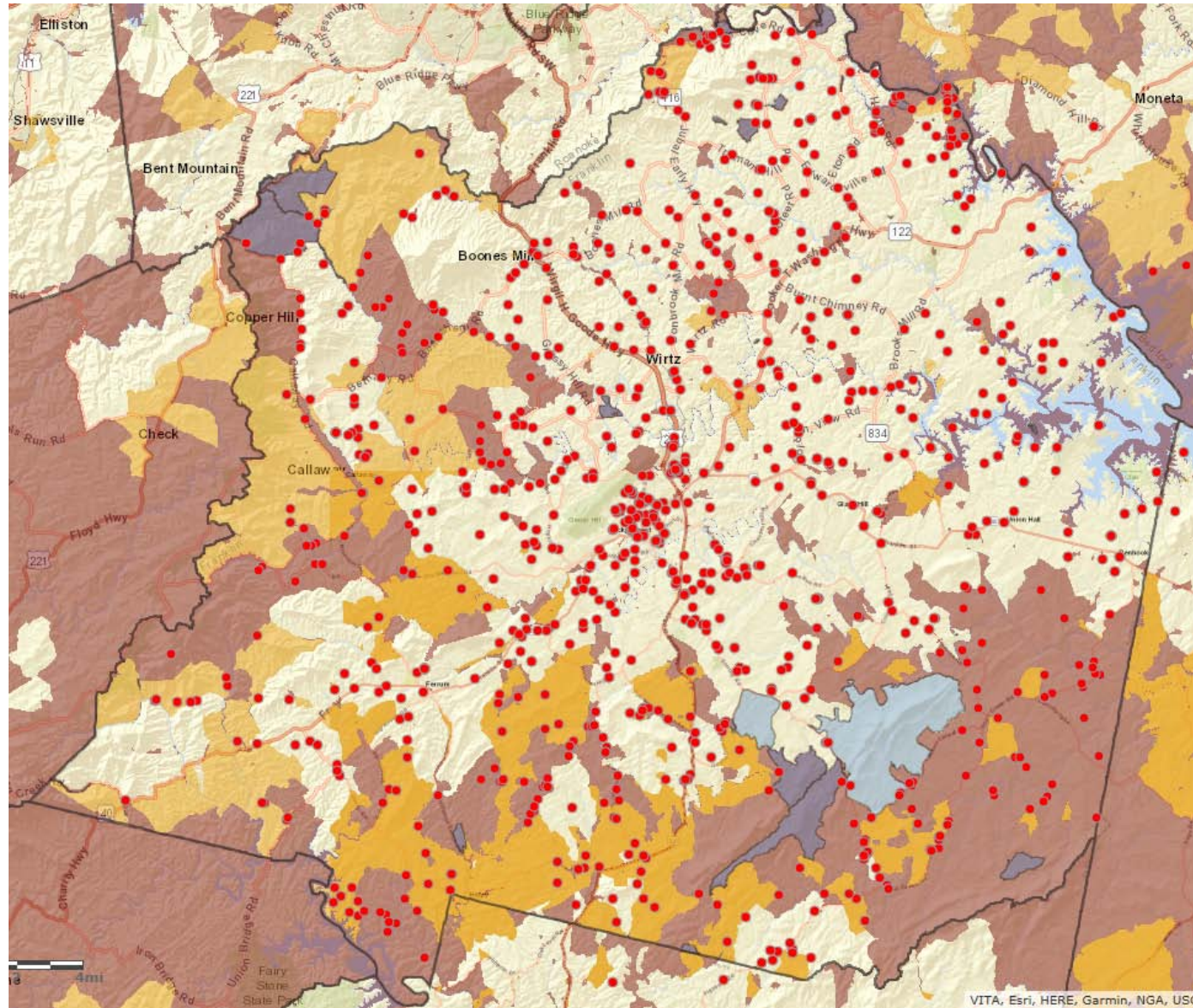
Franklin County Un/Underserved



● Unserved = Broadband speed below 10 Mbps Download speed

● Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed

Franklin County Un/Underserved



Do you have Internet Service at Home?

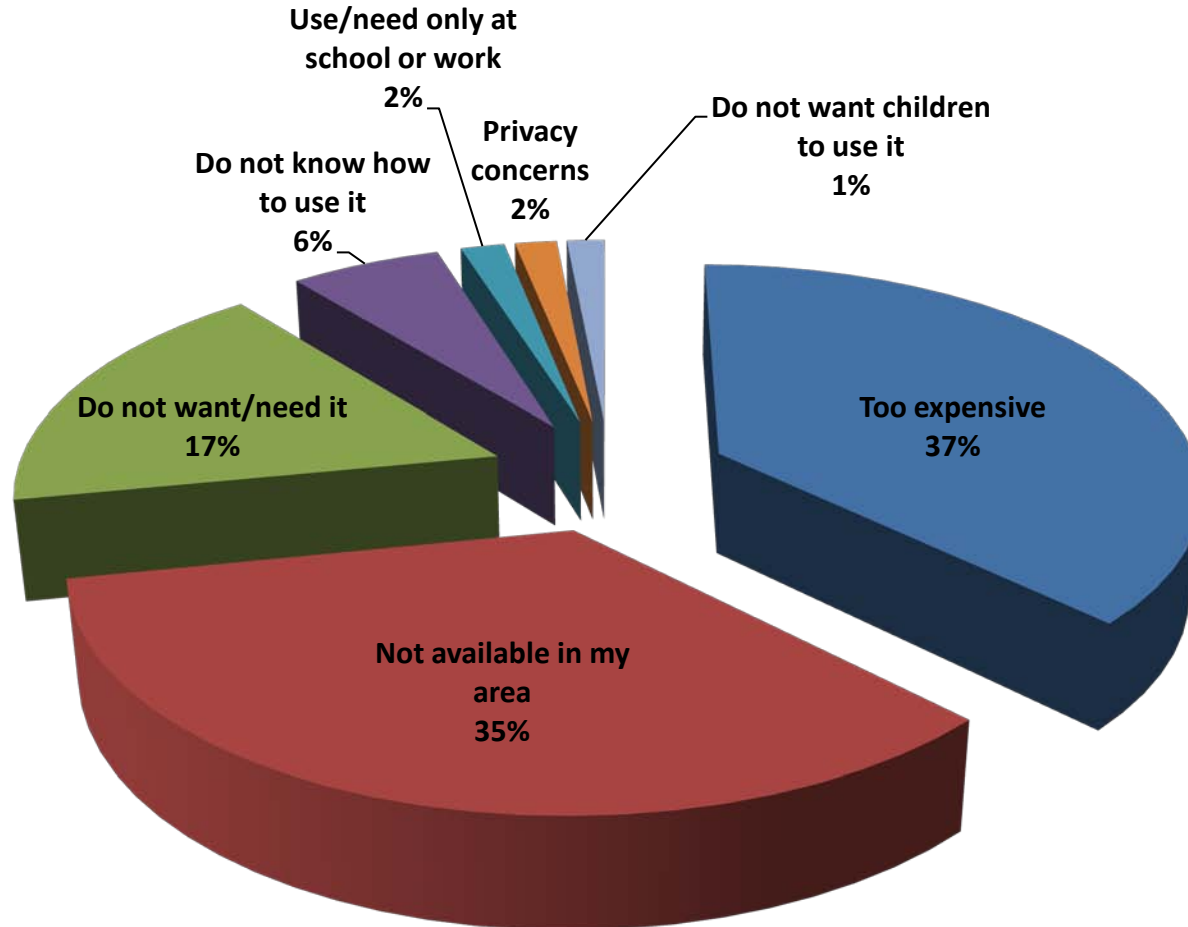
● No.

● Unserved = Broadband speed below 10 Mbps Download speed

● Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed

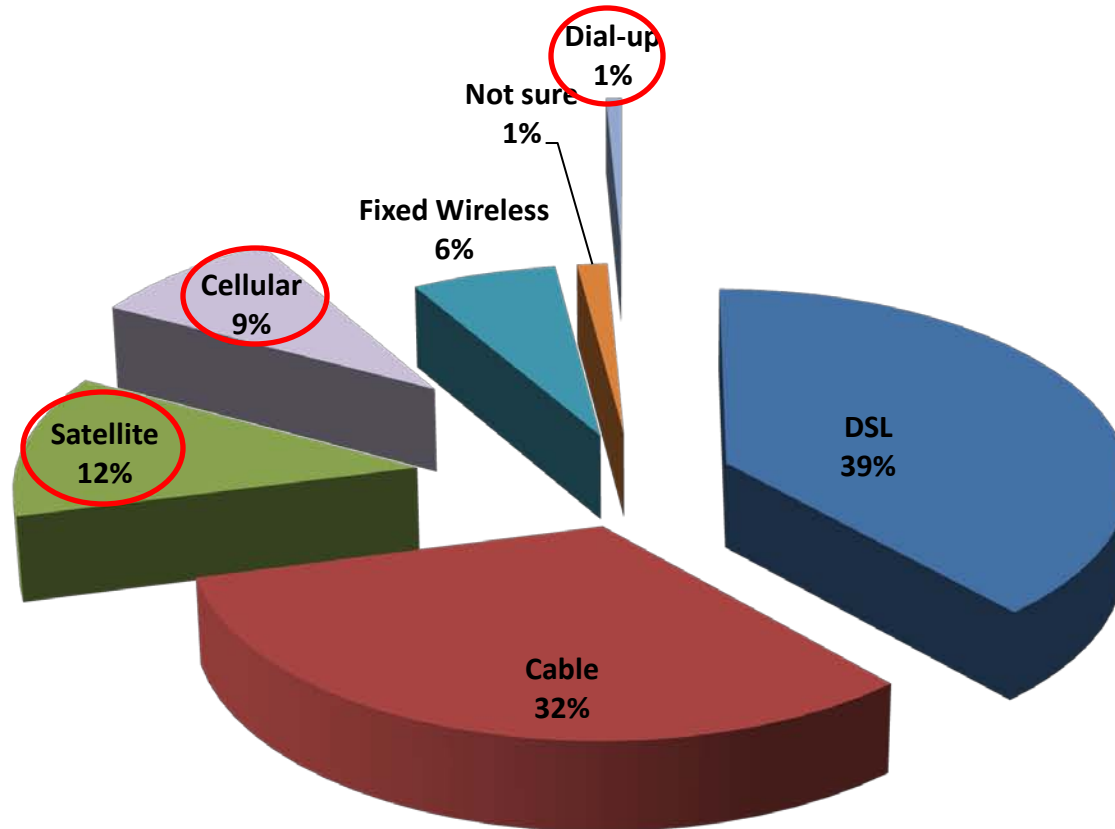
Franklin Co

Reasons 20% do not have Internet



Take away: Over 1/3 without Internet have no access. Over 1/3 of respondents may have affordability challenges.

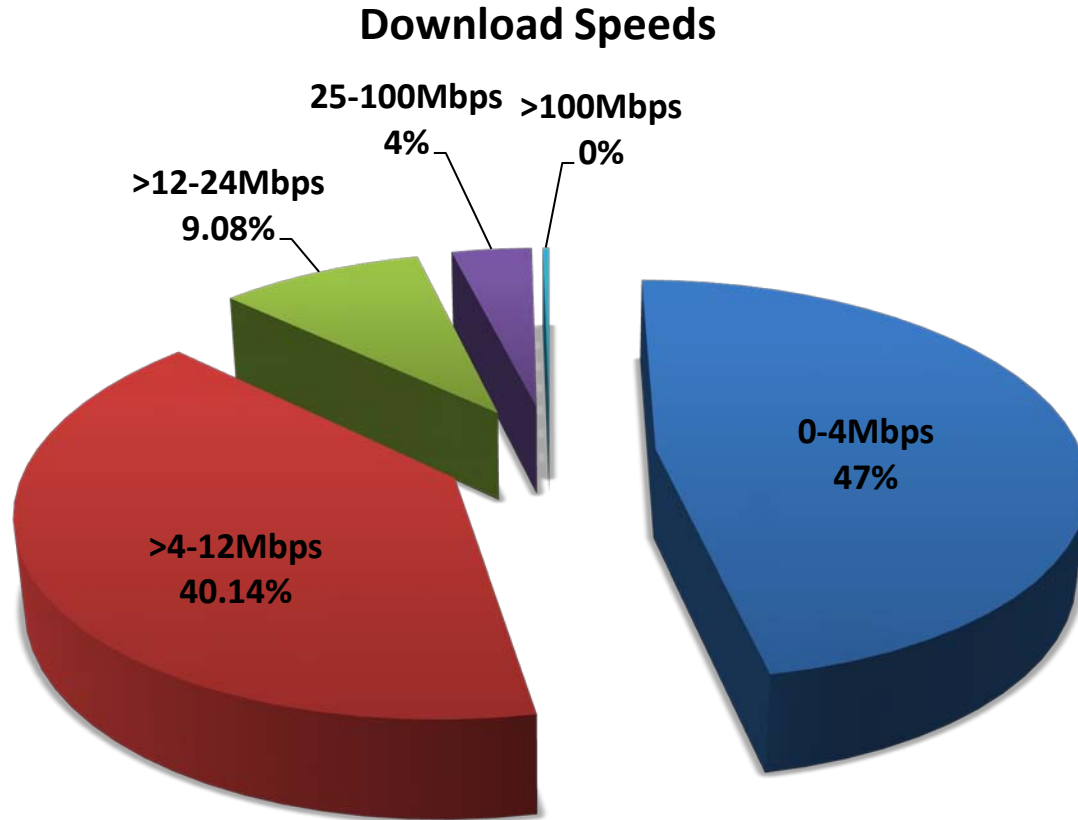
Franklin County Type of Internet Access



Take away: 22% of respondents depend on inadequate services (circled in red.)
50% of respondents reported they are satisfied with their service, 34% dissatisfied.
Most respondents (78%) consider Internet access very important or critical.

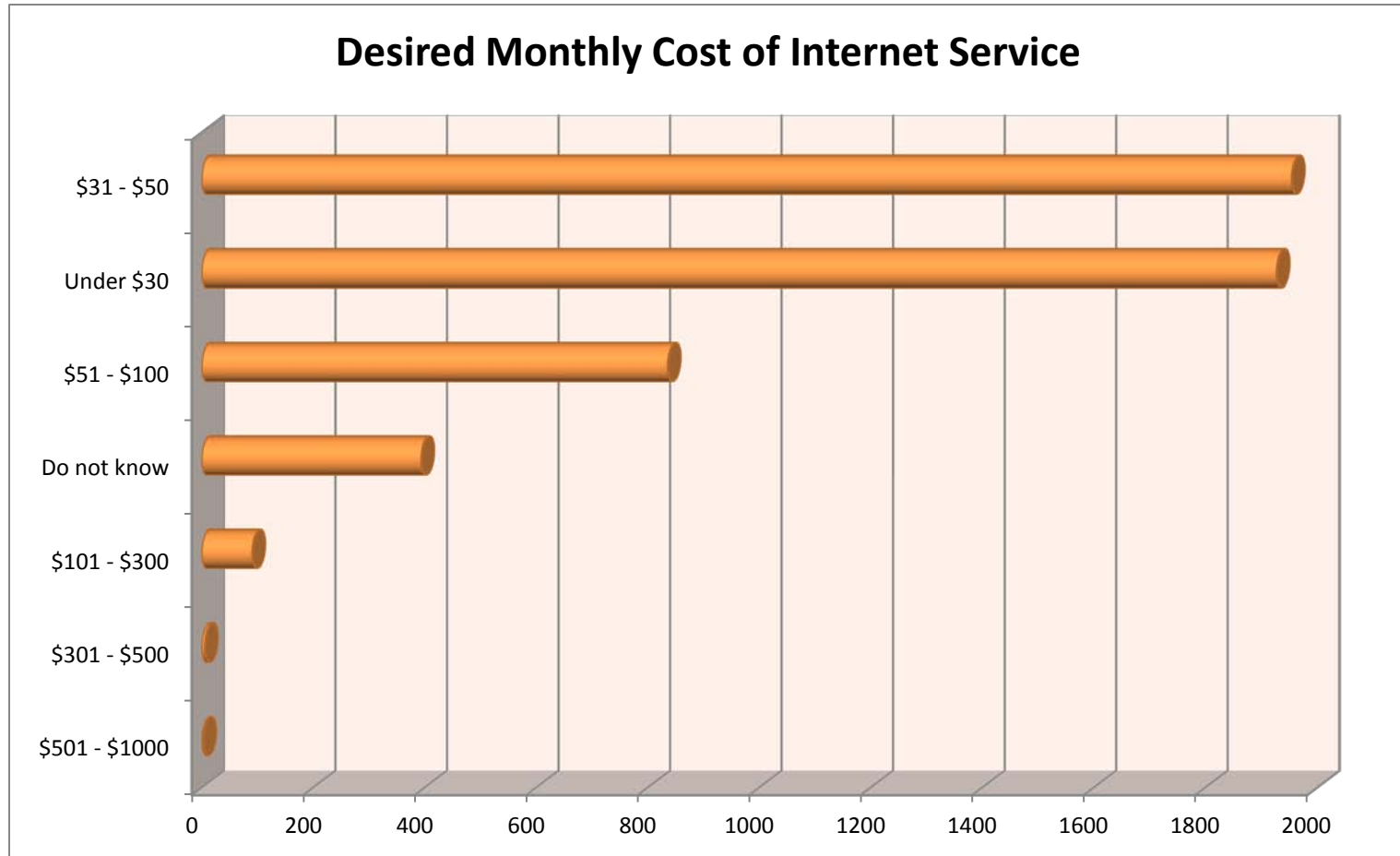
Franklin County Internet Speeds

only valid for online surveys



Take away: The majority of speed tests (47%) registered download speeds between 0-4 Mbps, DSL speeds.

