



# Northern Neck Regional Broadband Initiative Update

**NNPDC Update  
September 15, 2023**

## Project Status

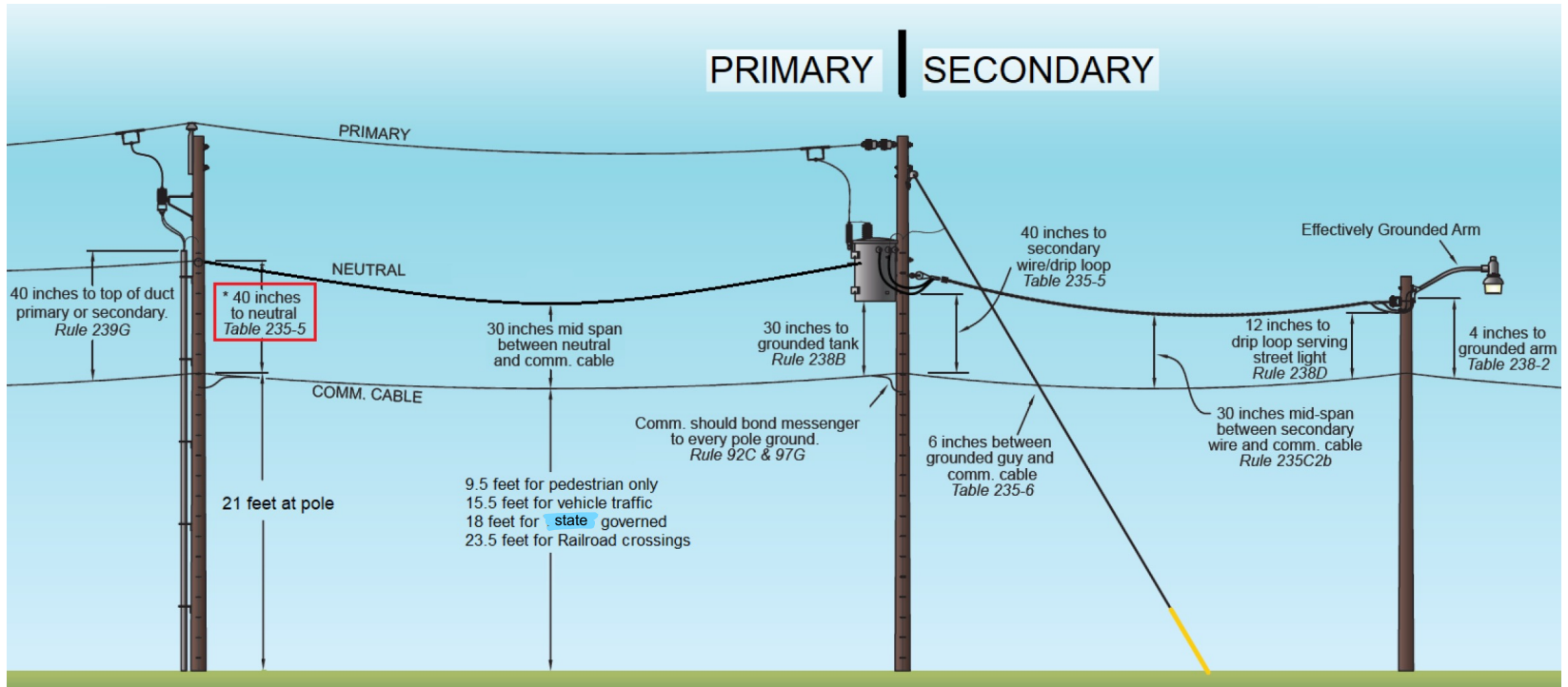
- Key dependencies for last-mile deployment:
  - 1) Middle mile capacity in place
    - Substantially complete and/or on schedule in all counties
    - Water crossings, special permits, final splicing matrices
  - 2) Utility pole make ready process
    - MRC underway in all counties; 75% of poles with NTP
  - 3) Significant queue of constructable “last mile” for RTC
    - Dependent on NTP throughput and underground “locate” work
    - ~196 Constructed; ~206 Released to Construction; ~416 Pending
    - Compared to ~160 miles Released to Construction at last update
- OSP materials deliveries on schedule and inventory levels consistent with plan
  - Innovative supply chain management, including shared NNEC warehouse
- Upcoming events:
  - Sept 22<sup>nd</sup>: Construction ride-along in King George
  - Sept 27<sup>th</sup>: First Customer Lighting in Northumberland
  - Oct 16<sup>th</sup>: NNPDC Regional Update
- Time to NTP for remaining poles is exceeding expectations; however, APB & NNEC presented best practice for make-ready at Rural Broadband Conference on 9/14.
- Preconstruction Milestone for Phase II approved by DHCD

# Network Cabinet Installation

- Located within VDOT right of way on pole or pad mounted on private easement
- Most are passive cabinets without power requirement
  - Powered cabinets typically located near “middle mile”
- Good location for supervisor site visit in all counties



# 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.)

# Make Ready Process Overview (oversimplified)

Stage	Responsible Party	Activity	(1) FCC Timelines for "Large Jobs"
Fielding	(2) ISP (including contractors)	Field survey each pole along route to document existing conditions	
Make Ready Engineering (MRE)	(2) ISP (including contractors)	Vendor/ISP review fielding results, confirm poles for attachment; prepare/submit application to pole owner	
Pole Owner's Evaluation	(2) Pole owner (frequently outsourced)	Review pole attachment applications. Identify make ready scope of work for electric, existing attachers, and ISP. Prepare cost estimates for electric MRC	60 days
Electric Make Ready Construction (MRC)	(2) 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)	(2) 3rd party attachers (frequently outsourced)	3rd party attachers relocate their attachments per approved application. Can be performed by ISP through "one touch make ready" (OTMR) process with common approved vendor	30 days (3)
Fiber Attachment	(2) ISP (outsourced to contractors)	ISP releases installation contractor to hang fiber	

