Broadband Expansion and Access Progress

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

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

> > December 1, 2022

Introduction

Chapter 74 (Senate Bill 66), the Digital Connectivity Act of 2021, Section 6.5-104(E)(1) requires a report be submitted to the Governor and the General Assembly on or before December 1 each year. The report is to include progress the Office of Statewide Broadband (OSB) is making towards developing a state broadband plan, increasing access to broadband infrastructure, improving digital literacy, the allocation of funds from the Digital Inclusion and Digital Connectivity Funds, as well as other metrics.

Background

Broadband internet access has become an essential part of everyday communications and everyday life. Chapter 74 reorganized the Office of Rural Broadband (ORB) into the Office of Statewide Broadband (OSB). The OSB was given the responsibility for broadband efforts statewide whether rural, urban or suburban. The OSB's responsibilities include access to infrastructure, digital literacy, digital inclusion and digital equity efforts.

Report

Section 6.5-104(E)(1)

<u>Subsection (I)(1)</u> Develop and implement the plan required under subsection (C) of this section (Statewide Broadband Plan):

The statewide broadband plan utilizes the data collected and analyzed in accordance with Section 6.5-104(A)(3). While a funding source was not initially provided for this work, the recently passed Federal Bipartisan Infrastructure Law requires a plan similar to Maryland's and provided funding to create it. The plan and mapping published will meet both the Federal and State requirements. The work requires the assistance of a consultant that specializes in the collection, analysis and presentation of broadband data. The DHCD was able to utilize an existing state contract with the Salisbury University's Eastern Shore Regional GIS Cooperative (ESRGC) to begin the work. ESRGC has retained a subconsultant that specializes in broadband planning to assist with the work. The data collection and analysis and creation of the Statewide Broadband Plan are expected to take approximately eight months.

<u>Subsection (I)(2)</u> Increase access and connection to broadband internet services throughout the state with specific reporting on improvements to infrastructure, adoption, and speeds:

The ORB began its efforts to improve access to broadband infrastructure in FY 2018 and has expanded its efforts every year since that time. Since FY 2018, the ORB/OSB has provided over \$150 million in funding across 20 Counties to expand broadband access to over 30,000 households.

Initially, all grant-funded projects met speeds of 25 megabits per second (Mbps) downstream and 3 Mbps upstream. In FY 2021 we increased the grant delivery speeds to 100 Mbps downstream by 20 Mbps upstream in order to ensure that households had the service levels they needed to run the multiple devices in the typical home. In FY2022 we increased the speed to which an area is considered unserved from 25 Mbps downstream by 3 Mbps upstream to those lacking 100 Mbps downstream by 20 Mbps upstream in accordance with the funding source (ARPA CPF) requirements. As appropriate, OSB will reexamine our speed requirements and adjust them as recommended.

Cumulative Funding by Jurisdiction

County	DHCD Funding	Non-DHCD Funding	County Total	County	DHCD Funding	Non-DHCD Funding	County Total
Allegany	3,847,347	8,356,284	12,203,631	Harford	2,933,050	1,432,174	4,365,224
Anne Arundel				Howard	78,000	19,500	97,500
Baltimore City		1-173	34	Kent	6,720,824	3,311,340	10,032,164
Baltimore	10,028,680	4,881,563	14,910,243	Montgomery			
Calvert	2,324,142	1,570,912	3,895,054	Prince George's			
Caroline	19,762,211	8,687,160	28,449,371	Queen <u>Anne's</u>	2,123,324	564,687	2,688,011
Carroll	12,440,850	3,915,617	16,356,467	St. Mary's	2,546,939	758,238	3,305,177
Cecil	14,067,666	2,897,680	16,965,346	Somerset	18,216,512	5,448,389	23,664,901
Charles	14,090,816	5,480,196	19,571,012	Talbot	6,512,341	19,737,317	26,249,658
Dorchester	2,255,962	617,485	2,873,447	<u>Washington</u>	4,753,167	1,231,103	5,984,270
Frederick	10,202,012	4,919,060	15,121,072	Wicomico	9,817,497	1,162,833	10,980,330
Garrett	2,402,689	4,384,740	6,787,429	Worcester	5,725,000	7,589,125	13,314,125
				FY19-FY22 Funding	150,849,029	86,965,403	237,814,432

Funding

To encourage adoption of broadband in low- and moderate-income households, we have developed the Maryland Emergency Broadband Benefit program that provides a \$15 monthly subsidy to help pay for internet service. This program has sufficient funding to operate through at least December 2023.