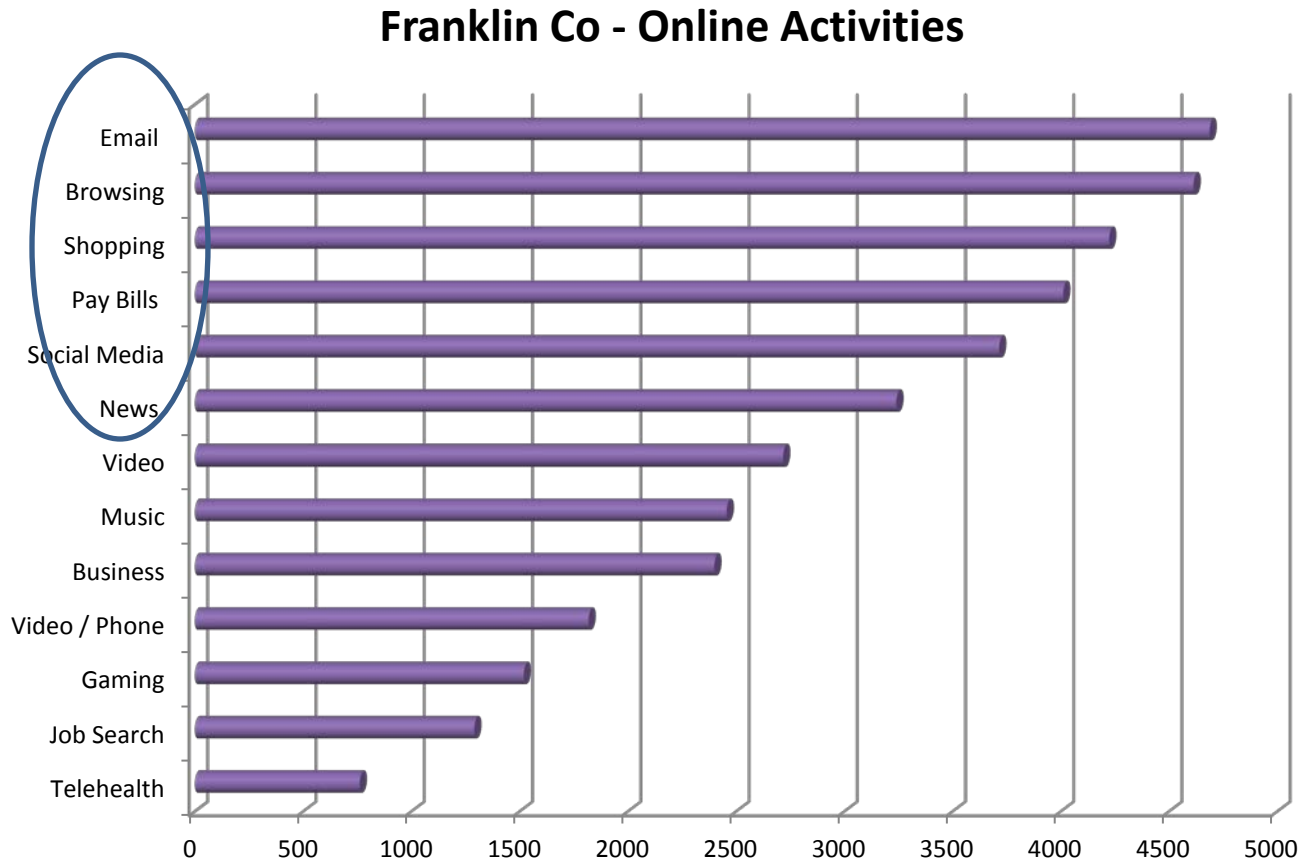
Franklin County Internet Costs



Take Away: Most respondents (48%) report paying \$51-\$100 per month for Internet service, regardless of speed tier or technology type. **Exception:** Fixed wireless users (27%) report paying between \$31-\$50 per month.

The most desired cost per month for Internet service is between \$31-\$50, followed closely by under \$30.

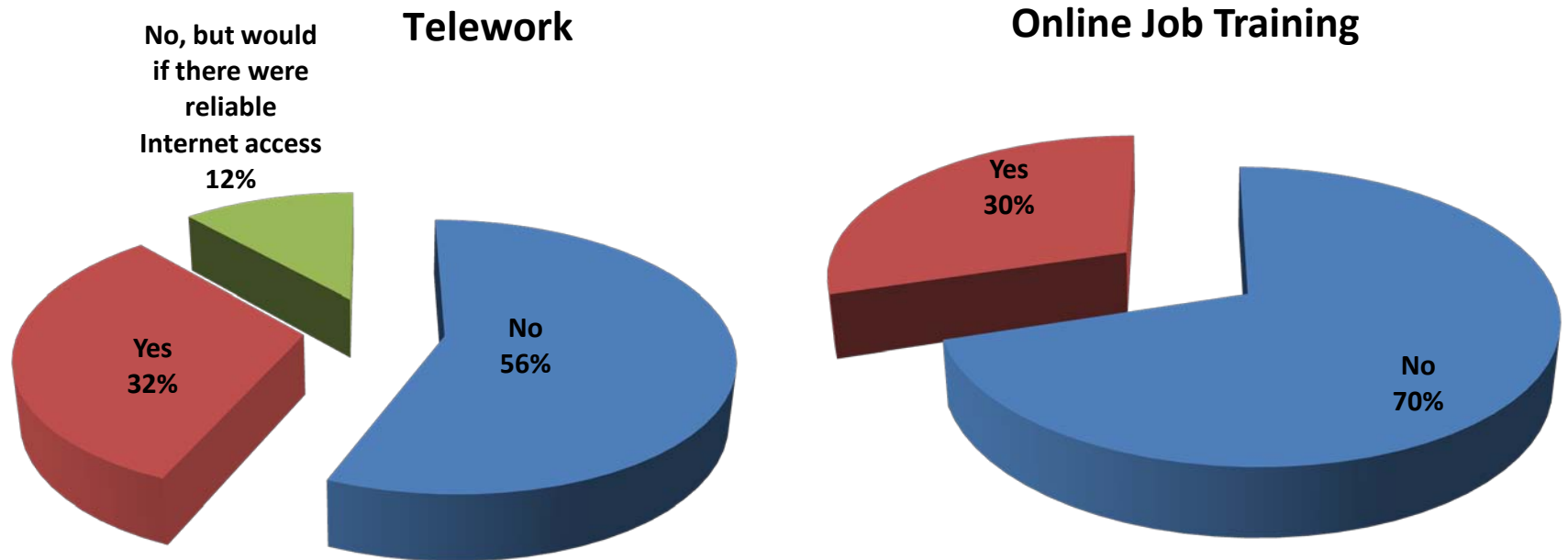
Franklin County Online Activities



Take away: Primarily low bandwidth activities, consistent low bandwidth speeds recorded from speed tests.

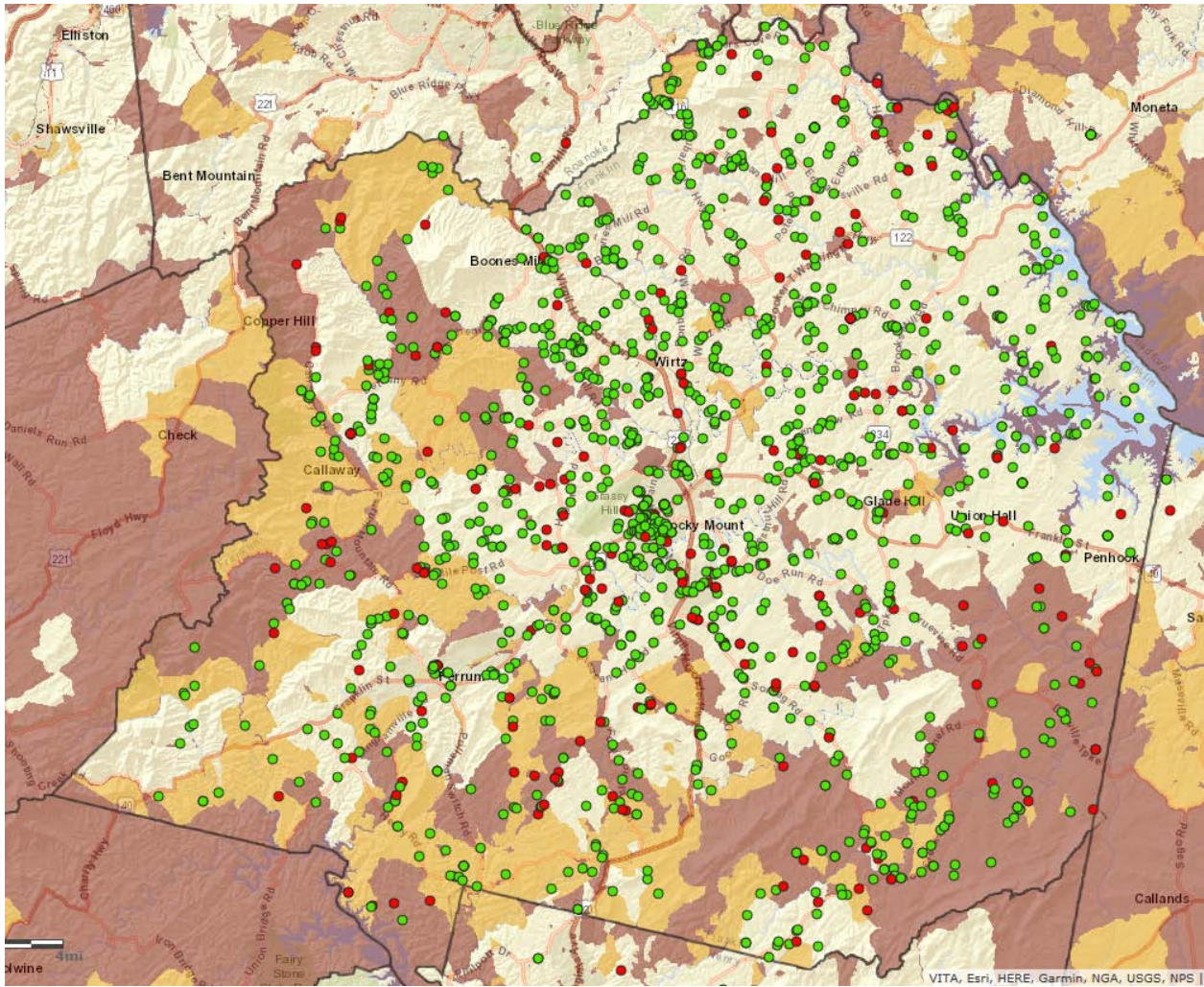


Franklin County – Home Utilization

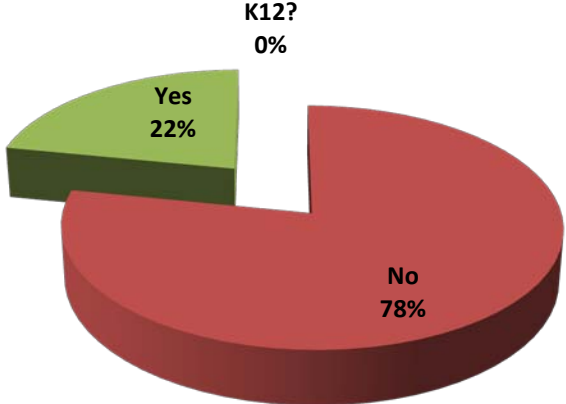


Take Away: 12% of respondents would work from home they had better Internet access.
Approximately 43% of workforce commutes out of the county.
30% report using the Internet for online job training

Franklin County K-12 Households



K-12 Households



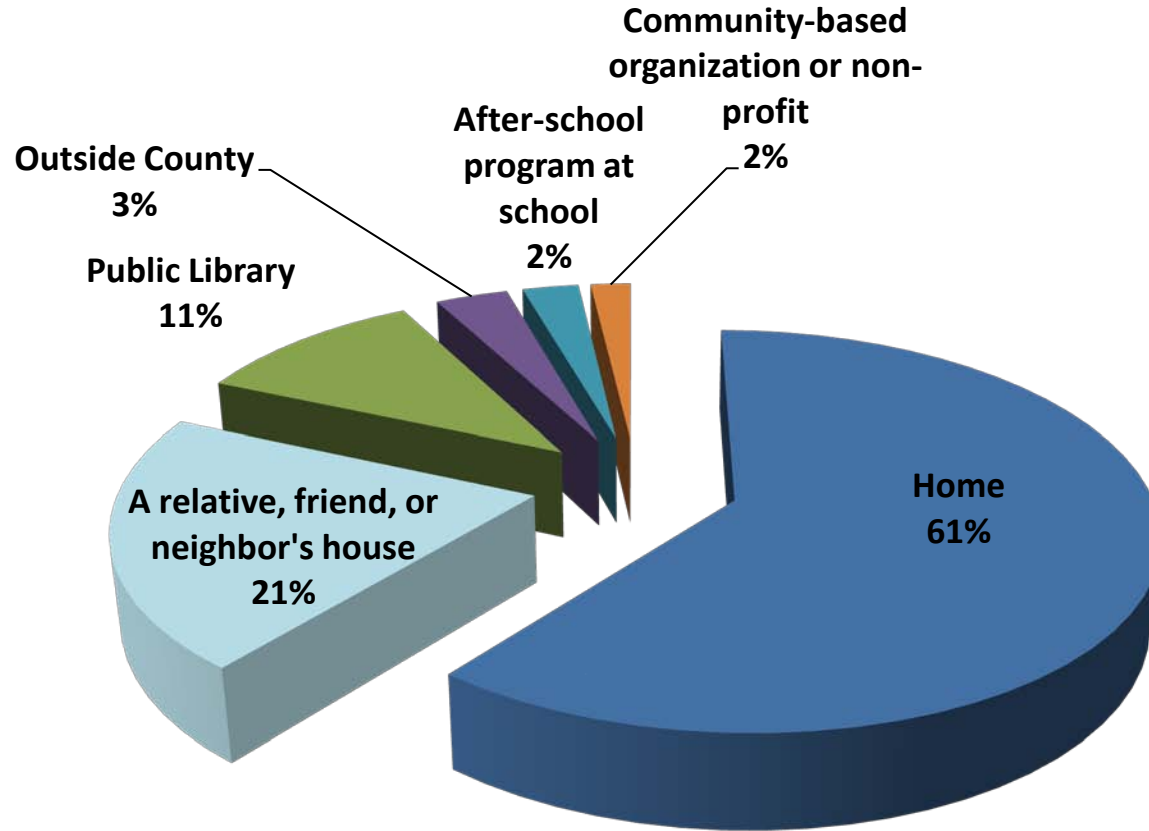
● Unserved = Broadband speed below 10 Mbps Download speed

● Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed

Take away: 1751(22%) reported K-12 students in the household.
6% of those are being home-schooled
15% of K-12 households have no access.

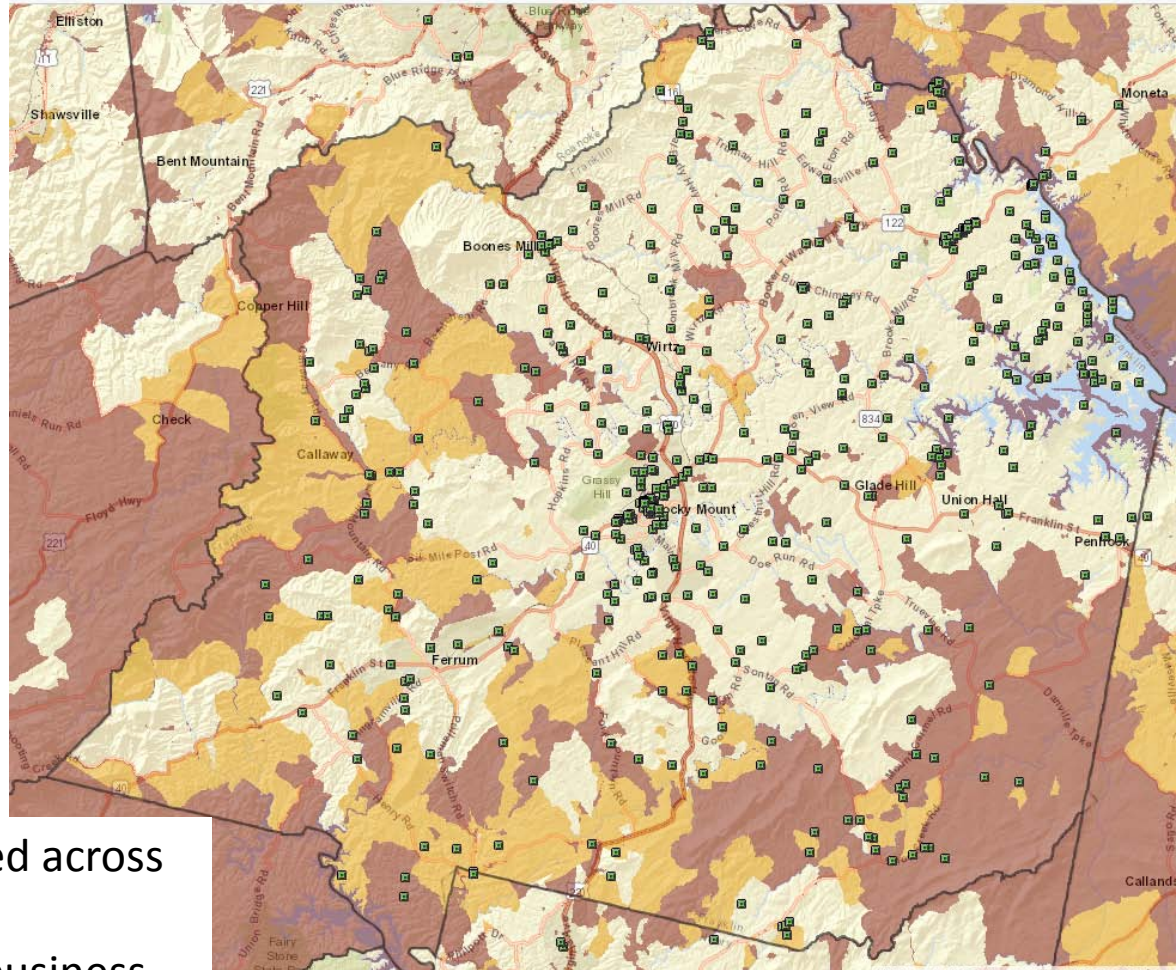
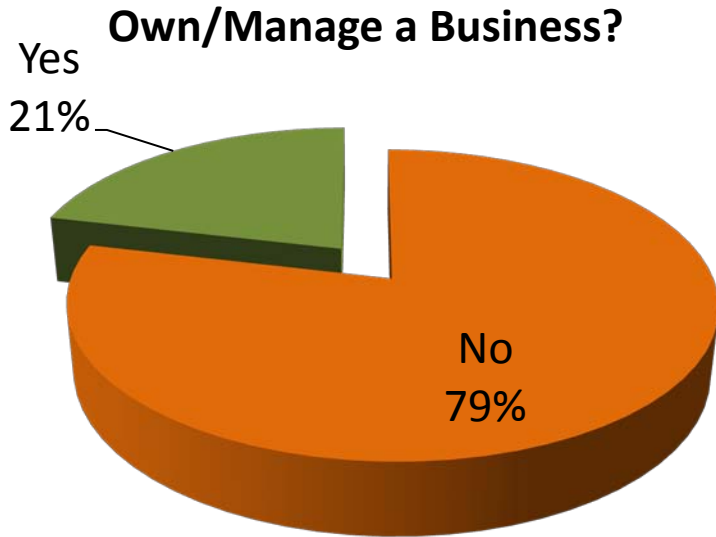
Franklin County

Where Children Access the Internet after School



Take Away: Most K-12 students (61%) have access to the Internet at home after school. 11% depend on access at the public library(s)

Franklin County Businesses



Business Locations:

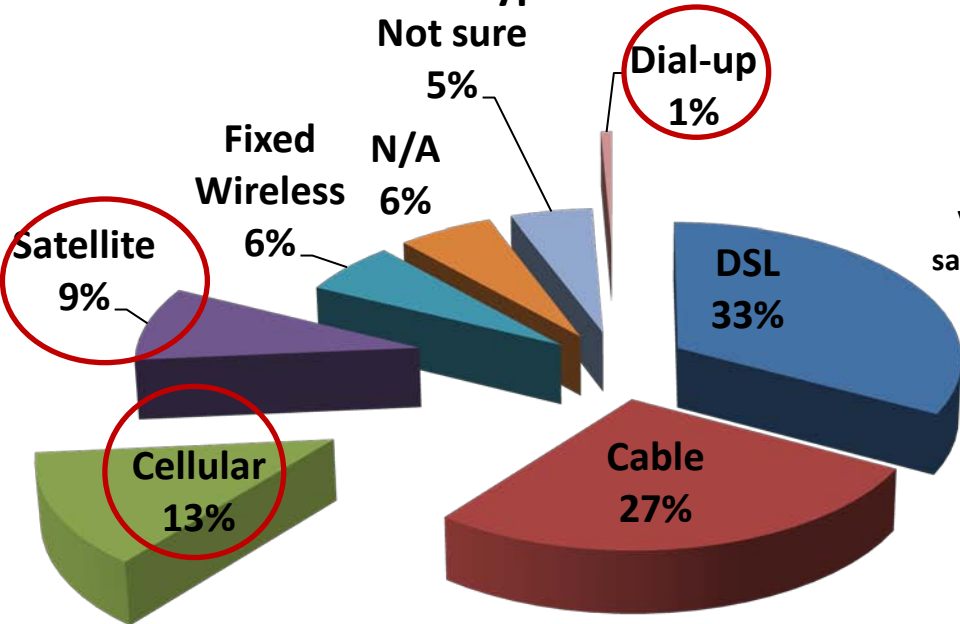
Take Away: 1291 businesses scattered across the county.

