



VIRGINIA HOUSE
APPROPRIATIONS
COMMITTEE

CHAIRMAN BARRY D. KNIGHT

November 14, 2023

ACHIEVING UNIVERSAL BROADBAND ACCESS?

Prepared By

House Appropriations Committee Staff

LEGACY FEDERAL BROADBAND PROGRAMS

Connect America Fund I and II (2011, 2018)

- Funding to largest telecommunication companies to bring service to high-cost areas (Phase I)
- Competitive auction among telecommunication providers in designated high-cost areas (Phase II)
- Virginia: 44,571 connections anticipated | + \$100.0 million federal investment over 10 years

Rural Development Opportunity Fund (2020)

- Competitive auction among telecommunication providers in designated high-cost areas
- Virginia: 186,475 connections anticipated | + \$230.0 million federal investment over 10 years

Note: Other federal agencies provide resources to help build broadband infrastructure, such as NITA, USDA, HUD, Treasury, and HHS.

STATE BROADBAND PROGRAMS

Virginia Telecommunications Initiative

- Authorized by Appropriation Act (2016) | Administered by the Department of Housing and Community Development (DHCD)
- Invests in infrastructure projects to extend service to unserved locations through public-private partnerships to make projects economically feasible; “last mile” connection to an end user
- Created in 2016 with \$935.0 million of state funds invested in projects to date

Line Extension Customer Assistance Program

- Authorized by Appropriation Act (2020) | Administered by DHCD
- Covers the cost of extending internet service to low-income customer homes in instances where the distance exceeds the ISP’s standard for connection drop length
- Created in 2021 with about \$1.0 million invested in projects to date

GO Virginia

- Authorized by Appropriation Act (2018) | Administered by DHCD
- Invests in regional planning for infrastructure development, “middle-mile” projects (doesn’t connect directly to an end user location) in partnership with the private sector
- Created in 2020 with \$5.2 million in investments to date

STATE BROADBAND PROGRAMS CONTINUED

Virginia Business Ready Sites Program

- Authorized by Virginia Economic Development Partnership Authority Guidelines | Administered by VEDP
- Invests in infrastructure to extend broadband and service to eligible economic development sites in Virginia
- Created in 2022 with no direct investments to date

Utility Leverage Program

- Authorized by Code of Virginia | Administered by the SCC and DHCD
- Allows utilities to recover costs for “middle mile” projects (doesn’t connect directly to an end user location)
- Created in 2019 (pilot)

Note: Not a comprehensive list of programs administered by the state to support Broadband deployment. Excludes Community Development Block Grant funds, Appalachian Regional Commission, Virginia Pooled Financing Program, etc.



VIRGINIA TELECOMMUNICATIONS INITIATIVE

VIRGINIA TELECOMMUNICATIONS INITIATIVE (VATI)

- VATI has been the state's primary vehicle for broadband deployment since its creation in 2016
- Projects are structured as a public-private partnership where state resources offset the cost for ISPs to extend broadband infrastructure to locations where it is not economically feasible for an ISP to do so alone
- VATI contracts are between the state, the local government, and the ISPs with funding going to the localities on a reimbursement basis for connections, and typically are structured over 18 months with contract extensions
- Historically, VATI investments have been targeted to unserved areas
 - Unserved defined as areas lacking speeds of 25/3 Mbps until FY 2023
 - New VATI standard defines unserved as locations without access to 100/20 Mbps speeds
- Due to the VATI program, Virginia is recognized as a national leader in broadband deployment, and has been able to deploy federal resources more quickly than other states

VATI PERFORMANCE METRICS

100 projects funded under the VATI Program since 2017

35 active projects with **55,420** connections

65 active projects with **341,218** obligated connections

\$173.1 million invested from state general funds

\$680.9 million invested from federal funds*

\$1.2 billion local and private sector match

Source: Department of Housing and Community Development, Data as of October 15, 2023.