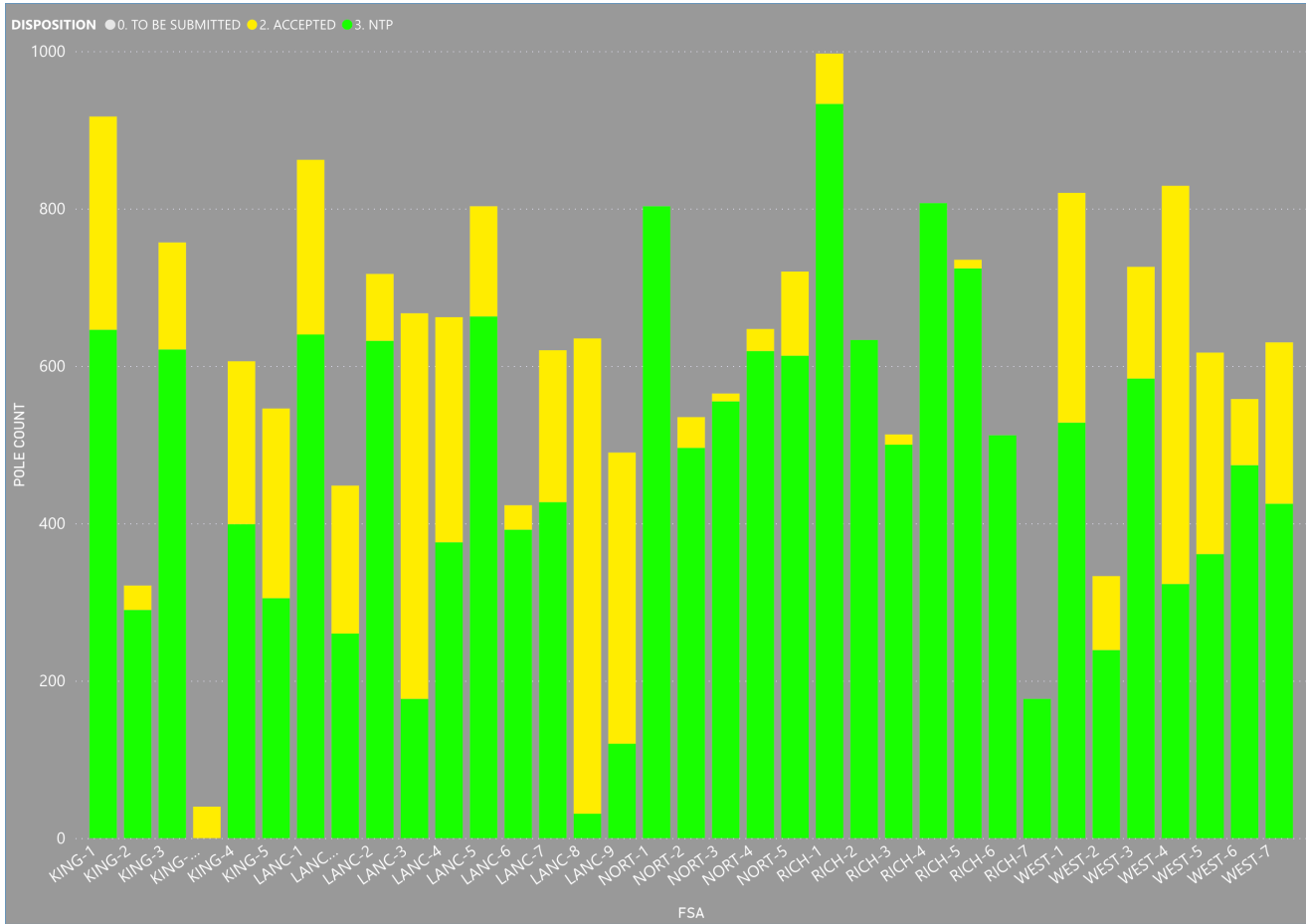
1) FCC's make-ready timelines apply to investor-owned utilities (DEV & AEP) and are the baseline for other pole owners (cooperatives, etc.)

2) Backdrop of unprecedented demand for materials, engineering and construction labor, trends which will accelerate as BEAD funds flow through individual states