21% of respondents own/manage a business.

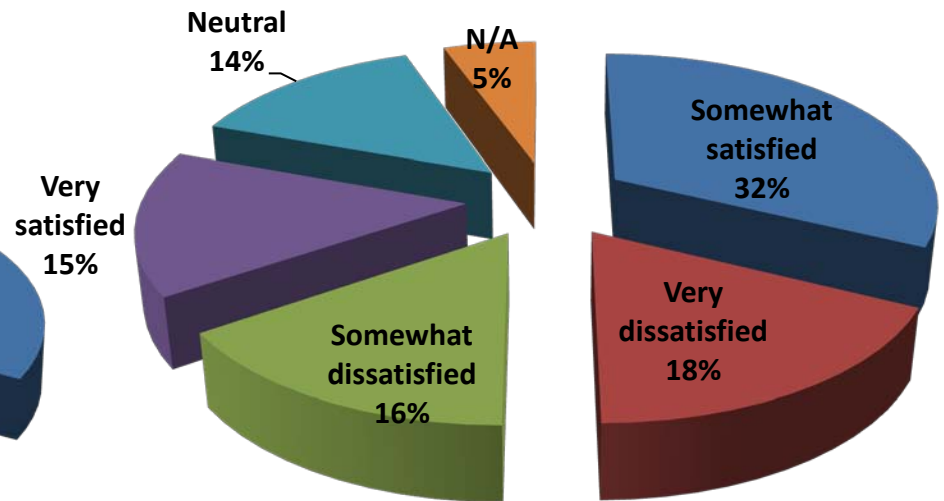
90% of businesses consider Internet access very important or critical.

Franklin County Business Connections

Business Connection Types

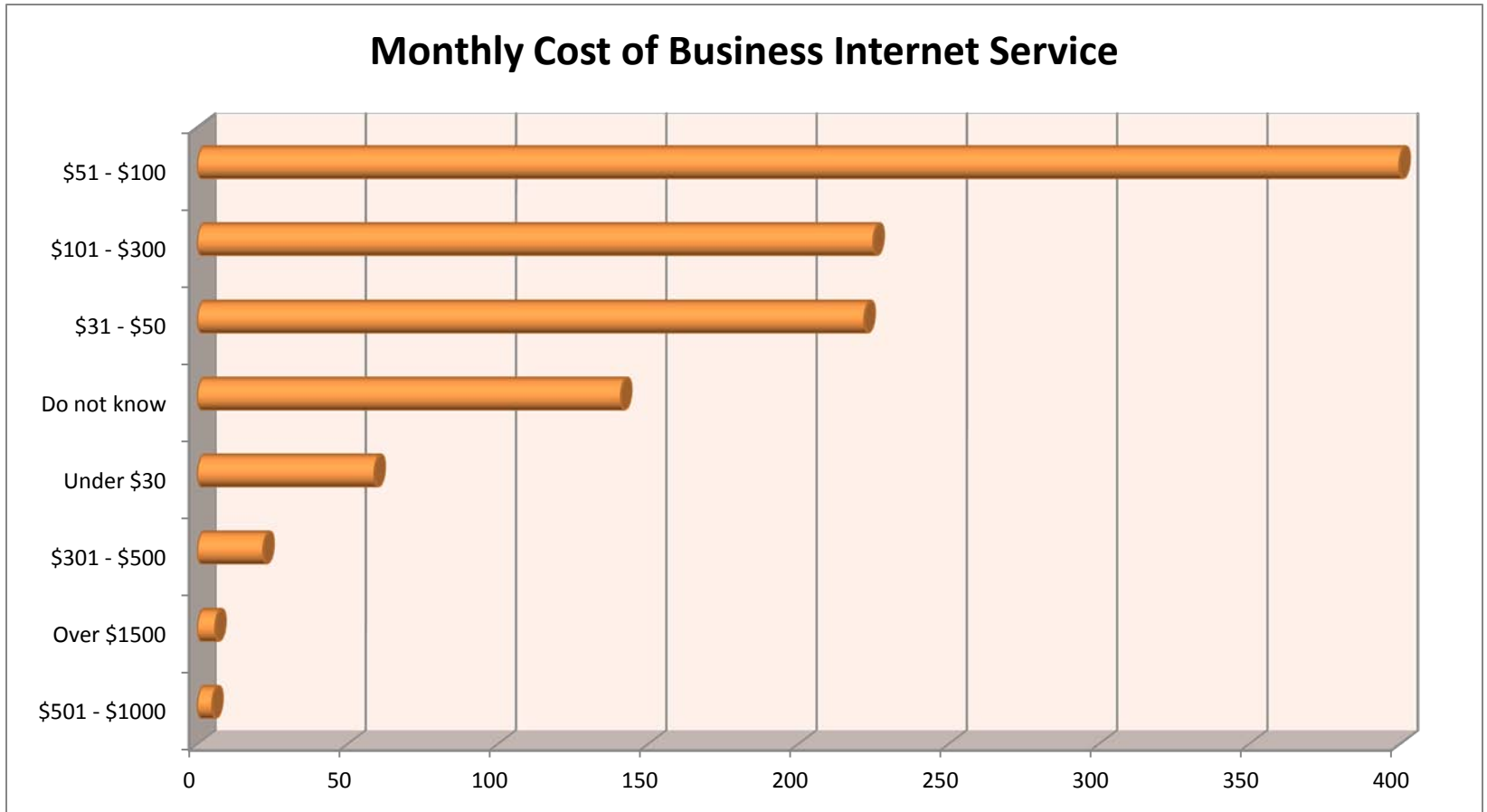


Business Internet Service Satisfaction



Take away: DSL is the most common business connection type, (33%) followed by cable (27%)
23% of businesses depend upon inadequate connection types
34% are dissatisfied with their business Internet service.

Franklin County



Take away: The majority of business owners (37%) pay between \$51-\$100 per month
Most business owners would prefer to pay \$31-\$50 and under

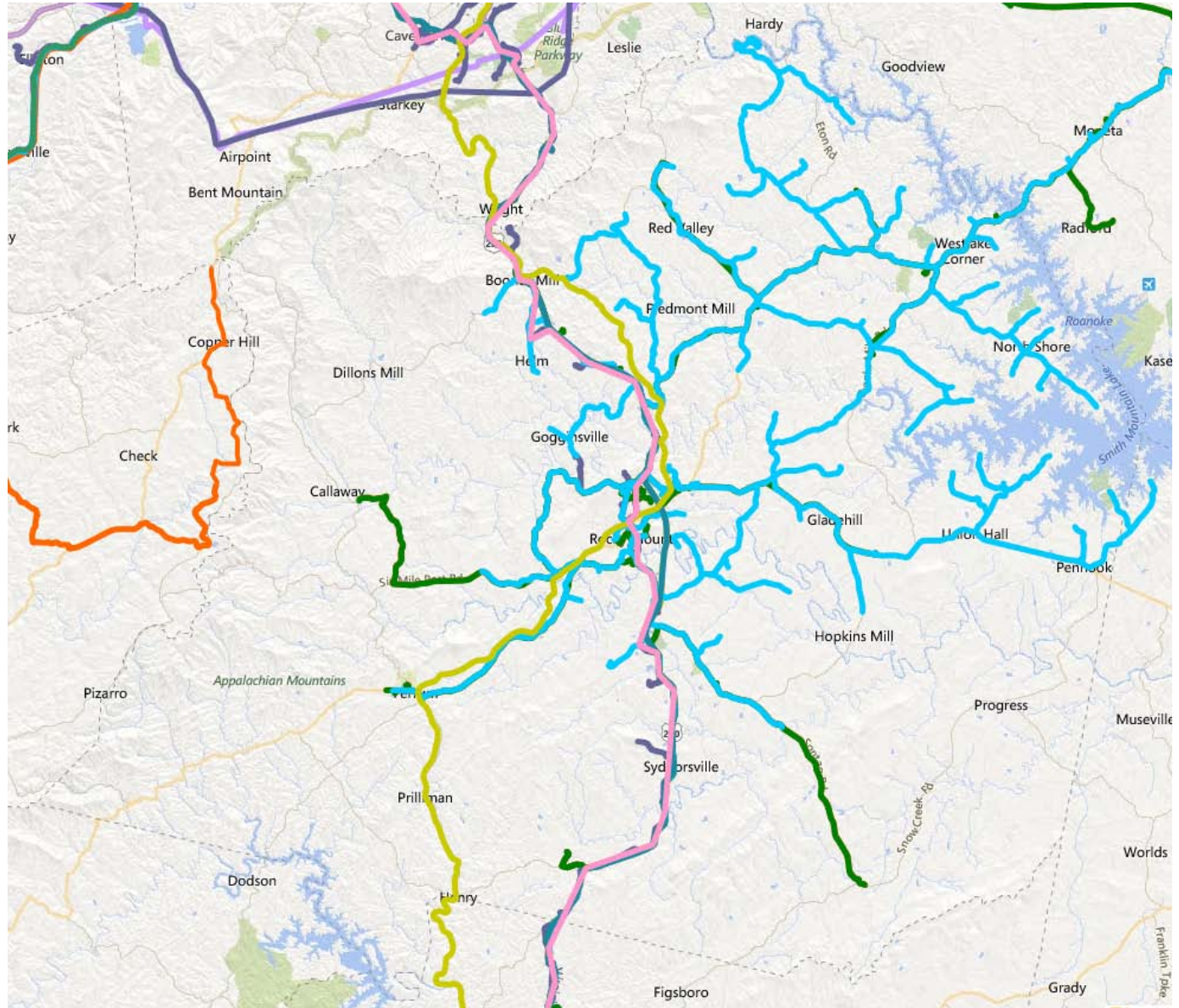
Vertical Assets, Fiber, Conduit and Community Anchors

LOCAL ASSETS

All Commercial Fiber Routes

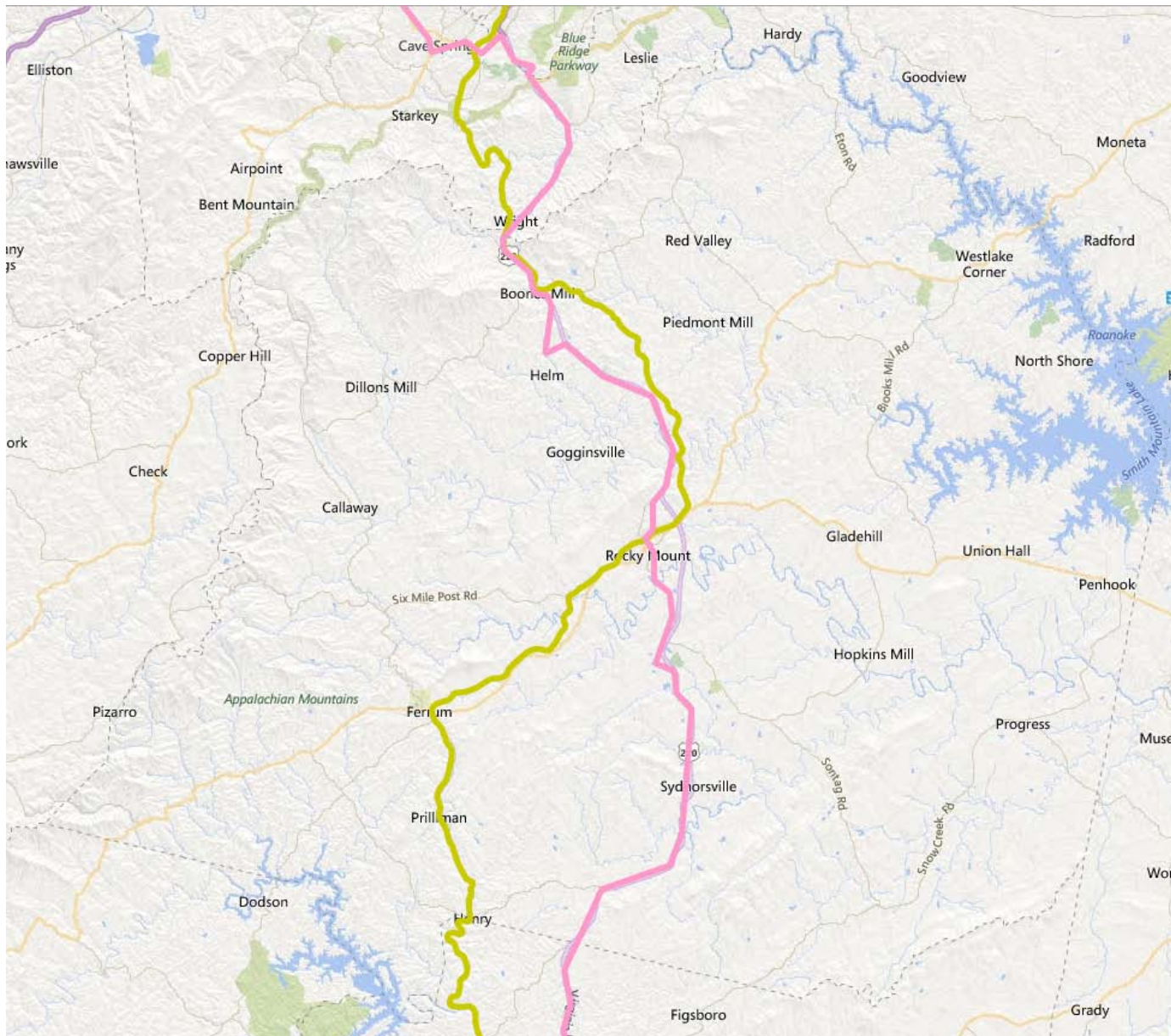
Metro and Long Haul providers

- Conterra
- Level3 Metro
- Lightower
- LIT Networks
- Lumos
- Mid-Atlantic Broadband
- Shentel
- Sunset Digital Com.
- Uniti Fiber
- Windstream



Must ensure conduit is added throughout the new business development location

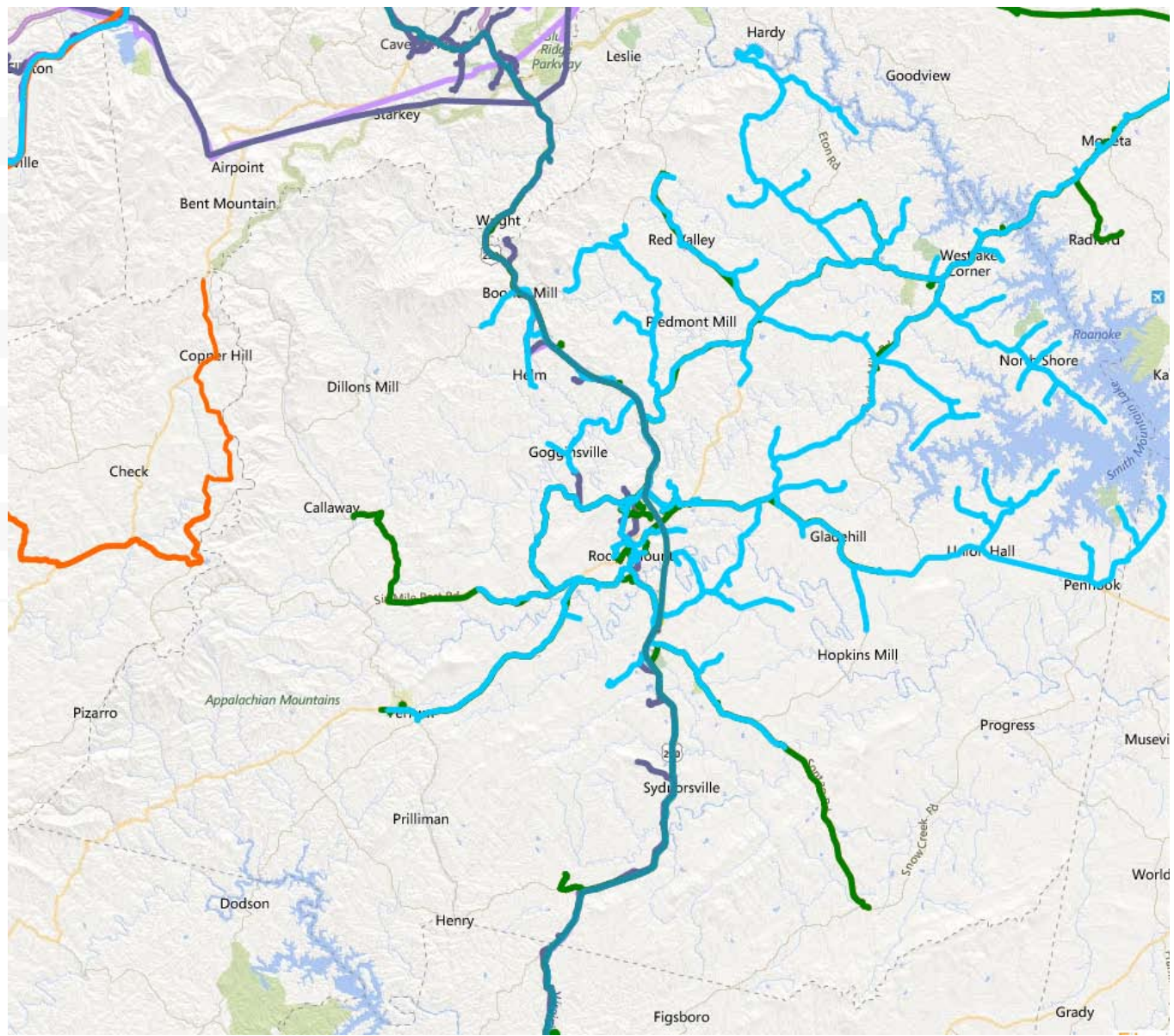
Commercial Long Haul Fiber



Level 3
Sprint

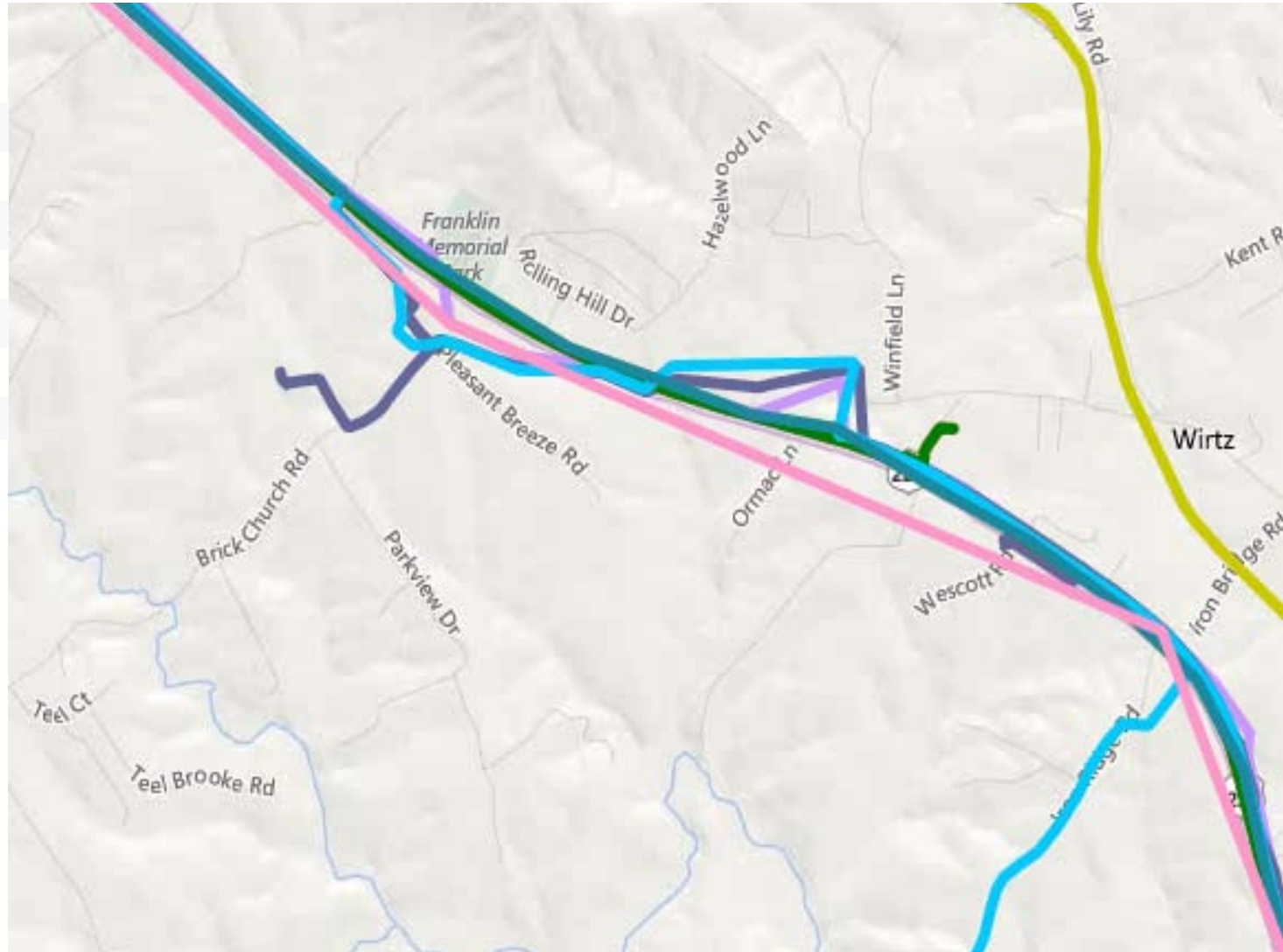
Commercial Metro Networks Fiber

- Conterra
- Level3 Metro
- Lighttower
- LIT Networks
- Lumos
- Mid-Atlantic Broadband
- Shentel
- Sunset Digital Com.
- Uniti Fiber
- Windstream