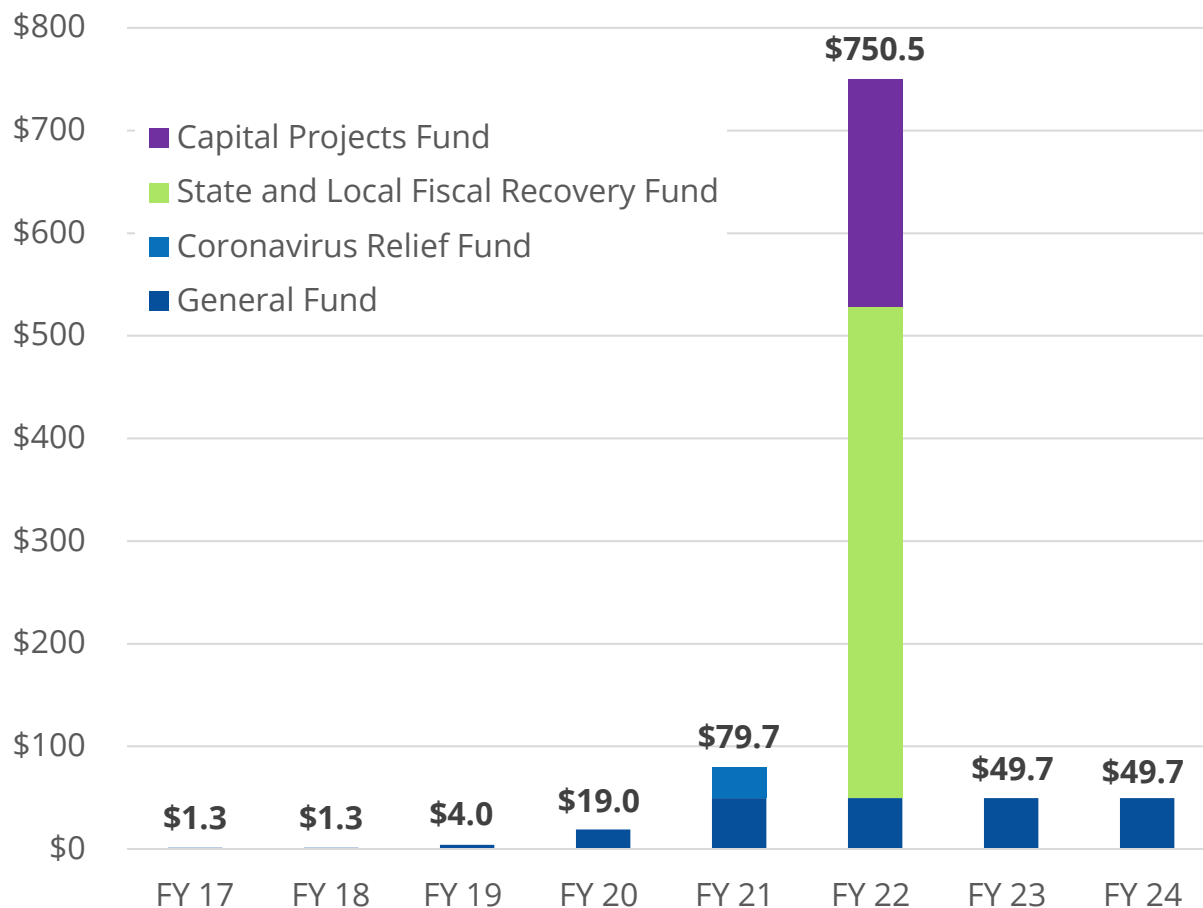
(*) Note: Excludes federal funds for program administration.

VATI BUDGET ALLOCATION OVER TIME (\$ IN MILLIONS)

With the availability of federal resources to aid in the recovery from the COVID-19 pandemic, Virginia invested significantly in the deployment of broadband infrastructure.