3) FCC's OTMR rules intended to reduce delays caused by incumbent attachers

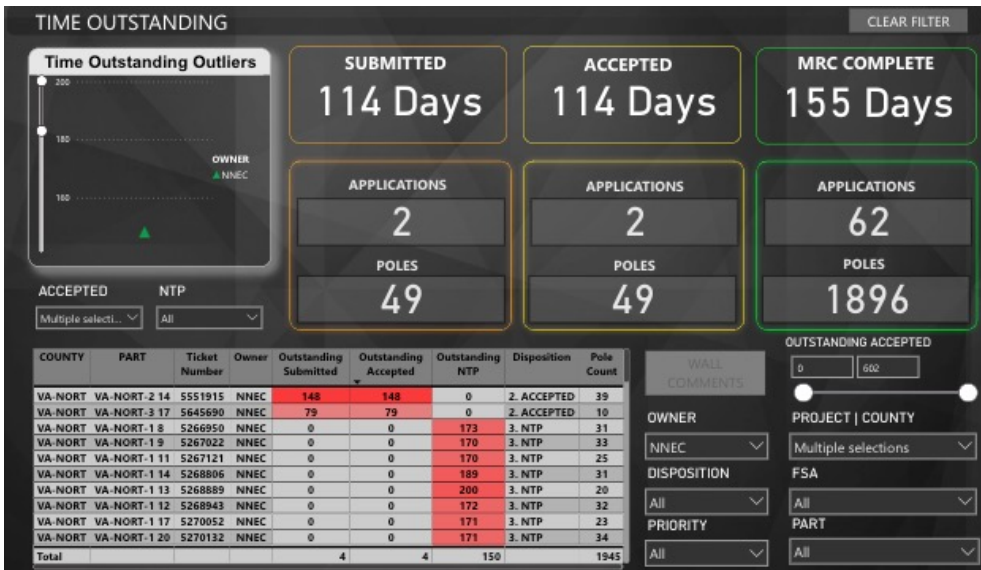
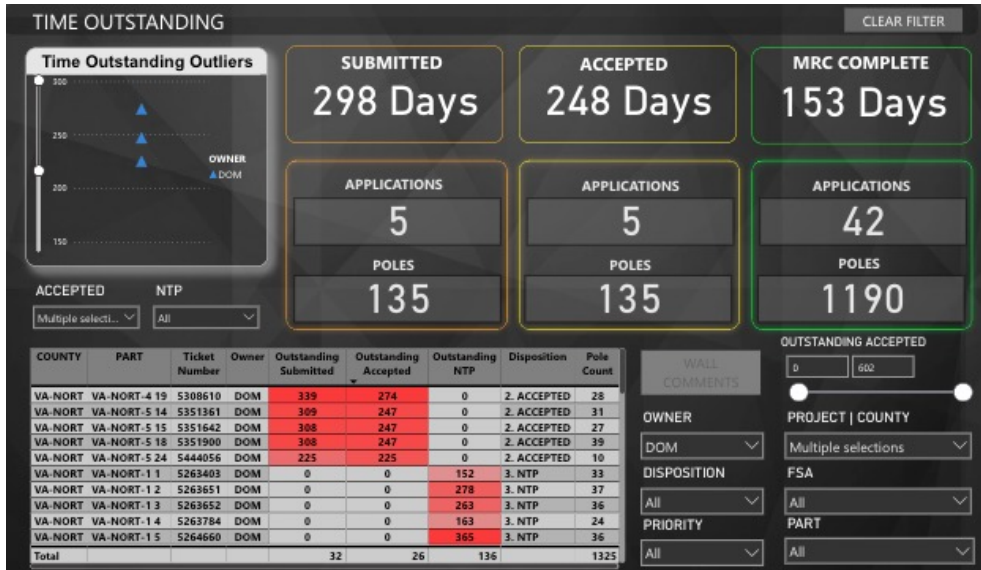
# Pole Attachment Application & MRC Status

- Typical period between “accepted” and “NTP” is approximately 120-165 days
  - Outliers beyond 120-165 days due to unforeseen circumstances disrupt the Release to Construction cadence (ie, incomplete RTC until the full bar is green)



# Make Ready Examples: Northumberland

- Service isn't available until the entire FSA is ready even though ~3k poles have NTP
- APB is waiting for NTP on 184 poles
- The pending applications have been in DEV's queue an average of 248 days and NNEC's for 114 days
- This is why last-mile fiber construction is ~60 days behind schedule