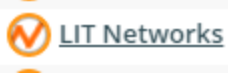
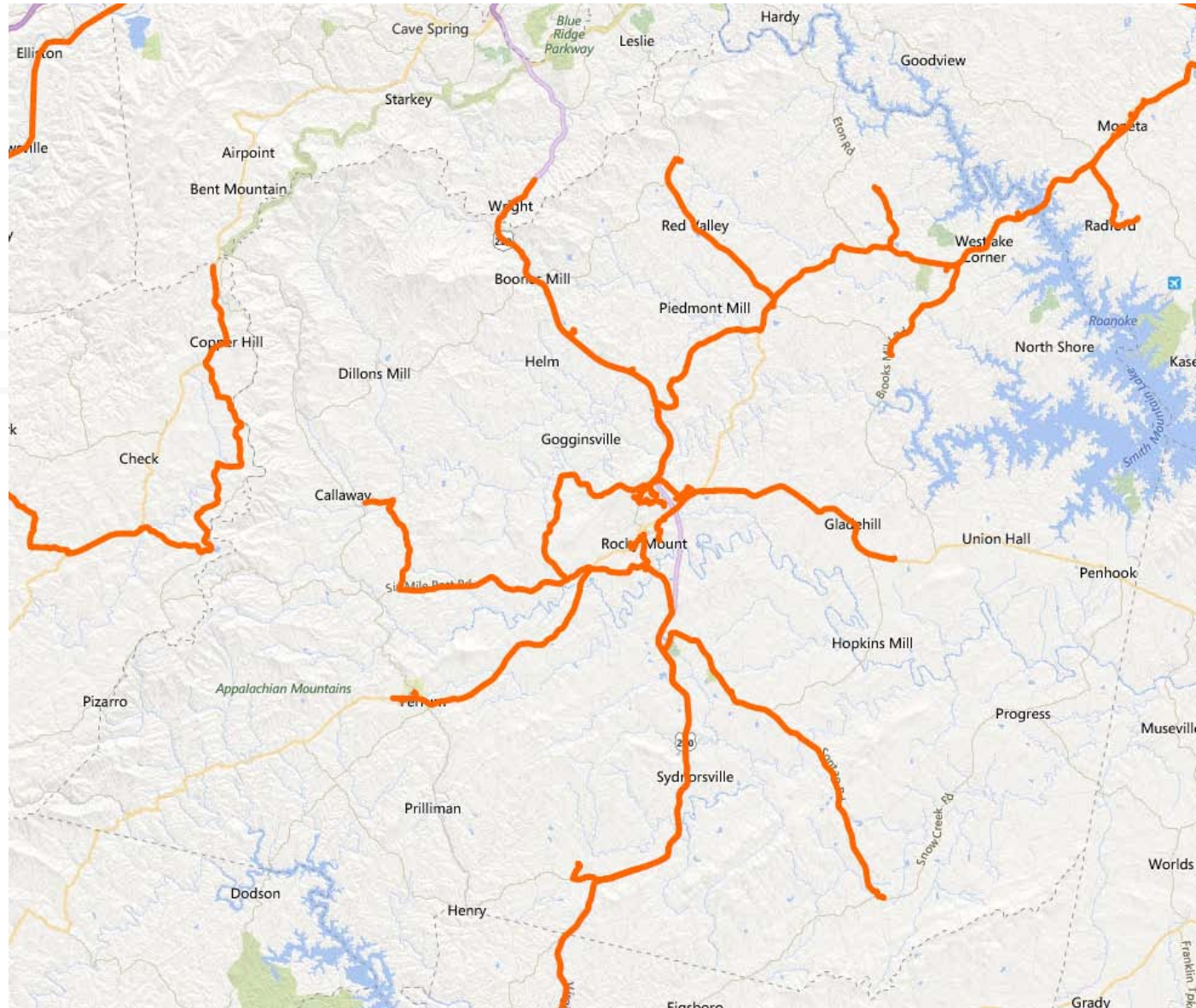


Commercial Fiber at Planned Business Park

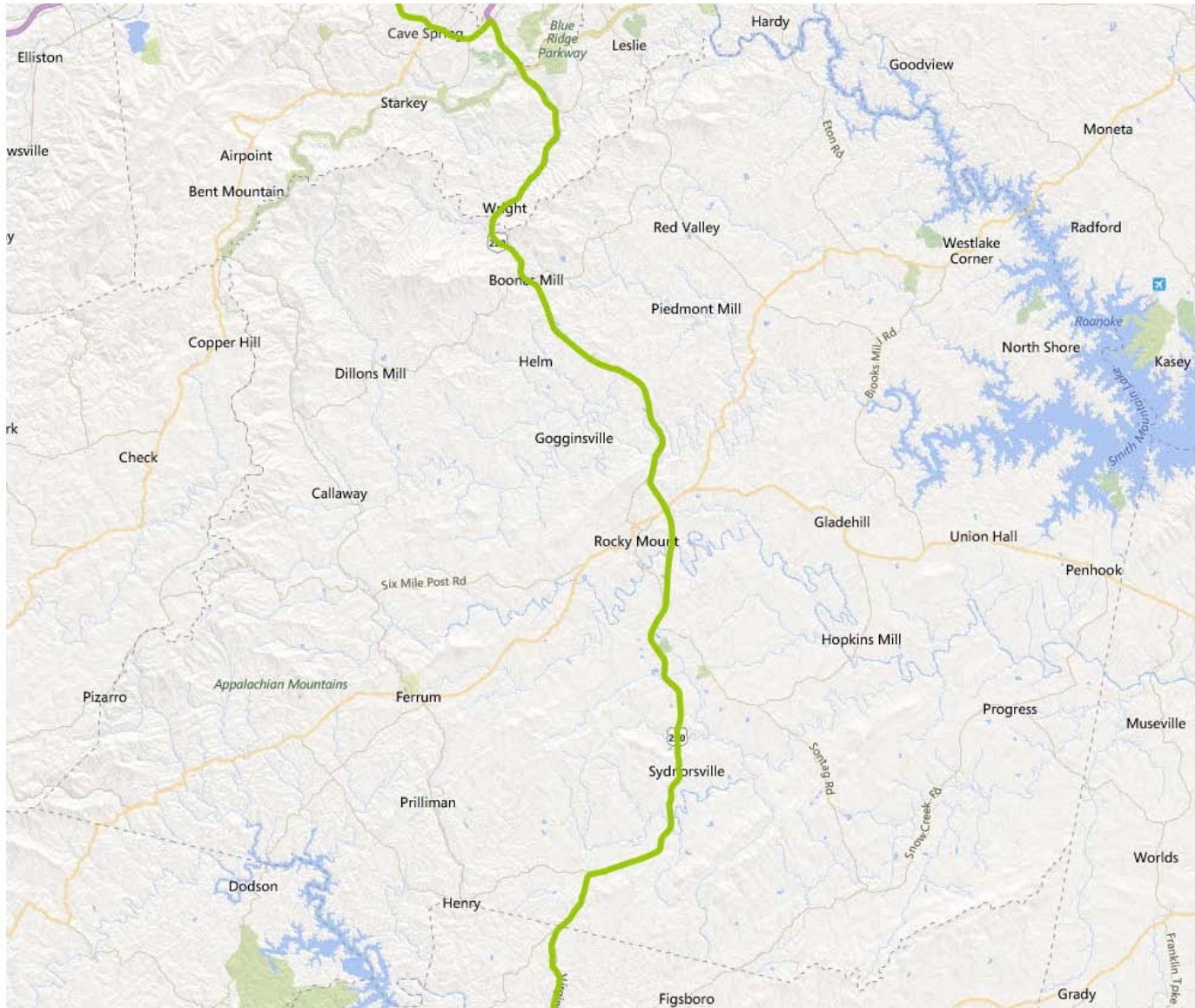
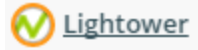
- Lighttower
- LIT Networks
- Lumos
- Mid-Atlantic Broadband
- Shentel
- Uniti Fiber
- Windstream
- Level 3
- Sprint

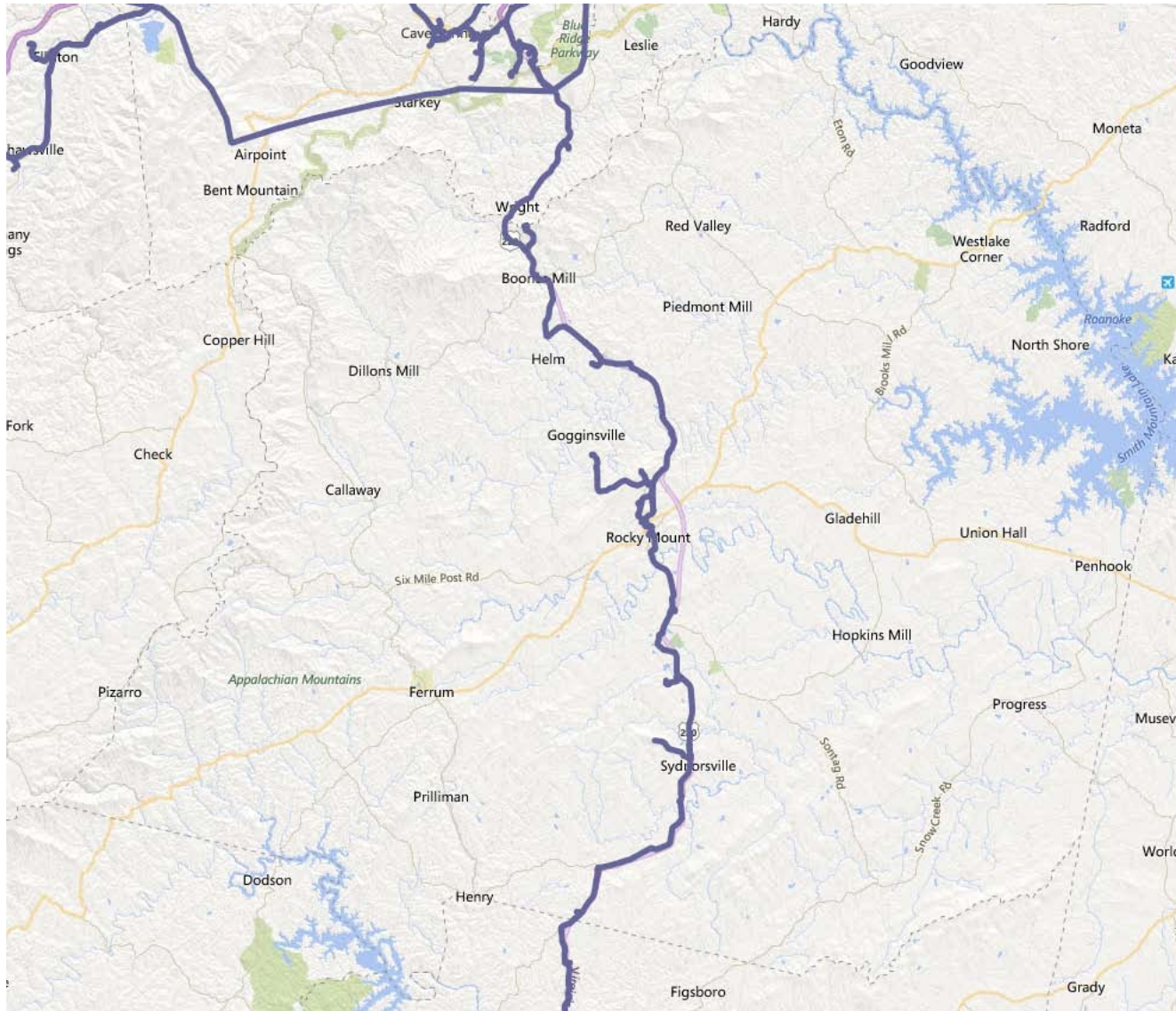
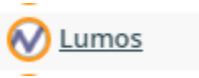


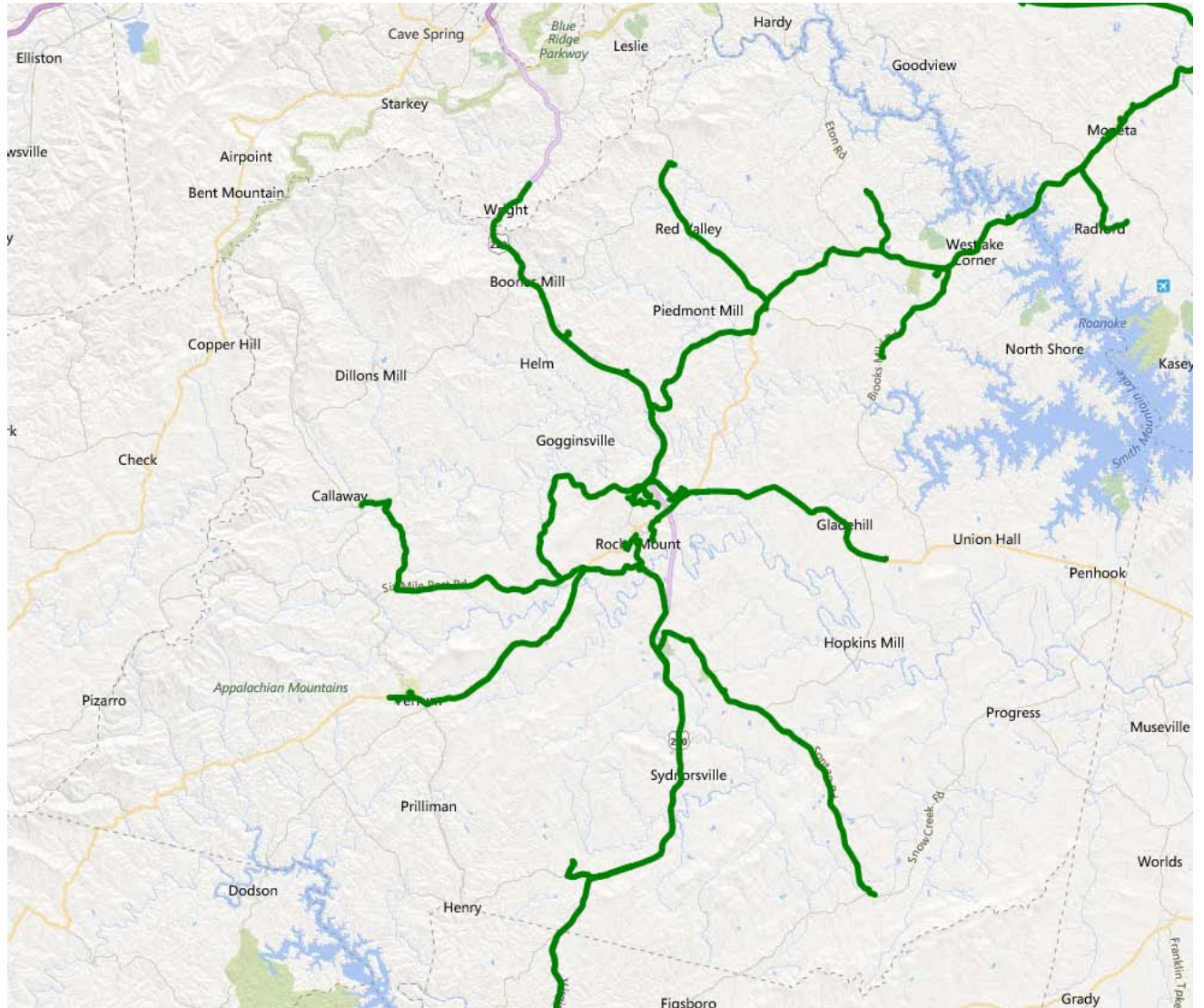
Commercial Metro Networks Fiber

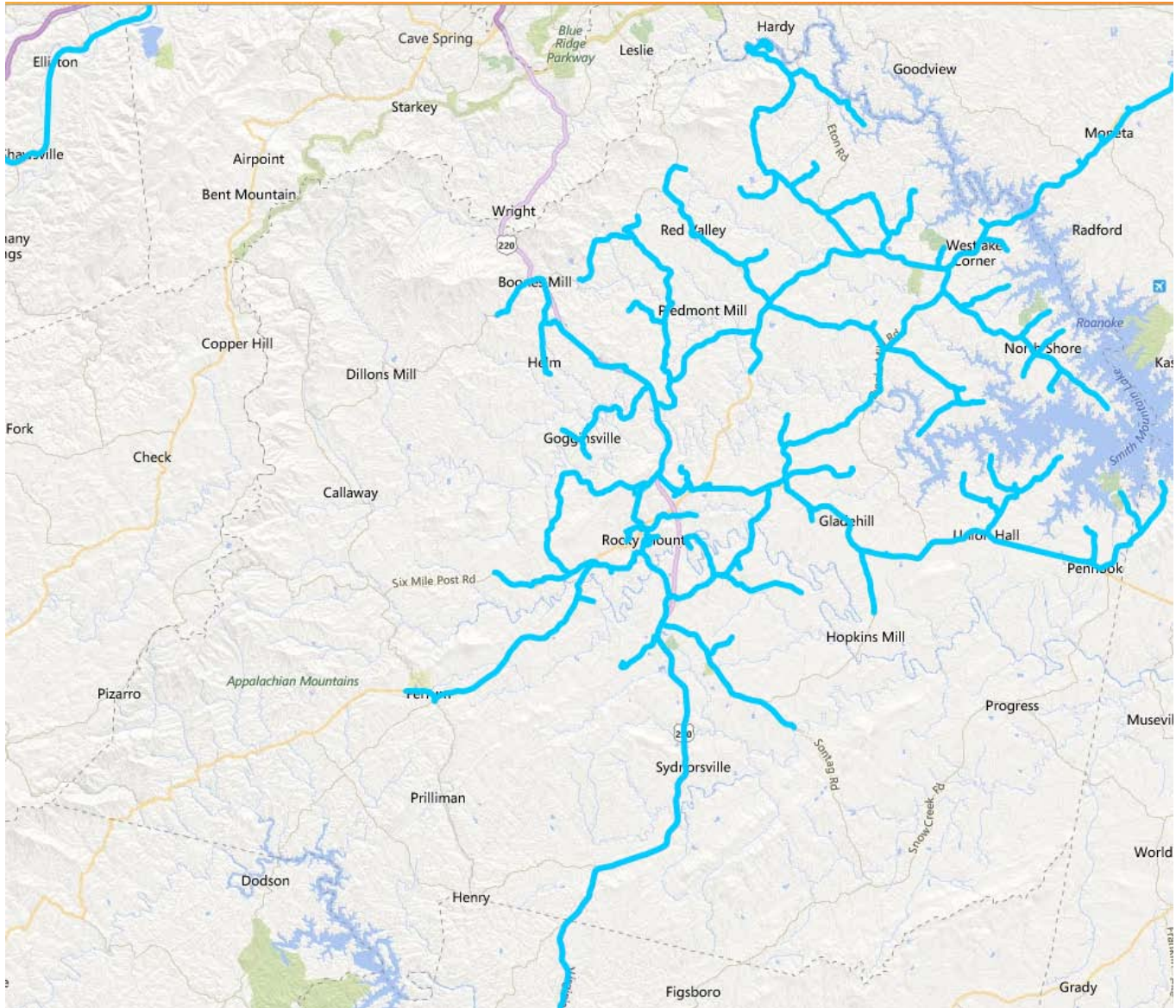
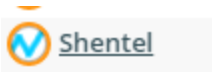


