



Broadband Expansion Incentives Study

Contents

Executive Summary	3
Background	3
Recommendations	8
Enhancing Tax Incentives	8
Reducing Regulatory Burdens	10
Further Streamlining Permitting for Broadband Projects	10
Exempting Service Providers from Resource Sharing Agreement Fees for Service to Unserved/Underserved Areas.....	11
Making Broadband Access Programs More Sustainable	13
Maryland Emergency Broadband Benefit PLUS	13
Private Investment in Broadband Networks	14
Models for Private Investment	15
Enabling Easier Access to Public Assets	17
Adopting Technology Neutral Policies.....	17
Conclusion	18
Appendix	19
Appendix A: Resource Sharing Agreement Policy Process Map	20
Appendix B: Resource Sharing Agreement Annual Fee Table	21

Executive Summary

In accordance with Chapter 440/House Bill 551, the Maryland Office of Statewide Broadband (OSB) conducted a study and is making recommendations to the Governor and Maryland General Assembly on incentives to encourage the expansion of broadband infrastructure in the State. The legislation asked the OSB to address three items:

1. How the State can ensure that federal broadband infrastructure grants are deployed to communities that are unserved or underserved, including either regulatory or financial mechanisms;
2. How the State can ensure that federal broadband infrastructure grants are deployed to best serve the needs of Marylanders; and
3. How other states have utilized private investment in broadband networks to inform how Maryland might implement similar measures.

In response to these questions, OSB offers recommendations in each of the three areas and provides examples and an analysis of other states' strategies encouraging private investment for consideration by Maryland leaders.

- Enhancing Tax Incentives
- Reducing Regulatory Burdens
- Making Broadband Access Programs More Sustainable

Background

Maryland's OSB, a component of Maryland's Department of Housing and Community Development (DHCD), was established by the Digital Connectivity Act of 2021 as a replacement for the Office of Rural Broadband (Chapter 74/Senate Bill 66), ensuring that all State residents are supported by high-quality, affordable broadband Internet service and have the tools necessary to take advantage of the internet. OSB was charged with developing a Statewide plan to ensure that all State residents can connect to reliable broadband internet by the end of 2026. In July 2021, as part of its mission to expand broadband access, OSB issued the first \$30 million in grant funds to 18 counties to expand service to over 12,000 households.¹

Building out America's broadband infrastructure is a top priority, as demonstrated by the \$65 billion for broadband in the Infrastructure Investment and Jobs Act (IIJA). One of the key areas that allocation focused on was expanding broadband. One of the challenges for rural residents is that no incentives exist to build broadband infrastructure in rural areas. Nationally, it is estimated that almost \$30 billion will be spent on incentives for rural residents over the next 10 years between 2021 and 2031, in addition to the \$47 billion spent from 2009 to 2017.² To date, the State of Maryland has received \$317,861,262 in federal grants, supporting six programs for funding broadband expansion as depicted in Exhibit 1.

¹Johnston, Ryan. 2021. "Maryland to Award \$30 Million in Broadband Grants." StateScoop. July 20, 2021. <https://statescoop.com/maryland-broadband-30-million/>.

²Arbel, Tali. 2021. How Will the \$65 Billion Broadband Service Plan Impact You? USA Today. August 12, 2021. <https://www.usatoday.com/story/tech/2021/08/12/broadband-internet-plan-65-billion-biden-infrastructure/8107732002/>.

The State has awarded more than \$200 million in state funding to increase high-speed internet access. The Connect Maryland initiative awarded grants to more than 100 recipients to construct new broadband infrastructure, lend devices to K-12 students, extend existing networks, and develop gap networks for low to moderate income communities.

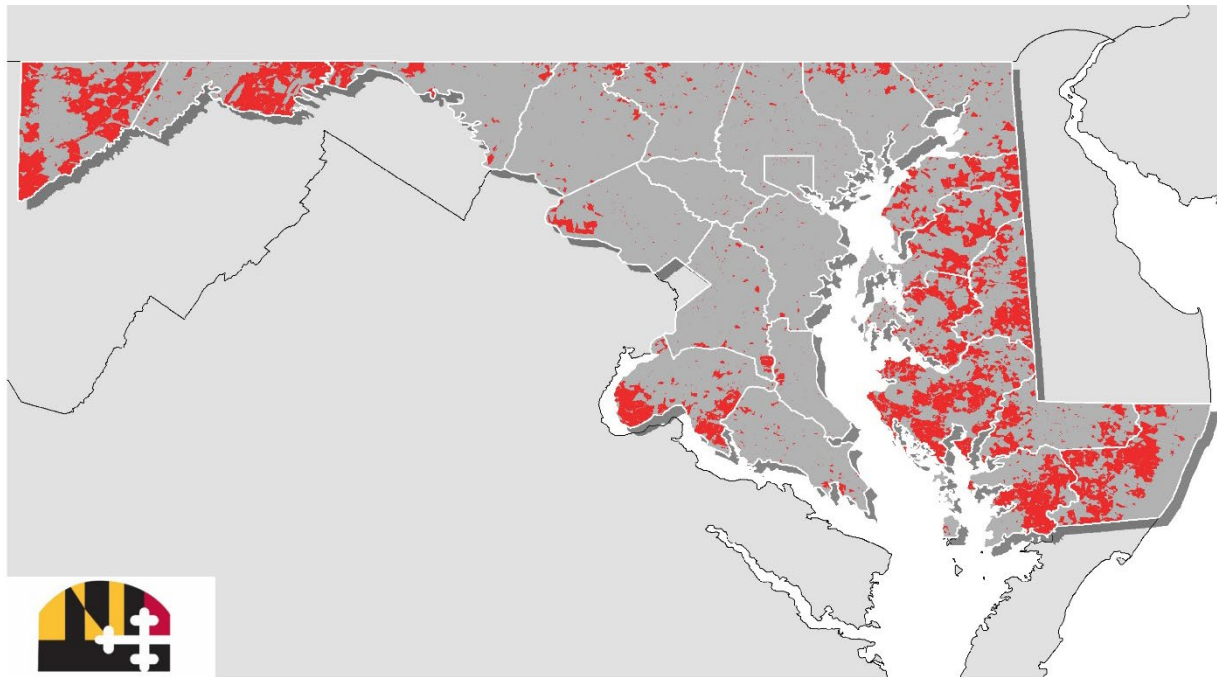
Exhibit 1: State of Maryland Federal Broadband Funding