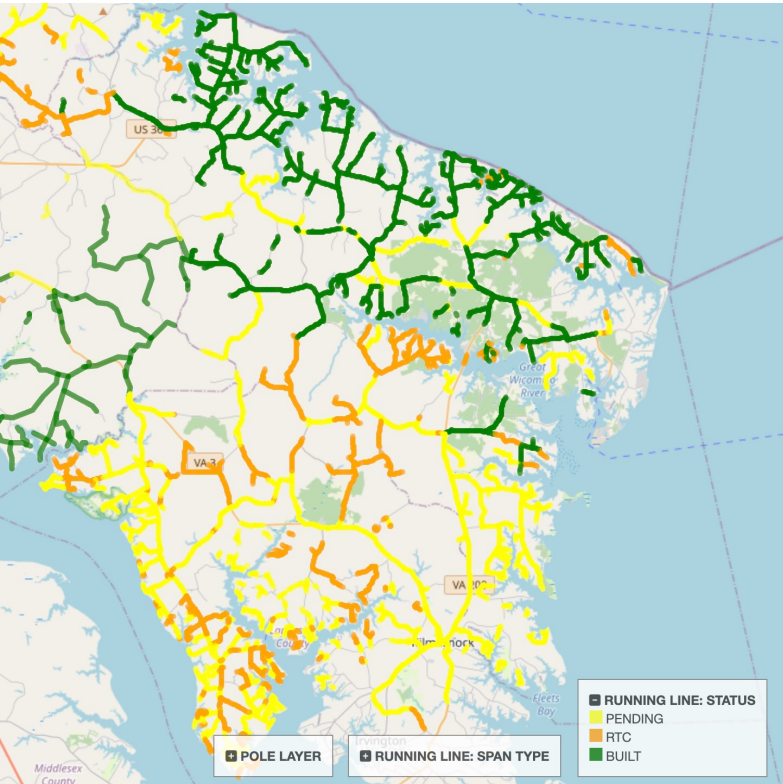
# Release to Construction Overview

- Release To Construction (RTC) Maps of “Last Mile” Fiber Construction (Does not include DEV “middle mile”)
  - Yellow indicates “Pending” release to construction crews
    - Could be dependent on underground permit, utility pole attachment approval, or to be included with adjacent miles of construction to meet construction demand (ie, a sufficient queue of permitted miles in sequence)
  - Orange indicates “RTC” status
    - Construction is likely underway or imminent on any particular day
    - Fiber construction may be completed but not yet passed inspection and full invoicing cycle
  - Green indicates “Built” status of last mile fiber – either underground or aerial
    - Construction complete & passed inspection. Report completed by vendor and verified by APB.
    - Does not necessarily mean the built fiber is transmitting broadband data
- Utility Pole Make-Ready Dependencies from Joint Use Database
  - Green indicates NTP received and no dependency on 3<sup>rd</sup> party attachment move
  - Yellow dots or lines indicate a pole attachment application has been accepted but not yet approved by the respective pole owner. The Notice to Proceed (NTP) has not yet been issued. Communications attachers, such as APB, do not know when an NTP will be issued until the day it is issued.
  - Red dots or lines indicate that an NTP has been issued but there is an existing communications attacher whose equipment needs to be relocated prior to APB last mile fiber construction.
    - APB implements One Touch Make Ready (OTMR) for 3<sup>rd</sup> party communications attachments whenever possible to not delay the last mile fiber construction; however, that option depends on the 3<sup>rd</sup> party attacher on every single utility pole.
- Customer Installations are expected begin in late September north of the Wicomico River; southern sections of the county will be available for installations as early as December 2023 up until May 2024, depending on the make-ready process throughput
  - As previously presented to the County, locations eligible for BEAD funding have not yet been determined