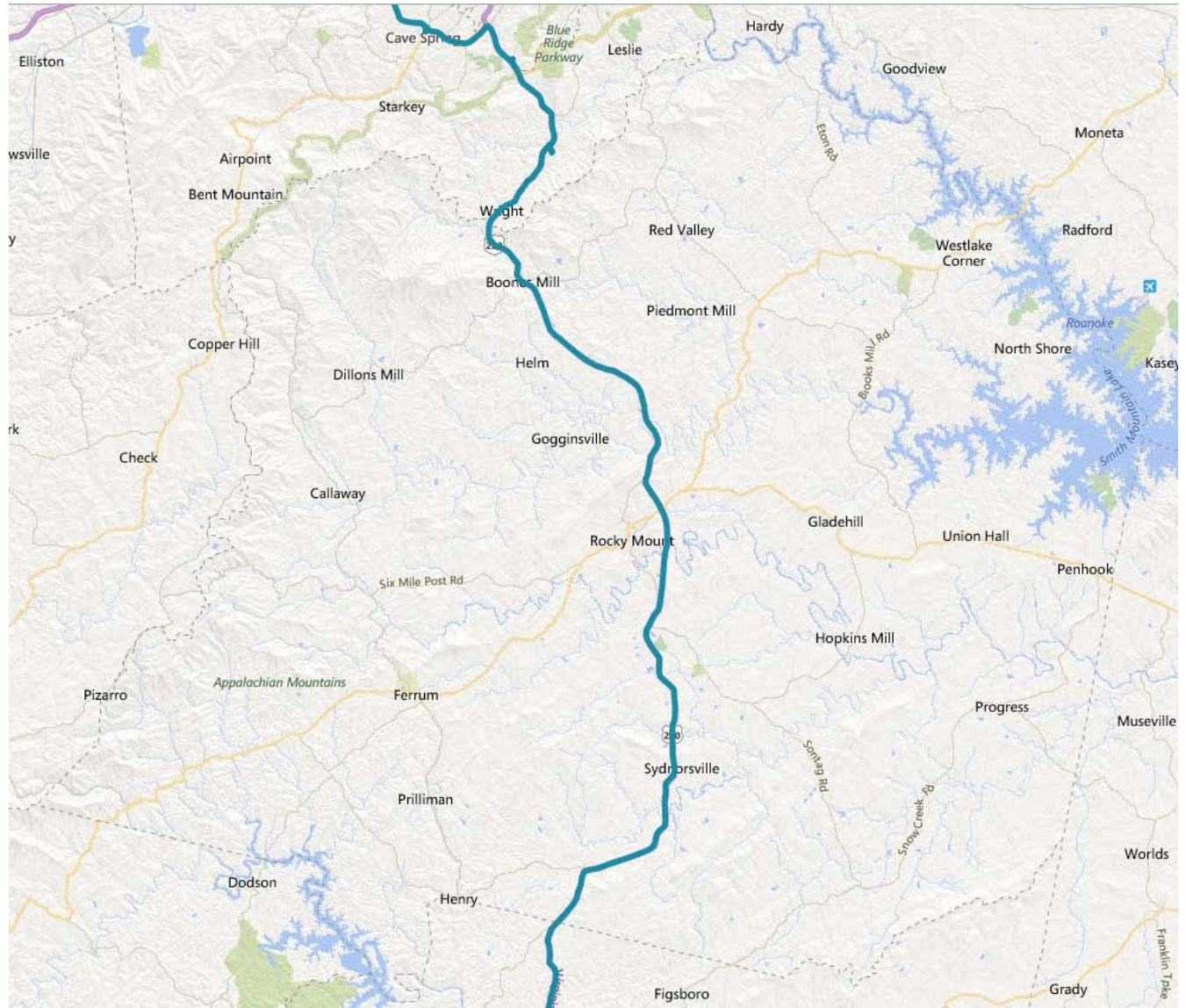
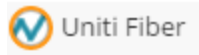
Commercial Fiber



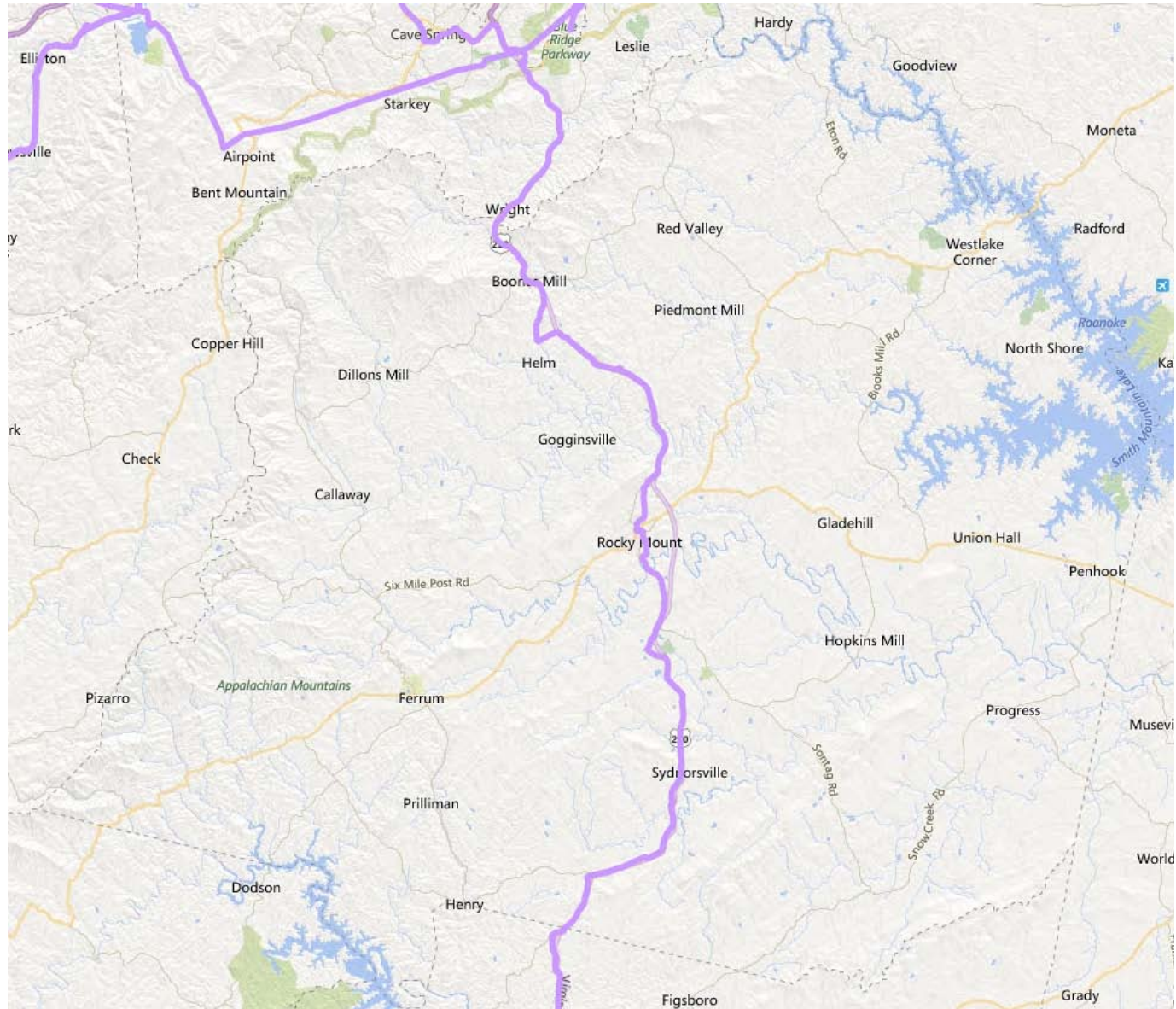
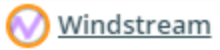








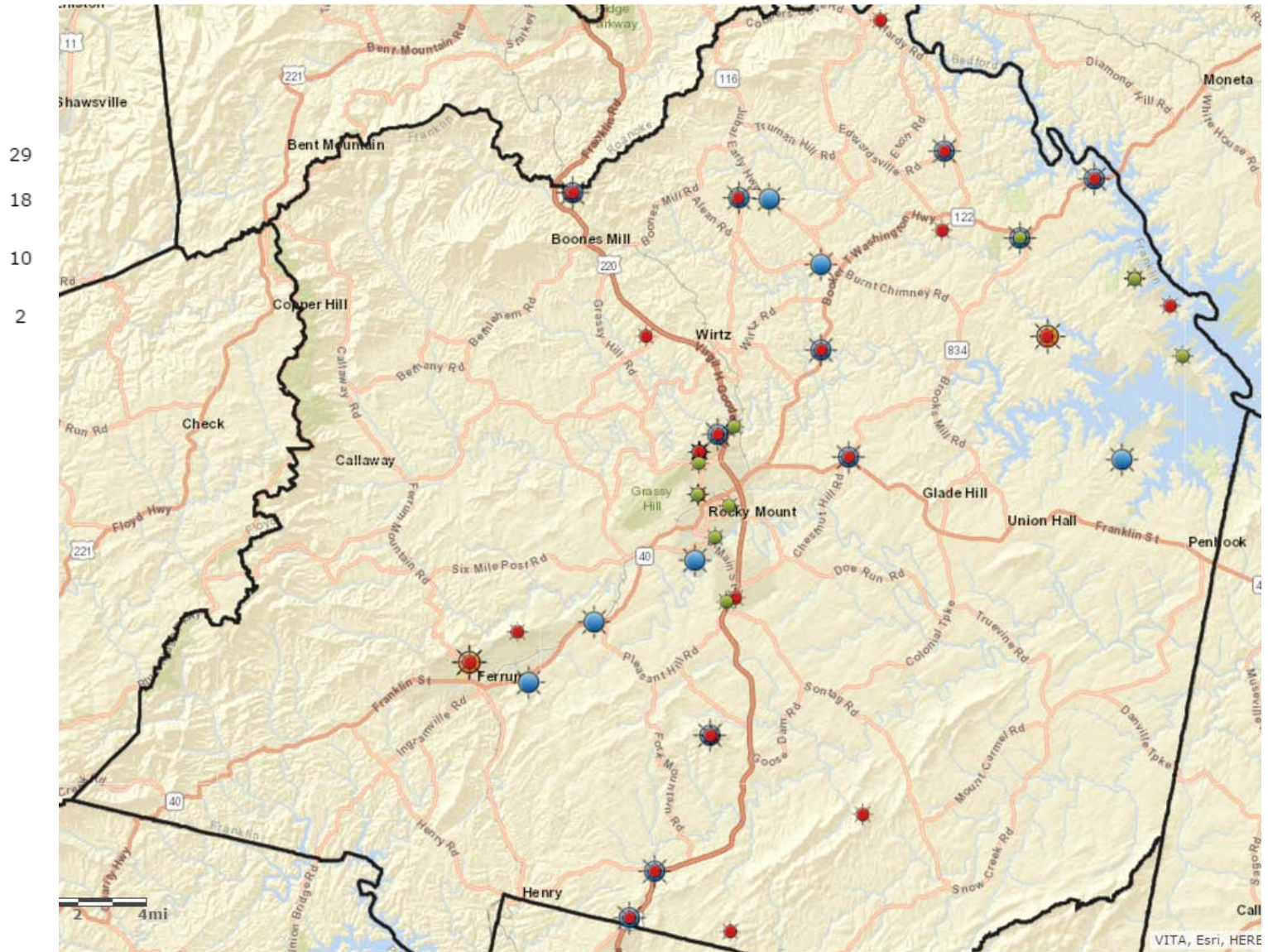
3/21/2018



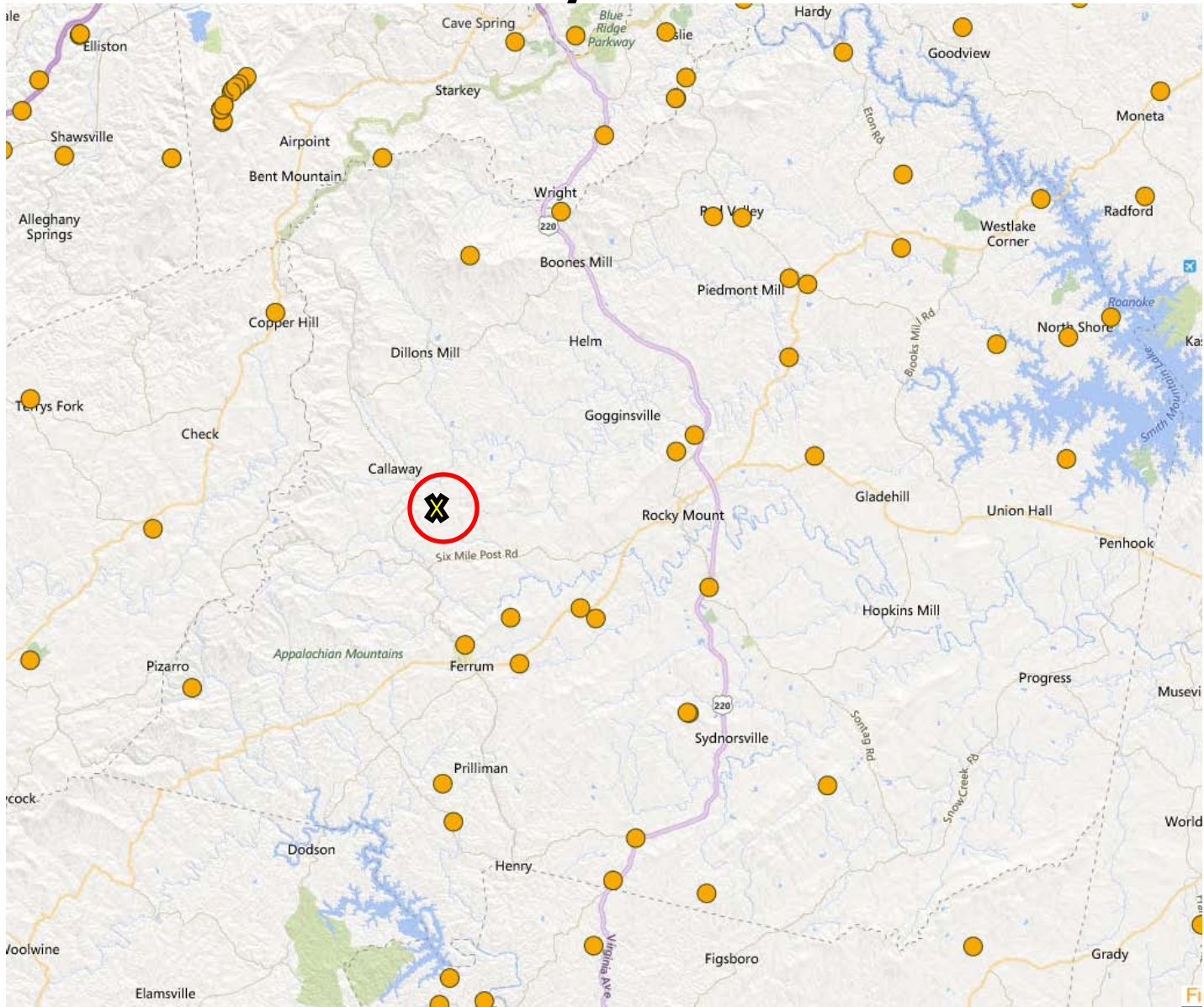
Franklin County Vertical Assets

Data Source:

-  'Franklin County GIS'
-  'FCC: ASR'
-  'Virginia Municipal League'
-  'FCC: Cellular'



