Broadband Expansion and Access Program Report

Completed pursuant to Chapter 74 (Senate Bill 66), Digital Connectivity Act of 2021, Section 6.5-104 (E)

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Introduction

In alignment with the goals set forth by Chapter 74 (Senate Bill 66), the Digital Connectivity Act of 2021, Section 6.5-104(E)(1), 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 Governor and the General Assembly have requested a report to be submitted on or before December 1 each year. 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.

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.

Additionally, OSB is actively leveraging \$267 million in funding from the federal Broadband Equity, Access, and Deployment (BEAD) program and Digital Equity (DE) funding to accelerate statewide broadband infrastructure efforts. These funds are critical to closing the digital divide, ensuring that all Maryland residents have access to reliable, high-speed internet.

Statewide Broadband Plan

Maryland's Statewide Broadband Plan was meticulously designed, created, and approved by the National Telecommunications and Information Administration (NTIA) to ensure comprehensive and strategic broadband expansion across the state. This plan aligns with federal goals to bridge the digital divide and foster equitable access to high-speed internet for all Marylanders.

As a key part of Maryland's broadband strategy, the **Broadband Equity**, **Access**, **and Deployment** (**BEAD**) **Five-Year Action Plan** outlines the state's approach to leveraging federal BEAD program funding to achieve universal broadband coverage. The plan focuses on expanding infrastructure, promoting digital equity, and addressing barriers to adoption in underserved and unserved communities. It identifies priority areas, details implementation strategies, and emphasizes collaboration with stakeholders to maximize impact.

This plan serves as a roadmap for transforming Maryland's broadband landscape, supporting economic growth, enhancing educational opportunities, and improving access to telehealth and other essential services.

The full BEAD Five-Year Action Plan is available for review at the following link: <u>Maryland BEAD</u> Five-Year Action Plan.

Current Funding Programs & Sources

Funds currently being utilized by the OSB are as follows:

ARPA CPF (Coronavirus Capital Projects Fund)

<u>Overview</u>: 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)

<u>Overview:</u> 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** has received the largest allocation of funds across the years, reflecting its critical role in building out the state's broadband capacity, particularly through fiber-optic networks in rural and underserved areas.

- In 2020, \$7,287,929 was awarded, of which \$6,948,007 was expended, leaving a small remaining balance of \$339,922.
- The following year (2021) saw a much larger award of \$24,686,453, with \$18,268,228 expended, leaving \$6,003,477 remaining.
- By 2022, Maryland invested heavily in infrastructure, with \$99,282,664 awarded and \$39,324,681 expended, leaving a substantial balance of \$59,957,982.
- Most recently, in 2023, the state awarded \$92,741,409, expending only \$6,420,756, leaving the largest remaining balance of \$84,373,753 to date.

The remaining unspent balance shows there is significant projects under development to scale up broadband initiatives across the state, particularly in areas where more extensive projects will take time to complete.

2. Neighborhood Connect Project

The **Neighborhood Connect Project** focuses on connecting underserved communities and neighborhoods to reliable broadband access. While this program has seen relatively smaller awards than the infrastructure projects, it has made consistent progress over the years:

- In **2019**, \$618,556 was awarded, with \$538,153 expended, leaving a modest remaining balance of \$80,404.
- In 2020, the project received \$2,351,208, expending \$2,195,150, leaving a balance of \$156,058.
- 2021 saw a larger award of \$5,446,337, with \$5,006,964 expended, leaving \$439,373.
- By **2022**, a significant award of **\$14,936,588** was given, with **\$12,491,820** expended, leaving a balance of **\$2,444,768**.

As of 2022, \$2,444,768 remains unspent for the Neighborhood Connect Project, which will continue to support localized broadband expansion, especially in suburban and lower-density areas.

3. Difficult to Serve Project

The **Difficult to Serve Project** is focused on providing broadband to the most challenging regions, such as extremely rural or geographically isolated areas. This initiative received its first round of funding in **2024**:

• \$19,629,100 was awarded, with only \$8,000 expended, leaving nearly the entire amount — \$19,621,100 — available for future use.

