

Broadband Infrastructure Build-Out Progress

Submitted by the
Department of Housing and Community Development
Office of Statewide Broadband

November 2025

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Introduction

In alignment with the goals set forth by Senate Bill 66 and Chapter 74 of 2021, the Maryland General Assembly has tasked the Department of Housing and Community Development (DHCD) with overseeing the expansion of broadband infrastructure across the state. To assess the effectiveness of these initiatives and ensure accountability, the committees have requested a comprehensive report. This report will evaluate the progress made by the Office of Statewide Broadband (OSB) in addressing the digital divide, a critical issue impacting Maryland's diverse communities. It will provide detailed information on several key areas, including:

- A breakdown of funds awarded and expended to date, organized by jurisdiction, offering a clear picture of the financial investments in various regions of the state.
- An account of remaining funds available for future projects, ensuring transparency and facilitating the strategic allocation of resources.
- Details on any state and federal funds that have been leveraged through DHCD, highlighting the partnerships and additional funding streams used to accelerate broadband deployment.
- A list of Internet Service Providers (ISPs) that have received funding, providing insight into the private-sector collaborations driving infrastructure expansion.
- A thorough analysis of the progress made towards meeting the goals of Chapter 74, specifically in ensuring universal, affordable, and reliable broadband connectivity for all Marylanders.

This report is crucial for understanding the current state of Maryland's broadband infrastructure and will serve as a blueprint for the continued expansion efforts aimed at providing equitable digital access statewide. Through the leadership of the OSB, significant strides are being made toward bridging the digital divide, but sustained efforts and accountability are vital to achieving universal broadband coverage.

Background

Broadband internet access has rapidly evolved from a luxury to a critical necessity, impacting every facet of modern life, from education and healthcare to economic development and civic participation. Recognizing this, Maryland took a significant step forward with Chapter 74, which restructured the former Office of Rural Broadband (ORB) into the broader-reaching Office of Statewide Broadband (OSB). This reorganization was essential to ensure that broadband expansion and accessibility efforts were no longer confined to rural areas but also addressed urban and suburban regions.

The OSB now leads a comprehensive approach to closing the digital divide, overseeing key areas such as infrastructure deployment, digital literacy programs, digital inclusion strategies, and

initiatives aimed at achieving digital equity. This office collaborates with various state and federal partners, ensuring that all Marylanders, regardless of geographic location or socioeconomic status, have access to reliable, high-speed internet. Furthermore, through grant programs like the Maryland Broadband Infrastructure Grant and partnerships with local municipalities, the OSB is accelerating the deployment of fiber-optic networks and other high-capacity technologies across the state. These efforts not only bridge the connectivity gap but also stimulate economic growth and enhance the quality of life for residents in every corner of Maryland.

Program Funding History

The Office of Statewide Broadband (OSB) initiated its efforts to enhance broadband access in fiscal year (FY) 2018 and has progressively expanded its reach each year. Since then, OSB has provided over \$270 million in funding across 23 jurisdictions, resulting in broadband access for more than 46,000 households. Figure 1 offers a cumulative overview of funding and locations served.

Initially, grant-funded projects aimed for speeds of 25 Mbps downstream and 3 Mbps upstream. In FY 2021, this was increased to 100 Mbps downstream and 20 Mbps upstream to meet the growing demand for higher-speed service to support multiple devices in households. By FY 2022, in accordance with the American Rescue Plan Act (ARPA) Capital Projects Fund (CPF) requirements, areas considered "unserved" were redefined as those lacking speeds of 100 Mbps downstream and 20 Mbps upstream. Additionally, ARPA CPF mandates that grant-funded projects deliver speeds of 100 Mbps symmetrical, unless geographical or cost-related constraints prevent this. OSB will continue to evaluate and adjust speed requirements as necessary.

We recognized that access to broadband infrastructure at the street may not be enough for all households to obtain service. Households with long driveways struggle with the costs associated with extending service from the public road to the home. In urbanized areas, many multi-family dwellings do not have the infrastructure inside the building for the household to receive service. Treasury approved the use of CPF monies for two programs to address these issues. Two grant programs were developed to utilize the remaining \$69 million CPF funds for these programs with applications due to OSB in December 2023 and awards planned in February 2024.

In June 2023, the National Telecommunications and Information Administration (NTIA) had allocated \$267 million to Maryland through BEAD and the Department developed a plan on how to connect every last Marylander to broadband. However, after the Trump Administration took office in 2025, NTIA required every state to redevelop their broadband deployment plans as it established new, federal standards for connection that now allow less reliable forms of service, and are reducing the amount of funding to be distributed under these standards.

The amount of funding for the state is still under negotiation but the process has made clear that the goals of the program under the Trump administration have shifted from reliability and future-

proofing to short-term cost efficiency. Unlike the previous administration’s fiber-first policy, which emphasized long-term infrastructure, scalability, and reliability, the current direction prioritizes cost reduction and rapid coverage claims. Fortunately, Maryland has been highly proactive in deploying infrastructure, already reaching 99.5% of households, including some of the most remote locations in the state..

Funding Programs & Sources

Funds currently being utilized by the OSB are as follows:

ARPA CPF (Coronavirus Capital Projects Fund)

Overview: Part of the American Rescue Plan Act (ARPA), the Capital Projects Fund (CPF) provides funds to states, territories, and Tribal governments to invest in critical capital projects that enable work, education, and health monitoring. Broadband infrastructure is one of the key areas for investment under this program.

Funding Limitations:

- Allocation: \$171 million total for projects including administrative funding.
- Usage: Primarily for broadband, telehealth, and remote learning projects.
- Timing: Projects must be completed by 2026, with states required to obligate the funding by 2024.
- Limitations: Focus is on unserved and underserved areas, with a preference for projects providing speeds of at least 100/100 Mbps.