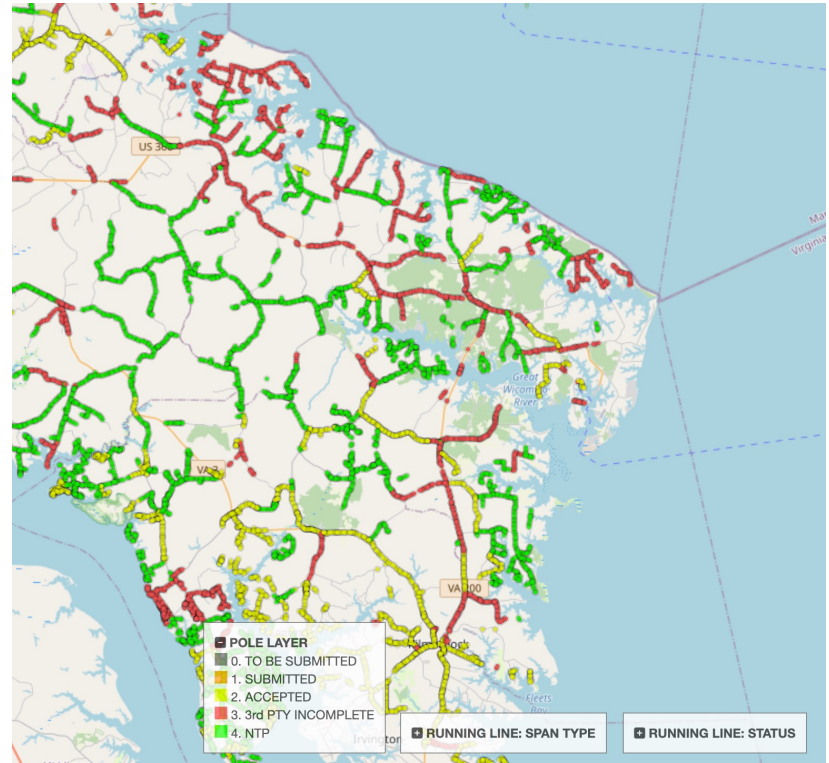


# RTC and Pole Status - Northumberland

## Release to Construction

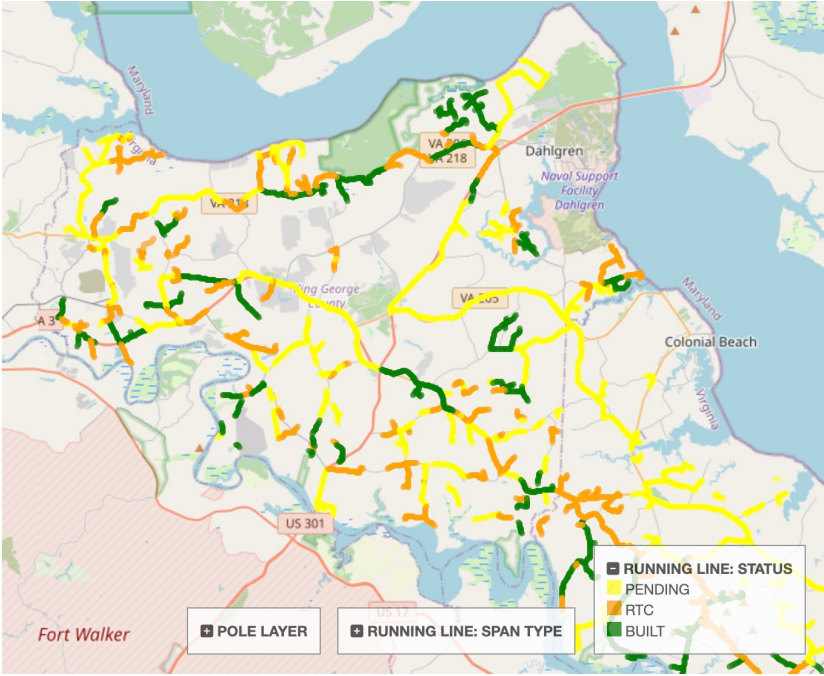


## Utility Pole Attachment Application Status

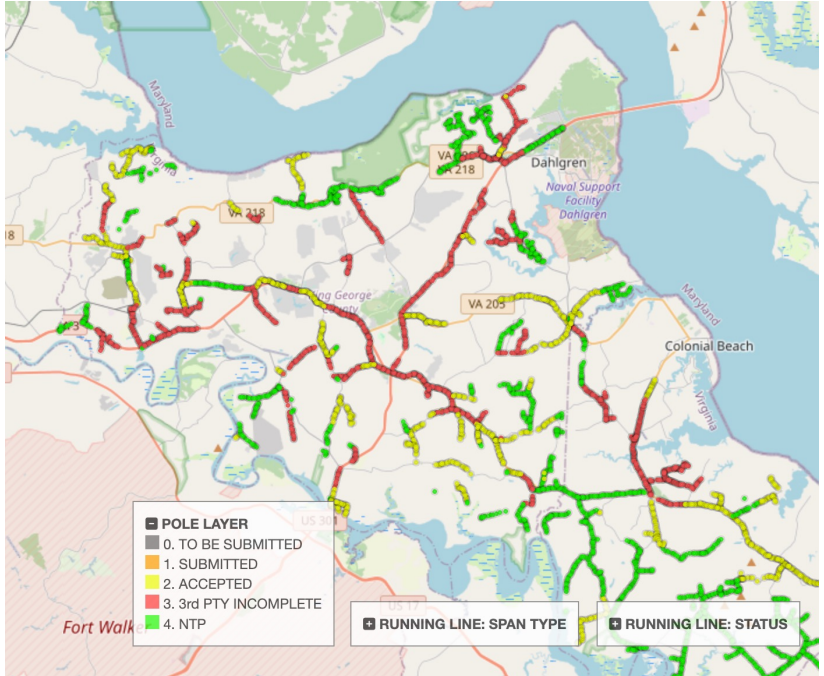


# RTC and Pole Status – King George

## Release to Construction

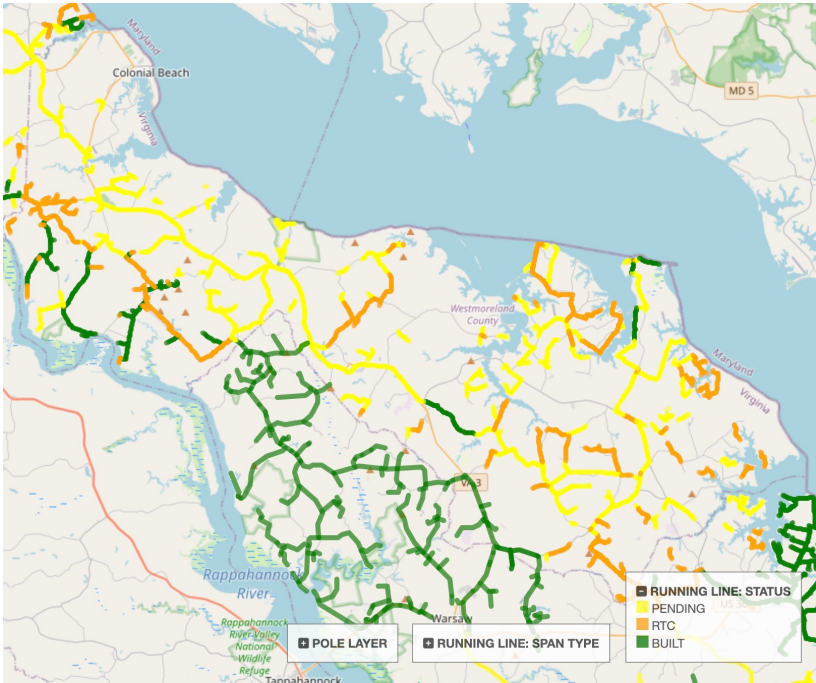


## Utility Pole Attachment Application Status

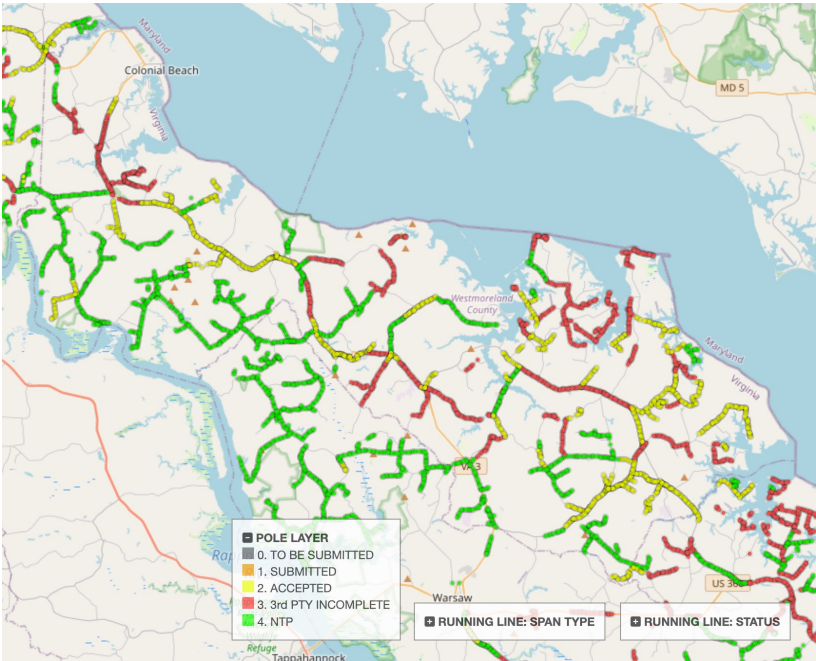


# RTC and Pole Status - Westmoreland

## Release to Construction

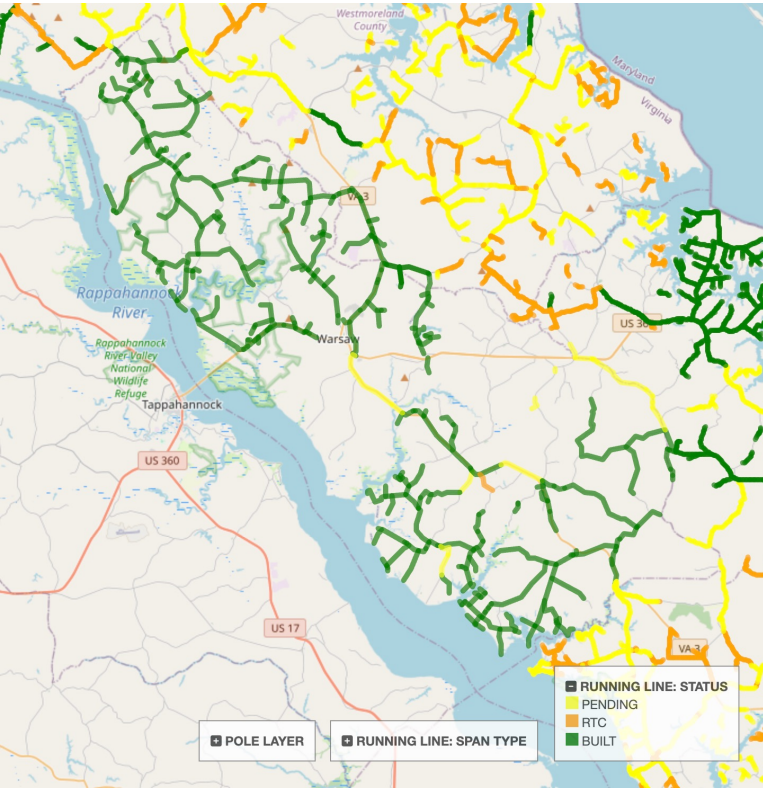


## Utility Pole Attachment Application Status

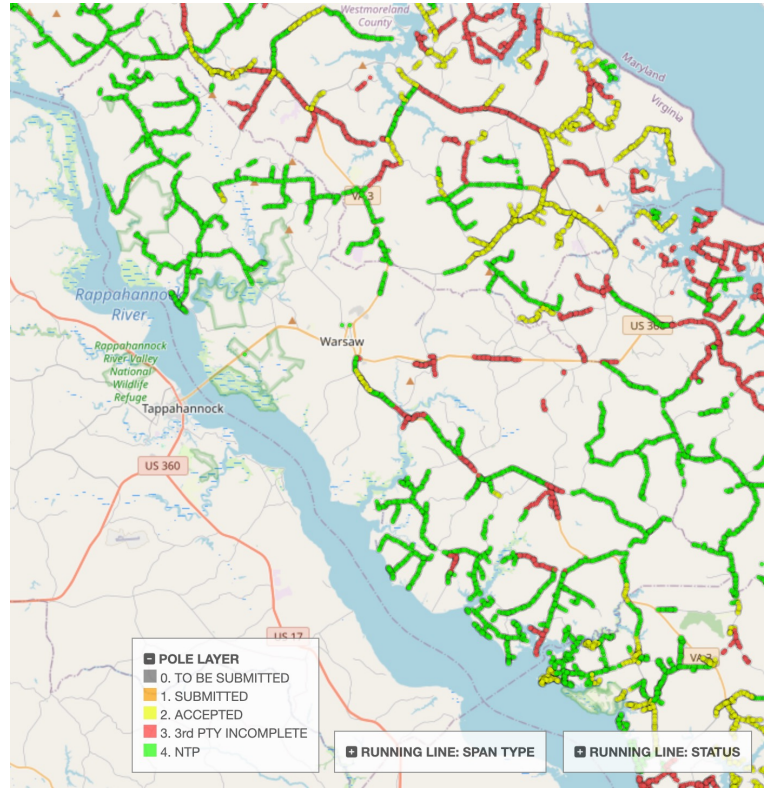


# RTC and Pole Status - Richmond

## Release to Construction

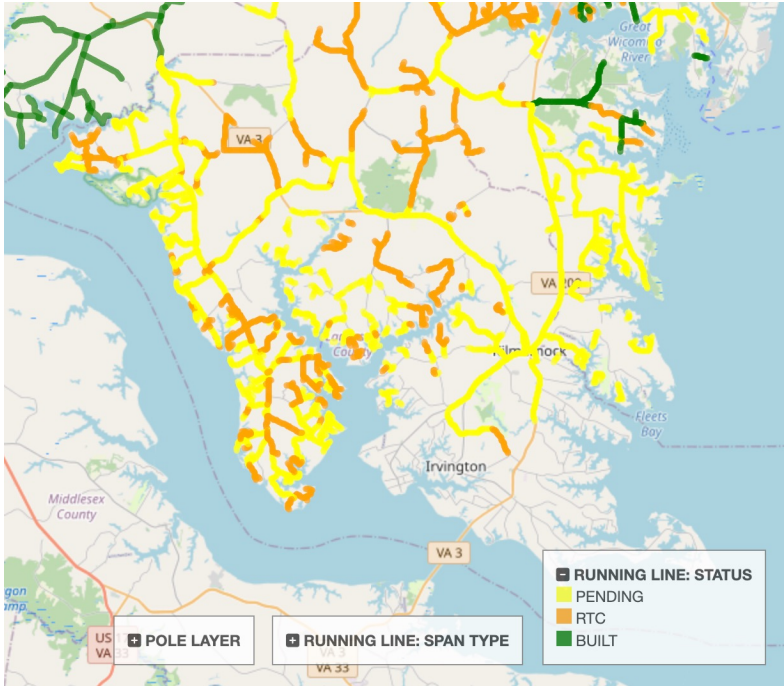