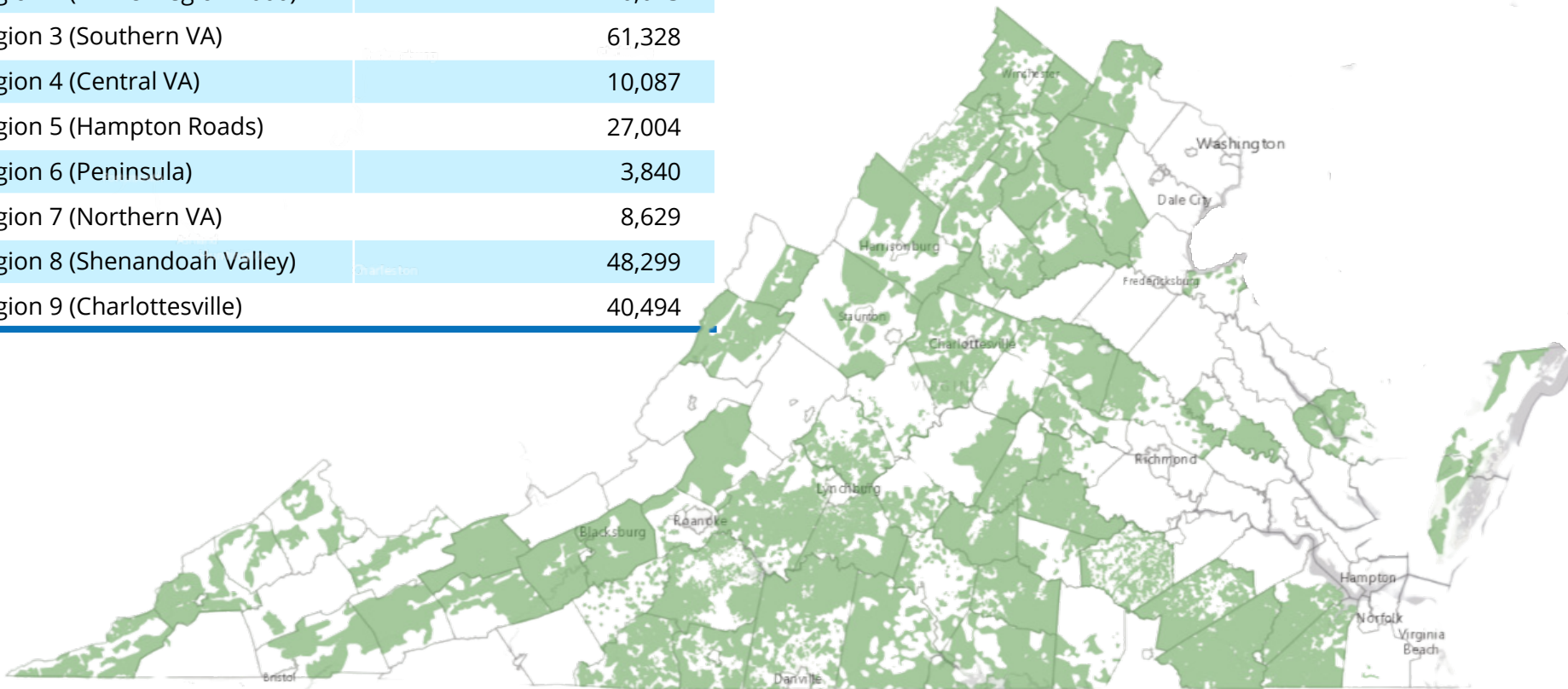
In FY 2021, the General Assembly invested \$30 million of Coronavirus Relief Funds to support middle mile projects.

In FY 2022, the General Assembly invested the entirety of its federal Capital Project Fund Award (\$222 million) and 11% of its State and Local Fiscal Recovery Fund (\$479 million) in supporting Virginia's goal of universal broadband access.



DISTRIBUTION OF FY 2022 VATI AWARDS

GO Virginia Region	Obligated Connections
Region 1 (Southwest)	45,414
Region 2 (NRV & Region 2000)	40,043
Region 3 (Southern VA)	61,328
Region 4 (Central VA)	10,087
Region 5 (Hampton Roads)	27,004
Region 6 (Peninsula)	3,840
Region 7 (Northern VA)	8,629
Region 8 (Shenandoah Valley)	48,299
Region 9 (Charlottesville)	40,494



Source: Commonwealth Connection, Mapping Virginia's Expanding Broadband Access (<https://commonwealth-connection.com/>)

