

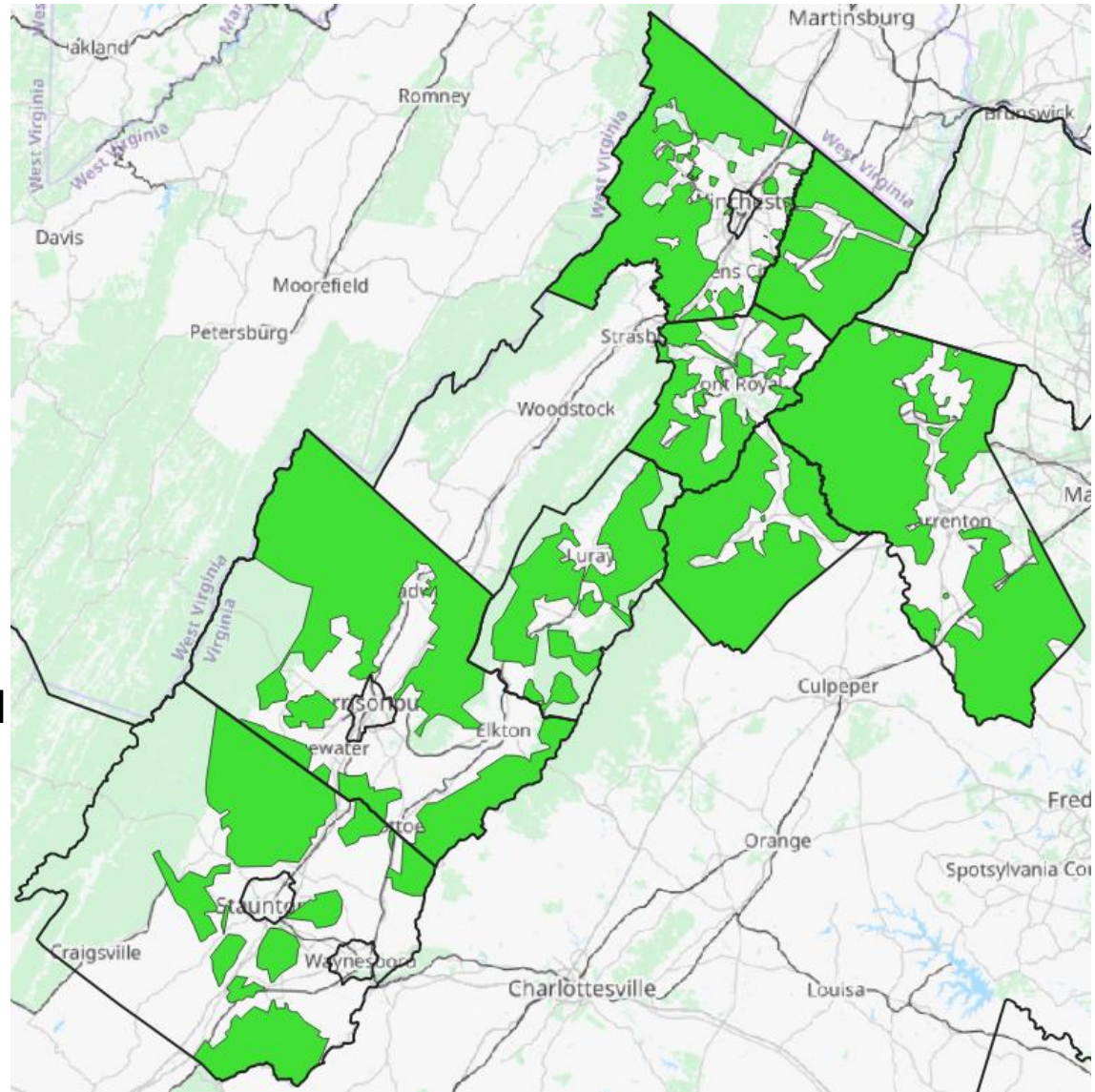


All Points Broadband Clarke Board Update

October 17, 2023

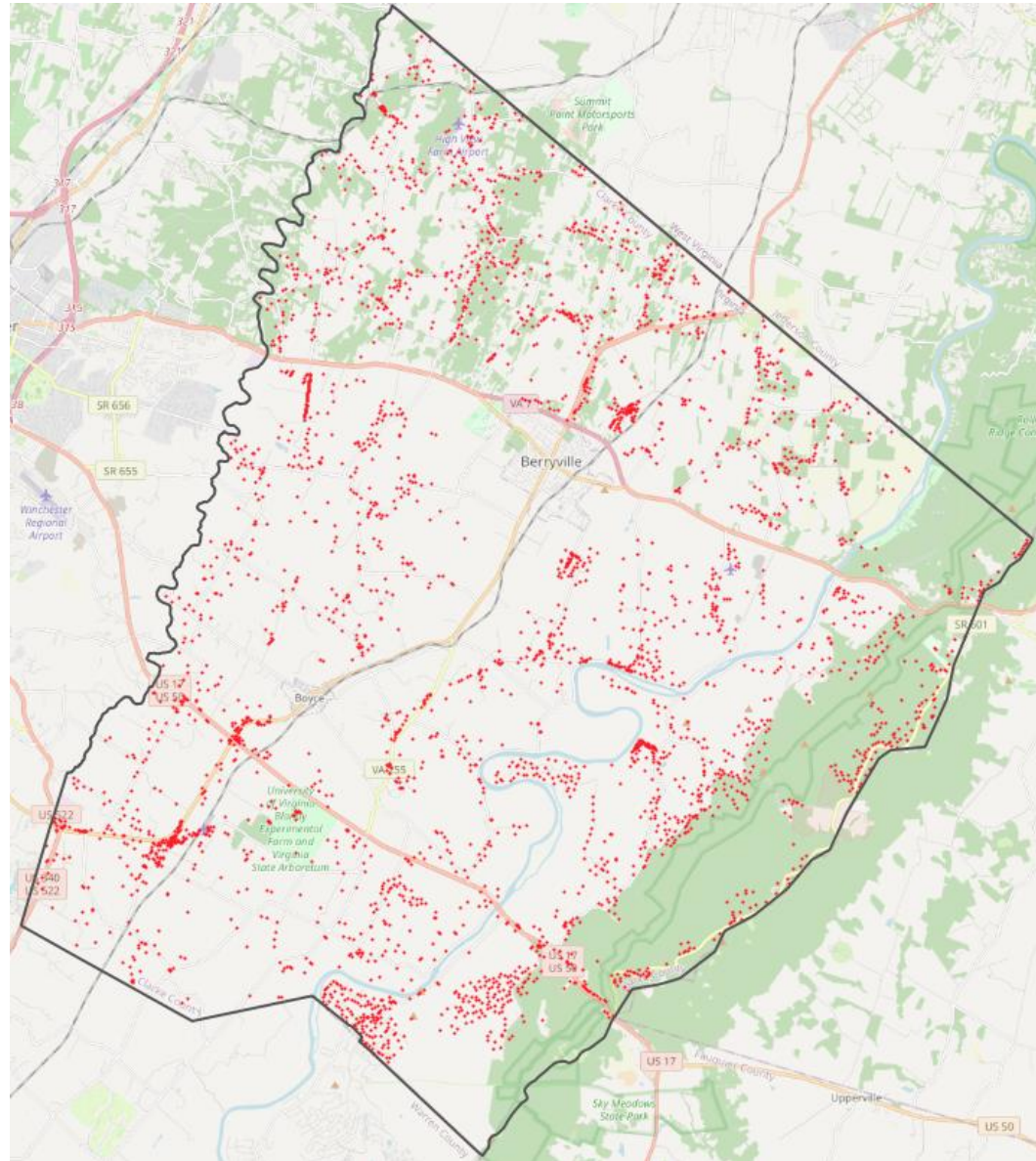
VATI Project Overview

- ~\$300M project
- VATI grant awarded 7/2022, starting 36-month project timeline for substantial completion
- ~3,100 miles distribution fiber and middle mile infrastructure
- Making FTTH broadband available to 41,690 unserved locations
- In partnership with Dominion, Rappahannock Electric Cooperative, Shenandoah Valley Electric Cooperative



Clarke Overview

- Partners:
 - Clarke County
 - NSVRC
 - All Points Broadband
 - Dominion Energy
 - Rappahannock Electric Cooperative
 - Shenandoah Valley Electric Cooperative
- ~270 miles of fiber infrastructure
- Connecting 3,278 currently unserved locations