Source	Purpose	Total
Federal Communications Commission Rural Digital Opportunity Fund	Rural broadband deployment	\$43,963,098
National Telecommunications and Information Administration Connecting Minority Communities Pilot Program – University of Maryland Eastern Shore	Rebuilding Our Digital Road: Digital Infrastructure Re-imagining project	\$3,000,000
Broadband Equity, Access, and Deployment Program	Expanding broadband	\$267,738,401
NTIA Connecting Minority Communities Pilot Program – Morgan State University	Miles of Education through Technology Access Zones project	\$4,115,616
NTIA – Enabling Middle Mile Broadband Infrastructure Program award to Baltimore Gas & Electric for the BGE Underground Fiber Project	Build 69.9 route miles of underground middle-mile fiber	\$15,438,846
Maryland Office of Rural Broadband	Build fiber and supporting infrastructure in unserved areas. 46,379 locations passed over the life of the program	\$245,343,703 over the life of the program
U.S. Treasury State and Local Fiscal Recovery Funds	Program at the University of Maryland to improve digital skills	\$6,000,000

Today, the OSB oversees more than half a billion dollars in federal funding from the American Rescue Plan Act (ARPA) of 2021, the Broadband Equity, Access, and Deployment (BEAD) Program, and other federal and state broadband programs, such as the Affordable Connectivity Program (ACP). In 2023, the OSB surveyed ISPs in the State. The survey showed that the average price of an ACP plan in the State is between \$20 and \$30 per month, and the average speed of the plans is 100 Mbps/100 Mbps symmetrical. While this survey was not specifically focused on incentives for ISPs to enhance broadband access, ISP responses to the open-ended questions provided insight into the possibilities for incentivizing broadband expansion. In addition, the public comments OSB received in December 2023 on its BEAD Volumes I and II, as well as its Digital Equity Plans, were also factored into this study.

The State strategically focused on expanding and enhancing broadband in 2018, creating the Office of Rural Broadband. Prior to establishing the new Office of Statewide Broadband in DHCD, the following map shows Maryland's unserved locations as of 2018.

Exhibit 2: Unserved Locations 2018 Map

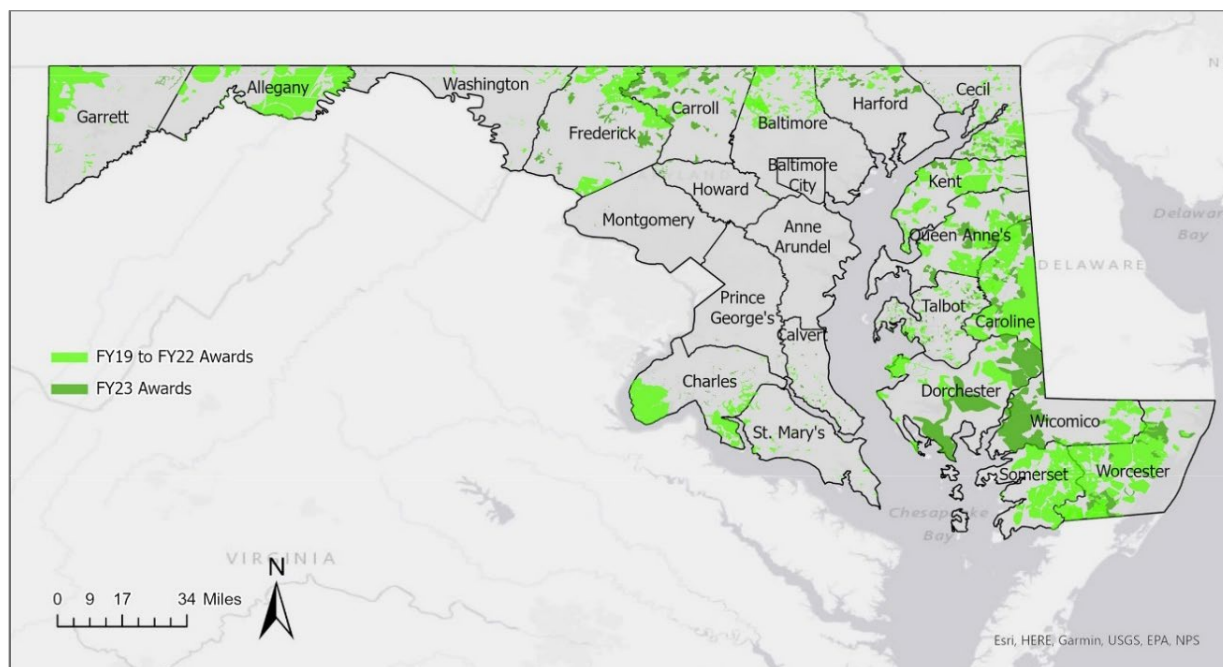



CHANGING
Maryland
for the Better
Governor's Office of Rural Broadband

FCC Form 477 data
Areas with <25x3 advertised service

In FY 2021, OSB awarded \$28 million in Coronavirus State and Local Fiscal Recovery Funds (SLFRF) for broadband. The following fiscal year, OSB awarded an additional \$114 million in SLFRF funding, including \$100 million in Maryland Network Infrastructure Grant Program (MDNI) projects. In FY 2023, OSB used its Capital Projects Funding (CPF) to award \$91 million to MDNI projects, with additional funding to come. The FY 2023 awards went to thirty-five projects from nine providers to serve a total of 14,488 locations.³ The following map shows awards and locations that benefitted from high-quality internet connections.