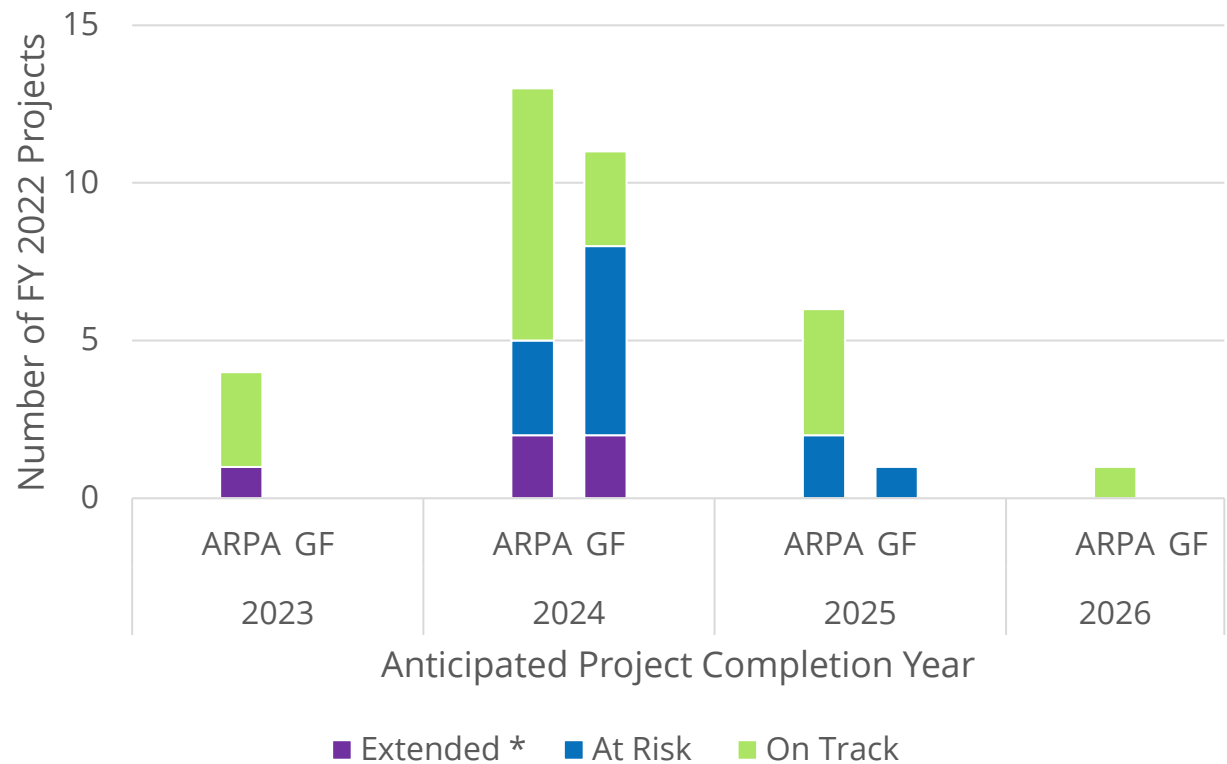
PROJECT STATUS FOR FY 2022 AWARDS AS OF OCTOBER 13, 2023

36 projects were awarded funds during the FY 2022 VATI grant round, funded with either federal ARPA funds (Capital Projects Fund and State and Local Fiscal Recovery Funds) or State General Fund resources.