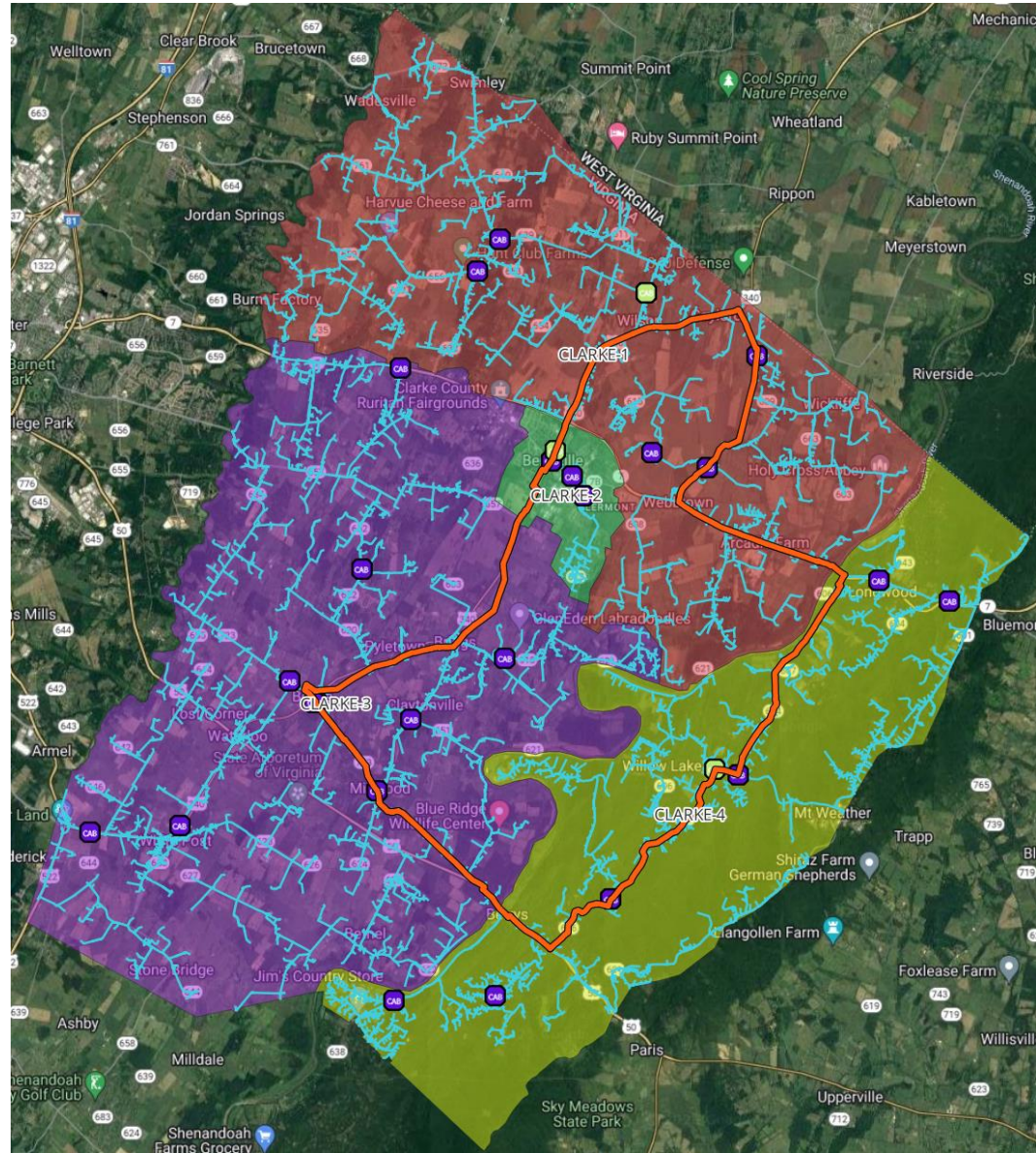


Project Status

- Key dependencies for last-mile deployment:
 - 1) Middle mile capacity in place
 - 2) Utility Make Ready
 - 3) Significant queue of constructable miles
- OSP materials deliveries on schedule and inventory levels consistent with plan
 - Reminder: APB does not seek reimbursement or report progress when materials are purchased, only when specific contract milestones achieved
- Project-wide low-level design and utility pole fielding underway in advance of attachment requests for tens of thousands of poles and make-ready construction for tens of thousands of poles