## Utility Pole Attachment Application Status

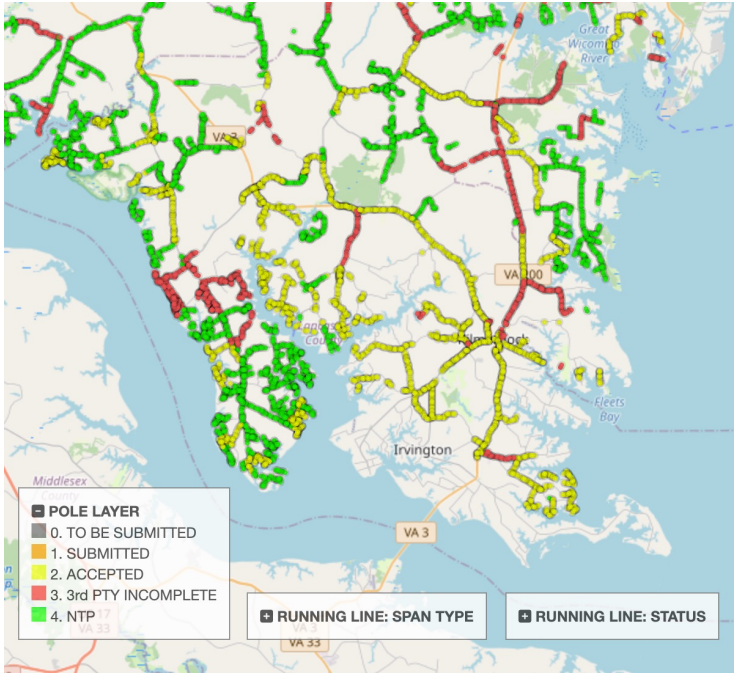


# RTC and Pole Status - Lancaster

## Release to Construction



## Utility Pole Attachment Application Status



## Remaining Timeline of Last-Mile Construction

- September 2023: Network Lighting Event - Northumberland
- October/November 2023: Substantial completion of northern Northumberland
- November 2023: Network Lighting Event - King George
- December 2023: Network Lighting Event – Westmoreland
- January 2024: Substantial Completion of King George Phase I & II
- March 2024: Substantial Completion of Westmoreland network
  - Network Lighting Event - Lancaster
- May 2024: Substantial Completion of Lancaster network and remainder of Northumberland network