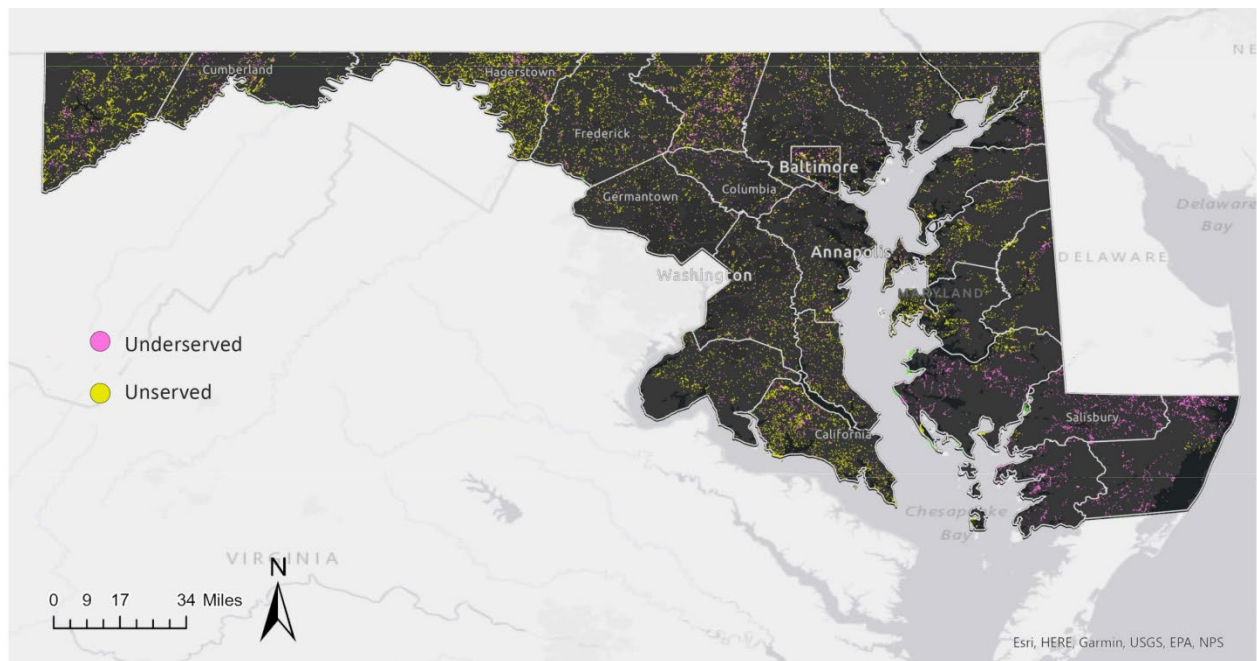
Exhibit 3: American Rescue Plan Act Funding for Broadband Map



³ 2023 CPF Annual Performance Report, Maryland Department of Housing and Community Development, Office of Statewide Broadband, <https://dhcd.maryland.gov/Broadband/Documents/Annual-Performance-Report-2023.pdf>

Maryland was awarded \$267 million in 2023 as part of the BEAD program. The following map shows all identified unserved and underserved locations prior to the BEAD Challenge Process, which is intended to ensure the State has an accurate accounting of all unserved and underserved locations and community anchor institutions in the state.⁴ The OSB will conduct the challenge process in early 2024.

Exhibit 4: 2023 Unserved and Underserved Locations Map



⁴ Maryland BEAD Initial Proposal Volume 1, Maryland Department of Housing and Community Development, Office of Statewide Broadband, <https://dhcd.maryland.gov/Broadband/Documents/State-Plans/DRAFT-Maryland-BEAD-IPv1.pdf>

Recommendations

Enhancing Tax Incentives

In 2021, an analysis was conducted of the cost per location for deploying broadband in different communities across the United States. This cost is often a major determiner for broadband providers when they are deciding where to expand a network. The analysis indicates that the typical cost per location in the United States is approximately \$4,000 but can be as low as \$1,500 or as high as \$23,000.⁵The NTIA has also conducted research into the cost per location and is providing that data to states as part of the Broadband Planning Toolkit to assist states in planning for the BEAD program. To assist providers with reaching the high-cost locations, several states have implemented financial incentives.

The Development District Association of Appalachia has indexed 36 tax incentives for broadband development around the country. Outlined in Exhibit 5 below is an analysis of the incentives states have implemented to support ISPs and ultimately increase broadband expansion.

Exhibit 5: Financial Incentive Summary

State	Financial Incentive Type	Incentive Summary
West Virginia	Property Tax Reduction	Tangible personal property used in a high technology business, including servers, is valued at only 5% of the purchase price and pre-written computer software, computers, servers, and building material. It is exempted from sales and use taxes.
Virginia	Sales and Use Tax Exemption	Equipment at data centers is exempt from sales and use tax.
Pennsylvania	Multiple Programs	Four programs reinvested sales tax into economic development zones in cities and refunded sales and use tax on computer data center equipment.
North Carolina	Sales and Use Tax Exemption	State tax exemptions on electricity, equipment, and software for data centers located in the State.
Mississippi	Tax Exemptions/Tax Credits	Tax exemptions and tax credits for broadband infrastructure purchases.