Countywide Network Layout

- 4 Fiber Service Areas designated based on location density, geography, and network redundancy
- 25 active and passive cabinets
- Redundant countywide fiber ring (orange)
- Field validation complete and QA/QC underway
- 1st VATI contract milestone to be achieved on schedule in Q4 2023



NSVRC Initiative Timeline

- Q3 2022: Low-level design underway
- Q1/Q2 2023: Make ready fielding, engineering and construction commence
- Q4 2023: APB/NSVRC and county partners collaborate to finalize newly eligible locations to add to project
 - Changes in eligibility and base mapping will create opportunity to extend fiber to additional locations
- Q2 2024: Last-mile fiber construction commences
 - Augusta County initial focus of construction activity
- Q1 2025: Projected commencement of Clarke County fiber construction
 - Primary schedule determinant is pole make ready cadence
- Q2 2025: Projected commencement of installations in completed FSAs in Clarke County
- Q3 2025: Substantial completion of last-mile network

What is on a Typical Pole?

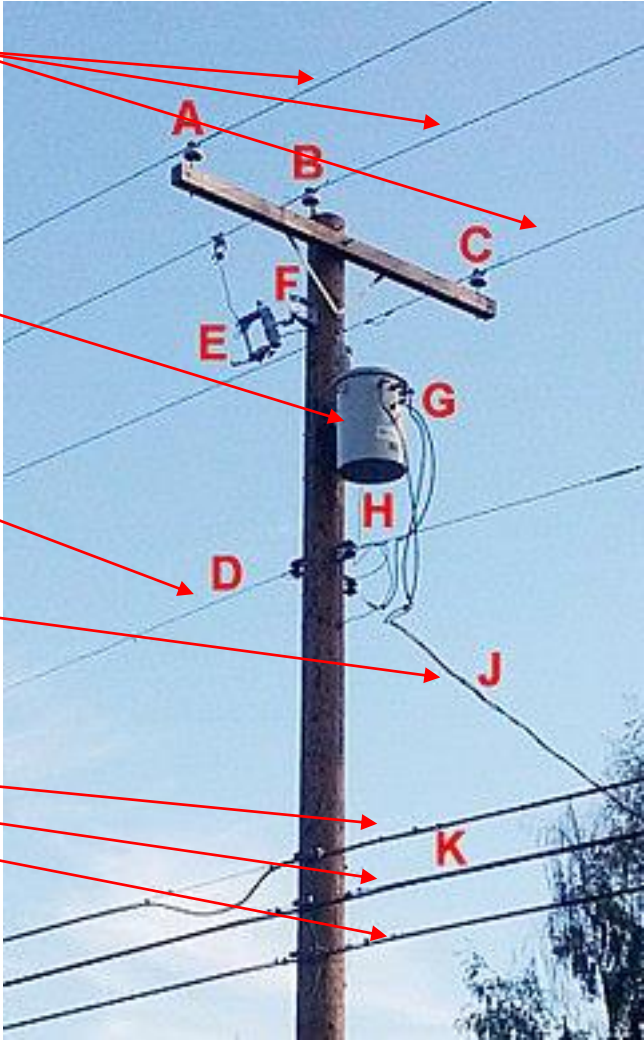
A/B/C: 3-phase primary distribution wires
(higher voltage, carrying power from substation)

G: transformer
(converts high voltage to lower voltage power for use by customers)