Concurrently, we have developed a device subsidy program that will assist these households obtaining a computer for use at their home. A contract for the OSB to purchase up to 150,000 laptops was recently approved by the BPW. OSB has developed a grant program where local jurisdictions will apply for a portion of the devices and distribute them to eligible households.

Subsection (I)(3) Improve digital literacy among residents of the state:

Supplemental budget #5 provided funding to the University of Maryland Extension to develop, provide training for, and distribute a digital literacy program. The OSB advised the UM Extension in their planning for the program and will provide assistance with the training and distribution of the program as well.

<u>Subsection (I)(4)</u> Increase speeds to meet or exceed the Federal Communications Commission standard for upload and download speeds:

The FCC standard for broadband service is 25 Megabits per second (Mbps) downstream and 3 Mbps upstream. This is also the speed that is used to determine if a household is considered served or unserved by many federal agencies in their funding opportunities. One exception is the Coronavirus Capital Projects Fund (CPF) that encouraged 100 Mbps downstream by 20 Mbps upstream be used as the unserved metric. The upcoming Broadband Equity Access and Deployment (BEAD) program requires the 25 Mbps by 3 Mbps downstream and upstream speeds be used to determine unserved areas.

The FY 2021 and FY 2022 funding provided to the OSB for broadband expansion via the Coronavirus State and Local Fiscal Recovery Fund and the Capital Projects Fund require that infrastructure expansion projects provide service at speeds of at least 100Mbps downstream and 100 Mbps upstream. We are also abiding by the CPF requested 100 Mbps by 20 Mbps unserved metric in our CPF funded programs.

As the OSB develops and implements the statewide broadband plan, speeds necessary for progressive use of broadband will be required for all state funded projects.

<u>Subsection (II)</u> The existing gaps in connectivity and the state's progress toward closing those gaps:

The OSB has made significant progress towards expanding broadband infrastructure to allow households and businesses to access broadband services. To date we have provided over \$152

million for broadband infrastructure projects that will provide broadband access to over 30,000 households.

We recognize 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. We have submitted plans to Treasury to utilize CPF monies for programs to directly address these issues and expect to have grant applications available in the first quarter of calendar 2023.

The statewide broadband plan will identify internet service providers (ISP), show where service is available and by which provider, examine demographic information and utilize all data in determining where to focus the Office's efforts. Upon completion of the plan and related mapping, we will have a full understanding of the gaps and the underlying needs of the households impacted.

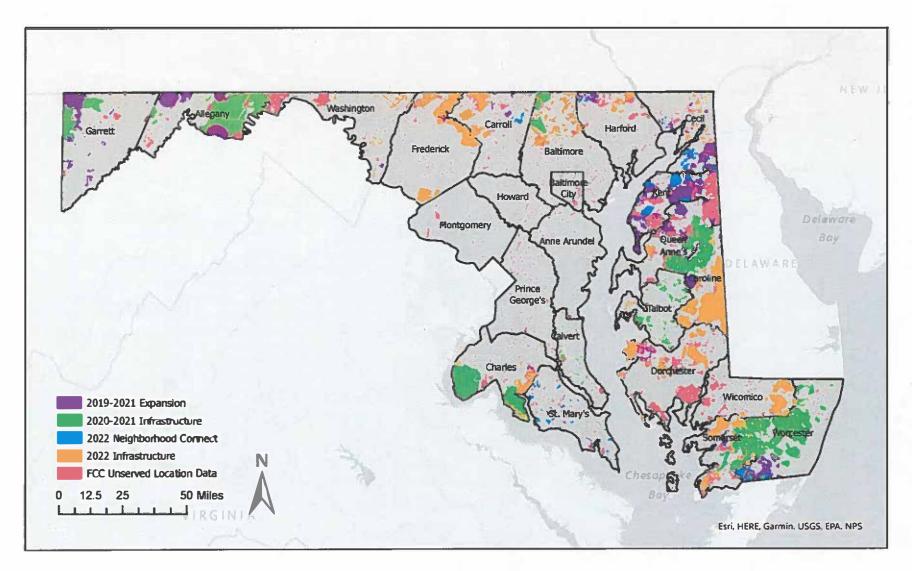


Figure 1

Areas lacking 25Mbps download by 3 Mbps upload speeds overlaid with program funded areas

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<u>Subsection (III)</u> The impact that gaps in internet service have on the workforce and state and local economies:

Broadband internet access has become an essential part of everyday communications and everyday life. This became very apparent when the pandemic caused companies to have workers leave their offices and work from home. Without reliable internet access, these workers were forced to jeopardize their health and continue to work from their office or were let go by their employers. Remote work was a growing trend prior to the pandemic; the pandemic simply provided the success many employers needed to see to fully accept remote working. Some employers have decided to not return to the typical office routine.