As of October 13, 2023, 5 projects have been granted contract extensions by DHCD. Of the remaining projects, about 12 may be at risk for contract extensions due to challenges related to permitting and supply chain constraints.

Federal ARPA awards must be spent by the end of 2026.

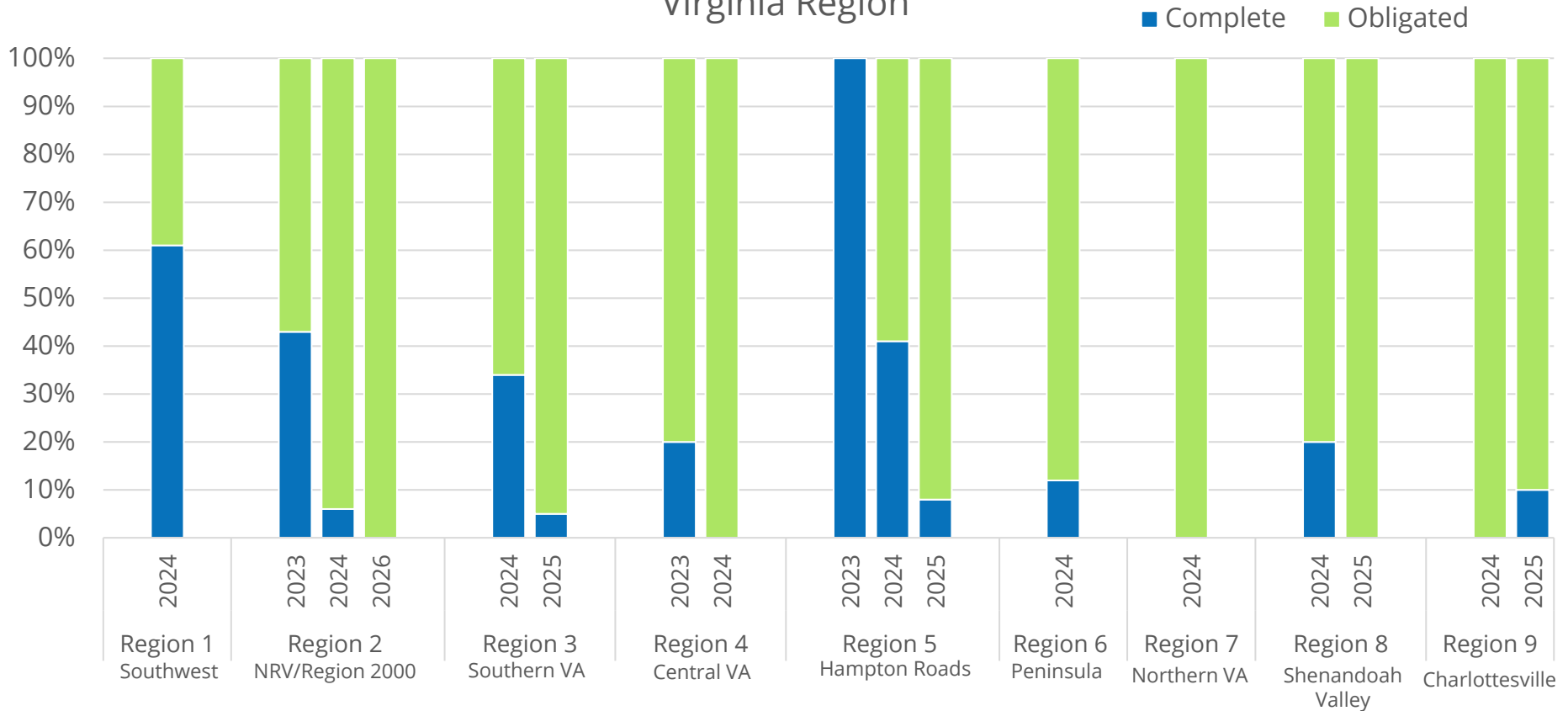
FY 2022 VATI Projects by Completion Year and Contract Status