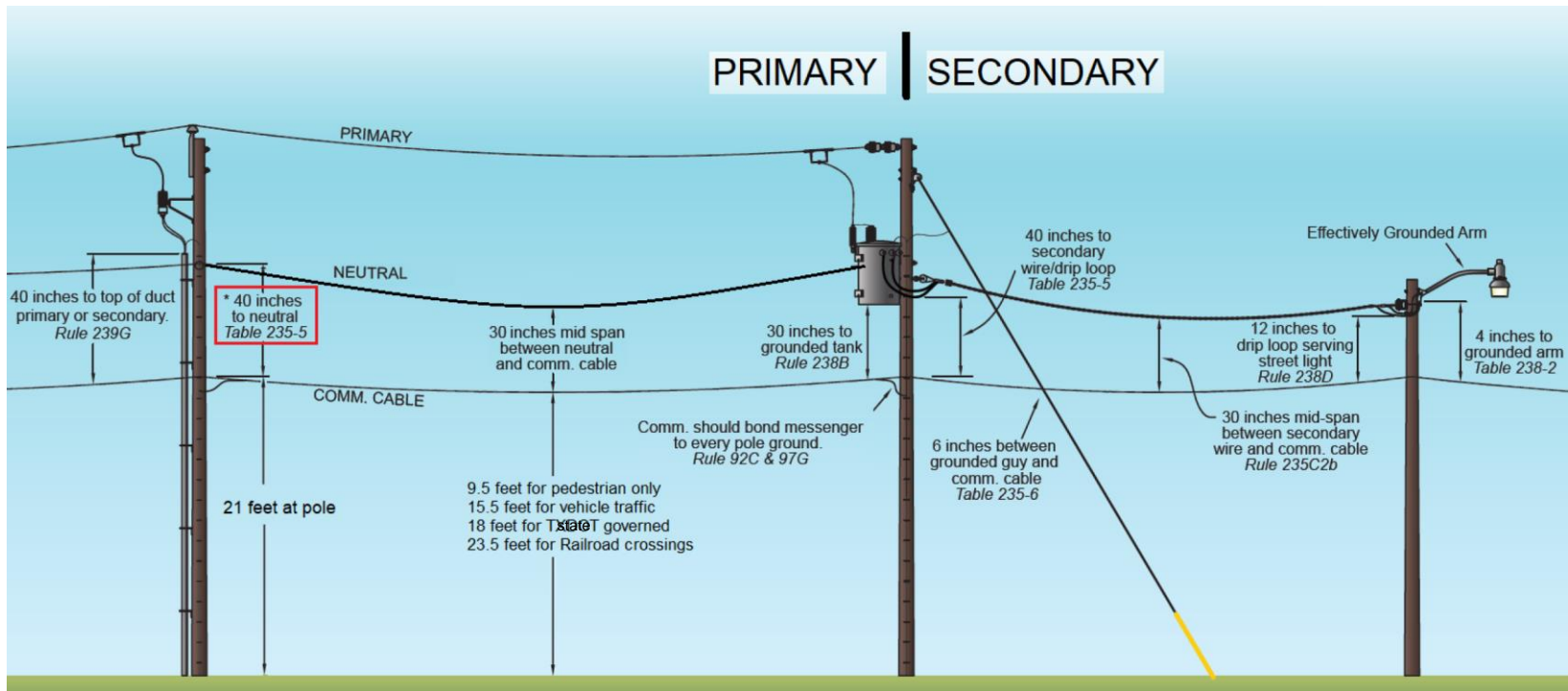
D: power neutral wire
(balances load on electrical system)

J: power service drop
(delivers power to end users)

K: Communications Attachments
(phone, cable and/or fiber)



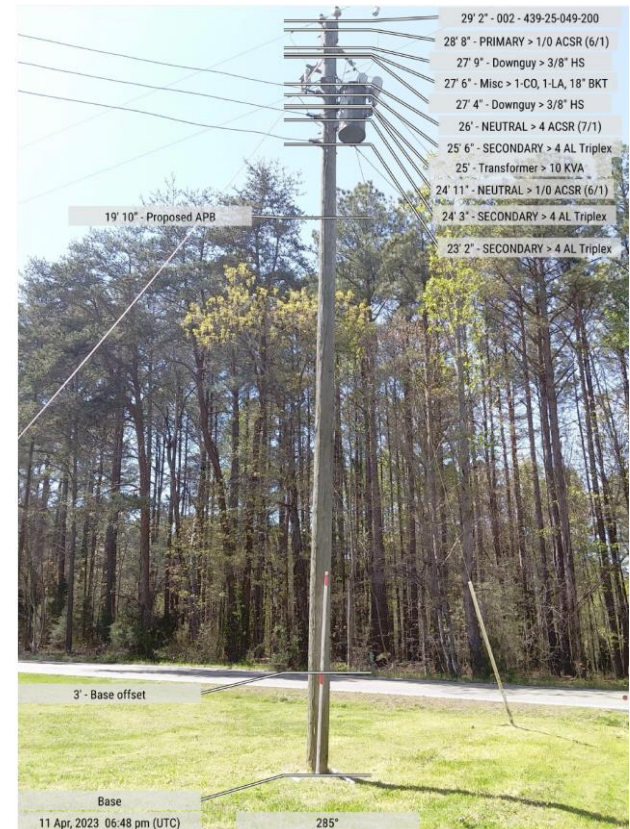
Why is Make Ready Required?