Given the complexity and higher costs of connecting these regions, the large remaining balance indicates that significant efforts will be needed in the coming years to address the logistical and financial challenges of these difficult-to-serve areas.

4. Public Housing Program

The **Public Housing Program** focuses on ensuring that residents in public and affordable housing have access to reliable broadband services. This project also saw its first funding in **2024**:

• \$10,453,148 was awarded, with no expenditures yet recorded, leaving the entire balance of \$10,453,148 available for future deployment.

The Public Housing Program is still in its initial planning and implementation stages, and the coming years will see a push to ensure that residents in public housing receive the broadband services they need to participate in the digital economy.

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

Progress Towards Full Broadband Coverage

Since 2019, the Maryland has made significant strides in addressing broadband accessibility across all jurisdictions, particularly focusing on reducing the number of unserved and underserved locations. The data reveals a steady decline in both categories, thanks to focused funding, infrastructure improvements, and policy initiatives.

The Declining Trend in Unserved and Underserved Areas

From 2019 to 2024, Maryland has made a **48% reduction** in its unserved and underserved broadband locations. In 2019, a total of **58,607 locations** were either unserved or underserved. By 2024, this figure has been reduced to **30,956**, marking a significant achievement. The number of unserved locations has steadily decreased from **39,853** in 2019 to **21,197** in 2024, while the underserved locations dropped from **18,754** to **9,759** during the same period.

This trend is indicative of Maryland's concerted efforts to close the digital divide, largely by investing in rural and underserved communities, where broadband infrastructure has traditionally lagged behind urban counterparts. The largest gains were seen between 2021 and 2022, where unserved locations dropped by nearly 6,648—a testament to the state's infrastructure expansion projects launched in response to federal initiatives and the growing reliance on digital access during the pandemic.

Figure 4 - Unserved/Underserved Decline

Unserved/Underserved Decline 2019-2024

Fiscal Year	Unserved	Underserved	Totals
2019	39,853	18,754	58,607
2020	36,745	17,292	54,037
2021	30,757	14,474	45,231
2022	24,109	11,526	35,635
2023	23,331	10,945	34,276
2024	21,197	9,759	30,956

Current State of Unserved and Underserved Locations (2024)

Despite these gains, certain counties in Maryland still face considerable challenges. As of 2024, **21,197** locations remain unserved, and **9,759** are underserved. These numbers highlight areas where ongoing efforts are needed to achieve full broadband coverage.

Jurisdictions with Significant Unserved Populations:

- 1. **Washington County** leads in unserved locations, with **3,300** homes and businesses still without reliable broadband access. This county's rural landscape and rugged terrain make infrastructure development more challenging.
- 2. **Garrett County** follows with **2,611** unserved locations. Being a rural and mountainous area, Garrett County has long been an area of focus, but geographical barriers continue to present challenges.
- 3. **St. Mary's County** also struggles with connectivity, with **2,034** unserved locations, indicating ongoing gaps in coverage for this relatively rural region.
- 4. **Carroll County** remains high on the list with **1,826** unserved locations, despite receiving significant broadband funding over the past few years.
- 5. **Frederick County**, with **1,734** unserved locations, continues to be a critical area in need of further infrastructure investment, even as development continues to spread into rural and suburban areas.

Jurisdictions with Significant Underserved Populations:

- 1. **Worcester County** leads in underserved locations, with **1,184** households or businesses receiving substandard broadband service. Given its coastal location and the presence of tourist areas, broadband expansion here is crucial to support both residents and businesses.
- 2. **Wicomico County** follows with **967** underserved locations, emphasizing the need for robust infrastructure to support local economies and communities.
- 3. **Somerset County** stands out with **575** underserved locations, reflecting both the rural nature of the county and the ongoing challenges in delivering high-speed internet to its residents.
- 4. **Baltimore County** has **873** underserved locations, despite being one of the more urbanized counties, which may suggest pockets of service issues in specific areas.
- 5. **Dorchester County** also reports **848** underserved locations, a high number relative to its size, further highlighting the challenges faced by rural counties in Maryland.