Franklin County Cellular Towers

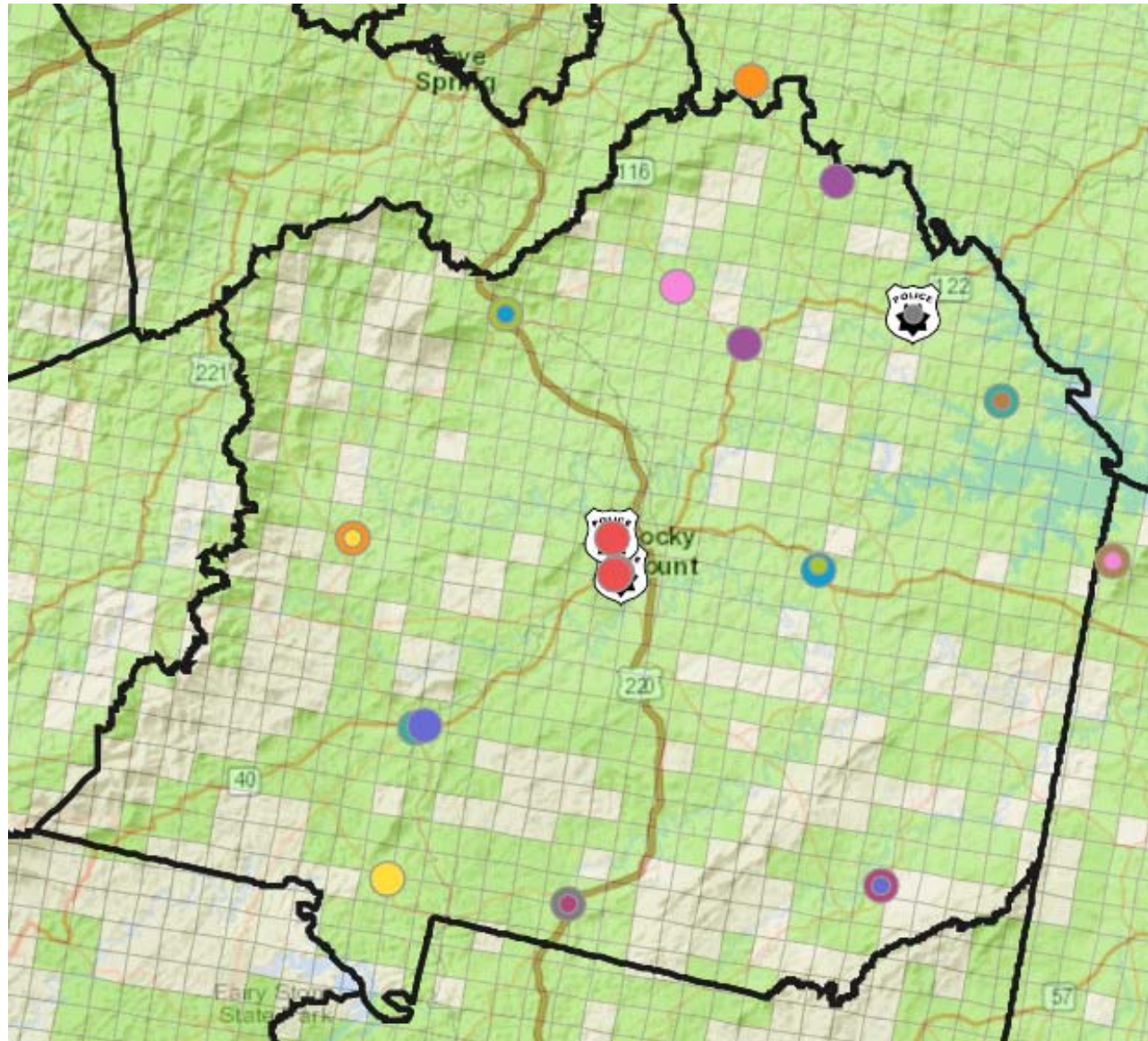






Law Enforcement

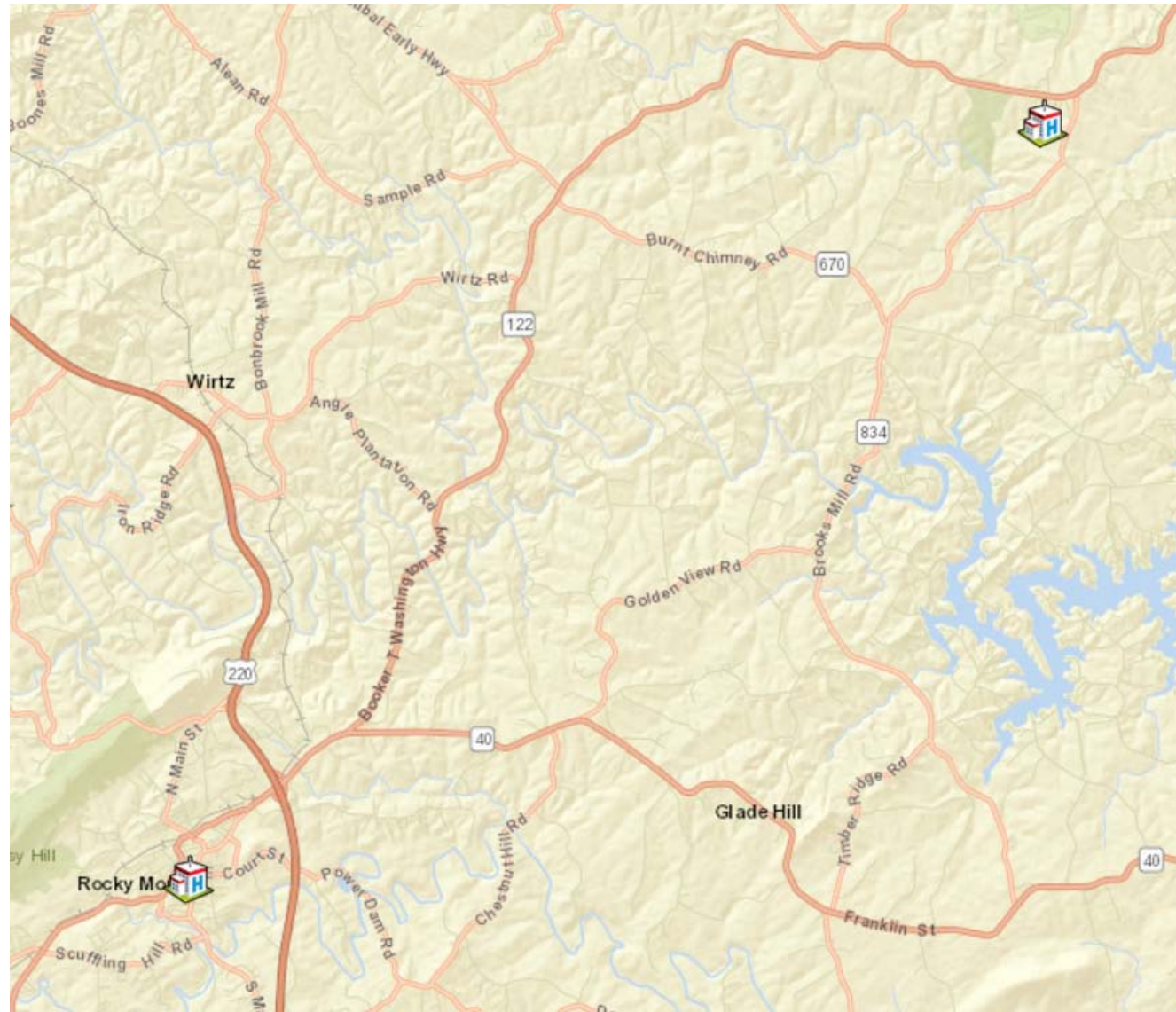
- Rocky Mount Fire Company
- Boones Mill Fire Company
- Boones Mill Rescue Dept
- Burnt Chimney Fire Company
- Callaway Fire Company
- Callaway Rescue Squad
- Cool Branch Fire Company
- Cool Branch Rescue Squad
- Ferrum Fire Company
- Ferrum Recue Squad
- Fork Mtn Fire Company
- Fork Mtn Rescue Dept
- Franklin County Rescue Squad
- Glade Hill Fire Company
- Glade Hill Rescue Dept
- Hardy Fire Company
- Hardy Rescue Dept
- Henry Fire Company
- Red Valley Rescue Dept
- Scruggs Fire Company
- Scruggs Rescue Dept
- Snow Creek Fire Company
- Snow Creek Rescue Dist
- Westlake Fire Station

Franklin County Public Safety



Franklin County Healthcare

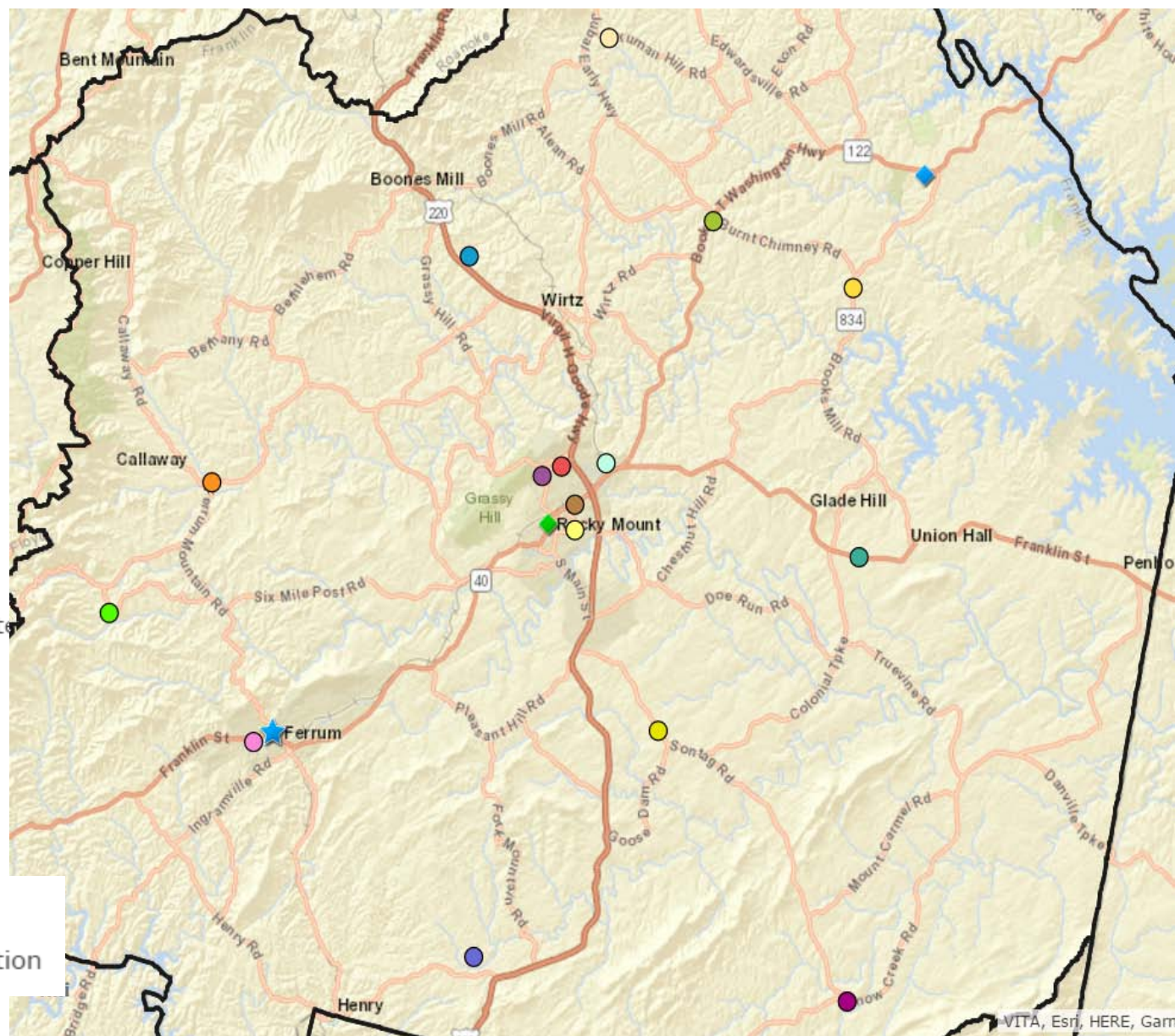
-  Carilion Franklin Memorial Hospital
-  Westlake Medical Center



Franklin County K-12 Schools, Libraries, College

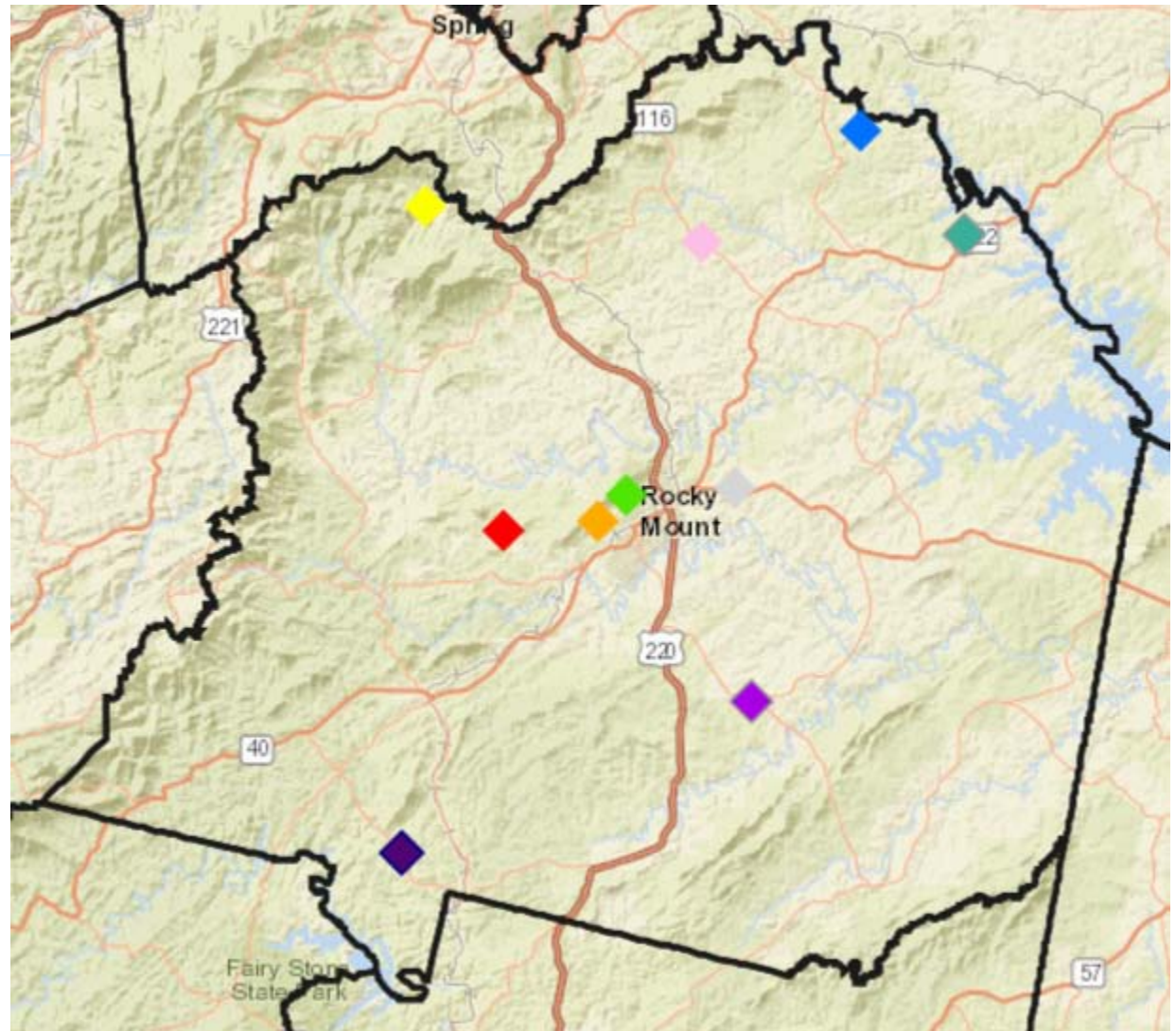


- Benjamin Franklin Middle
- Boones Mill Elementary
- Burnt Chimney Elementary
- CATCE (Gereau Center)
- Callaway Elementary
- Dudley Elementary
- Ferrum Elementary
- Franklin County High
- Glade Hill Elementary
- Henry Elementary
- Lee M Waid Elementary
- Phoebe Needles Educational Center
- Rocky Mount Elementary
- Snow Creek Elementary
- Sontag Elementary
- Windy Gap Elementary School
- ◆ County Public Library
- ◆ Westlake Branch Library Location
- ★ Ferrum College



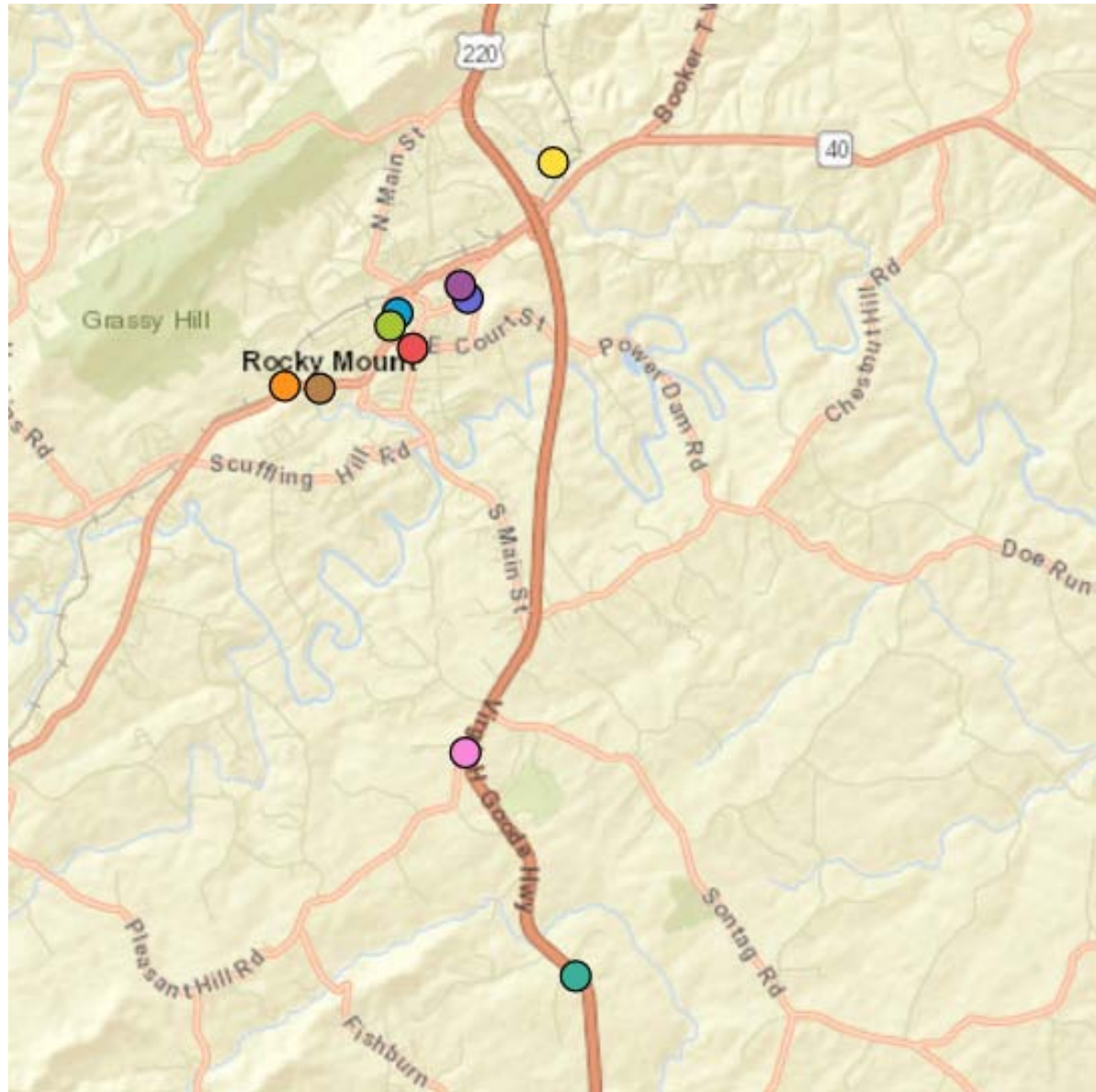
Franklin County Community Centers

- ◆ Coles Creek Community Center
- ◆ Coopers Cove Community Center
- ◆ Franklin County Family YMCA
- ◆ Henry Community Center
- ◆ Masjid An-nur & Islamic Community Center
- ◆ Naff Community Center
- ◆ Red Valley Community Center
- ◆ Redwood Community Center
- ◆ Smith Mountain Lake YMCA
- ◆ Sontag Community Center



