Arlington County, Virginia
Broadband Strategic Recommendations

February 2024

Project Background

April 2022 — Broadband Resource Evaluation and Needs Assessment — April 2023 — Comparative Internet Service Model Evaluation — September 2023 — Broadband Strategic Recommendations — February 2024
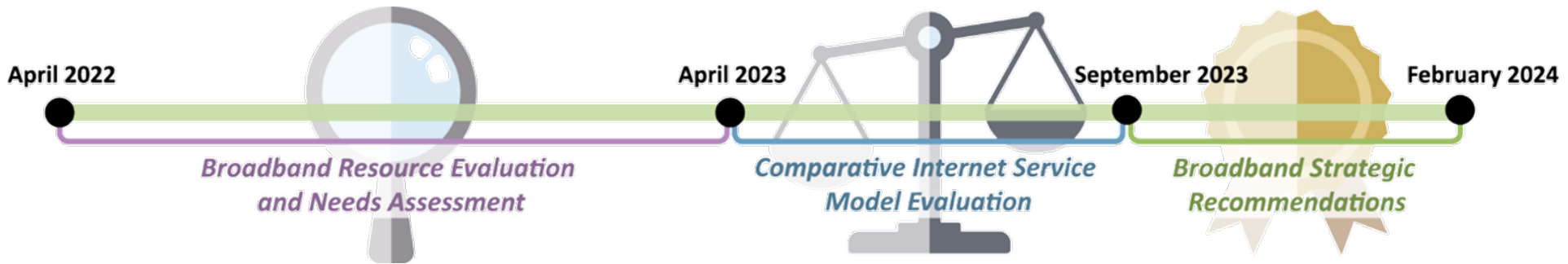
The 2022 Broadband Study sought an independent assessment of broadband infrastructure and digital resources; the nature and extent of Internet service challenges and gaps; and strategic programming or policies to ensure quality, affordable broadband Internet, and digital equity.
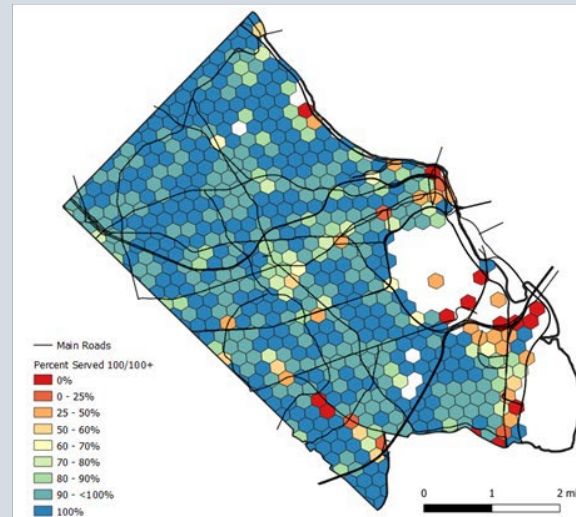
- The *Resource Evaluation and Needs Assessment* addressed the current state of broadband and digital inclusion in Arlington County and assessed the federal, state, and local tactics and tools currently available and their ability to eliminate any gaps.

- The *Comparative Internet Service Model Evaluation* analyzed multiple infrastructure and cost subsidy models for their ability to improve broadband Internet service access for underserved areas and cost-burdened households within Arlington County.

- The *Strategic Recommendations* detail recommendations designed to address current and future broadband and digital needs in Arlington County supported by best practice research.
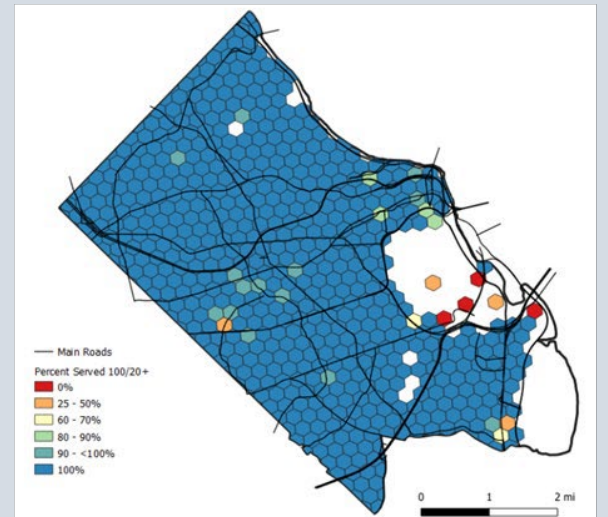
Arlington's Broadband Marketplace