Broadband Connectiveness	\$24,223,815	ARPA CPF
Municipal Broadband	\$45,000,000	ARPA CPF
LGIF FY23	\$95,000,000	ARPA CPF
Gap Networks	\$2,000,000	ARPA SLFRF

ARPA SLFRF (State and Local Fiscal Recovery Funds)

Overview: Another program under ARPA, the State and Local Fiscal Recovery Funds (SLFRF) provides flexible aid to state, local, and Tribal governments to respond to the pandemic’s economic impacts. Broadband is one of the allowable infrastructure investments.

Funding Limitations:

- Allocation: \$222 million total for projects including administrative funding.
- Usage: Funds can be used for broadband infrastructure, particularly in underserved and unserved areas.
- Timing: Funding must be obligated by December 31, 2024, and projects completed by 2026.

- **Limitations:** The program has broad flexibility, but broadband projects must focus on affordability and access in low-income areas. Funds are meant for projects that achieve a minimum speed of 100 Mbps download and 20 Mbps upload.

Service Fee Subsidy	\$45,000,000	ARPA SLFRF
Device Subsidy	\$30,000,000	ARPA SLFRF
LGIF FY22	\$15,180,000	ARPA SLFRF
Digital Inclusion Fund	\$2,000,000	ARPA SLFRF
Gap Networks	\$3,000,000	ARPA SLFRF
Network Infrastructure	\$97,096,185	ARPA SLFRF
LGIF FY21	\$30,000,000	ARPA SLFRF

IIJA Funding (Broadband Equity, Access, and Deployment Program)

Overview: Created under the Infrastructure Investment and Jobs Act (IIJA), the BEAD program focuses on deploying high-speed internet to unserved and underserved areas.

Funding Limitations:

- **Allocation:** \$267 million for infrastructure deployment \$13 million for digital equity initiatives.
- **Usage:** The funding must be used to deploy broadband in unserved and underserved areas, aiming for gigabit-capable networks.
- **Timing:** States had until 2024 to submit initial plans and must begin using funds in 2025. Projects should be completed by 2030.
- **Limitations:** The priority is on reaching areas with no or very limited access to broadband and on closing the digital divide. There’s a requirement to meet affordability criteria and digital equity.

BEAD Implementation	\$267,738,400	IIJA BEAD
DE Capacity Grant	\$13,427,134	IIJA DE

Infrastructure Expenditures and Funding Balances

Through multiple projects, the Office of Statewide Broadband (OSB) has distributed and expended significant amounts of funding, while still maintaining a notable balance of unspent funds for future use. Below is a breakdown of the funding story across four key projects:

Infrastructure, Neighborhood Connect, Difficult to Serve, and Public Housing.

1. Network Infrastructure Projects

The Network Infrastructure Program represents Maryland’s most significant and sustained investment in broadband expansion, reflecting the central role that large-scale fiber deployment plays in closing connectivity gaps across rural and underserved communities.

The program began with targeted investments in 2020, when \$7,287,929 was awarded and \$6,948,007 was expended, leaving a modest balance of \$339,922. This early phase emphasized rapid deployment and set the foundation for broader expansion. In 2021, funding increased substantially, with \$24,686,453 awarded and \$22,126,477 expended, resulting in \$2,559,976 remaining again demonstrating strong execution and timely project delivery.

By 2022, Maryland significantly scaled its infrastructure ambitions. That year, \$99,282,664 was awarded, while \$47,254,927 was expended, leaving \$52,027,737 committed to projects requiring longer development timelines. This trend continued in 2023, when the state awarded \$94,162,409, expending \$21,559,401 and carrying forward a remaining balance of \$72,603,008.

The growing unspent balances in recent years reflect not delays, but the increasing size, complexity, and multi-year nature of these infrastructure projects. These funds are tied to major fiber builds that involve extensive engineering, permitting, and construction phases and represent a robust pipeline of work that will continue to scale broadband access statewide.

2. Neighborhood Connect Project

The Neighborhood Connect Project focuses on delivering broadband access at the community level, addressing localized gaps in service that persist even in areas near existing infrastructure. While smaller in scale than statewide infrastructure projects, this program has demonstrated consistent progress and effective use of funds.

In 2019, the program awarded \$618,556, with \$538,153 expended and a remaining balance of \$80,404. Momentum continued in 2020, when \$2,351,208 was awarded and \$2,195,150 expended, leaving \$156,058. The program expanded further in 2021, with \$5,446,337 awarded and \$5,006,964 expended, resulting in \$439,373 remaining.

By 2022, Neighborhood Connect entered a growth phase, awarding \$14,936,588 and expending \$12,826,049, with \$2,110,539 remaining. These remaining funds are obligated to ongoing and future deployments, particularly in suburban and lower-density areas where targeted investments can produce immediate and measurable connectivity gains.

Overall, the program’s spending pattern highlights its effectiveness in translating funding into near-term outcomes while maintaining flexibility to continue addressing evolving community needs.

3. Difficult to Serve Project

The Difficult-to-Serve Project was launched to address Maryland’s most challenging broadband environments, including extremely rural and geographically isolated areas where deployment costs are high and traditional approaches are often infeasible.

In its first year of funding in 2024, the program awarded \$19,629,100. To date, \$79,368 has been expended, leaving \$19,549,732 available for future use. This limited early expenditure reflects the deliberate and necessary planning phase required for these projects, including feasibility studies, engineering assessments, and coordination with providers capable of serving high-cost areas.

The substantial remaining balance underscores both the complexity of these deployments and the state’s long-term commitment to ensuring broadband access reaches even the most difficult-to-serve regions. These funds position Maryland to tackle projects that require innovative solutions and extended implementation timelines.