County Government Buildings

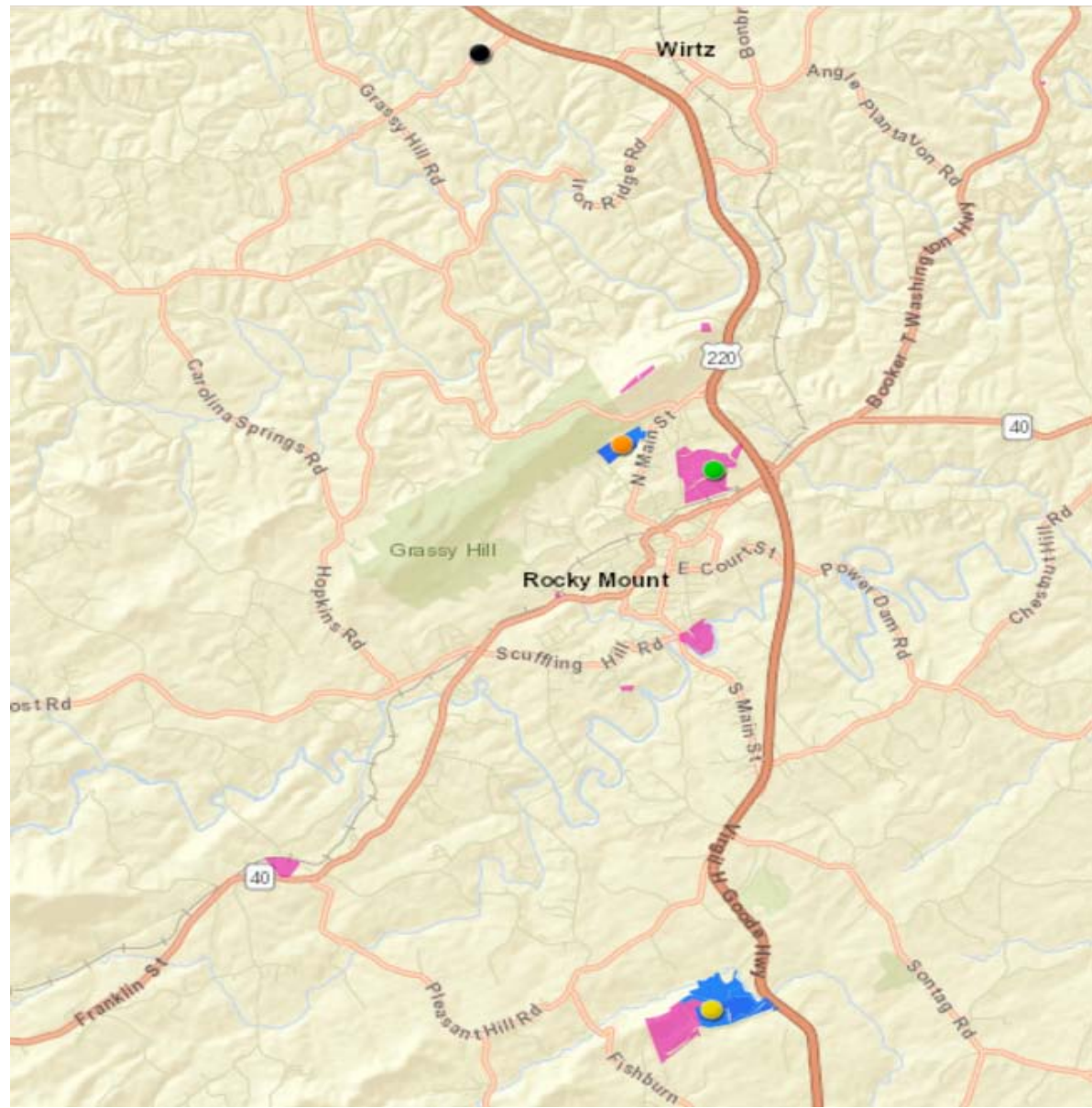
- Courthouse
- Franklin Center
- Franklin County Chamber of Commerce
- Franklin County Health Dept
- Franklin County Public Safety
- Franklin County School Board
- Franklin County Social Services
- Government Center
- Landfill
- Rocky Mount Administration Building





Business Parks, Commercial/Industrial Property

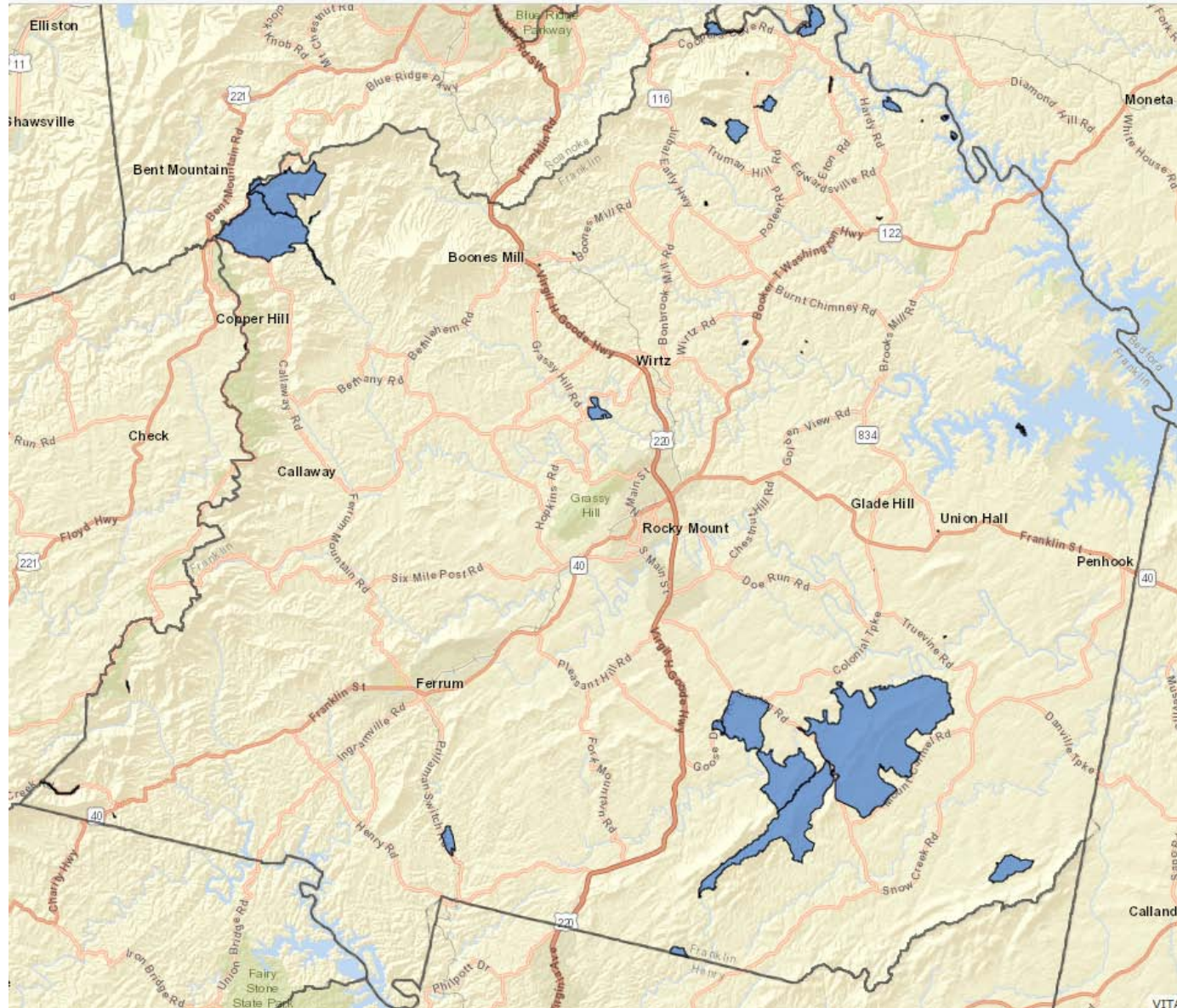
-  Business Park Parcels
-  Commercial/Industrial Parcels
-  County Business Park
-  Franklin County Commerce Center
-  Franklin Rocky Mount Industrial Park
-  Technology Park



Franklin County CAFII Funding Areas

**Connect America
Funds Phase II (CAFII)
Eligible Blocks
(Preliminary)**

Potential Funding
\$80,548.13 per year
over 6 yrs.



Affect the Broadband Economics

REVIEW OF LOCAL POLICIES & FEES



Make sure your policies and procedures are “Broadband Friendly”

Review comprehensive plans, community zoning regulations and process, policies, fees, etc. must **encourage and enable broadband investment.**

Review local franchise agreements for **setback or long-drop** policy. Long-drop policy information should be conveyed to all new homebuilders, and real estate developers.

Adopt Dig Once: Dig Once means less construction disruption, and costs for private providers—who may simply decide not to deploy in an area where the economics don’t work.

Policy Considerations for Telecommunications Deployment

<https://www.wired.virginia.gov/sites/default/files/Telecom%20Deployment%20Policy%20Recs.pdf>

Policy Assessment - Areas to Consider

https://www.wired.virginia.gov/sites/default/files/Policy%20Assessment%20Tool%20Guide_0.pdf

Policy Assessment worksheet:

<https://www.wired.virginia.gov/sites/default/files/Policy-Assessment-Tool.xlsx>

Google Fiber Checklist:

<https://fiber.storage.googleapis.com/legal/googlefibercitychecklist2-24-14.pdf>

Remember: to make it “cheap, quick & easy”

Franklin County Local Policies

The following policies may not represent a comprehensive list of potential local Internet related policies. All local Internet related policies should be reviewed with potential partners and adjusted as necessary to explore incentives and identify barriers to broadband expansion

Source: www.municode.com

Code of Ordinances Chapter 25 - ZONING ARTICLE II. - BASIC REGULATIONS DIVISION 4. - SUPPLEMENTARY REGULATIONS

Sec. 25-128. - *Towers, antennas, satellite dishes*

25-128.a Special Use Permit Requirements Sec..

Franklin County, Virginia - Code of Ordinances Chapter 5 - BUILDING REGULATIONS ARTICLE II. - BUILDING CODE Sec. 5-27. - Permit fees. Sec. 5-27. - Permit fees.

(h) Towers, antennas, and similar regulated structures: Structural fee—\$100.00

Code of Ordinances Chapter 25 - ZONING ARTICLE III. - DISTRICT REGULATIONS DIVISION 7. - RESIDENTIAL PLANNED UNIT DEVELOPMENT DISTRICT (RPD)

Sec. 25-306. – Utilities: Within a planned unit development all newly installed utilities, including television cable and electrical systems, shall be installed underground.

Assessment Based

COMMUNITY BROADBAND NEEDS



Franklin County Needs Identified

- **Demand Survey**

- Residential

- The majority (39%) of residential respondents are connected by DLS, 32% cable.
 - 34% are dissatisfied with their current service
 - 22% rely in inadequate services; upon cellular, satellite or dial up
 - 20% have NO access at home.
 - 22% of all respondents report school aged children at home, 15% of K-12 households have no Internet access.
 - 32% work from home, 12% would work from home if they had better access.
 - **OPTION: Expand access and capacity to county residents – Snow Creek, Penhook, Calloway, Henry, Hardy, Ferrum**



Needs Identified (Cont'd)

– Businesses

- DSL (33%) is the most common business connection type, followed by cable (27%)
- 90% consider Internet very important or critical to their business.
- 34% state they are dissatisfied with their business Internet service.
- 23% of businesses depend on inadequate connection types; cellular, satellite, or dial-up
- **OPTION: Expand access and capacity to county businesses in the following areas; Snow Creek, Penhook, Henry, Calloway, Hardy**



Needs Identified (Cont'd)

- **Technology Adoption**

- Digital Literacy

- 19% of population are seniors
 - 15% of population have a disability
 - ~30% of population may have affordability challenges

- **OPTIONS:**

- Promote computer literacy classes at libraries, community and senior centers for the populations that may be slow to adopt technology, or need special equipment.
 - Consider a computer refurb/donation program such as Virginia Star - a state-wide Student Training and Refurbishment program; <http://vostar.org/> for those with affordability challenges.



Needs Identified (Cont'd)

Libraries

- USAC
 - Does not participate in eRate.
 - **OPTION: Consider eRate participation, consult with Library of Virginia to maximize/coordinate eRate opportunities.**

- LVa speed test:
 - Median Download ~22 Mbps, Upload ~13 Mbps;
 - National recommendation of 1 Gig (1024 Mbps) for libraries serving communities with a population of over 50,000. (Franklin Co. total pop 56,360)
 - Library patrons use 40 Mb connection from B2X. No contract in place
 - **OPTION: Increase capacity at libraries to meet national recommendations.**

- ✓ Public computers, workforce development and computer literacy training classes are available at both library branches.



Needs Identified (Cont'd)

Schools

- 1 Gbps lit fiber from Shentel Communications, LLC at ~\$6,900 per month, ~\$6.70 per Mb. **Contract Expires 06/30/2019**
- (15) 1 Gbps lit fiber WAN connections from Shentel Communications, LLC at \$27,600 per month, ~ \$27 per Mb **Contract Expires 06/30/2019**

OPTION – most cost on WAN – build your own and include dark fiber – leverage eRate .

From NCES - The National Center for Education Statistics :

- ~141 Kbps per Student/Teacher
- ✓ **Above national recommendation of 100Mb per 1000 Students + staff**

Some public schools are in noted un/underserved areas;

OPTION - increase access and capacity to Callaway Elementary, Snow Creek Elementary, and Henry Elementary

Needs Identified (Cont'd)

County Government

- Local government facilities connected by B2X, Shentel, and Lumos
- No active contract in place for B2X county connections

Public Safety

- Fire and Rescue stations in the following areas may need increased access and capacity; Snow Creek, Callaway, Fork Mtn and Henry.

Community Centers

- The following community centers may need increased access and capacity; Henry CC, Naff CC, and Coles Creek CC.

Franklin Needs Summary

4 schools, 3 community centers potentially need increased access and capacity

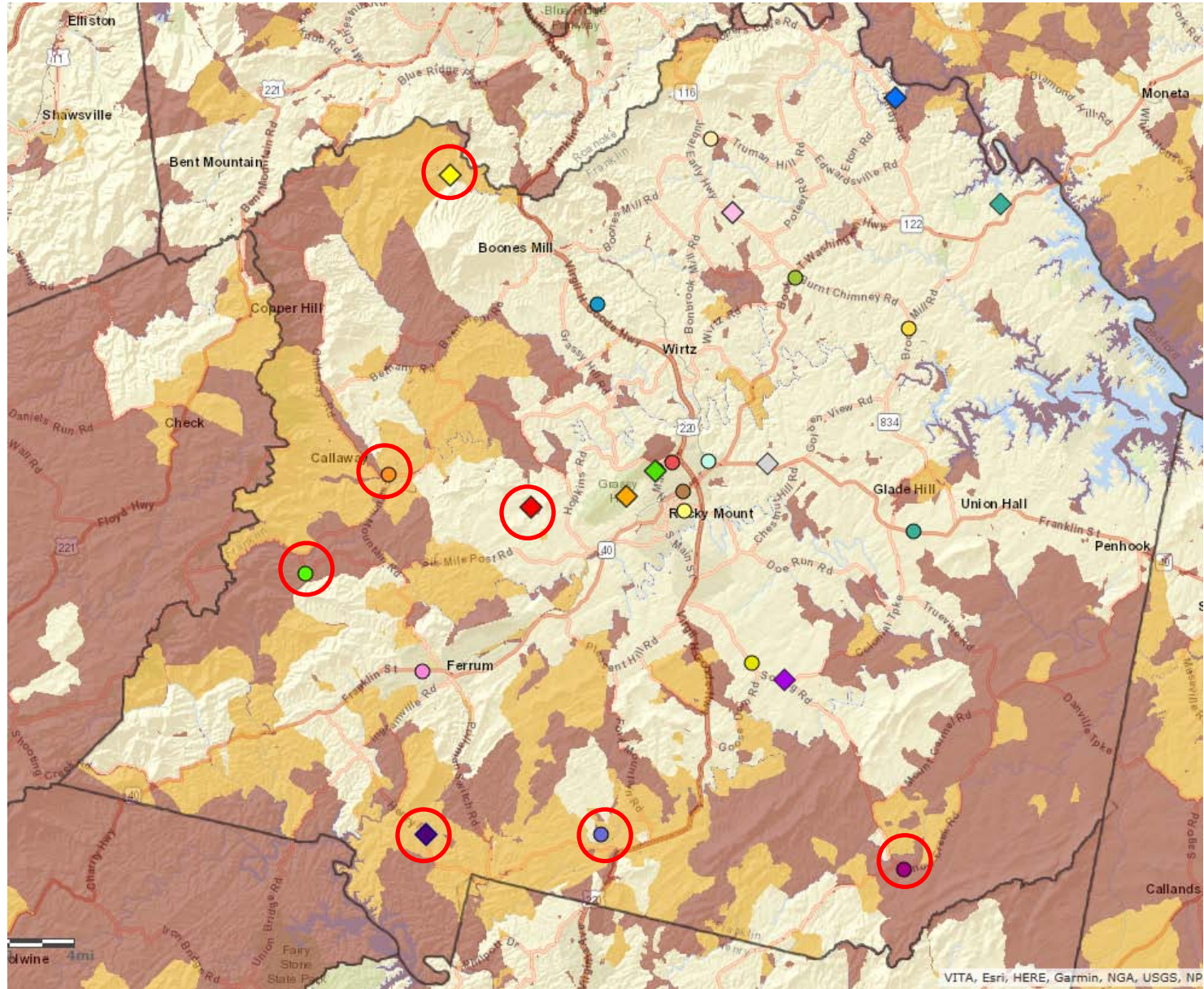
Schools

- Phoebe Needles Educational Center
- Callaway Elementary
- Snow Creek Elementary
- Henry Elementary

Community Centers

- Henry CC
 - Naff CC
 - Coles Creek
- Unserved = Broadband speed below 10 Mbps Download speed

- Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed



Franklin Needs Summary (Cont'd)