⁵ Estimates of broadband deployment costs. (2021, February 10). [www.williamrinehart.com](https://www.williamrinehart.com/2021/broadband-deployment-costs/).
<https://www.williamrinehart.com/2021/broadband-deployment-costs/>

One of the longest-running broadband incentive programs is in Mississippi, where the State has provided a tax credit since 2003 for network equipment purchases lasting nine years but exempting equipment purchased using COVID funds from the credit.⁶ Mississippi further exempted all network equipment placed in service between June 30, 2003, and before July 1, 2025, from property taxes for a period of ten years.⁷ West Virginia has a limited property tax exemption as the State values tangible personal property, including servers, that are directly used in a high technology or advertising business at 5% of the purchase price. Only Mississippi has such a heavy property tax exemption.

Several states offer a sales and use tax exemption for data center equipment. The states that offer the exemptions typically offer the exemption in perpetuity. South Carolina, however, placed a limit on the exemption based on when facilities are placed into service. Such exemptions could facilitate the sustaining and maintaining of broadband infrastructure. The states that have this exemption in place are Georgia, North Carolina, Pennsylvania, South Carolina, Tennessee, and Virginia.

As noted above, states have implemented a variety of financial incentives to encourage broadband expansion. Given that Maryland has a specific interest in expanding broadband to communities that are unserved or underserved, financial incentive legislation should be drafted to specifically target “unserved/underserved” or “rural” areas through eligibility requirements that require investment in those geographic regions.

Legislation can be drafted to target incentives in the most underserved areas by specifying that only “qualifying broadband projects” are eligible for the broadband financial incentive. This gives the State the ability to direct funding to projects in specific regions while mitigating the cost of the financial incentive to the State. The definition of qualifying projects can specify certain thresholds of existing broadband or internet speed by requiring that any qualifying project must provide broadband in areas where, as an example, “more than X percent of residential households do not have access to a fixed, terrestrial broadband service which delivers at least Y megabits per second downstream and at least Z megabit service upstream.” By adjusting the percentage of unserved households or download speeds, the State can target these financial incentives with greater specificity and further limit the fiscal impact of broadband incentive legislation. The fiscal impact of these policies can also be limited to sunset dates that further limit the period that financial incentives are in place.

Estimating the fiscal impact of broadband incentives is a complex undertaking and requires multiple assumptions on the costs and benefits generated by the establishment of broadband in unserved areas. In instances where the sales and use taxes for rural broadband projects would be eliminated or reduced for qualifying broadband projects, one must also consider the possibility that absent any incentive, and no sales and use taxes would be generated since ISPs are unlikely to install broadband in the highest cost per location areas without financial incentives from the State. Under this scenario, no State revenue would technically be lost by a reduction in sales and use taxes, as no expenditures would be made absent the policy incentive. Additionally, one must also consider the positive fiscal impact generated by the hundreds of jobs that will be required to implement the over \$400 million in broadband funding currently appropriated to the State. Finally, one must also consider the equity and socioeconomic benefits of providing broadband to all Marylanders, regardless of their ZIP code.

⁶ [Miss. Code Ann. § 57-87-5](#)

⁷ [Miss. Code Ann. § 57-87-7](#)

Reducing Regulatory Burdens

Broadband can be offered through fiber, cable, DSL, and fixed wireless, with fiber being the most reliable but most costly.⁸ Fiber broadband networks are often considered future-proof to avoid reinstallations. Still, they also can lead to delayed expansion into topographically difficult areas where fiber deployment is challenging and burdensome with respect to permitting requirements and right-of-way access applications.⁹ According to Pew Trusts, to build broadband networks, ISPs must install infrastructure on public and private land, requiring easements and permits.¹⁰

Regardless of the type of broadband infrastructure installation, the process of beginning to offer broadband service in a particular area can be time-intensive and costly.

Further Streamlining Permitting for Broadband Projects

The State published “Navigating Maryland’s Resource Access and Permitting Process for Broadband Projects, A User’s Guide to Streamlining Protective Environmental Permitting & Securing Resource Access” in October 2018. The User Guide provides the recommended approach for achieving the fastest pathway for protective broadband permitting and access to public resources. Leveraging the User Guide, ISPs receive a detailed process, including the three steps of the permitting process from more than nine issuing entities. Exhibit 6 below illustrates the Step-by-Step process outlined in the User Guide. According to the User Guide, the permitting process may range from 6 months to 12 months.¹¹

While the Guide describes the process clearly and outlines the steps ISPs must take, this section intends to highlight the complexity of the permitting process and associated turnaround times for permits to be issued. OSB believes there are still opportunities to reduce the overall permitting timeframe, which would incentivize ISPs to expand broadband more rapidly across the State, especially to reach the remaining Marylanders who are unserved or underserved.

⁸ [With Billions for Broadband Incoming, How Have State and Local Governments Expanded High-Speed Internet Access? – Rockefeller Institute of Government \(rockinst.org\)](#)