Counties Nearing Full Coverage:

Several jurisdictions are nearing full broadband coverage, having successfully minimized their unserved and underserved populations:

- **Wicomico County** has only **27 unserved** locations, which is a remarkable achievement given the number of underserved locations it faces.
- **Baltimore City** reports **0** unserved or underserved locations, reflecting the success of urban broadband infrastructure in Maryland's largest city.
- Worcester County has reduced unserved locations to just 87, indicating strong progress toward full broadband connectivity.

Key Areas for Continued Focus:

Despite these successes, rural counties remain the focus of continued broadband investment. Counties such as Garrett, Washington, and St. Mary's exhibit a significant proportion of the remaining unserved locations. These areas are vital to Maryland's overall strategy, as the geographical challenges and lower population densities require innovative solutions and sustained funding.

Additionally, urban and suburban areas such as Baltimore County and Prince George's County also have pockets of underserved communities, indicating that even in developed areas, gaps in service quality persist.

Figure 5 - Unserved/Underserved Locations by County

Unserved Underserved Locations 2024

Jurisdiction	Unserved	Underserved
Allegany County	728	352
Anne Arundel County	708	206
Baltimore City	0	0
Baltimore County	734	873
Calvert County	482	146
Caroline County	531	137
Carroll County	1,826	940
Cecil County	725	362
Charles County	588	130
Dorchester County	504	848
Frederick County	1,734	318
Garrett County	2,611	502
Harford County	618	188
Howard County	268	164
Kent County	484	116
Montgomery County	633	241
Prince George's County	700	253
Queen Anne's County	862	219
Somerset County	279	575
St Mary's County	2,034	478
Talbot County	734	42
Washington County	3,300	518
Wicomico County	27	967
Worcester County	87	1,184
Total	21,197	9,759

Workforce and Economy Impacts:

Maryland's significant progress in reducing unserved and underserved broadband locations—achieving a 48% reduction from 2019 to 2024—highlights the state's commitment to addressing the digital divide. However, gaps in internet access continue to have a profound impact on Maryland's workforce and economy, especially in rural and underserved areas. Reliable internet is essential for job searching, applications, and remote work opportunities, yet individuals in unserved areas often lack access to online job portals, training programs, and gig economy platforms, limiting their earning potential. A study by Brookings found that rural workers without sufficient broadband access are 5% less likely to be employed in remote-ready jobs compared to those in urban areas.

In addition, gaps in internet access prevent workers from participating in online education or training programs, which are crucial for acquiring the skills needed for high-demand jobs in fields like IT, healthcare, and advanced manufacturing. The state's investments in broadband expansion and digital literacy initiatives aim to address this barrier, allowing workers to upskill and remain competitive in the job market. These disparities also disproportionately affect low-income and minority communities, perpetuating income and employment gaps, and making it more difficult to achieve social equity. Closing the digital divide is therefore not just an economic issue, but a matter of addressing broader social and racial inequities in the state.

The lack of broadband in underserved areas also poses significant economic challenges. Without reliable internet, businesses struggle to operate efficiently, particularly in sectors dependent on digital infrastructure. According to the Federal Reserve, high-speed internet can boost small business revenue by up to 25%, and areas without broadband access are less attractive to potential business investors. In turn, this limits the state's ability to grow its local economies, especially in rural areas. Furthermore, without broadband, areas miss out on potential tax revenue from businesses and consumers who rely on digital services for daily activities.

Broadband gaps also contribute to a mismatch between available jobs and local skills. Workers in unserved regions often cannot access higher education or workforce development programs online, which means they are ill-prepared for emerging job opportunities. Closing this gap will help ensure that Maryland's workforce is adequately skilled for future economic demands, ultimately contributing to higher productivity and economic growth.

The COVID-19 pandemic brought the urgent need for reliable broadband into sharp focus, as remote work and online learning became essential. Maryland's broadband expansion efforts, particularly from 2021 to 2022, resulted in a reduction of 6,648 unserved locations and laid the foundation for long-term economic recovery. These efforts helped small businesses shift to ecommerce, supported the widespread adoption of telehealth, and ensured students could continue learning remotely.