These employer decisions are going to impact where their workforce will live and how they will work. Companies allowing remote work have a much larger workforce available to them – someone can live in the mountains of Garrett County and work for a brokerage firm in New York City, bringing a well-paying job to the area. If a worker is looking for a new home, they will require broadband service in order to continue their remote working.

Home pricing is also affected by broadband availability. Home prices have been shown to increase by 3% if reliable broadband is available. Broadband availability has a similar impact on the rental housing market.

<u>Subsection (IV)</u> Information from local education agencies on the impact of internet service quality on student achievement and access to 21st century opportunities:

This information is being gathered as part of the required statewide broadband plan and will be included in the 2022 progress report.

Subsection (V) Demographic data on locations with gaps in services:

This information is being gathered as part of the required statewide broadband plan and will be included in the 2022 progress report.

<u>Subsection (VI)</u> The allocation of money from, and programs supported by, the Digital Inclusion Fund, the Digital Connectivity Fund, and the Rural Broadband Assistance Fund in the preceding fiscal year:

These funds are new and require regulations for their establishment and use. We are currently drafting the associated regulation and will include the requested information in the 2023 progress report. Supplemental Budget #5 recognized this and placed funds with immediate usage needs in existing budget locations including the DHCD Office of the Secretary and the Local Government Infrastructure Fund (LGIF). Both of these budget locations have been used for broadband funds in the past. Funds currently being utilized by the OSB are as follows:

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Service Fee Subsidy	\$45,000,000	Office of Secretary	
Device Subsidy	\$30,000,000	Office of Secretary	
LGIF FY22	\$15,180,000	LGIF	
LGIF FY21	\$30,000,000	LGIF	
Additional Staffing for OSB	\$278,865	Office of Secretary	

Other budget lines are in a dedicated purpose account to be released as programs are developed.

Municipal Broadband	\$45,000,000	dedicated purpose fund	
Digital Inclusion Fund	\$2,000,000	dedicated purpose fund	
Gap Networks	\$5,000,000	dedicated purpose fund	
Network Infrastructure	\$97,600,000	dedicated purpose fund	
Broadband Connectiveness	\$23,720,000	dedicated purpose fund	
Tech Extension	\$4,000,000	dedicated purpose fund (UMS)	
Digital Navigators	\$2,000,000	dedicated purpose fund	

The Service Fee Subsidy program, named the Maryland Emergency Broadband Benefit (MEBB) program, provides a \$15 per month subsidy for broadband service to eligible low- and moderateincome households. The MEBB program utilizes the federal Affordable Connectivity Act (ACP) eligibility rules and enrollment process. The ACP provides up to a \$30 subsidy for internet service. The MEBB subsidy, like the federal ACP program, provides the funds as a reimbursement to the ISP after they have provided a credit to the subscriber. With the federal EBB and MEBB subsidy, a household can obtain a service supplement of up to \$45 per month. This ensures eligible households can afford sufficient reliable internet service. There are currently 34 ISP's participating in the program and we have encumbered \$18.7 million for subsidies to over 120,000 unique households.

In FY 2022 we encumbered over \$114 million for broadband grants that will extend broadband to over 15,000 additional households. Our FY23 grant program with \$95 million in funding is open for applications with awards expected in January 2023.

The Device grant program is under development with applications planned to be accepted through mid-December and awards being made in the first quarter of calendar 2023. This \$30 million program will provide a Chromebook laptop to eligible households. Local jurisdictions will apply for a share of the laptops and be responsible for the final distribution to eligible households within their jurisdiction.

Additional staffing has been added to the OSB. Two permanent and four contractual positions were approved for the Office. OSB has filled four of these six positions, with recruitment for the remaining two positions underway.

Conclusion

Plans are underway to meet all the requirements of Chapter 74/Senate Bill 66. We will continue to provide updates and reports as requested.