4. Public Housing Program

The Public Housing Program advances Maryland’s digital equity goals by prioritizing broadband access for residents in public and affordable housing communities. First funded in 2024, the program awarded \$31,915,508 to support infrastructure deployment in multi-unit housing environments.

At this early stage, no expenditures have yet been recorded, leaving the full balance available for future deployment. This reflects the program’s current focus on pre-construction activities, including site assessments, stakeholder coordination, and project design, critical steps for successful implementation in public housing settings.

As projects transition from planning to construction, the program will play a pivotal role in ensuring residents have reliable broadband access necessary for education, workforce participation, healthcare, and other essential digital services, reinforcing Maryland’s broader commitment to inclusive connectivity.

Analysis of Broadband Funding by Jurisdiction

Since 2019, the Maryland Office of Statewide Broadband has provided substantial financial support to various jurisdictions to enhance broadband infrastructure across the state. The total funding allocation from FY2019 to FY2024 amounts to approximately **\$274.67 million**, distributed across numerous counties and jurisdictions (figure 1). This investment is critical in reducing the digital divide, particularly in underserved rural and urban areas, and reflects Maryland’s commitment to expanding high-speed internet access to its residents.

Key Highlights by Jurisdiction

1. **Carroll County** leads with the highest total funding, receiving **\$28.85 million** from FY19 to FY24. Major investments in 2022 and 2023, with over **\$11.82 million** and **\$15.31 million** respectively, demonstrate significant strides toward improving broadband access in this area.
2. **Frederick County** follows closely, receiving **\$20.71 million** over the same period. Notably, **\$10 million** was allocated in 2021 and **\$9.41 million** in 2023, which indicates large-scale projects aimed at expanding the network infrastructure.
3. **Somerset County** stands out with a notable allocation of **\$17.52 million**. Most of this funding was concentrated in 2022, where **\$13.13 million** was provided for broadband development.
4. **Charles County** received a substantial total of **\$17.58 million**, with **\$10.05 million** allocated in 2022. This highlights a strong push in recent years toward improving the connectivity in the region.
5. **Dorchester County** saw significant funding over time, with **\$10.99 million** granted in total, including a sizable **\$7.64 million** in 2023, emphasizing the county's focus on addressing broadband needs.
6. **Wicomico County** has also benefitted from a large influx of funding, receiving **\$15.50 million**. The funding spiked in 2022, with **\$9.82 million**, followed by additional support in subsequent years.
7. **Baltimore County**, one of the state's major jurisdictions, received **\$18.52 million**, largely driven by investments in 2022 and 2023, totaling over **\$15 million** across these two years.
8. **Garrett County** received **\$9.42 million**, with significant investments in 2023 amounting to **\$4.88 million**, showcasing efforts to improve broadband in a largely rural area.

Noteworthy Counties:

- **Anne Arundel County** and **Prince George's County**, two major counties in Maryland, received **\$1.1 million** and **no direct allocations**, respectively. This suggests that these counties may be leveraging other funding mechanisms, or they already have adequate infrastructure in place compared to rural counterparts.
- **Howard County**, although typically a well-developed area, received a relatively modest **\$799,374** total funding, showing targeted improvements in specific areas.
- **Washington County** received **\$5.80 million** from FY19 to FY24, with significant amounts allocated in 2022 and 2023, suggesting active engagement in improving connectivity within the county.

Rural County Focus:

Rural counties such as **Kent County** and **Queen Anne's County** benefitted from notable funding, with **\$9.55 million** and **\$5.59 million** respectively. This underscores the state's priority to expand broadband services in less densely populated regions where internet access is often sparse.

Multi-County Initiatives:

A total of **\$10.40 million** has been directed toward multi-county initiatives. This is indicative of larger regional or state-wide projects that span multiple jurisdictions to build out shared infrastructure, thereby maximizing resources and ensuring a broader reach.