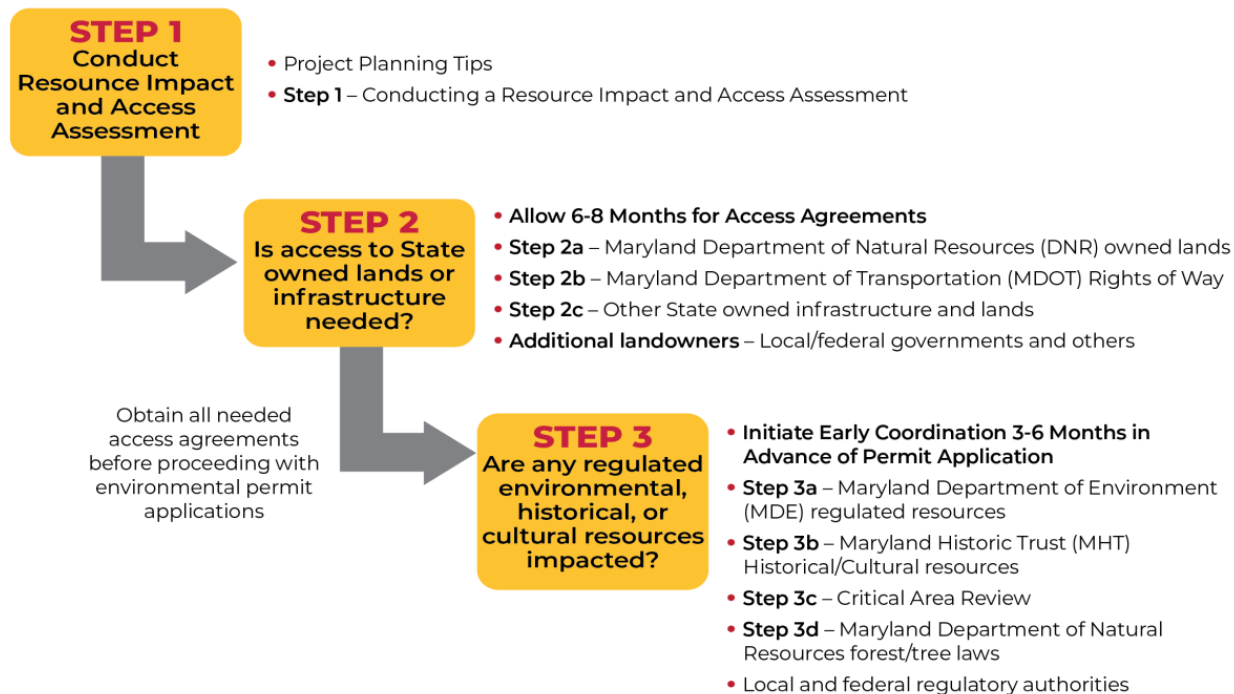
⁹ [The benefits and costs of broadband expansion | Brookings](#)

¹⁰ [How Broadband Infrastructure Gets Built | The Pew Charitable Trusts \(pewtrusts.org\)](#)

¹¹ [Navigating-Broadband-Permitting-Process.pdf \(maryland.gov\)](#)

Exhibit 6: Step-by-step process for navigating the State resource access and permitting process

Navigating the State Resource Access and Permitting Process



Exempting Service Providers from Resource Sharing Agreement Fees for Service to Unserved/Underserved Areas

The 1996 Maryland Telecommunications Act and SF&P § 3A-301 - 313 defined the term “resource sharing” and established review procedures by the Department of Information Technology (DoIT). This Act and intergovernmental coordination intend to enable sharing access to the State’s right-of-ways.

Through this legislation, the Department of Information Technology Secretary is tasked with establishing a programmatic process for private companies to apply for the State right-of-way access, currently referred to as the Resource Sharing Agreements Program Policy. This policy establishes a comprehensive programmatic framework to which all State information technology Resource Sharing Agreements (RSA) subject to DoIT oversight will adhere, as well as establish business processes on the proper execution and monitoring of RSAs and the establishment of requisite internal management controls, which is depicted in Appendix B: Resource Sharing Agreement Policy Process Map. The Resource Sharing Agreement Program Policy has been updated by the Secretary of the Department of Information Technology as recently as May 2020.

Generally, the current RSA permit application process is as follows and covers five types of proposals [Tower Co-locations, Fiber Optic Cabling, Small Cell “Micro,” Land, Rooftop, or Building]:

1. RSA Proposal Application
 - a. Submit Supplement 1 if a company is seeking an RSA Fee Waiver
 - b. Submit Supplement 2 if a nonprofit organization is the company to install broadband communication infrastructure in rural and underserved areas
2. Executive Summary
3. Value of Proposed Consideration to the State
4. Connect Plan

DoIT conducts its application review once a complete RSA proposal packet has been submitted. During this time, if the monetary value is less than \$100,000.00, DoIT will process the packet through established legal due diligence outlined in the Resource Sharing Program Policy. If the monetary value is greater than \$100,000.00, the project must be advertised on eMaryland Marketplace for 30 days and simultaneously sent to the Legislative Policy Committee for a potential 60-day review.¹² Associated RSA fees are determined through competitive market rates outlined in Appendix C: Resource Sharing Agreement Annual Fee Table. Funds collected from all telecommunications RSAs and the sale, lease, and exchange of communication sites, communication facilities, or communication frequencies must generally be deposited into the Major Information Technology Development Project Fund (MITDPF). However, funds collected from RSAs with specified Executive Branch agencies and agencies within the Judicial and Legislative branches of State government are retained by those agencies and not deposited into MITDPF. The MITDPF is used to pay for major IT development projects in general funded agencies.¹³

The Guide is updated through Policy Memoranda issued by the Department of Information Technology (DoIT). The DoIT Secretary has issued several of these policy updates in the last five years. Sometimes, these updates are in response to legislative changes to RSA requirements. Other updates are used to clarify which ISPs (for-profit or non-profit) are required to obtain RSA approval and pay the associated fees (Appendix C: Resource Sharing Agreement Annual Fee Table). Exhibit 7 below describes some recent policy updates and summarizes the changes made.

Exhibit 7: Resource Sharing Program Policy Updates Summary

Date	Stakeholder	Purpose of Update
August 13, 2019	Private Industry	Companies that already have an approved RSA and respective permits and who have statutory permissions to the State rights-of-way do not need to re-submit additional RSA applications for broadband infrastructure expansion.
October 3, 2019	Non-Profits	Nonprofits installing broadband in rural and underserved areas are exempt from RSA.
October 9, 2019	For-Profits	For-profit companies installing last-mile broadband in rural and unserved areas are eligible for an RSA Fee Waiver.