Note (*): Projects granted extensions are reflected with their new anticipated completion date.

PROJECT STATUS FOR FY 2022 AWARDS AS OF OCTOBER 13, 2023

FY 2022 VATI Passings Completed by Project Completion Date and GO
Virginia Region



CHALLENGES TO PROJECT IMPLEMENTATION

Federal Program Requirements

Supply Chain Issues

Workforce Shortages

Permitting and Make Ready Work

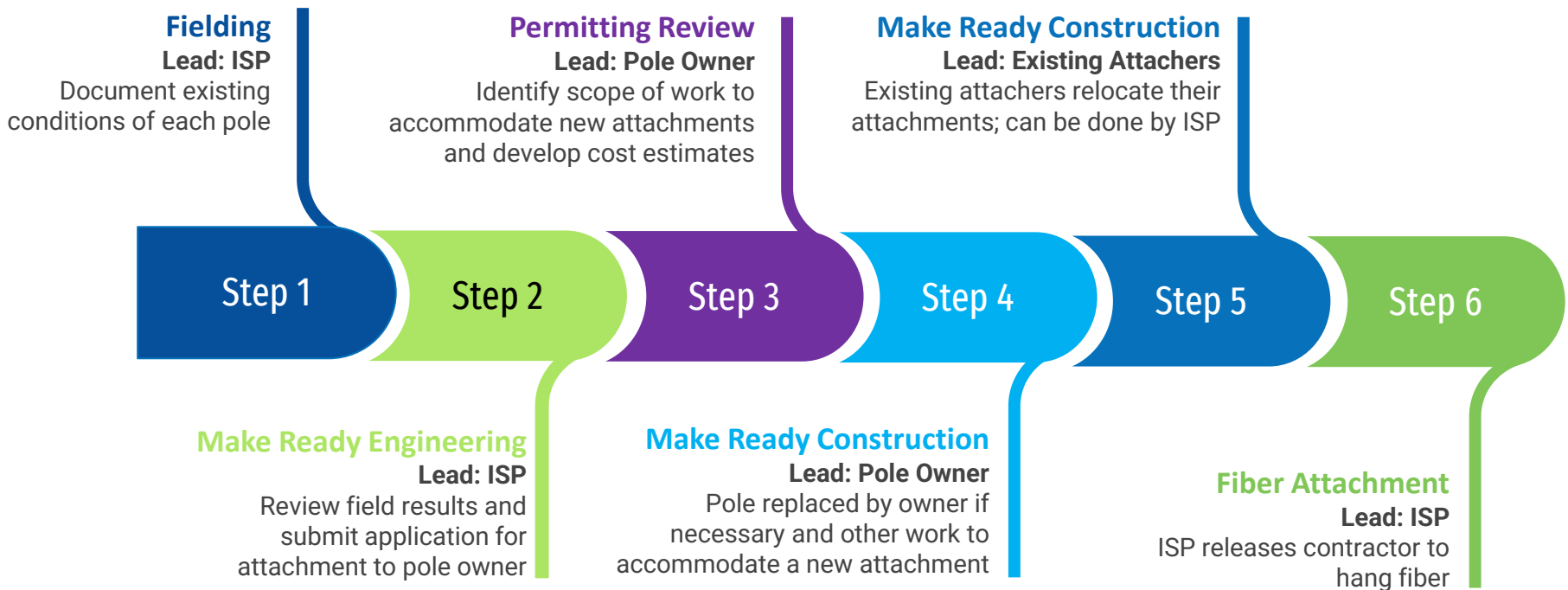
MAKE READY WORK

- Process by which a utility pole is prepared for a new attachment
 - National Electric Safety Code requires certain minimum clearances between cables and the ground, which can vary by location (pedestrian, traffic, rail crossings, etc.)
 - Adding fiber to a utility pole may require line relocation, electrical equipment relocations, pole replacements, or new poles
- Federal law requires pole owners to grant ISPs access to their poles, and such access can only be denied for safety and reliability concerns
 - FCC regulates pole attachments in Virginia (states can regulate pole attachments with federal “opt out” provision)
 - FCC regulation for pole attachments does not apply to municipalities or electric cooperatives
- Attachments are generally governed by an agreement between the ISP and pole owners

Source: *Overview of Joint Use and Make Ready*, All Points Broadband, Broadband Advisory Council Meeting, August 2023

MAKE READY WORK CONTINUED

MAKE READY PROCESS



Source: *Overview of Joint Use and Make Ready*, All Points Broadband, Broadband Advisory Council Meeting, August 2023

MAKE READY AND POLE ATTACHMENT COSTS

- “Cost Causer” Rule - Costs are typically the responsibility of the ISP for Make Ready Work
 - Existing violations are the responsibility of the violator (pole owners or existing users)
- Utilities can recover costs for pole attachments by charging annual attachment fees for utilization of their poles
 - An FCC Formula determines the annual fee Dominion and AEP are allowed to charge for pole attachments (\$8.05 per pole per attachment)
 - Federal law provides for a grievance process for rate disputes
 - Electric cooperatives and municipalities are exempt from the federal statute governing pole attachments and can set their own rates directly with the ISP through agreements
 - Virginia Code provides for a grievance process between the ISP and electric cooperatives where the SCC can determine a reasonable cost for an attachment

VOLUME OF POLE ATTACHMENT REQUESTS IS UNPRECEDENTED (DATA ILLUSTRATIVE ONLY)

On average, for rural areas to deploy 1 mile of fiber it requires the review and preparation of 26 poles for aerial deployments.

Current Status of Attachment Requests by Number of Poles

Total Requests

+ 375,000

In Process

+ 260,000

Completed

+ 110,000

Notes: Data provided to HAC Staff by Dominion, AEP, and Virginia, Maryland, Delaware Association of Electric Cooperatives. Data is illustrative only to reflect the size and scope of work related to broadband projects underway in Virginia that require pole attachments. Data reflect various points in time, and aggregate information from check points in the make ready and permitting process.





BROADBAND EQUITY
ACCESS AND
DEPLOYMENT
PROGRAM

BEAD MONEY IS COMING

- The Infrastructure Investment and Jobs Act authorized the deployment of \$42.5 billion to expand access to the internet through the Broadband Equity, Access, and Deployment Program (BEAD)
- **Virginia is expected to receive \$1.4 billion from the BEAD program (not all funds will be used for infrastructure)**
- States are required to submit 5-year plans, initial proposals, and final proposals to the federal government on how they plan to use and deploy funding under BEAD

BEAD Priorities (In Order)