- The study found that lack of quality broadband infrastructure and lack of choice/competition affect a limited number of households
  - 10 commercial companies provide residential Internet to at least 10 locations in Arlington
  - High-quality service of at least 100/20 Mbps is near ubiquitous (99%)
  - Most properties (95%) have choice of at least two Internet providers providing 100/100 or better service
  - Nearly half (44%) have choice of three or more providers
  - Comcast upgraded its Xfinity service in 2023 since the needs assessment analysis. Only 4 locations (covering 159 units) in Arlington County do not have targeted speeds for new infrastructure in the NTIA grant program (100/100)

Number of Providers at Location	100/20+ Locations/Percent Total	100/100+ Locations/Percent Total
0	46 / 0.1%	1,068 / 3.0%
1	1,576 / 4.4%	28,008 / 78.0%
2	18,427 / 51.3%	6,843 / 19.0%
3+	15,885 / 44.2%	15 / 0.0%
Total	**35,934**	**35,934**

Percent Locations Served (>=100/100)   **Percent Locations Served (>=100/20)**

Source: Broadband Data Collection, Federal Communications Commission. Acquired December 2022.
Some analyses discussed in this presentation use more recent data, including ISP upgrades.
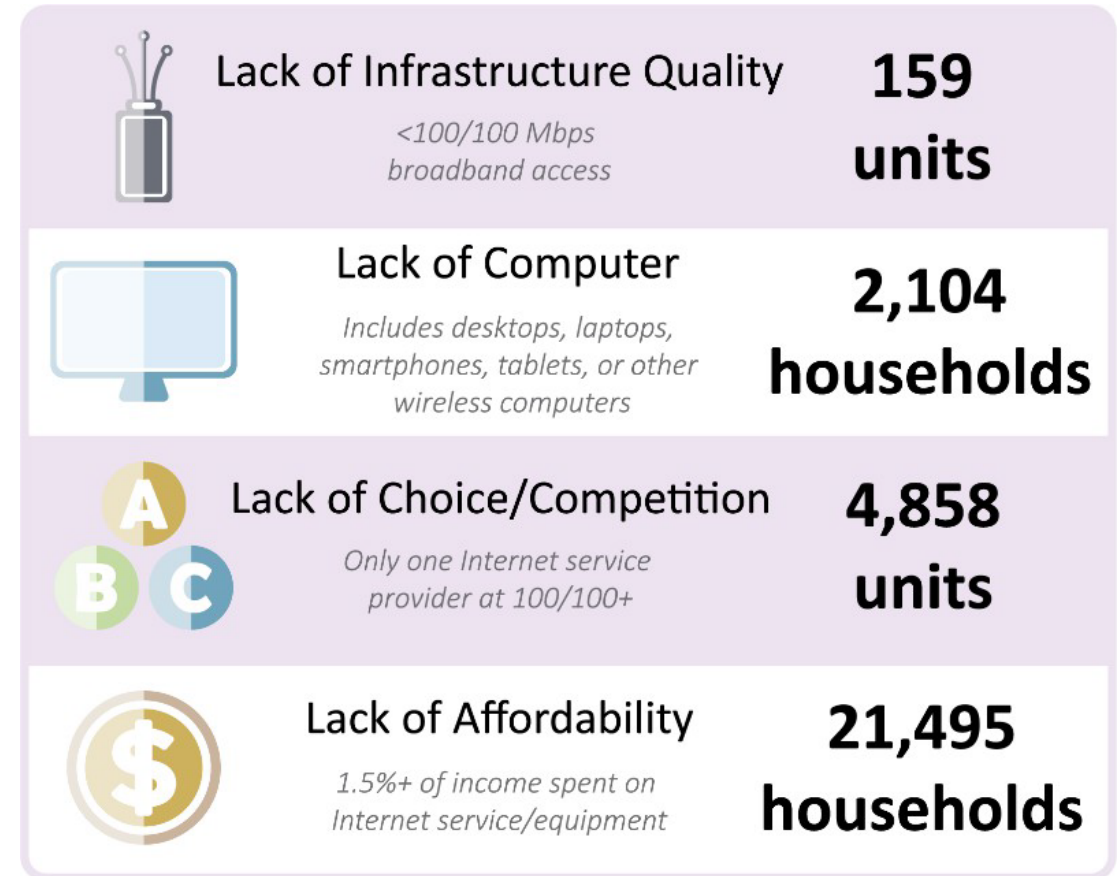
Broadband Affordability in Arlington