¹² [DoIT-RSA-Program-Policy.pdf \(maryland.gov\)](#)

¹³ [2020 Regular Session - Fiscal and Policy Note for Senate Bill 790 \(maryland.gov\)](#)

As recently as 2020, the Maryland General Assembly held hearings on bills (SB 790/HB1150) to codify exemptions of private industry ISPs from some RSA requirements, including the payment of associated fees for all last mile broadband telecommunications projects in unserved areas of the State.

Fiscal notes from the Department of Legislative Services indicated that the language of the drafted legislation could be interpreted to nullify all existing RSAs, contributing to revenue loss totaling as much as \$4.9 million annually. The fiscal note also indicates that it would cost the State an additional \$26.0 million to purchase and install its fiber optic cable lines to replace those currently shared under RSAs.¹⁴ The additional costs assume that in unintentionally nullifying all existing RSAs, the State would assume all the costs previously supported by ISPs under existing RSAs. The bill did not pass.

To continue leading the way for broadband expansion, OSB recommends codifying in public law that any ISPs attempting to connect the remaining Marylanders who are unserved and underserved, as defined by OSB, are exempt from the RSA process.

As mentioned above, legislation that provides waivers only for projects providing broadband to the unserved or underserved Marylanders for ten years would limit the fiscal impact of this policy, especially in comparison to the previously drafted fiscal note. Revenues to the Major Information Technology Development Project Fund Special Fund for Resource Sharing Agreement Revenues have decreased year over year from \$4.7 million in 2021 to a projected \$1 million in 2023.¹⁵ Given this downward trend in revenue for RSAs, codifying a waiver for the population that does not currently have access to broadband would likely have a de minimis fiscal impact.

Making Broadband Access Programs More Sustainable

State and local government leaders across Maryland recognize that broadband is an essential driving force for economic infrastructure, healthcare access, and reliable access to education. The Affordable Connectivity Program (ACP) was created as part of the IIJA and received initial funding of \$14 billion. ACP built off the Emergency Broadband Benefit program, which was established under the Consolidated Appropriations Act of 2021 with \$3.2 billion in funding. The ACP program provides \$30 per month (\$75 per month for tribal members) to qualifying households to help subsidize internet access and is paid directly to broadband providers.

Maryland Emergency Broadband Benefit PLUS

Multiple incentives are being leveraged to facilitate the expansion of broadband. The largest distribution of funding that will be coming in the next year will be from the BEAD program, a grant program established in the IIJA to states to facilitate broadband expansion. As part of this program, the National Telecommunications and Information Agency (NTIA) asked states to propose a low-cost, affordable plan that they will ask BEAD applicants to follow. The model plan closely follows the outline of the ACP rules requiring ISPs to offer a plan of no more than \$30 per month (\$75 per month on tribal lands) with all taxes and fees included and no data caps on a subscriber's service. Maryland adopted the NTIA model low-cost plan in its BEAD Initial Proposal volume 2. As of December 25, 2023, 274,726 households in

¹⁴ [2020 Regular Session - Fiscal and Policy Note for Senate Bill 790 \(maryland.gov\)](https://mga.maryland.gov/2020-regular-session/fiscal-and-policy-note-for-senate-bill-790)

¹⁵ <https://mgaleg.maryland.gov/Pubs/BudgetFiscal/2024fy-budget-docs-operating-F50-Department-of-Information-Technology.pdf>

Maryland are enrolled in the ACP, receiving \$30 per month toward their internet service.¹⁶ To ensure low income households have access to affordable internet service many federal grant programs, including the BEAD program, are requiring ISPs to participate in ACP.

Leveraging \$45 million from the State’s ARPA funding, the State created the Maryland Emergency Broadband Benefit (MEBB) Program to expand the ACP benefit. The MEBB provides an additional \$15 per month to eligible households – providing a total of \$45 per month toward the cost of internet service for eligible Marylander households. The State has partnered with EducationSuperHighway to promote the ACP to residents.¹⁷

As the current funding for ACP begins to wind down, the FCC has announced plans for closing out the program unless Congress acts to provide funding.¹⁸ Despite the possibility of an additional \$7 billion in funding for the program, the future of ACP still needs to be determined.¹⁹ Funding is expected to end in April 2024 and will impact 23 million Americans in rural, suburban, and urban households. The funding for MEBB is also being exhausted with funds expected to be fully expended in the first quarter of calendar year 2024.

To build on the ACP and continue the success of the MEBB, the State should consider rebranding the program, perhaps to the Maryland Emergency Broadband Benefit PLUS, and incentivize ISPs by offering a tax deduction for their contributions. For example, if an ISP is willing to pledge dollar X toward MEBB PLUS, the ISP would get a Y% tax deduction as if it were a charitable donation. The State would not hold the funds but would be pledged, tracked, and certified by the ISP to the State on an annual basis.

Private Investment in Broadband Networks

As high-speed, reliable internet access becomes increasingly important in daily life, each state takes a unique approach to funding mechanisms and increasing private investments. Most states offer grants, tax credits, bonds, and loans to distribute funds and encourage investment, as well as encourage public and private partners. As of January 2022, states have employed different strategies to encourage private investment in broadband networks. The recommendations and strategies utilized by other states are presented for consideration by the State. This analysis provides successful methods resulting in increased internet access and encouraging private investment. Analyzing private investment in broadband infrastructure involves assessing various factors that influence investment decisions and potential returns while using the available data and the overall impact on the sector. A comprehensive overview of key elements to consider in broadband private investment analysis follows.