- The National Electric Safety Code (NESC) establishes certain minimum clearances that must be maintained between various components of the electric grid, telecommunications infrastructure, and the ground
- Some utilities condition access to their poles on compliance with requirements in addition to the NESC, such as the requirement to conduct Pole Loading Analysis (PLA) when certain conditions are present (span length, angle change, etc.)

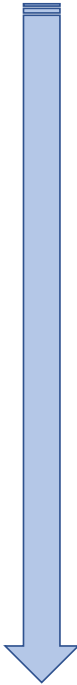
What Does Make Ready Mean?

- Make ready is the process of preparing utility poles to accommodate new communications attachments
- Make ready generally consists of increasing clearances between lines and/or the ground through one or more of the following:
 - 1) relocating communications lines
 - 2) relocating electric equipment
 - 3) adding additional “mid-span” poles
 - 4) replacing existing poles with taller poles
- The first step in the make ready process is pole “fielding”, during which data about current conditions is collected in the field to inform subsequent engineering and analysis



Make Ready Process Overview (oversimplified)

- FCC has established 165-day timeline for “large jobs”
- REC and SVEC have committed to achieving ~1,250 poles/month of NTPs (system-wide)
- APB, REC & SVEC are employing new methods and procedures to meet the shared challenge



Stage	Responsible Party	Activity	FCC Timelines for "Large Jobs"
Fielding	APB (including contractors)	Field survey each pole along route to document existing conditions	
Make Ready Engineering (MRE)	APB (including contractors)	Vendor and APB review fielding results, confirm poles for attachment; prepare/submit application to pole owner	
Pole Owner's Evaluation	Pole owner (frequently outsourced)	Review pole attachment applications. Identify make ready scope of work for electric, existing attachers, and APB. Prepare cost estimates for electric MRC	60 days
Electric Make Ready Construction (MRC)	Pole owner (frequently outsourced)	Pole owner performs make ready construction / pole replacement for its owned assets; at which point an "NTP" is issued	105 days
Communications Make Ready Construction (MRC)	3rd party attachers (frequently outsourced)	3rd party attachers relocate their attachments per approved application. Can be performed by APB through "one touch make ready" (OTMR) process with common approved vendor	30 days
Fiber Attachment	APB (outsourced to contractors)	APB releases installation contractor to hang fiber	

Pole Attachment Status

- To date, APB has completed fielding on 15,364 poles
- 7,834 poles are currently pending pole owner review
- 1,054 poles have received Notice to Proceed (NTP)
- Oldest pending ticket 182 days old, average pending ticket 89 days old
- APB and utility partners ramping make ready cadence to ~4,500 poles/month

TIME OUTSTANDING CLEAR FILTER

Time Outstanding Outliers

OWNER: DOM (blue triangle), SVEC (yellow triangle)

ACCEPTED: Multiple select... NTP: All

SUBMITTED	ACCEPTED	MRC COMPLETE
92 Days	89 Days	84 Days
APPLICATIONS	APPLICATIONS	APPLICATIONS
366	366	64
POLES	POLES	POLES
7834	7834	1054

COUNTY	PART	Ticket Number	Owner	Outstanding Submitted	Outstanding Accepted	Outstanding NTP	Disposition	Pole Count
VA-AUGS	VA-AUGS-1 31	5547125	DOM	182	182	0	2. ACCEPTED	36
VA-AUGS	VA-AUGS-1 6	5585382	DOM	154	154	0	2. ACCEPTED	24
VA-AUGS	VA-AUGS-1 8	5586774	DOM	154	154	0	2. ACCEPTED	22
VA-AUGS	VA-AUGS-1 22	5586874	DOM	154	154	0	2. ACCEPTED	25
VA-AUGS	VA-AUGS-1 10	5587401	DOM	154	154	0	2. ACCEPTED	17
VA-AUGS	VA-AUGS-1 11	5589395	DOM	153	153	0	2. ACCEPTED	25
VA-AUGS	VA-AUGS-1 14	5589855	DOM	152	152	0	2. ACCEPTED	28
VA-AUGS	VA-AUGS-1 15	5592019	DOM	151	151	0	2. ACCEPTED	31
VA-AUGS	VA-AUGS-1 17	5592237	DOM	151	151	0	2. ACCEPTED	36
VA-AUGS	VA-AUGS-1 2	5592434	DOM	150	150	0	2. ACCEPTED	31
VA-AUGS	VA-AUGS-1 56	5589012	DOM	152	148	0	2. ACCEPTED	22
Total				78	76	12		8888

