

MEMORANDUM

February 13, 2023

TO: Economic Development Committee

FROM: Dr. Costis Toregas, Council IT Adviser

SUBJECT: FY23-28 CIP Amendments: Digital Equity - Montgomery Connects (P341700)
\$1,977,000 in FY23 and \$4,680,000 in FY24

Expected to attend:

Gail Roper, Director, Technology and Enterprise Business Solutions (TEBS)
Joe Webster, Chief Broadband Officer, TEBS
Alison Dollar, Chief, Office of Strategy and Planning, TEBS
Seamus McNamara, Office of Management and Budget
Leny Bautista, Finance Manager, Office of Management and Budget

Documents for Committee review:

Att 1: Budget submission detail (©1-3)
Att 2: Map of funded projects (©4)
Att 3: Digital Equity program accomplishments (©5-16)
Att 4: Broadband & Digital Equity Grant update (©17-22)

Background

The Economic Development Committee (ECON) has assumed a new responsibility in FY23 compared to the portfolio of the prior Planning, Housing and Economic Development Committee (PHED): the review of the Technology and Enterprise Business Solutions (TEBS) budget items that pertain to Technology and Telecommunications services provided to external organizations. The review of the Digital Equity project amendment to the 2023-2028 CIP (P341700) will give the Committee a chance to consider the relationship between technology and economic development, as well as to drill down to equity considerations for access and use of technology in the community.

Discussion

The CIP project named “Digital Equity- Montgomery Connects” (P341700) was previously named “ultraMontgomery” until 2023, when it was renamed to Digital Equity-Montgomery Connects. This change was made to better describe the purpose of the project.

The approved budget and proposed budget for years 2023 and 2024 are as follows:

P3341700	Approved 2023-2028 CIP	Recommended 2023-2028 CIP amendment
2023 Allocation	\$4,180,000	\$1,977,000
2024 Allocation	\$4,280,000	\$4,680,000

In order to help introduce the project to the Committee, Council staff raised a number of questions (in bold below); the answers from TEBS are provided for each question.

1. Please provide your understanding and/or vision of the role that technology (Telecommunications and IT) can play in Economic Development.

Technology, broadband connectivity, and communications drive economic development. Technology supports economic development by improving efficiency, enhancing communication and collaboration, fostering innovation, providing access to information and resources, and promoting transparency and accountability. With greater accessibility to technology, businesses and households can connect devices without worry, entrepreneurs have the infrastructure they need to innovate, and the County has additional capacity to address local problems. This translates into improved economic performance with the creation of more jobs, attracts more workforce, create a foundation for more innovation, and provides incentive for companies to relocate to or expand into the County.

The implementation of critical infrastructure will enhance our ability to develop economic development infrastructure in homes, libraries, public spaces, and communities. We currently have public internet access being used by entrepreneurs in public spaces. In addition, emerging technology offers new opportunities to unlock economic growth. Utilizing modernized internal operational systems powered with artificial intelligence gives power to our ability to respond to citizens, the development community, and industry. Embracing AI is a cultural change that requires a change in technology, mindset, and processes.

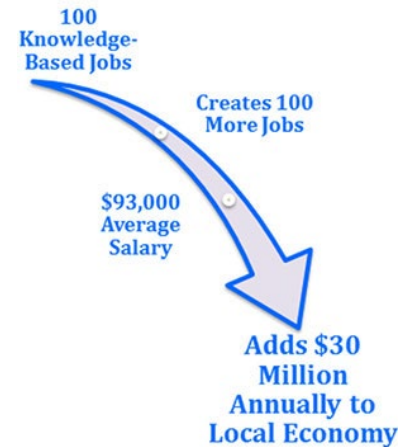
Strategic Initiatives:

- **Future Technology.** Strategy to share and mine data with a new generation of artificial intelligence to break down the myriad and storied walls that keep information from flowing to benefit better citizen services, cybersecurity, research, the development community, and staff. AI enables the organization to sort through large amounts of data to find important insights automatically instead of assigning teams of analysts to pore through data manually. AI may also include:

- Future Technology. Driving innovation through AI (Artificial Intelligence), AR/VR (Augmented and Virtual Reality), 5G, and IOT innovation (Internet of Things)
 - Smart Communities. IOT and AI applications to make government more efficient and effective.
 - Exploring the use of sensor technologies that can benefit public safety, parks, and transportation.
- **Digital Equity.** The Montgomery Connects digital equity program provides services to close the racial equity and social justice divide by allowing all members of the public – regardless of income, race, ethnicity, or age – to have access to affordable high-speed broadband, home computing devices, and to have the skills to use the internet and technology for learning, employment, civic engagement, and daily living. Montgomery Connects includes:
 - MoCoNet – 100 Mbps free residential broadband at 6 affordable housing developments.
 - Support to enroll residents in the Affordable Connectivity Program (ACP) \$45/month broadband subsidies.
 - Rural Broadband for the Agricultural Reserve. Approximately 83 known occupied underserved properties remain that are not served or in a broadband grant area.
 - Technology training for youth, seniors, immigrants, and in additional languages, and tech hot line support.
 - Partnership with Universities of Shady Grove to develop a data literacy strategy. Measure, Access, and Learn initiatives to strengthen our knowledge of data literacy.
- **Business Development and Retention.** Support efforts to attract, retain, and grow tech businesses in Montgomery County, and using broadband infrastructure to incentivize business location within Montgomery County.
 - Leveraging FiberNet to support innovation in education and online learning. Having good schools – and helping good schools become great – is a way to attract and retain an educated workforce.

Finally, there is strong statistical evidence that technology drives our local and national economy:

- For every 100 knowledge-based jobs created in Montgomery County, an additional \$30 million dollars is generated into the local economy
- 30% of the information jobs, and 40% of the information economy payroll, in Maryland are generated from Montgomery County
- Information, Professional, Scientific, and Technical jobs in Montgomery County generate 8% of Maryland’s total economy
- [Strategic Networks Group](#) collected research from 10 states and reported that 31 percent of their new jobs can be “directly attributed to broadband and the use of e-solutions



2. The ECON committee mandate is to review “Telecommunications and Technology (services provided to external organizations)”; please provide a high-level summary of services that fall under this category.

FiberNet broadband connectivity is a critical component of departments’ and agencies’ ability to meet their mission. These entities are vital to the County’s economic development goals, offering services that attract workforce and businesses, and make County a great place to do business in and with. FiberNet serves over 600 sites and public safety communications operations including all Montgomery County departments, 224 MCPS locations, 6 Montgomery College sites, 17 M-NCPPC sites, 26 HOC including residential broadband service at 2 location, 4 WSSC sites, connections to 24 State and regional sites, and serves numerous public safety operations centers and communications facilities.

Earlier this month MCPS requested a 10-fold increase in FiberNet’s bandwidth connecting all MCPS Middle Schools. The request for the bandwidth increases at the Middle Schools is in anticipation of the increased demand on the Internet due to the launch of MCPS’s “STEAM” program (science, technology, engineering, art and math), whereby MCPS is introducing more technology and programs to our secondary schools for the purpose of innovation. MCPS has held a number of showcase events at various schools which were featured on the news in early January. Many of the newer technologies being introduced to classrooms are internet-connected.

In addition, MCPS’s bandwidth requirements took a leap shortly after the pandemic began as MCPS distributed a Chromebook to every student in the county that they take home and use in all their classes. Tools such as teacher management and sharing to those Chromebooks have all moved to the Google for Education platform in the cloud which drive the demands for increased bandwidth and connectivity.

3. **The amendment seeks to reduce the FY2023 allocation by \$2,203,000. What led to this underspending in FY23? And is the indicated unencumbered balance of \$4,250,000 expected to be reduced in FY23? and if so, what project will move to implementation?**

The FY23 allocation anticipated that the County will be successful in being awarded \$3 million in State broadband grant funding for Municipal Projects and would require a \$1 million match:

FY23 ultraMontgomery CIP Funding Schedule (FY23-24)

Funding Source	FY23	FY24	Note
Current Revenue: Cable TV	680	680	Anticipated \$1M Match would be provided from a combination of Cable and General funds
Current Revenue: General	600	600	
State Aid	3,000	3,000	\$3M State grant (aspirational, not yet awarded)
Total Funding Sources	4,280	4,280	
Total Expenditures	4,280	4,280	CIP Funding Schedule always matches Funding Expenditure because the Schedule is showing where funds for Expenditures will be drawn from

\$45 million of the \$400 million Maryland appropriated for the broadband was designated for Municipal Broadband Grants. It was anticipated that MoCoNet-type broadband infrastructure in low-income housing developments would be eligible for the Municipal funding and would require a 25% match: \$3M in State Aid and \$1M in County funding was added in FY23, FY24, and FY25. However, as of February 6, 2023, the State has not yet released the rules for the Municipal grants. The change in Gubernatorial administrations may also impact parameters of this program.

In the proposed FY24 CIP, the \$3 Million in State Aid and anticipated funding match are moved from FY23 to FY24. The \$3M in State Aid and \$1M in County funding are shifted 1 year to FY24, FY25, and FY26.