¹⁶ “ACP Enrollment and Claims Tracker.” Universal Service Administrative Company. <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/>.

¹⁷ “Governor Moore Launches Maryland ActNow Campaign to Close the Digital Divide in Maryland - Press Releases - News.” Office of Governor Wes Moore. <https://governor.maryland.gov/news/press/pages/governor-moore-launches-maryland-actnow-campaign-to-close-the-digital-divide-in-maryland.aspx>.

¹⁸ “Affordable Connectivity Program to End Soon barring Congressional Action | Federal Communications Commission.” 2024. January 11, 2024. <https://www.fcc.gov/document/affordable-connectivity-program-end-soon-barring-congressional-action-0>.

¹⁹ Clarke, Yvette. 2024. To Appropriate Funds for the Affordable Connectivity Program of the Federal Communications Commission. <https://www.congress.gov/bill/118th-congress/house-bill/6929/>.

Models for Private Investment

States are providing financial incentives, such as tax credits, to private companies willing to invest in underserved or unserved areas and creating grant programs and incentives that reward private entities for expanding broadband infrastructure in areas where it might only be economically viable with assistance. Sixteen states currently use special tax provisions to entice broadband deployment. These include tax deductions, exemptions for companies that would procure broadband equipment, and areas including unserved and underserved communities. A few examples of states currently offering tax credits are Maine, Indiana, and Iowa. Maine created a High Technology investment tax credit, allowing providers to receive credit for leasing and buying equipment. Indiana's incentive allows localities to assign infrastructure development zones. Once a zone is chosen in a municipality, these zones exempt property tax in broadband use areas. Iowa similarly exempts broadband infrastructure for ten years once the broadband network build is complete. A few states allow government bonds allowing for financing public infrastructure projects and publicly owned broadband networks. In New Hampshire, local governments can use bonds to allocate funds directly to broadband deployment. Although these are new tax incentives created specifically for broadband deployment, newly formed state broadband offices will collect data through stakeholder engagement sessions, surveys, and other data collection mechanisms to track the impacts of private investors willing to use the incentives.

Public Private Partnerships encourage and engage private investors to deliver broadband access in rural communities. Wyoming utilizes an approach to identify Public Private Partnerships to connect emergency facilities and other institutions in a mostly rural state and includes stakeholder engagement to identify critical issues. In 2018, the Wyoming legislature allocated 10 million dollars to fund broadband expansion projects and limited eligibility to Public Private Partnerships.

The benefit of Public Private partnerships relies on three key elements: risk, benefit, and control as illustrated in Exhibit 8. There are three models benefiting states currently in broadband expansion. These methods veer from the traditional models and prove to be successful in other states in metro and rural areas.²⁰

²⁰ Hovis, Joanne, Marc Schulhof, Jim Baller, and Ashley Stelfox. 2017. "The Emerging World of Broadband Public-Private Partnerships a Business Strategy and Legal Guide." https://www.benton.org/sites/default/files/partnerships_0.pdf.

Exhibit 8: Models for Public Private Partnerships

	MODEL 1 PUBLIC FACILITATION, PRIVATE INVESTMENT	MODEL 2 PUBLIC FUNDING, PRIVATE EXECUTION	MODEL 3 SHARED INVESTMENT & RISK
RISK	LOW	HIGH	MODERATE
BENEFIT	POTENTIAL BUT NOT ASSURED	HIGH	HIGH
CONTROL	NONE	MODERATE	MODERATE

Model 1: Public Facilitation, Private Investment

The first model provides a view from the public sector perspective, allowing low-risk benefits that have high potential but provide no controls. The public sector would gain support in economic development credits, with no control of the deployment and the infrastructure.

Model 2: Public Funding and Private Execution

This model provides a substantial amount of public investment, allowing private execution in return for public support and risk and allowing the private investor to provide financing, construction, and operations of broadband projects. Often, this type of agreement is used in other infrastructure areas, leveraging private capital and operations expertise while removing logistical barriers from larger projects. This model is a private public partnership with greater benefits, delivering public funding and private execution of the project. Broadband network deployments move rapidly, and private investors have demonstrated success with business propositions for grants among communities with common goals and shared interests.

Model 3: Shared Investment and Risk

Hybrid models provide localities and private partners with a solution to share risk and cost while reaping the benefits of broadband networks in their communities. Moderate risks, high benefits, and moderate control make this attractive. This is a new model for broadband; long-term success has yet to be evaluated, and more likely, a strategy in metro areas where private capital will see larger returns. Arrangements based on shared investment and risk are strengths of both the public and private sector partners. Localities consider Fiber-to-the-premises (FTTP) deployment as a tool for education and economic development. Knowing that in a shared investment model, the risk is shared, but the

community still receives 100 percent of the benefits it seeks—recognizing that the benefits do not all appear on the project’s financial statements. For the private partner, a shared investment means less upfront capital with an opportunity for future revenues.

To illustrate this hybrid approach in action, in 2015, the Garrett County Council approved a contract with a private partner to deploy a fixed-wireless broadband network to serve up to 3,000 unserved homes in the county's most remote locations. This partnership was possible because the private partner could leverage the fiber the county had gradually built to connect selected institutions in the community. Due to the rural locations, incumbent providers had no incentive and no intention to upgrade current offerings. This high-risk proposition paid off for Garret County by providing adequate service. The lack of high-quality broadband service had prevented small businesses, educators, and telecommuters from undertaking various activities in their daily life made possible with high quality broadband.