- Affordability and other digital equity issues are a larger barrier than infrastructure issues.

- While no national standard for internet affordability exists, this study defined "affordable internet" as spending no more than 1.5% of a household's income.

- Using this benchmark, Internet affordability issues impact households earning ~50% AMI and below compared to the average internet package for 100/100 service.

	Lack of Infrastructure Quality *<100/100 Mbps broadband access*	**159 units**
	Lack of Computer *Includes desktops, laptops, smartphones, tablets, or other wireless computers*	**2,104 households**
	Lack of Choice/Competition *Only one Internet service provider at 100/100+*	**4,858 units**
	Lack of Affordability *1.5%+ of income spent on Internet service/equipment*	**21,495 households**

Model Evaluation Summary

- The *Model Evaluation* in the prior phase found that the models assessed did **not** sufficiently address Arlington's needs
  - Infrastructure models do not address the larger issue of affordability challenges
    - Wireless Service Authority and Third Party Operator models fail to generate revenue to cover their cost or subsidize service prices for the cost-burdened community
    - ISP model is dependent on whether ISP offered low-cost service and willingness to enter an already-competitive marketplace
  - The household subsidy model does address affordability issues, but does not address challenges such as language barriers, digital literacy, and outreach to eligible households

Digital Inclusion Recommendations

Strategy 1: Promote Digital Inclusion through Targeted Programming and Expanded Available County Offerings

G A P S

- **Internet Affordability:** 21,495 households pay more than 1.5% of their income towards the average Internet service at 100/100 Mbps
- **Subsidy Participation:** Eligible participation rates (31%) in the ACP program are lower than Virginia (41%) and Nationwide (42%). Even if ACP is fully leveraged, a gap still exists for households earning between 30% and 50% AMI
- **Device Availability:** 2,104 households report not having access to a **personal** computer.* 5,267 households report solely using a smartphone (or tablet or other computer device), which may not be optimal for telework, virtual learning, and other video streaming functions
- **Digital Skills:** Seniors, low-income, and multilingual households have a greater need for awareness and digital skills training
- **Internet Adoption:** 3,654 households in Arlington (3.3%) lack a broadband Internet subscription, with lower rates of Internet and computer availability among seniors and people of color
  - Seniors make up nearly two-thirds of the Arlington population who lack a computer or an Internet subscription despite making up only 12% of the population
- **Scale:** Some positive County programming (related to technical assistance/connectivity), but the scale is not meeting the demand

"Computer" includes desktops, laptops, smartphones, tablets, other portable wireless computers, and other computers. Source: 1-Year 2021 ACS

Digital Inclusion Recommendations

Strategy 1: Promote Digital Inclusion through Targeted Programming and Expanded Available County Offerings

RECOMMENDATIONS

- Foster a Network of Multilingual Digital Navigators to Raise Awareness of Resources and Increase Skill-building

- Increase Participation in Subsidy Programs through Outreach and Enrollment Assistance and Advocate for Affordable Internet Service Availability

- Foster a Local Network of Device Recycling, Refurbishment, and Distribution

- Scale Existing County Digital Equity Programming (e.g., Libraries' technical support, Teleconnect, ReLaunch for small businesses, APS digital literacy training) to Meet Demand

? What are Digital Navigators?

Trusted guides who assist community members in Internet adoption and the use of computing devices — including home connectivity, access to broadband subsidies, acquiring devices, and digital skills. Navigators can be volunteers or cross-trained staff who already work in social service agencies, libraries, health, and more and who can offer both remote and in-person guidance.