FY23 ultraMontgomery CIP Funding Schedule (FY23-24)

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY21	Est FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Current Revenue: Cable TV	8,604	2,122	2,402	4,080	680	680	680	680	680	680	-
Current Revenue: General	1,600	-	-	1,600	500	600	500	-	-	-	-
State Aid	9,000	-	-	9,000	3,000	3,000	3,000	-	-	-	-
TOTAL FUNDING SOURCES	19,204	2,122	2,402	14,680	4,180	4,280	4,180	680	680	680	-

FY24 ultraMontgomery CIP Funding Schedule (FY23-24)

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Current Revenue: Cable TV	8,604	2,826	-	5,778	516	1,080	1,155	1,667	680	680	-
Current Revenue: General	1,600	-	-	1,600	500	600	500	-	-	-	-
State Aid	9,961	-	-	9,961	961	3,000	3,000	3,000	-	-	-
TOTAL FUNDING SOURCES	20,165	2,826	-	17,339	1,977	4,680	4,655	4,667	680	680	-

As of February 6, 2023, the Digital Equity – Montgomery Connects CIP unencumbered balance is \$1,040,005.31 and is expected to be encumbered in FY23.

See Question 6 response for specific projects.

- State Aid was expected to be \$3m in 2023, but \$961k has been received to date. Given this shortfall, do you expect the \$3m revenue target to be viable for FY24 and FY25 as you show in the project funding Schedule?**

See Question 3 response regarding \$3 million. The \$961,000 is in addition to the \$3 Million and is for four new grants the County received for the Maryland GAPS grants. This funding is for four Montgomery Connects projects. Two the four projects have shifted due to changes in HOC construction schedules. MHP (Montgomery Housing Partnership) Hillwood Manor is expected to be complete in February 2023, MHP Frederick Apts is in planning, and the AHC-HFH (Affordable Housing Coalition-Habitat For Humanity) Randolph Road project at the site of the former Dept. of Recreation Headquarters will form the other two projects. A Supplemental Appropriation will be requested for implementation of these grants. There is no match requirement, but funding from the CIP will be used for additional costs related to these projects. (If the County had not received the additional grants, we would have completed 3 of these 4 projects on a longer funded schedule and would have reduced funding available for other projects.)

- County digital equity efforts includes the distribution of laptops targeted for more than 50,000 residents from a grant from federal sources. Please describe the current status, where you expect to be by end of FY24, and specifically explain how you are dealing**

with maintenance, training, Internet connectivity and software costs for each laptop that goes to a resident; are these costs in the Operating Budget?

38,600 laptops have been distributed and we expect to distribute the remainder in FY24.

- No maintenance is provided with the laptops and recipients acknowledge in writing that the County will not provide technical support.
- Information about free LinkedIn online tutorial videos and other lifelong learning resources available through MCPL are provided to every recipients. Older recipients also receive information about free Senior Planet in Montgomery technology training courses for older adults and written information about how to operate the computer.
- Our focus has been on both devices and connectivity for individuals. Every recipient received information about how to enroll in the \$45 per month Affordable Connectivity Program (ACP) broadband subsidy and onsite enrollment assistance is provided at every computer distribution event. Over 1,000 families have enrolled in ACP with the in-person assistance of Montgomery Connects, and the total families enrolled in ACP has increased by 26% since the launch of the Montgomery Connects computer program to 15,282 families.
- The federal and state grants funding the computers do not permit funding to be used for software. The County provides links to free versions of Office365 and Google Docs.

6. Can you provide a map showing the location and name of currently funded projects under this effort?

See Map Attachment on ©4 showing the following:

MoCoNet Status	Name	Location
Connected	Bauer Park Apts	14635 Bauer Drive, Rockville, MD 20853
Connected	Main Street Apts	50 Monroe Pl, Rockville, MD 20850
Connected	Snowdens Ridge	2105 Harlequin Terrace, Silver Spring, MD 20904
Connected	Residences on the Lane	198 East Montgomery Avenue, Rockville, MD 20857
In Construction	Elizabeth House III	1315 Apple Avenue, Silver Spring, MD 20910
In Construction	Colonnade at the Creek	1100 Linden Avenue, Takoma Park, MD 20912
Planned	4010 Randolph Road	4010 Randolph Road, Silver Spring, MD 20902
Planned	Hillandale Gateway	10140 New Hampshire Avenue, Silver Spring, MD 20903
Planned	Wheaton Gateway	11250 Veirs Mill Road, Wheaton, MD 20902
Candidate	Strathmore Court	5440 Marinelli Road, North Bethesda, MD 20852
Candidate	Diamond Square	80 Bureau Drive, Gaithersburg, MD 20878
Candidate	Parkview Towers	7667 Maple Avenue, Takoma Park, MD 20912

7. Monetizing IT assets is an interesting option; can you describe the current status of these discussions? And is there something the Committee can do to assist the Executive get traction through partnerships and other strategies?