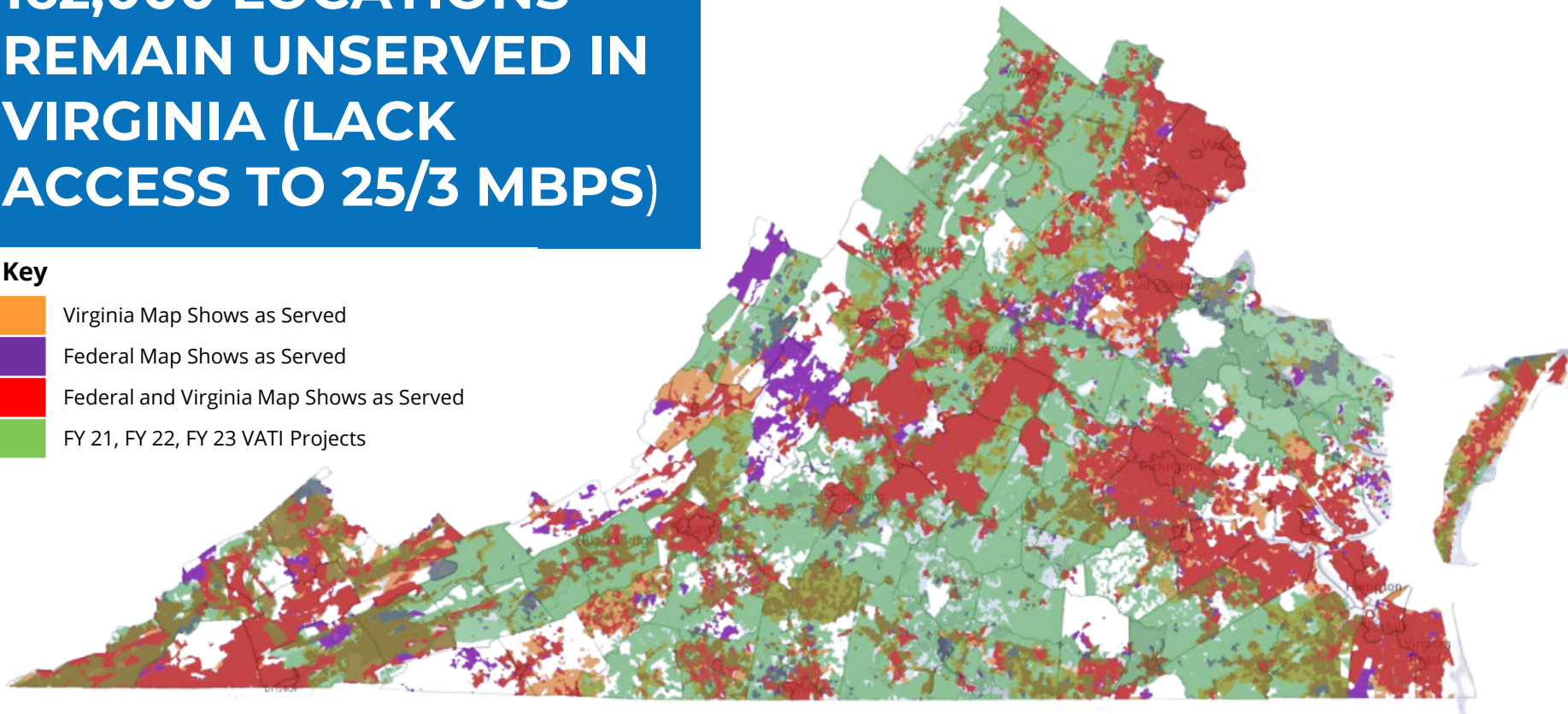
- 1 Reaching unserved locations (top priority)
- 2 Reaching underserved locations (100/20 Mbps)
- 3 Programs that supplement deployment (workforce)
- 4 Broadband adoption and utilization
- 5 Other non-deployment uses

WHAT'S LEFT? THE CHALLENGE PROCESS UNDER BEAD

**162,000 LOCATIONS
REMAIN UNSERVED IN
VIRGINIA (LACK
ACCESS TO 25/3 MBPS)**

Key

- Virginia Map Shows as Served
- Federal Map Shows as Served
- Federal and Virginia Map Shows as Served
- FY 21, FY 22, FY 23 VATI Projects



Source: Commonwealth Connection, Mapping Virginia's Expanding Broadband Access (<https://commonwealth-connection.com/>)

ANTICIPATED BROADBAND ALLOCATIONS FOR INFRASTRUCTURE (\$ IN MILLIONS)