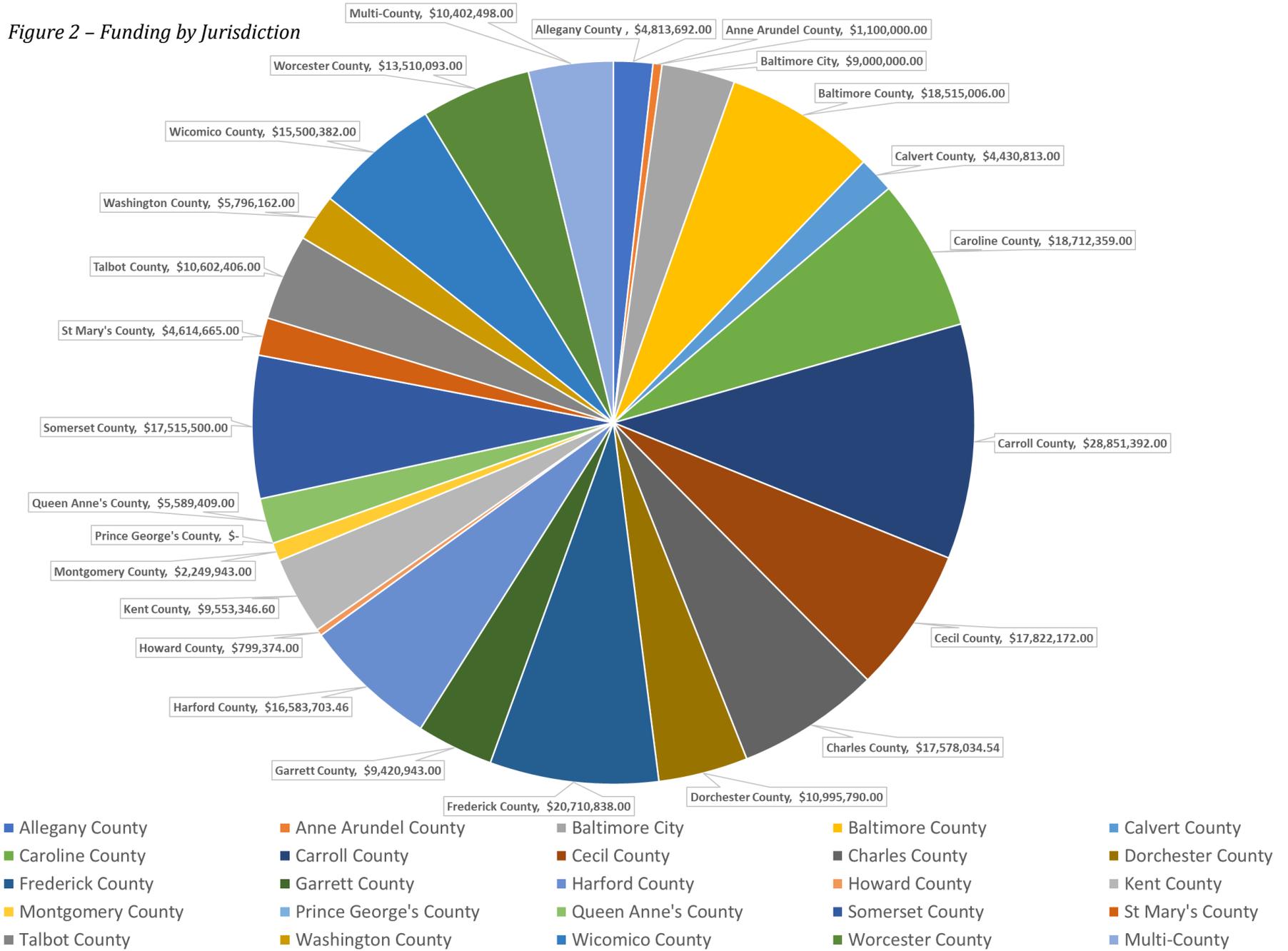
Funding Patterns:

There is a clear upward trend in broadband funding over the years, with a substantial spike in 2022 and 2023. In 2022, Maryland jurisdictions received **\$114.22 million**, while in 2023, they were granted **\$89.40 million**. This surge aligns with both federal and state initiatives through ARPA to fast-track broadband development, particularly in response to the growing demand for reliable internet due to the COVID-19 pandemic. The consistent allocations through 2024, totaling **\$30.93 million**, indicate a sustained commitment to ensuring that broadband access reaches all parts of the state, especially as technology becomes an ever-more essential part of daily life.

Figure 1 - Cumulative Infrastructure Funding by Jurisdiction

Jurisdiction	2019	2020	2021	2022	2023	2024	Total
Allegany County	113,692		3,600,000			1,100,000	4,813,692
Anne Arundel County						1,100,000	1,100,000
Baltimore City						9,000,000	9,000,000
Baltimore County		34,639	2,252,641	7,741,401	7,386,325	1,100,000	18,515,006
Calvert County	64,448	64,448	2,259,694		942,223	1,100,000	4,430,813
Caroline County			240,000	15,921,211	2,551,148		18,712,359
Carroll County			620,488	11,820,362	15,310,542	1,100,000	28,851,392
Cecil County		413,758	605,914	12,797,982	2,904,518	1,100,000	17,822,172
Charles County		2,924,083	482,135	10,049,174	3,022,643	1,100,000	17,578,035
Dorchester County		194,526		2,061,435	7,639,829	1,100,000	10,995,790
Frederick County			202,012	10,000,000	9,408,826	1,100,000	20,710,838
Garrett County		1,706,275	1,732,314		4,882,354	1,100,000	9,420,943
Harford County			414,748	2,765,999	12,302,956	1,100,000	16,583,703
Howard County				78,000	721,374		799,374
Kent County	147,578	565,394	1,624,920	4,382,932	1,903,423	929,100	9,553,347
Montgomery County					1,149,943	1,100,000	2,249,943
Prince George's County							-
Queen Anne's County	200,000		531,547	1,391,775	2,366,087	1,100,000	5,589,409
Somerset County		1,248,119	240,000	13,128,393		2,898,988	17,515,500
St Mary's County	92,838	200,000	240,000	2,014,101	2,067,726		4,614,665
Talbot County			2,756,212	3,598,570	3,147,624	1,100,000	10,602,406
Washington County			102,747	4,650,420	1,042,995		5,796,162
Wicomico County			244,000	9,817,497	3,837,825	1,601,060	15,500,382
Worcester County			3,600,000	2,000,000	6,810,093	1,100,000	13,510,093
Multi-County		2,154,240	8,248,258				10,402,498
FY19-FY24 Total Funding	618,556	9,505,482	29,997,630	114,219,252	89,398,454	30,929,148	274,668,522