WALL COMMENTS

OWNER: Multiple select... PROJECT | COUNTY: Multiple selections

DISPOSITION: All FSA: All

PRIORITY: All PART: All

OUTSTANDING ACCEPTED: 0 / 329

The volume of make-ready work underway in Virginia (and nationally) is unprecedented

Remaining Eligible Locations Outside the FY22 VATI Project

- The FY22 VATI grant is set for the specific locations included in the polygons included with the application that were not successfully challenged – FY22 VATI grant funding cannot be used for locations outside the approved project
- Because of changes in eligibility criteria and shift to new federal mapping, there are additional locations outside the project area eligible for additional state and/or federal broadband funding in the future
- APB, NSVRC and County staff are actively working to identify specific solutions for newly eligible locations:
 1. APB direct investment
 2. FY24 BEAD program (no County match)
 3. Referral to other programs / providers
- How can Clarke help?
 - Send resident inquiries to [APBfiber.com](https://www.apbfiber.com)
 - Continue sharing data regarding other unserved areas/locations
 - Assume that most recent FCC data is more helpful but not 100% accurate

Customer Preregistration: APBfiber.com

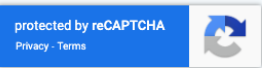
[Check availability](#) > [Select services](#) > [Installation](#) > [Review order](#) > [Sign in](#)

Check Availability at Your Address

Start typing your address in search field.
Addresses inside of a service area are included in the list.

Enter your address, including city, state and zip:

117 Bethel Ln, Boyce, VA 22620-2914, United States

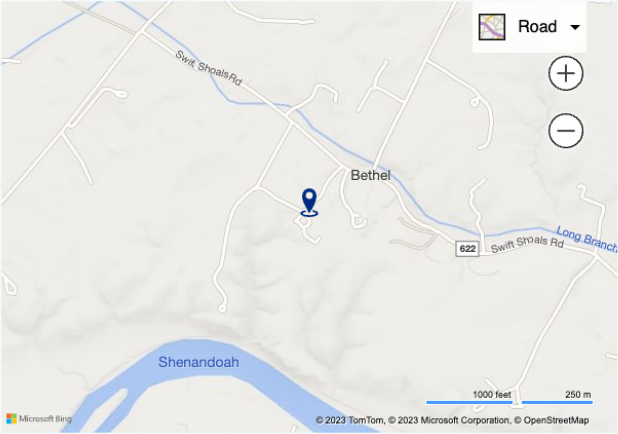


Check address

You are inside of a planned service area.

Services will be available to you soon.

To stay updated on work progress, please provide your contact information.



First Name	Last Name
<input type="text" value="Enter First Name"/>	<input type="text" value="Enter Last Name"/>
Phone Number	Email
<input type="text" value="Enter Phone Number"/>	<input type="text" value="Enter Email"/>
Company (optional)	
<input type="text" value="Enter Company"/>	
Comments (optional)	
<input type="text"/>	

We are on our way:
Service is planned for the address but not yet available. The resident should register the location and APB will notify them ~90 days ahead of serviceability

Preregister:
Remember to enter contact information and click “Go To Survey”

- No obligation
- Opt-out anytime
- Receive email notices

October Mailer To All Project Locations

CLARKE COUNTY HAS PARTNERED WITH ALL POINTS BROADBAND TO BRING YOU FIBER BROADBAND

COMING SOON: BLAZING-FAST FIBER IS HEADED TO YOUR HOME

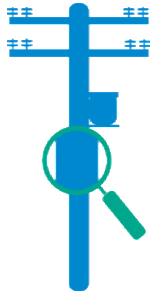
You don't have to live with slow internet! Clarke County and All Points Broadband are working to bring fast, reliable fiber broadband internet to you.

Good news: Your location is included in the project!

Pre-register today at [APBfiber.com](https://www.apbfiber.com) to stay up to date on the project and be notified as soon as fiber is available for purchase.

WHAT IS HAPPENING NOW?

[APBfiber.com](https://www.apbfiber.com)



Make Ready
Utility Poles are being made ready for All Points Broadband fiber.

Construction
Construction crews will build the fiber network once the poles are ready.

Installation
All Points Broadband will contact pre-registered locations 90 days before service is available.



Thank You