- June 2024: DHCD VATI Closeout reports

## Service Levels and Affordability

- \$30/month discount to any household that qualifies for the Affordable Connectivity Program (ACP). Qualifiers include:
  - Household income of \$62,080 or less for a family of 5
  - Household with dependent receiving free or reduced school lunch (CEP)
  - [Affordableconnectivity.gov](https://affordableconnectivity.gov)
- Prior to offering broadband service, residents will have the opportunity to confirm ACP eligibility and receive discount
  - Managed by a 3<sup>rd</sup>-party but hosted on All Points website customer portal

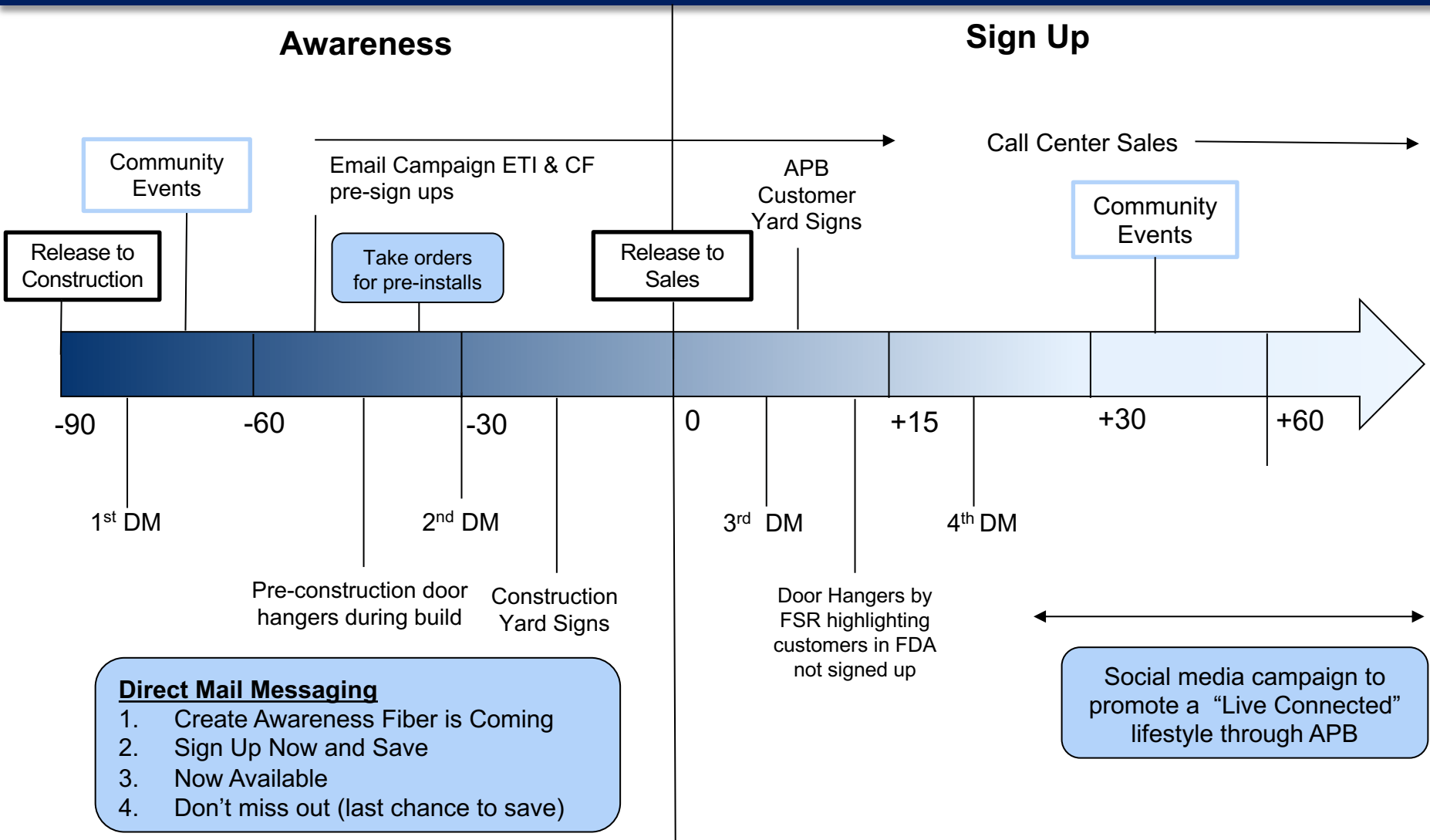
- Residential Service Levels:

<b>Service Tier</b>	<b>ACP Pricing</b>	<b>Undiscounted Pricing</b>
• 50x50 Mbps	\$29.99	\$59.99
• 100x100	\$59.99	\$89.99
• 1000x1000	\$99.99	\$119.99

- Customer contribution fee for Standard Installation
  - \$99 within 500 feet, \$0/ft between 500-1,000 feet, \$2/ft beyond 1,000 feet
  - In-home portion scheduled at customer's convenience

# APB Go To Market Approach

## ANTICIPATED TIMELINE (USING DAYS FROM RTS):





# Customer Sign Up

## CHECK AVAILABILITY



[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:

16699 History Land Hwy Warsaw Virginia 22572 United States

Check address



We are a part of The Affordable Connectivity Program (ACP). ACP helps low-income households pay for broadband service and internet connected devices. [Learn more](#)

### Check Availability:

After clicking the get started button on the main apbfiber.com page, the customer will be prompted to enter their address.

# Customer Sign Up

## SCENARIO 1: SERVICE IS CURRENTLY AVAILABLE

### Check Availability at Your Address

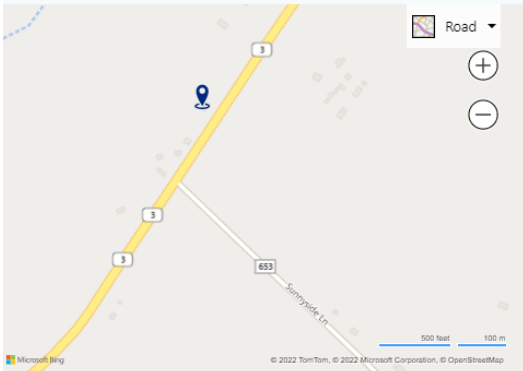
Start typing your address in search field.  
Addresses inside of a service area are included in the list.

Enter your address, including city, state and zip:

16699 History Land Hwy Warsaw Virginia 22572 United States

Check address

✔ Great news - You may now sign up for services.



### Contact information

Enter your contact information.

First Name  
Enter First Name

Last Name  
Enter Last Name

Phone Number  
Enter Phone Number

Email  
Enter Email

Company (optional)  
Enter Company

Comments (optional)

I would like to apply to Affordable Connectivity Program (ACP). [Learn more](#)

### Update billing information

Different billing address  
Enable if you want to specify different billing address

Select services >



## Great News:

Service is currently available at this address. The customer will enter their contact information and proceed to select their services pay and schedule service time frames.

# Customer Sign Up

## SCENARIO 2: SERVICE WILL BE AVAILABLE SOON


### 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:

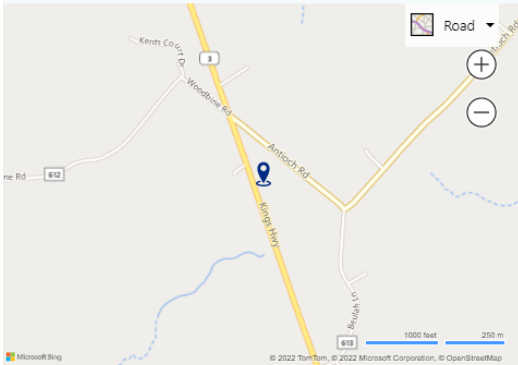
24465 Kings Hwy, Warsaw, VA 22572-4310, United States

Check address

 You are inside of a planned service area.  
Services will be available to you soon.

### Want to receive updates as we grow?

We'll contact you as we expand our services.



First Name  Last Name

Phone Number  Email

Company (optional)

Comments (optional)

Street Address 1  City

Street Address 2 (optional)  State

Street Address 3 (optional)  Zip code

Send



### We are on our way:

Service is currently unavailable today at this address. However, the customer should register the location so APB will alert them the moment they are able to receive services.



Thank You