Figure 2 – Funding by Jurisdiction



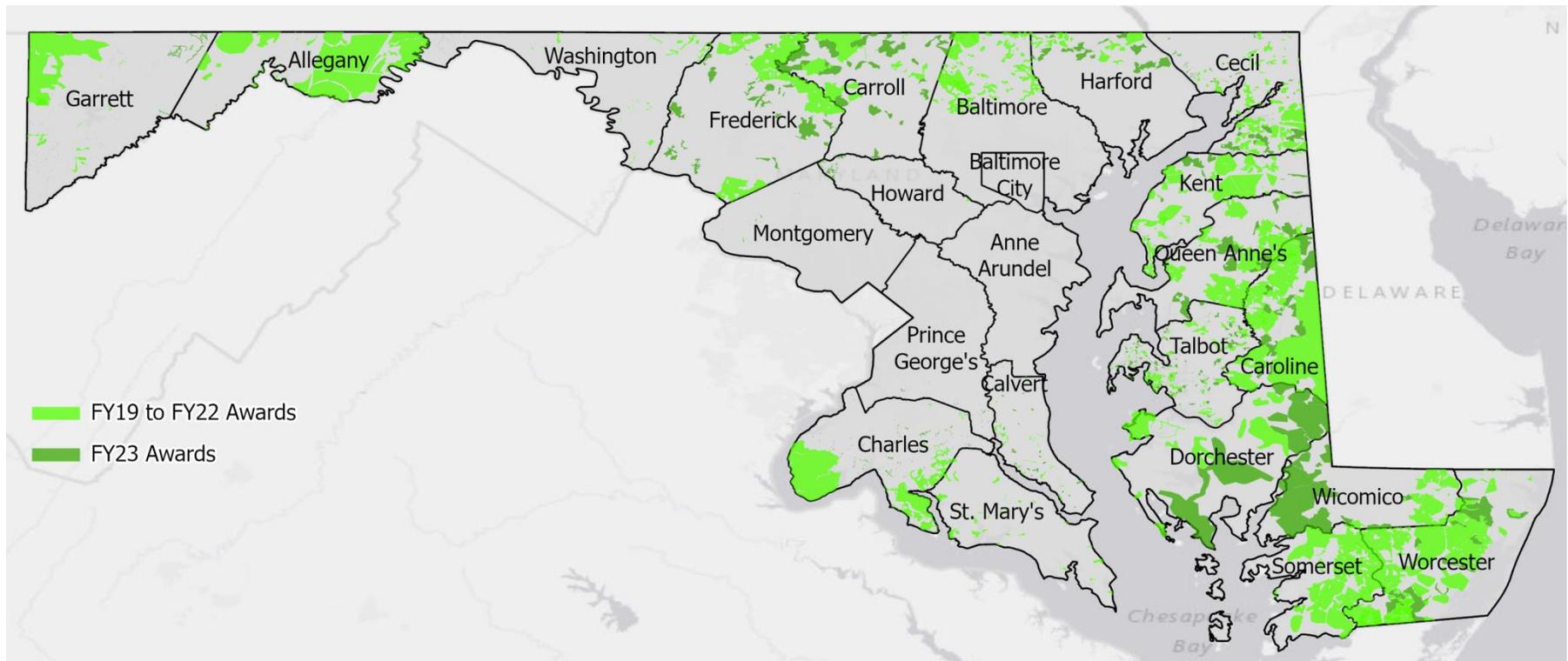


Figure 3 - Deployment Funded Areas
 *2024 awards pending designations

ISP Participation in Maryland's Broadband Infrastructure Projects

Since the inception of Maryland's **Office of Statewide Broadband (OSB)** funding initiatives, numerous Internet Service Providers (ISPs) have played an instrumental role in expanding broadband access to underserved and unserved regions across the state. These ISPs, ranging from local utility cooperatives to major national providers, are leveraging the OSB's investments to close Maryland's broadband gaps, particularly in rural and hard-to-reach areas.

Key ISPs and Their Jurisdictions:

1. **Allegany County:**
 - **Talkie Communications** and **Conxx** are expanding rural connectivity, addressing historically underserved areas. Talkie specializes in fiber-to-the-home (FTTH) deployments, while Conxx focuses on high-speed wireless solutions, both essential to meet the county's diverse needs.
2. **Baltimore and Calvert Counties:**
 - **Comcast**, a major national ISP, has been central to broadband infrastructure in these counties, bringing high-speed connectivity to densely populated areas and working with the OSB to further expand in less-served neighborhoods.
3. **Caroline County:**
 - **Choptank Electric Cooperative** is a key player, using its extensive infrastructure to roll out broadband as part of a utility partnership, targeting rural residents.
4. **Carroll County:**
 - **Quantum Internet and Telephone** has focused on extending fiber-based services, improving speeds and access to underserved areas within this growing suburban county.
5. **Cecil County:**
 - **Talkie Communications**, **Choptank Electric**, and **Verizon** have collaborated to address both rural and suburban connectivity gaps. These ISPs, combining fiber and fixed-wireless services, offer a variety of solutions to cater to the county's unique geographical needs.
6. **Charles County:**
 - **ThinkBig Networks**, **Comcast**, and **Verizon** are expanding fiber networks in residential and commercial areas. ThinkBig has prioritized extending fiber to rural homes, while Verizon and Comcast have reinforced suburban and urban internet services.
7. **Dorchester County:**
 - **Bay Country Communications** and **Choptank Electric** have been awarded funding to bring high-speed broadband to one of Maryland's most rural counties, improving access to agriculture-based and remote communities.
8. **Frederick County:**
 - **Shenandoah Cable Television (Shentel)** and **QCOL** are advancing fiber and cable connectivity across this rapidly growing county. Their focus includes

increasing bandwidth and reducing internet latency for residential and business users.

9. Garrett County:

- Providers such as **QCOL**, **MdBC**, **Comcast**, and **Verizon** are deploying services across Garrett’s mountainous terrain. The challenges of geography make high-speed broadband deployment complex, but these ISPs are utilizing both fiber and wireless technologies.

10. Harford and Kent Counties:

- **ThinkBig Networks** has made significant strides in building out fiber optic networks in rural areas, ensuring that underserved communities have access to robust, reliable internet services.

11. Howard County:

- **Verizon** is leading efforts in this suburban county, where the focus is on improving access and maintaining high-speed service in more densely populated regions.