In conclusion, bridging Maryland's remaining broadband gaps is critical not only for sustaining economic growth but also for preparing the workforce for future opportunities. By investing in broadband infrastructure and digital literacy, Maryland can ensure all its residents have the tools to contribute to and benefit from a growing, connected digital economy.

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 substantial strides toward achieving universal broadband access. Through the launch of several grant programs, including the Broadband Infrastructure Grant Program, OSB has provided funding to internet service providers (ISPs) and electric cooperatives to build broadband infrastructure in unserved and underserved areas. These grants have spurred fiber-optic deployments across rural and suburban counties. Partnering with federal agencies like the FCC and NTIA, OSB has leveraged funding from the American Rescue Plan Act (ARPA) and the Broadband Equity, Access, and Deployment (BEAD) Program to enhance its initiatives.

In 2023, Maryland secured \$267 million from the BEAD program to address unserved regions, focusing on rural counties such as Garrett, Allegany, and Somerset. The OSB has developed a comprehensive roadmap to utilize this funding to achieve universal broadband coverage by 2026. This effort has already yielded measurable results: the number of unserved locations has decreased from 39,853 in 2019 to 21,197 in 2024, and underserved locations have dropped from 18,754 to 9,759. Strategic investments in counties with significant connectivity gaps, like Washington, Garrett, and St. Mary's, have driven this progress, with multiple ISPs expanding fiber-optic networks.

Collaborative partnerships with ISPs, including major players like Comcast and Verizon, and local providers such as Talkie Communications, Choptank Electric, and ThinkBig Networks, have maximized broadband expansion efforts by blending public and private investment. OSB has also coordinated with local governments to map priority areas and align deployment with local infrastructure planning.

Affordability remains a key priority. OSB has participated in the Affordable Connectivity Program (ACP) and distributed Maryland Emergency Broadband Benefit funds, reducing monthly broadband costs for low-income households. As infrastructure expands, these programs ensure that broadband access remains equitable and inclusive. Maryland is committed to improving digital literacy and fostering equitable access to technology across the state. Through a combination of targeted funding, strategic planning, and grassroots initiatives, the state aims to empower residents with the digital skills necessary to thrive in the modern world.

At the heart of Maryland's efforts is the State Digital Equity Plan, developed in collaboration with stakeholders to identify barriers to digital inclusion and propose actionable solutions. This plan addresses the needs of underserved populations, emphasizing programs that increase access to affordable technology, provide digital skills training, and enhance overall digital literacy.

To support these goals, Maryland has secured funding through the NTIA Digital Equity Capacity Grant Program, which provides the resources needed to implement key initiatives outlined in the State Digital Equity Plan. These grants will enable Maryland to expand digital literacy training, improve community access to technology, and enhance outreach efforts to marginalized groups.

Key initiatives under this framework include the Maryland Digital Inclusion Grant, which funds local organizations delivering digital skills training to residents. These programs are tailored to diverse communities, offering training in essential skills like basic computer use, online navigation, and utilizing digital tools to access education, employment, and healthcare resources.

Additionally, the University of Maryland's Digital Navigator Program serves as a hands-on approach to digital inclusion. Trained Digital Navigators provide one-on-one assistance to residents, helping them overcome barriers such as affordability, lack of devices, or insufficient knowledge about digital tools.

Together, Maryland's State Digital Equity Plan, NTIA Capacity Grants, and innovative programs like the Digital Inclusion Grant and Digital Navigator Program create a cohesive strategy to close

the digital divide and ensure that every Marylander has the tools and skills to succeed in a digitally connected world.

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. Maryland has been awarded \$267.7 million in BEAD funding, which is part of the larger federal Infrastructure Investment and Jobs Act (IIJA). This funding is designed specifically to bridge the digital divide by delivering high-speed, reliable internet to areas that have traditionally been left behind.

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.