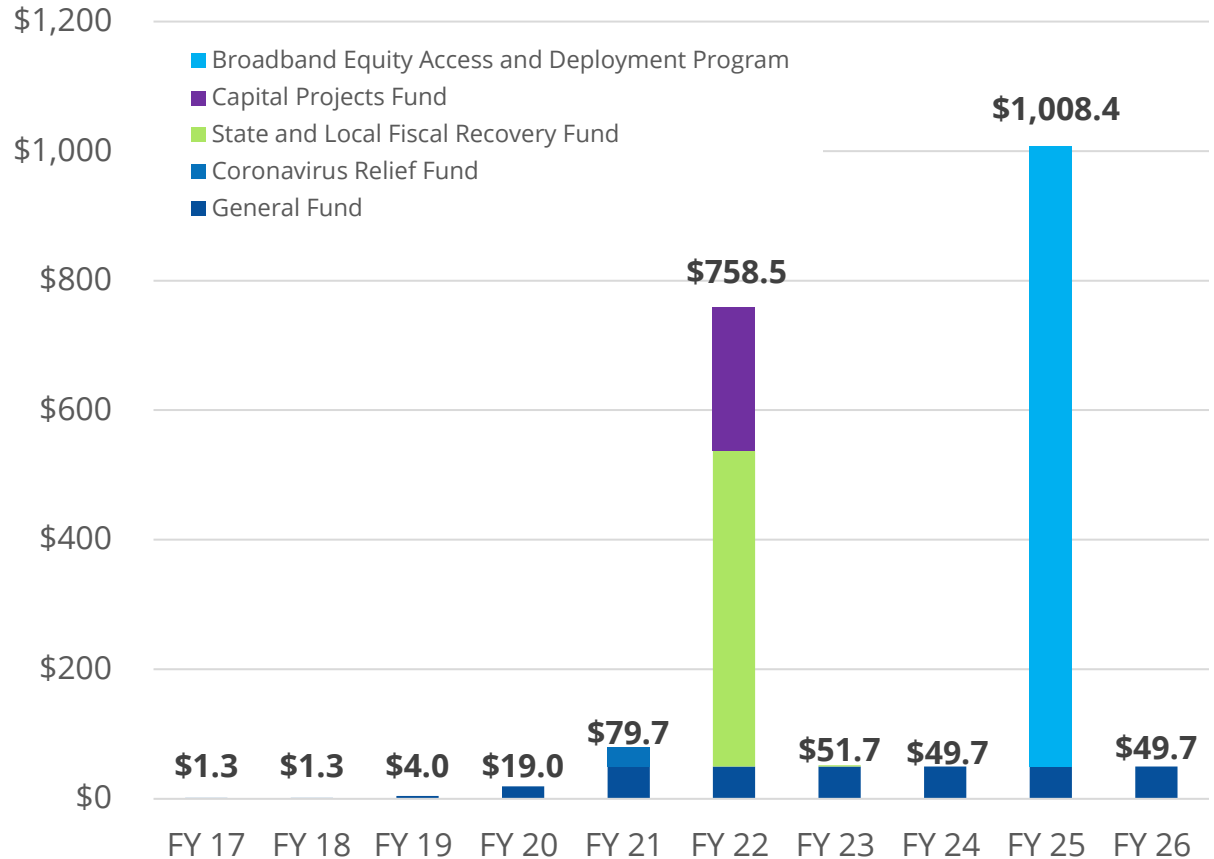
\$728.4 million of Virginia's BEAD allocation is expected to support last mile connections to unserved and underserved locations (estimated)

\$230.3 million is expected to enable line extension projects to connect customers (estimated)

The federal government has final sign off on the eligible projects before money is released to states for deployment

Virginia has requested a lump sum payment of its BEAD dollars

Once Virginia receives approval from the federal government, funds will be deployed in one tranche to ISPs with a four-year project completion deadline



Note: FY 25 and FY 26 assume a continued \$49.7M GF base for VATI in the upcoming budget cycle. BEAD money may come sooner or later than FY 25. State and Local Fiscal Recovery Fund for FY 22 and FY 23 has been adjusted to include appropriations for LECAP.

CONCLUSION

KEY TAKEAWAYS

- High performing Broadband Office has allowed the Commonwealth to be among the first to take full advantage of all federal resources for broadband deployment
- With the addition of the BEAD money, Virginia has an opportunity to achieve its goal of universal broadband access
- Deploying \$750.0 million in cash at one time exacerbated pain points in our broadband deployment system which relies on partnerships between the state, local governments, ISPs, railroads, and pole owners (utilities, phone companies, etc.)
 - These pain points will only be further exacerbated when the Commonwealth deploys \$1 billion of BEAD money for infrastructure projects as soon as the end of next year
- Federal funding sources are timebound and delays beyond the normal extension period for VATI contracts (12 months) may put projects at risk for losing federal funds
- Provisions prohibiting the use of BEAD funding for projects already covered by a legacy federal program will likely require VATI funds to be used in future years to complete any unrealized legacy federal projects
- Redesigned projects that transition from aerial deployments to underground deployments may be smaller than originally anticipated and require additional VATI funds be used to finish unrealized projects

IDEAS TO CONSIDER

- Continue to monitor broadband projects to ensure completion and use of ARPA funds by 2026
- Proactively address potential challenges, such as permitting and supply chain issues during the award process for BEAD money with all potentially impacted parties: localities, ISPs, pole owners, state
- Leverage BEAD money to address workforce challenges for utility providers and ISPs using the Talent Accelerator program at VEDP
- Develop an incentive program for the pole owners and ISPs to achieve certain timeline milestones for Make Ready Work that allows for pole owners and ISPs to recover additional costs as needed
- Explore legislation to require and standardize the pole permitting process for regulated utilities under the State Corporation Commission