12. Montgomery and Prince George’s Counties:

- **Comcast** dominates the broadband landscape in both counties, maintaining extensive networks that serve Maryland’s most populous regions. These areas see fewer unserved locations but require ongoing efforts to improve underserved access.

13. Queen Anne’s County:

- **Breezeline**, **Choptank Electric**, and **Atlantic Broadband** are extending broadband to less-dense residential areas, focusing on FTTH solutions and enhancing connectivity in remote communities.

14. Somerset and St. Mary’s Counties:

- **Choptank Electric**, **Charter Communications**, **Spectrum Southeast**, and **Atlantic** are bridging gaps in these two rural counties by offering affordable high-speed services to both unserved and underserved residents.

15. Talbot County:

- **Easton Utilities** has been a critical player, working closely with the OSB to expand its municipal broadband service, ensuring Talbot residents receive reliable, high-speed connections.

16. Washington County:

- **Antietam Cable** and **Verizon** have built robust networks, focusing on expanding service to rural and semi-rural locations, with a mix of cable and fiber infrastructure.

17. Wicomico and Worcester Counties:

- **Talkie Communications**, **MdBC**, and **Choptank Electric** are bringing high-speed broadband to these counties, which face challenges related to their remote, coastal locations.

18. Multi-County Initiatives:

- **MdBC** and **Choptank Electric** have been integral to multi-county projects, providing critical infrastructure in partnership with the OSB to expand broadband access across multiple jurisdictions in the state.

OSB's Strategy and ISP Collaboration:

The collaboration between these ISPs and the OSB has been critical to Maryland's success in expanding broadband. **The state's BEAD allocation** and other federal funding streams have allowed these providers to focus on hard-to-reach areas, with particular emphasis on:

- **Rural Fiber Expansion:** ISPs like **Choptank Electric**, **ThinkBig**, and **Talkie Communications** are leading the charge in rural fiber deployments, delivering next-generation internet speeds to some of the most isolated regions in Maryland.
- **Utility and Broadband Partnerships:** **Easton Utilities** and **Choptank Electric** are examples of how utility companies are leveraging their existing infrastructure to provide broadband services, a trend gaining traction in rural Maryland counties.
- **Wireless Solutions:** Providers like **QCOL** and **Conxx** are using innovative wireless technologies to cover areas where fiber deployment is not cost-effective, particularly in the mountains of Garrett County and other challenging terrains.

As Maryland moves forward with its broadband goals, the continued partnership between the OSB and a diverse set of ISPs will be essential in ensuring that every resident, regardless of location, has access to reliable, high-speed internet. The OSB remains committed to ensuring that by **2028**, every Maryland home and business will be connected, through a mix of fiber, cable, and wireless technologies, largely driven by strategic collaborations with these ISPs.

Progress Towards Full Broadband Coverage

Since 2019, Maryland has made substantial and measurable progress toward achieving universal broadband access across all jurisdictions. Through sustained federal and state investment, strategic infrastructure deployment, and targeted policy initiatives, the State has dramatically reduced the number of locations lacking reliable high-speed internet service.

As of 2025, Maryland's remaining connectivity gap is clearly defined, enabling the State to focus its final deployment efforts through the BEAD program and other complementary initiatives.

Statewide Reduction in Unserved and Underserved Locations

Between 2019 and 2025, Maryland reduced the number of unserved and underserved broadband locations from 58,607 to 9,014, representing an approximately 85 percent reduction statewide.

This progress reflects one of the most significant infrastructure advancements in the State's recent history.

Of the 9,014 remaining locations:

- 4,665 are classified as unserved, and
- 4,349 are classified as underserved.

The most significant reductions occurred following 2021, as large-scale infrastructure projects funded through federal relief and broadband-specific programs came online. These efforts accelerated deployment in rural and historically underserved areas and positioned Maryland to move from broad expansion to precision-focused completion.

Jurisdictions with Significant Unserved Populations:

While progress has been widespread, remaining gaps are concentrated in a limited number of counties primarily rural or geographically complex areas where deployment costs are higher and construction timelines are longer.

Counties with the Highest Combined Unserved and Underserved Locations

- Washington County has the largest remaining need, with 1,986 total locations (1,010 unserved and 976 underserved). Its rural character and terrain continue to present infrastructure challenges.
- Frederick County follows closely with 1,217 locations (645 unserved and 572 underserved), reflecting the difficulty of keeping pace with growth in rural and transitioning suburban areas.
- Garrett County reports 1,214 locations (805 unserved and 409 underserved), underscoring the persistent challenges associated with mountainous terrain and low population density.
- Carroll County has 1,192 locations remaining (688 unserved and 504 underserved), despite significant prior investment.
- Prince George's County has 610 underserved and unserved locations, with the majority (455) classified as underserved highlighting that service quality gaps remain even in urban and suburban environments.

Other counties with notable remaining needs include St. Mary's (488), Baltimore County (366), Allegany (328), and Montgomery County (307).

Key Areas for Continued Focus:

Maryland's remaining broadband gap is increasingly concentrated rather than widespread. Rural counties such as Washington, Garrett, Frederick, and Carroll account for a substantial share of the remaining unserved locations, requiring continued emphasis on high-cost, low-density deployment strategies.

At the same time, suburban and urban counties including Prince George's, Baltimore County, and Montgomery County demonstrate that connectivity challenges are not limited to rural areas alone. In these jurisdictions, remaining gaps are often driven by affordability, aging infrastructure, or localized service limitations rather than complete lack of access.

These dynamics reinforce the need for a flexible, technology-neutral approach under BEAD to ensure the final locations are served efficiently while maintaining service quality and long-term sustainability.