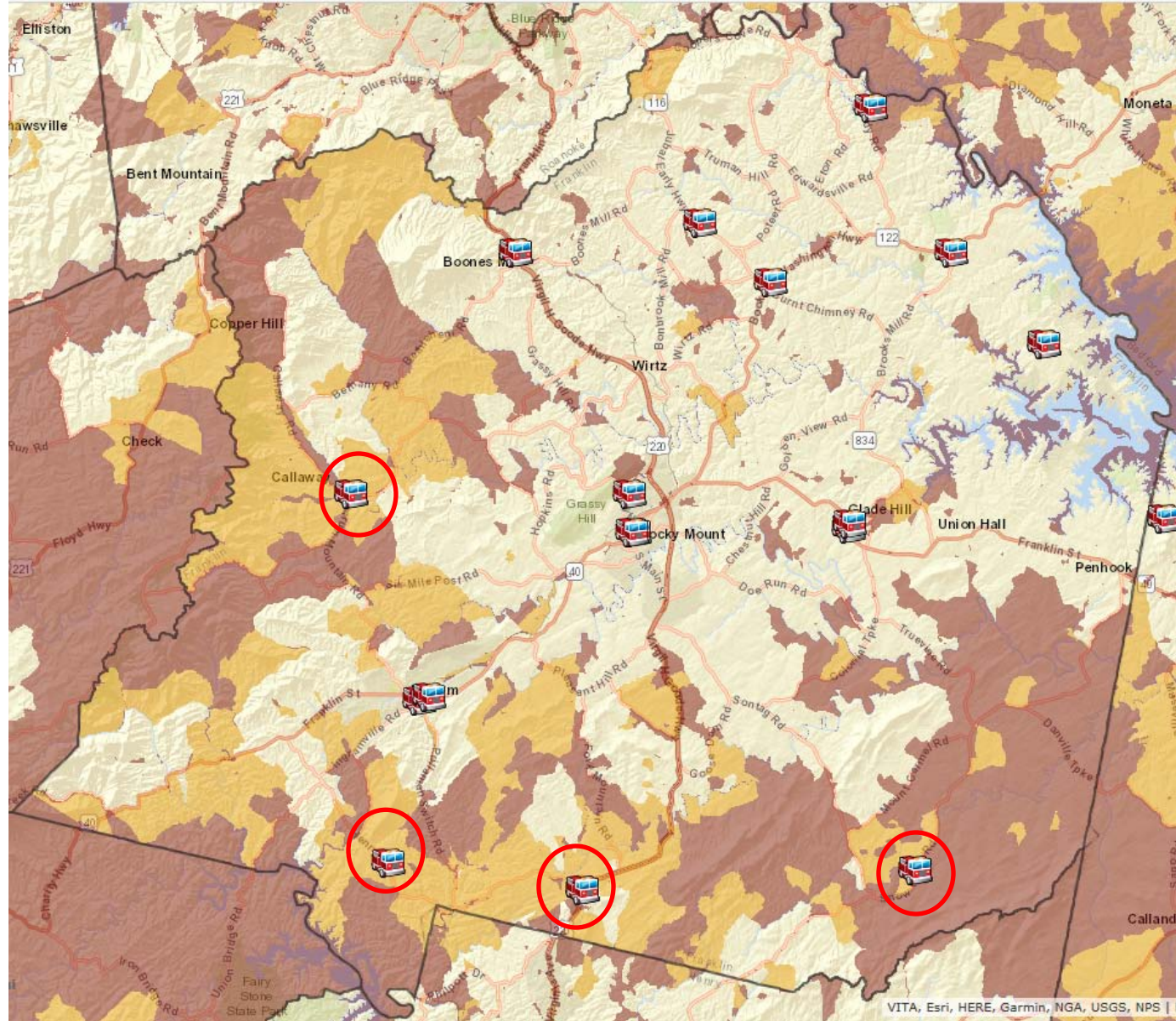
4 Fire/Rescue stations potentially need increased access and capacity

Fire/Rescue Station

- Snow Creek
- Callaway
- Henry
- Fork Mtn

● Unserved = Broadband speed below 10 Mbps Download speed

● Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed





Potential Funding



<https://www.wired.virginia.gov/broadband/resources>

Look Under Funding Options



E-Rate – already participating: February 3 - May 26 (Schools) or July 21 (Libraries and Consortia)

Lifeline Support <http://www.lifelinesupport.org/ls/changes-to-lifeline.aspx> - Open all year

NOW USDA accepting applications for the [Community Connect Grant Program](#) for FY 2017. These grants may be used to provide broadband service in unserved, lower-income and extremely rural areas.

USDA Distance Learning and Telemedicine Program (DLT)
http://www.rurdev.usda.gov/UTP_DLT.html The application window is announced annually

USDA Telecommunications Infrastructure Loans & Loan Guarantees
<http://www.rd.usda.gov/programs-services/farm-bill-broadband-loans-loan-guarantees> **NOTE:**
These loans are for local incumbent providers. Open annually around April

USDA Distance Learning and Telemedicine Program (DLT)
http://www.rurdev.usda.gov/UTP_DLT.html - The application window is announced annually

NOW USAC Healthcare Connect Fund Program
<http://www.usac.org/rhc/healthcare-connect/default.aspx> - Filing Window : Mar 1 – June 30, 2017

DHCD VCI/VTI - <http://www.dhcd.virginia.gov/> - TBA

Next Steps

- Identify and Prioritize Goals Based on Needs
 - Assessment findings need to be conveyed to the BoS.
 - Committee passes their recommendations to BoS, or leaves the decisions to the BoS.
- Determine the role the local government will assume in achieving the goals
 - Review CIT Partnership Models Handout
 - Decision need to be adopted by the COUNTY
- CIT will prepare the Requirements Document and Draft RFP
 - CIT will formally document chosen goals, role, assets to be shared, local considerations etc. to include in RFP
- Seek private partner(s)
 - The County will publish the RFP, evaluate responses and choose partner(s)

Questions? Comments?



Contact Information

Jean Plymale, Broadband Project Manager

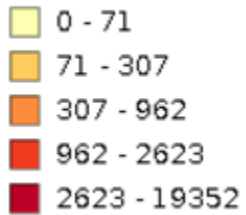
Jean.plymale@cit.org

540-250-2751

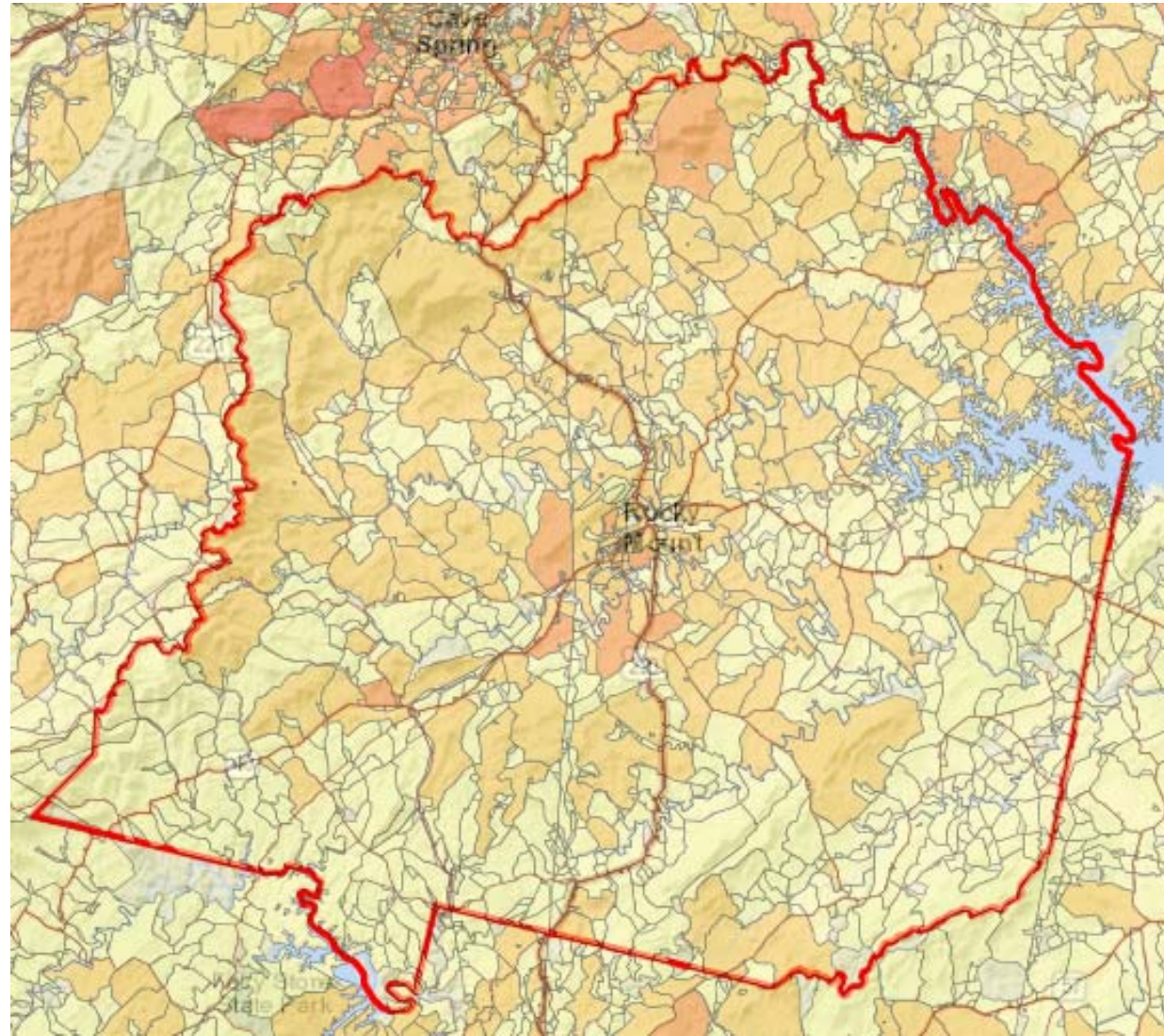


Population Density

2015 Census Population Estimates



NOTE: denser areas in the south and west as those will correlate with unserved areas – to note there is population in those areas albeit limited areas.



COUNTY OF FRANKLIN, VIRGINIA PUBLIC COMMENT NOTICE

The Franklin County Broadband Authority intends to file grant application(s) with Virginia Department of Housing and Community Development (DHCD) under its 2019 Virginia Telecommunications Initiative Program (VATI). In accordance with the VATI Program Guidelines, the Franklin County Broadband Authority is requesting public comments as to its submission of grant application(s).

Franklin County consists of 712 square miles and a population of approximately 56,000 with over 20% of the area that is unserved by broadband as identified in the Center for Innovative Technology's 2017 needs assessment. The County is seeking public-private partnerships to improve broadband coverage and access in the areas of the County that are currently considered unserved. The VATI program defines unserved as areas that have broadband speeds of 10 Mbps download and 1 Mbps upload or less.

In order to provide a record to the Virginia Department of Housing and Community Development, comments should be addressed to Steven Sandy, Director of Planning and Community Development. The preferred methods of comment would be by email to steve.sandy@franklincountyva.gov or by letter sent to Steven Sandy, 1255 Franklin Street, Suite 103, Rocky Mount, VA 24151. Comment will also be received by telephone (540) 483-3027, ext. 2217. These comments will be recorded. Public comment will be open from Friday, November 23, 2018 to Friday, December 14, 2018. A complete list of all of the comments will be sent to VHCD.

DHCD will post electronic copies of all submitted applications to the agency website after the deadline for application submissions has passed and before project approval. Any private sector service provider wishing to request that DHCD deem a proposed project area as ineligible for VATI must submit a challenge with the information required in this section no later than 5:00 p.m. on January 15, 2019. DHCD will have 30 business days to validate a challenge.

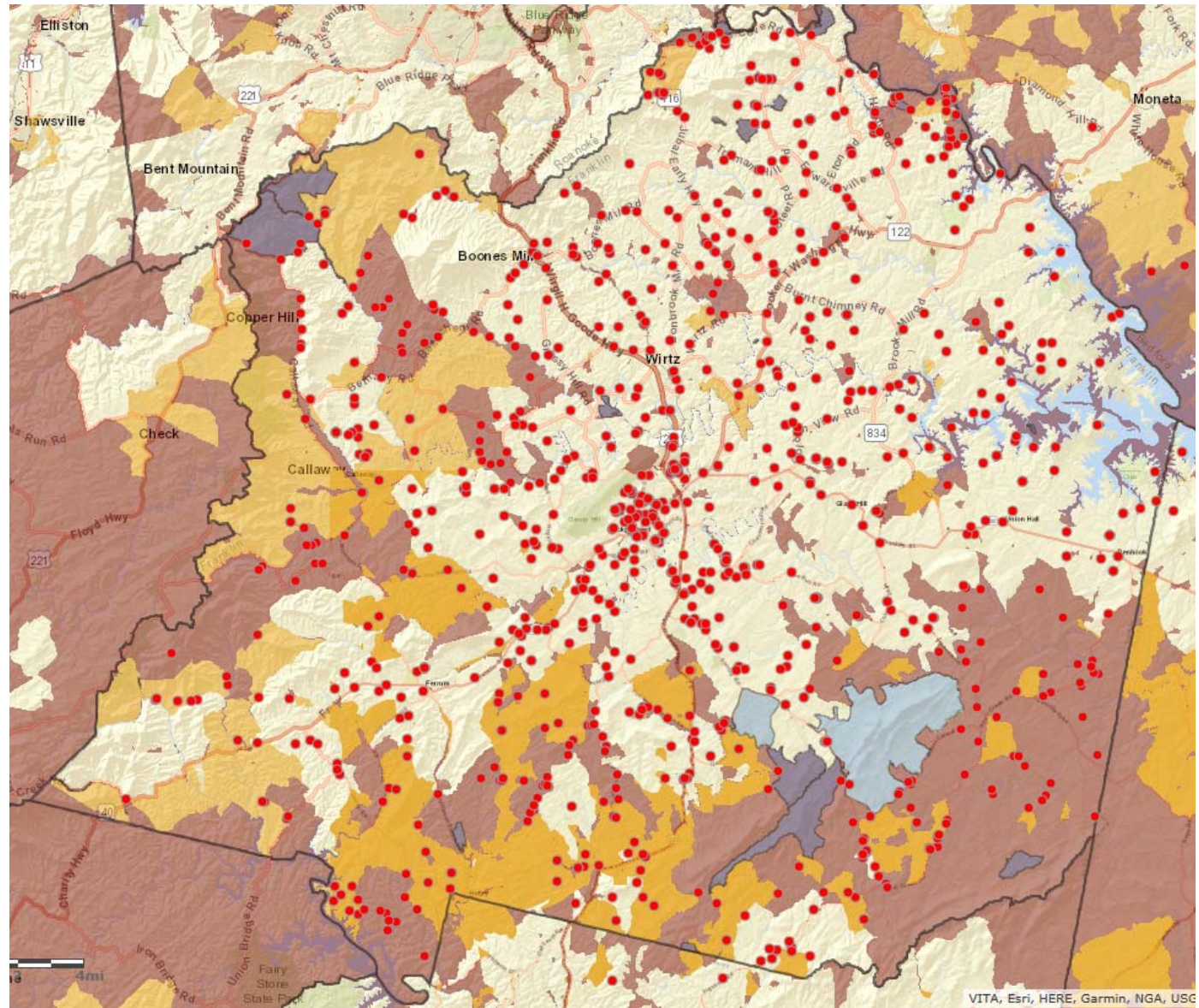
Franklin County Un/Underserved

Do you have Internet Service at Home?

● No.

● Unserved = Broadband speed below 10 Mbps Download speed

● Underserved = Broadband speed between 10 Mbps Download speed and 25 Mbps Upload speed



Dear Mr. Sandy,

I live on top of Windy Gap Mtn.

I have a laptop but no internet service.

I would so much love to be online. I am 6 years old. limited income.

So this Broadband is such a great idea. I never thought I could be on line.

So I am very hopeful. Thank You for all your hard work.

What a blessing it would be to communicate with family far away.

263 Bandy Drive
Hardy, VA. 24101

Windy Gap

Thank You,
Cynthia Hodges

Sandy, Steve

From: Holland, Shirley B. <sbholland@carilionclinic.org>
Sent: Sunday, December 09, 2018 7:13 PM
To: Camicia, Bob; Jacobsen, William D. (Bill); Robertson, Brent; 'district20@senate.virginia.gov'; 'DelCPOindexter@house.virginia.gov'; Cundiff, Tommy; Mitchell, Leland; Sandy, Steve; Sefcik, Madeline; Carter, Mike; Thompson, Ronnie; Brubaker, Cline; Tatum, Tim
Subject: Re: Cell service, broadband service

Thanks for this response, Bob. I have personally experienced what you describe as "cherry picking": in contacting leadership at Verizon in particular, responses have been along the lines of "not being in this year's budget for that tower". It seems that such a basic need would be a public service as is power/ electricity, water or highways, as examples. If private companies aren't able to meet our needs, what can we do to make them more accountable or to encourage more competitive alternatives? It's encouraging to know there may be a public authority or more promising options to the current situation. Is there a role for the public to play? I think there are enough people interested in this need to organize in a way that could be helpful.

Thank you for your consideration and let me know how we can help.

Shirley Holland

From: Bob Camicia <Gillscreek@earthlink.net>
Sent: Sunday, December 9, 2018 2:08 PM
To: Holland, Shirley B.; Jacobsen, William D. (Bill); brent.robertson@franklincountyva.gov; 'district20@senate.virginia.gov'; 'DelCPOindexter@house.virginia.gov'; Cundiff, Tommy; Mitchell, Leland; Sandy, Steve; Sefcik, Madeline; Carter, Mike; Ronnie Thompson; Cline Brubaker; Tatum, Tim
Subject: Re: Cell service, broadband service

This email was sent from outside of Carilion Clinic. ** Do not click links or download attachments unless you know the content is safe. If you are not sure whether this email is safe, contact the Technology Service Center at 540-224-1599 (71599).**

Thank you Shirley for your input on a major issue that is facing rural Virginia. The federal "free-market" model that has been used to allow cellular service to migrate throughout the USA since the late 1970s has been almost totally ineffective for quick service provisioning the rural low-density areas like where we live. And now Broadband service distribution is following a similar model.

The model basically says that a provider will not be required to completely cover an area that it is given, at some cost, for service. Most countries have required service providers to cover the entire area in order to get a license. USA does not. consequently, the providers only cover the most financially profitable customers, i.e., normally those in closely clustered areas such as larger subdivisions or "cherry picking". Some new technologies are starting to potentially allow changes to that model, but this will be a slow and costly, to some group, process.

Currently, help comes in the form of local and state government financial aid, small at this stage, and some periodic minor federal aid. As the Newly appointed Chairman of the Franklin County Broadband Authority and our Authority and committee. We are now pursuing some strategies, with outside consultants, to speed the process up of making service more available.

Thank you again for painting the picture that many of our citizens are facing, and that potential citizens, in the form of people associated with economic development inward-migration, will consider.

Bob Camicia
Chairman - Franklin County Broadband Authority

On 12/9/2018 10:43 AM, Holland, Shirley B. wrote:

Good morning,

I am writing to share with you today's experience.

There are six inches of snow on the ground and six more inches to come, according to the forecast.

This Sunday morning at 8 am, my daughter, husband and I left our Glade Hill home on snow covered roads in very low visibility to travel to Rocky Mount to Carilion Franklin Memorial Hospital. A 15 minute commute took us 45 minutes.

Why were we going out when Virginia was declared a state of emergency and everyone advised us to stay off the roads?

Because we needed phone and internet service.

Our daughter, a graduate student at Duke University, was required to make a presentation to her professors and graduate class at nine am. Through Zoom.

We tested our connections at home and they were too "unstable" to hold.

It's hard to believe, as we approach 2020, that we live in a community where we can't depend on this most important infrastructure. Basic cell service. Basic internet connection. This impacts our ability to be a 'livable' community. It diminishes our ability as a community to tele-commute, to work at home, to grow our small businesses, to be successful.

We need government representatives and community leaders who understand this need and who do everything they can to get us – as taxpayer citizens—the basic services we need.

What can we do? How can we organize to get this changed? How do we advocate for progress?

I know you share this sense of urgency and I thank you for your leadership and persistence.

Is there anything I can do to help?

Thank you and stay off the roads today!

Shirley Holland

600 Jacks Mountain Road

Glade Hill, Virginia 24092

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