However, public-private partnerships are evolving in Broadband, and depending on the project, location, and type of technology being considered, all three models can work successfully to attain deployment in unserved and underserved locations. The three models are considerations for local governments, public sector decision makers, and private sector service providers. A successful partnership relies on the compromise of each party's needs and will always involve trade-offs within these frameworks. Although Model 3 is the most appealing to public sector entities, all data are limited, and there are few reference points to review.

Enabling Easier Access to Public Assets

Allowing private providers access to public assets such as right of way, utility poles, or any existing infrastructure reduces deployment costs. If cities or localities own the infrastructure, partnering with city utilities could lower the costs for private investors, expediting the permitting processes, which potentially increases the broadband investment in unserved and underserved communities that are often rural.

Adopting Technology Neutral Policies

In the creation of broadband adoption, technology-neutral policies allow for a regulatory approach that widens the technology considerations and reduces the reliance on specific technology or providers. Instead, inviting technology options available for broadband deployment, such as fiber-optic, cable, DSL, and fixed wireless technologies, introduces solutions to novel challenges to the digital divide. States should evaluate the cost-effectiveness, scalability, and sustainability of different technologies in meeting the market demand before restricting technology options. Having an open approach to neutral policies brings many benefits, including competition among providers. Such policies may nudge the provider to consider alternative technologies to improve services, lower prices, and expand current networks. While focusing on unserved and underserved communities, looking at different approaches for different project areas with challenges, and making certain technologies more suitable to the area. A technology neutral approach allows for creativity and tailored solutions to local areas.

Conclusion

The State of Maryland is leading the way to ensure 100% of Marylanders have broadband access. As we begin 2024, Maryland ranks third among states in BroadbandNow’s annual rankings of internet coverage, speed, and availability.²¹ Additionally, 66% of Marylanders have access to fiber-optic service in the State.

To further enable Maryland to become the first state in the nation to connect 100% of its residents to broadband, the Maryland Office of Statewide Broadband, in accordance with Chapter 440 of House Bill 551, the Maryland Office of Statewide Broadband (OSB) is pleased to conclude this report by recommending three types of incentives to encourage the expansion of broadband infrastructure in the State: enhancing tax incentives, reducing regulatory burdens, and making broadband access programs more sustainable. In addition to our recommendations, we provided a study for review and consideration of private partnerships other states are deploying across the country.

²¹ [Internet Access in Maryland: Stats & Figures \(broadbandnow.com\)](https://www.broadbandnow.com)

Appendix

Appendix B: Resource Sharing Agreement Annual Fee Table

A. Page 48 of the link [DoIT-RSA-Program-Policy.pdf \(maryland.gov\)](https://www.maryland.gov/doit-rsa-program-policy.pdf)

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Resource Sharing Agreement Policy

owned by Company to the State. Any proceeds from the disposition of the Equipment may be retained by the State as compensation.

3.4 **Hold Over:** Should Company hold possession of the Site or any portion thereof after the date upon which the expiration or earlier termination of this Agreement, Company will become a Hold Over Tenant on a month-to-month basis upon all the terms, covenants, and conditions of this Lease except those pertaining to the Term and, during any such month-to-month period, Company shall pay a monthly Agreement fee in an amount which is one twelfth (1/12th) of one-hundred twenty-five percent (125%) of the Annual Agreement Fee that was payable by Company during the immediately preceding year. Company will continue occupancy from month-to-month until terminated by the State or Tenant by the giving of thirty (30) days written notice to the other. Nothing in this Section is to be construed as a consent by the State to the occupancy or possession of the Site by Company.

4. Agreement Compensation

4.1 **Annual Fee.** Company shall timely pay all fees and charges outlined in this Agreement. An annual fee, subject to adjustment in accordance with the table below (the "Annual Fee"), shall be paid in accordance with the table below. Payment of the Annual Fee for year one of the Term shall be paid in full on the Commencement Date. The Annual Agreement Fee thereafter shall be paid in full on the anniversary of the Commencement Date.

Initial Term	Annual Agreement Fee	Option 1	Annual Agreement Fee	Option 2	Annual Agreement Fee	Option 3	Annual Agreement Fee	Option 4	Annual Agreement Fee
Year 1	\$42,000.00	Year 11	\$56,444.49	Year 16	\$65,434.63	Year 21	\$75,856.67	Year 26	\$87,938.67
Year 2	\$43,260.00	Year 12	\$58,137.82	Year 17	\$67,397.67	Year 22	\$78,132.37	Year 27	\$90,576.83
Year 3	\$44,577.80	Year 13	\$59,881.96	Year 18	\$69,419.60	Year 23	\$80,476.34	Year 28	\$93,294.14
Year 4	\$45,894.53	Year 14	\$61,678.42	Year 19	\$71,502.19	Year 24	\$82,890.63	Year 29	\$96,092.96
Year 5	\$47,271.37	Year 15	\$63,528.77	Year 20	\$73,647.25	Year 25	\$85,377.35	Year 30	\$98,975.75
Year 6	\$48,689.51								
Year 7	\$50,150.20								
Year 8	\$51,654.70								
Year 9	\$53,204.34								
Year 10	\$54,800.47								

4.2 **Where payable.** The Company shall pay the Annual Fee and any Additional Agreement Fee, in lawful currency of the United States of America, to the "State of Maryland Major Information Technology Development Project Fund" by delivering or mailing payment to the Department of Information Technology, Finance and Accounting Division, 100 Community Place, Crownsville, Maryland 21032-2022, or to such other address or in such other manner as DoIT from time to time specifies by written notice to the Company. Payment must reference the Company Site Number: RSA55XXRSAS, and State Site Name: XXXXXX Tower, XXXXX County. Company agrees that, if any payment to be made under this Agreement is not received by State by the date it is due, Company will pay State a late fee of Five Percent

Maryland DoIT V 0.01 23 July 2020 48