Accomplishments: Counties Achieving 100% Connectivity:

A major milestone in Maryland's broadband journey is the number of jurisdictions that have now achieved **100 percent connectivity**, with **zero remaining unserved or underserved locations**. These accomplishments reflect years of coordinated investment, strong local partnerships, and effective deployment strategies.

Counties and jurisdictions that have reached full broadband coverage include:

- **Baltimore City**
- **Cecil County**
- **Dorchester County**
- **Somerset County**
- **Talbot County**
- **Worcester County**

These successes demonstrate that universal broadband access is achievable and provide valuable models for deployment strategies in remaining high-need areas.

With just **9,014 locations remaining statewide**, Maryland is firmly positioned in the final phase of its broadband expansion. The BEAD program, combined with lessons learned from counties that have already achieved full connectivity, will enable the State to close the remaining gaps and reach **100 percent broadband coverage** ensuring that all Maryland residents and businesses have access to the digital infrastructure necessary for full participation in the modern economy.

Figure 4 - Unserved/Underserved Locations by County

County	Unserved and Underserved	Unserved	Underserved
Allegany	328	183	145
Anne Arundel	72	57	15
Baltimore	366	164	202
Baltimore City	0	0	0
Calvert	221	89	132
Caroline	136	68	68
Carroll	1,192	688	504
Cecil	0	0	0
Charles	247	116	131
Dorchester	0	0	0
Frederick	1,217	645	572
Garrett	1,214	805	409
Harford	217	108	109
Howard	186	93	93
Kent	47	30	17
Montgomery	307	126	181
Prince George's	610	155	455
Queen Anne's	102	60	42
Somerset	0	0	0
St. Mary's	488	255	233
Talbot	0	0	0
Washington	1,986	1,010	976
Wicomico	78	13	65
Worcester	0	0	0
Totals	9,014	4,665	4,349

BEAD Impact to 100% Connected:

The Broadband Equity, Access, and Deployment (BEAD) Program remains the cornerstone of Maryland’s strategy to achieve 100 percent statewide broadband connectivity. BEAD is specifically designed to address the remaining unserved and underserved locations across the state, ensuring that every household and community anchor institution has access to reliable, high-speed internet service.

Maryland’s original BEAD allocation totaled approximately \$267.7 million, positioning the State to complete the final phase of its broadband buildout. These funds were intended to complement prior federal and state investments by targeting the most challenging and costly remaining gaps in service, particularly in rural, remote, and high-cost areas.

Federal Restructuring and Policy Changes

In June 2025, the federal administration issued the NTIA BEAD Restructuring Policy Notice, fundamentally altering key program requirements and requiring all states, including Maryland, to redesign their BEAD proposals. This restructuring significantly reshaped the framework under which BEAD funding could be deployed and introduced new priorities emphasizing cost containment and regulatory flexibility.

Key changes introduced through the restructuring included:

Technology Neutrality

The prior “fiber-first” preference was removed, allowing all technologies, licensed or unlicensed fixed wireless, satellite (including low-Earth orbit systems), cable, DSL, and fiber to compete for funding, provided they meet minimum performance standards of 100/20 Mbps speeds, latency of 100 milliseconds or less, and demonstrate long-term scalability.

Scoring and Cost Emphasis

Project selection criteria were revised to prioritize the lowest cost per location as the primary factor in award decisions, placing greater emphasis on cost efficiency relative to earlier rounds of federal broadband funding.

Limits on Non-Deployment Activities

Previously approved funding for non-deployment activities such as digital literacy programs, workforce training, and community outreach is no longer guaranteed, narrowing the scope of allowable expenditures primarily to infrastructure deployment.

Regulatory Simplification

Several non-statutory requirements related to labor standards, workforce and DEI initiatives, climate considerations, net neutrality provisions, and affordability pricing were removed or reduced, streamlining compliance obligations for states and subrecipients.

Maryland’s BEAD Proposal and Current Standing

In response to these federal changes, Maryland undertook a comprehensive redesign of its BEAD strategy to ensure compliance with updated NTIA guidance while continuing to protect the long-

term interests of residents. The State’s approach seeks to balance federal requirements with core policy objectives, including service quality, affordability, reliability, and sustainable infrastructure investment.

Maryland released its BEAD Draft Final Proposal for public comment on August 25, 2025, incorporating extensive stakeholder feedback from local governments, internet service providers, community organizations, and residents. The Final Proposal was submitted to NTIA on September 5, 2025 and captured:

All 9,014 unserved and underserved locations statewide, and

1,134 Community Anchor Institutions, including schools, libraries, healthcare facilities, and other essential public-serving entities.

Funding Outlook and Ongoing Negotiations

As a result of the restructuring process and subsequent curing negotiations with NTIA, Maryland’s deployment budget within the BEAD Final Proposal has been reduced to approximately \$85 million. These reductions reflect the revised federal emphasis on cost-per-location efficiency and technology neutrality rather than a reduction in the State’s commitment to universal service.

Maryland continues to engage in active curing discussions with NTIA to finalize budget assumptions, eligible costs, and deployment parameters. Despite these changes, BEAD remains the final and critical funding mechanism that will enable Maryland to reach 100 percent broadband connectivity, ensuring that all remaining unserved households and community anchor institutions are connected.

Through strategic use of BEAD funding combined with prior federal and state investments Maryland is positioned to complete its statewide broadband buildout and deliver reliable, high-speed internet access as essential infrastructure for economic growth, education, healthcare, and civic participation..