Addressing Arlington's Affordability Challenges

Local subsidies would address affordability issues; however, it is not a recommended solution

- Substantial funding would be needed to subsidize the average monthly Internet cost and to develop and manage a new program
- Additional resources would be needed to address other equity issues
- Subsidy support is already available from federal programs to many households and offered to all students who request assistance by Arlington Public Schools
  - Note: ACP stopped accepting applications and may not continue past April 2024 without Congressional approval. Without this subsidy, low-income households are more likely to face affordability challenges.
- Household income is not the only indicator of connectivity in Arlington – digital education is needed for certain households to make meaningful use of Internet access
- No national standard exists related to internet affordability leading to challenging policy-making

- Promote and assist with marketing and enrollment of existing subsidy programs
- Engage with ISPs to promote low-cost plans and expand eligibility to more households
- Adjust broadband incentives for projects funded by County (e.g., AHIF)
- Advocate for broadband to be treated as an essential utility in federal/state housing programs
- Reconsider a local subsidy option if federal programs are discontinued using APS as an implementation model, lower speed tier targets (i.e., 50/10, 100/20), targeting the most vulnerable residents, and scaling up as resources allow
- Continue to research and document internet affordability challenges

Infrastructure Recommendations

Strategy 2: Address Broadband Internet Service Gaps

GAPS

- Limited understanding of why Internet providers are not currently serving properties.

- Limited available tools to address connectivity issues. The Cable Franchise Agreement is one potential, albeit limited, tool.

- Nascent national data in need of further investigation and analysis against Arlington's data.

RECOMMENDATIONS

- Build a database of service gaps and their causes

- Work with property owners and ISPs to encourage competition and reduce economic challenges preventing service

Governance Recommendations

Strategy 3: Establish Broadband and Digital Equity Governance

GAPS

- No plan or policy offering strategic direction
- No dedicated staff coordinating the County's efforts
- Some positive programming related to small business and residential technical assistance, but the scale is largely not meeting the demand
- Modest funding spent on pilot efforts that in many cases did not address the most important need

RECOMMENDATIONS

- Create a policy framework that provides strategic direction
- Use a coalition of stakeholders to inform policy, manage programs, and leverage resources
- Expand resources to advance broadband and digital equity policies and programs

Case Study: Digital Equity in Philadelphia

- Philadelphia developed a plan to achieve digital equity, established a team to create and pursue strategies to support those goals, and fostered an expansive network of public, private, and community-based partners
  - Mayoral priority and clear roadmap
  - Dedicated leadership
  - Digital navigator support
  - Cross-organizational focus
  - External funding and partnerships
- Arlington is well positioned to capitalize on a similarly advantageous situation and should look to Philadelphia as a model
  - Community-based organizations that are already engaged in addressing digital equity gaps
  - ISPs and other private stakeholder organizations with an interest in making Arlington a more digitally inclusive community
  - Staff that are committed to addressing the challenge

Case Study: Ammon Fiber

- Ammon Fiber is a municipality-led broadband service
  - Local Improvement Districts (LIDs) as a "financial tool to assist residents with their fiber investment" to construct a fiber-to-the-premises broadband network
  - City residents fund construction of the network elements (fiber and electronics) through the LIDs
  - City experienced sign-up rates in all LIDs of more than 47%
- High risk associated with securing enough business to maintain positive cashflow means Arlington County is unlikely to successfully pursue Ammon model
  - Arlington has more competition than Ammon, likely reducing signups
  - Arlington has more renters than Ammon, which affects financing: LID process requires the property owner to request service and repay construction costs

Case Study: San Francisco's Article 52

- San Francisco enacted Article 52 to address situations where property managers were excluding new competitive broadband service providers from their multi-tenant buildings
  - Article 52 requires that "[n]o property owner shall interfere with the right of an occupant to obtain communications services from the communications services provider of the occupant's choice."
- Could a right to choose policy help Arlington?
  - Virginia law does not enable the County to enact a similar code
  - If the County receives information regarding substantial property owner barrier issues, Arlington may have more motivation to pursue a similar regulatory code and should share information with the Virginia Legislature to promote and advocate for enabling legislation.
    - If a technical impediment or bulk agreements are the cause, such a code would not help with competition

THANK YOU

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