Progress on Ch. 74 Initiatives

Chapter 74 Goals

The **Chapter 74 Senate Bill 66** restructured the Maryland broadband office into the **Office of Statewide Broadband (OSB)** and laid out a framework for accelerating the deployment of broadband across Maryland. The primary goals outlined in the bill are as follows:

1. **Achieve Universal Access:** The bill mandates the OSB to ensure that every resident and business in Maryland has access to affordable and reliable broadband services by **December 31, 2026.**

2. **Focus on Unserved and Underserved Areas:** The OSB is tasked with prioritizing efforts in rural and economically disadvantaged areas, targeting "unserved" and "underserved" communities. These are defined as areas where residents either have no access to broadband or have access that does not meet the federal broadband benchmark of **25 Mbps download / 3 Mbps upload**.
3. **Affordable and Equitable Access:** The law emphasizes not just deployment but also affordability, seeking to ensure that broadband is available to all Marylanders, including low-income households.
4. **Infrastructure Investment:** The bill outlines the creation of grant programs and funding mechanisms to incentivize ISPs to expand broadband infrastructure, particularly in hard-to-reach areas.
5. **Collaboration and Partnerships:** The OSB is tasked with collaborating with local governments, ISPs, electric cooperatives, and non-profit organizations to maximize the effectiveness of broadband expansion efforts.
6. **Digital Literacy and Inclusion:** The OSB is also responsible for initiatives to improve digital literacy and ensure Marylanders can effectively use broadband services, especially in underserved communities.
7. **Oversight and Reporting:** The OSB must provide regular reports on progress toward universal access, including the distribution of funds, success of infrastructure projects, and the overall status of broadband availability throughout the state.

Progress Towards Chapter 74 Goals

Since the passing of **Senate Bill 66**, OSB has made significant progress toward achieving universal broadband access in Maryland:

1. **Grant Programs for Infrastructure Buildout:**
 - OSB has launched several grant programs to accelerate broadband deployment. This includes the **Broadband Infrastructure Grant Program**, which provides funding to ISPs and electric cooperatives to build broadband infrastructure in unserved and underserved areas. These grants have been awarded across multiple counties, targeting both rural and suburban areas, with a focus on fiber optic deployments.
 - The OSB has also partnered with the **Federal Communications Commission (FCC)** and **National Telecommunications and Information Administration (NTIA)** to leverage federal funding such as **American Rescue Plan Act (ARPA)** funds, and **Broadband Equity, Access, and Deployment (BEAD) Program** allocations.
2. **BEAD Program Allocation:**
 - In 2023, Maryland received a **\$267 million allocation** from the federal **BEAD program** to support broadband expansion. This funding is being used to focus on the remaining unserved areas, particularly in rural counties like Garrett, Allegany, and Somerset. The OSB has set up a roadmap to deploy BEAD funds over the next few years to complete universal broadband coverage by **2026**.
3. **Targeting Unserved and Underserved Areas:**

- OSB has reduced the number of **unserved and underserved locations** from **39,853 in 2019** to **9,014 in 2025**. This shows significant progress in bridging the digital divide and reaching 98% connectivity, particularly in rural and less dense areas.
 - Counties like Washington, Garrett, and St. Mary's, which have some of the largest unserved populations, are seeing targeted broadband infrastructure investments, with multiple ISPs participating in expanding fiber-optic networks.
4. **Collaborations with ISPs and Local Governments:**
- OSB has fostered partnerships with a wide range of ISPs, including national players like **Comcast** and **Verizon**, as well as local providers like **Talkie Communications**, **Choptank Electric**, and **ThinkBig Networks**. These partnerships have helped maximize the reach of broadband expansion efforts, leveraging both public and private investment.
 - OSB has also worked closely with local governments to map out areas of greatest need and align broadband deployment efforts with local infrastructure planning.
5. **Affordability Initiatives:**
- The OSB participated in the **Affordable Connectivity Program (ACP)**, as well as distributed the Maryland Emergency Broadband Benefit which provided subsidies for low-income households to reduce their monthly broadband bills. The OSB helped promote this program to ensure that as broadband infrastructure expands, it remained affordable for all Marylanders.
6. **Digital Literacy and Inclusion Efforts:**
- In addition to infrastructure expansion, the OSB has launched several digital literacy initiatives, targeting seniors, low-income residents, and students in underserved areas. These initiatives aim to ensure that Marylanders not only have access to broadband but are also equipped with the skills to use it effectively.
 - The **Digital Inclusion Fund** supports community-based organizations that provide digital skills training, device access, and technical support to residents.
7. **Oversight and Accountability:**
- The OSB provides regular updates on its progress, including detailed reports on the deployment of funds, the number of homes and businesses connected, and the remaining unserved areas. These reports have demonstrated a consistent downward trend in the number of unserved and underserved locations, showing that the state is on track to meet its 2026 goal.

Conclusion

Maryland's broadband initiative has dramatically improved internet access across the state, with substantial reductions in unserved and underserved locations from 2019 to 2024. However, key rural areas still require targeted efforts, particularly Washington and Garrett Counties, to bridge the final gaps. Moving forward, the state's broadband infrastructure expansion programs will need to focus on high-impact investments, particularly in regions that are geographically challenging or have lagged behind in receiving reliable internet services.

Looking ahead, the OSB plans to leverage its allocation from the **Broadband Equity, Access, and Deployment (BEAD)** Program to ensure the remaining unserved and underserved locations are connected. With the BEAD program and other state and federal funding streams, Maryland is well-positioned to close its broadband gaps entirely by **2028**. The goal is to provide every Marylander with access to high-speed internet, enabling better opportunities for education, healthcare, work, and civic engagement. The **BEAD allocation** is a crucial tool in the state's plan to overcome the challenges that have historically made broadband expansion difficult in rural and low-density areas. By focusing on a combination of robust infrastructure investment, public engagement, and digital equity, Maryland will not only meet the broadband needs of today but also future-proof its internet infrastructure for generations to come.