The Executive Branch is meeting in the next week to discuss monetization opportunities for the FiberNet asset. We are working on a business strategy to propose short- and long-term strategies. Yes, the Committee will be involved in the overall decision-making of these proposed options.

In addition to the answers to questions Council staff raised, TEBS has provided two additional information updates: a 12-slide presentation summarizing the accomplishments of the County's digital equity program (see ©5-16), and a 6 page update on all the externally funded grant programs received in the area of Broadband and Digital Equity (see ©17-22). This last program achievement shows that non-tax revenues can make a big difference to County residents and leverage County investments in a targeted manner.

Staff recommendation

Council staff recommends approval.



Digital Equity - Montgomery Connects

(P341700)

Category	General Government	Date Last Modified	01/10/23
SubCategory	Technology Services	Administering Agency	Technology Services
Planning Area	Countywide	Status	Ongoing

	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
EXPENDITURE SCHEDULE (\$000s)											
Planning, Design and Supervision	1,429	539	-	890	100	250	250	250	20	20	-
Construction	18,656	2,207	-	16,449	1,877	4,430	4,405	4,417	660	660	-
Other	80	80	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	20,165	2,826	-	17,339	1,977	4,680	4,655	4,667	680	680	-

FUNDING SCHEDULE (\$000s)											
Current Revenue: Cable TV	8,604	2,826	-	5,778	516	1,080	1,155	1,667	680	680	-
Current Revenue: General	1,600	-	-	1,600	500	600	500	-	-	-	-
State Aid	9,961	-	-	9,961	961	3,000	3,000	3,000	-	-	-
TOTAL FUNDING SOURCES	20,165	2,826	-	17,339	1,977	4,680	4,655	4,667	680	680	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)				
Appropriation FY 24 Request		779	Year First Appropriation	FY16
Cumulative Appropriation		8,704	Last FY's Cost Estimate	19,204
Expenditure / Encumbrances		4,454		
Unencumbered Balance		4,250		

PROJECT DESCRIPTION

The Digital Equity - Montgomery Connects - CIP provides for capital funding to support Montgomery County's digital equity initiatives. Internet service accessibility, affordability, and adoption are critical factors in addressing equity disparities. Funding will support planning, design, and construction of: MoCoNet residential broadband in affordable housing developments to close the digital equity gap through the provision of free or low cost, reliable and robust residential Internet services, and devices, at affordable housing throughout the County; Public WiFi and Advanced Wireless Conduit Networks to provide conduit and fiber to support public WiFi and wireline and wireless broadband networks in commercial and community gathering areas of Montgomery County. Innovation Testbeds to spur development and expansion of traffic, transit, and pedestrian sensors, Internet of Things (IoT), advanced robotic, and cybersecurity IoT applications and innovation in Montgomery County; Purple Line Fiber to connect Montgomery County research and higher education facilities to MAX and Internet2 at the University of Maryland, College Park; and White Oak Science Gateway Conduit Network to provide broadband conduit infrastructure in Viva White Oak and other White Oak commercial development projects.

ESTIMATED SCHEDULE

Digital equity installations began in FY21 and will continue through FY28. White Oak Science Gateway conduit construction will be performed concurrently with Viva White Oak construction. Design for public WiFi, advanced wireless, conduit, and testbeds in commercial and community gathering areas are underway and outreach to potential private partners is in development. Purple Line fiber connections are dependent on the Purple Line and third-party construction.

COST CHANGE

Project has received an additional \$961,000 in state grants for FY23.

PROJECT JUSTIFICATION

Digital Equity - Montgomery Connects is a digital equity program, designed to ensure that businesses and underserved residents of affordable housing units in Montgomery County have as much reliable, secure, and robust broadband service as they need to live, work, learn and keep our economy moving at the speed of our ideas. Digital Equity - Montgomery Connects also supports the County's racial equity and social justice goals by focusing our digital equity deployment of devices and residential broadband in affordable housing developments and underserved communities. Digital Equity - Montgomery Connects helps ensure that all residents have the broadband service, devices to participate in the digital world; expanding access to competitive broadband services in commercial buildings to support small and large businesses; and by leveraging infrastructure development and strategic conduit network deployment to create robust public WiFi and public private partnerships to support leasing of County broadband assets. Access to reliable broadband infrastructure throughout the County supports business growth and innovation in biotech bio-health, cybersecurity, IT services, financial services, media and similar high-bandwidth-consuming sectors, and for federal and state government, research and higher education institutions. Ensuring that all businesses can access reliable broadband services is essential to ensuring equity.

OTHER

This project was previously named ultraMontgomery until 2023 when it was renamed to Digital Equity - Montgomery Connects. This change was made to better describe the purpose of the project.

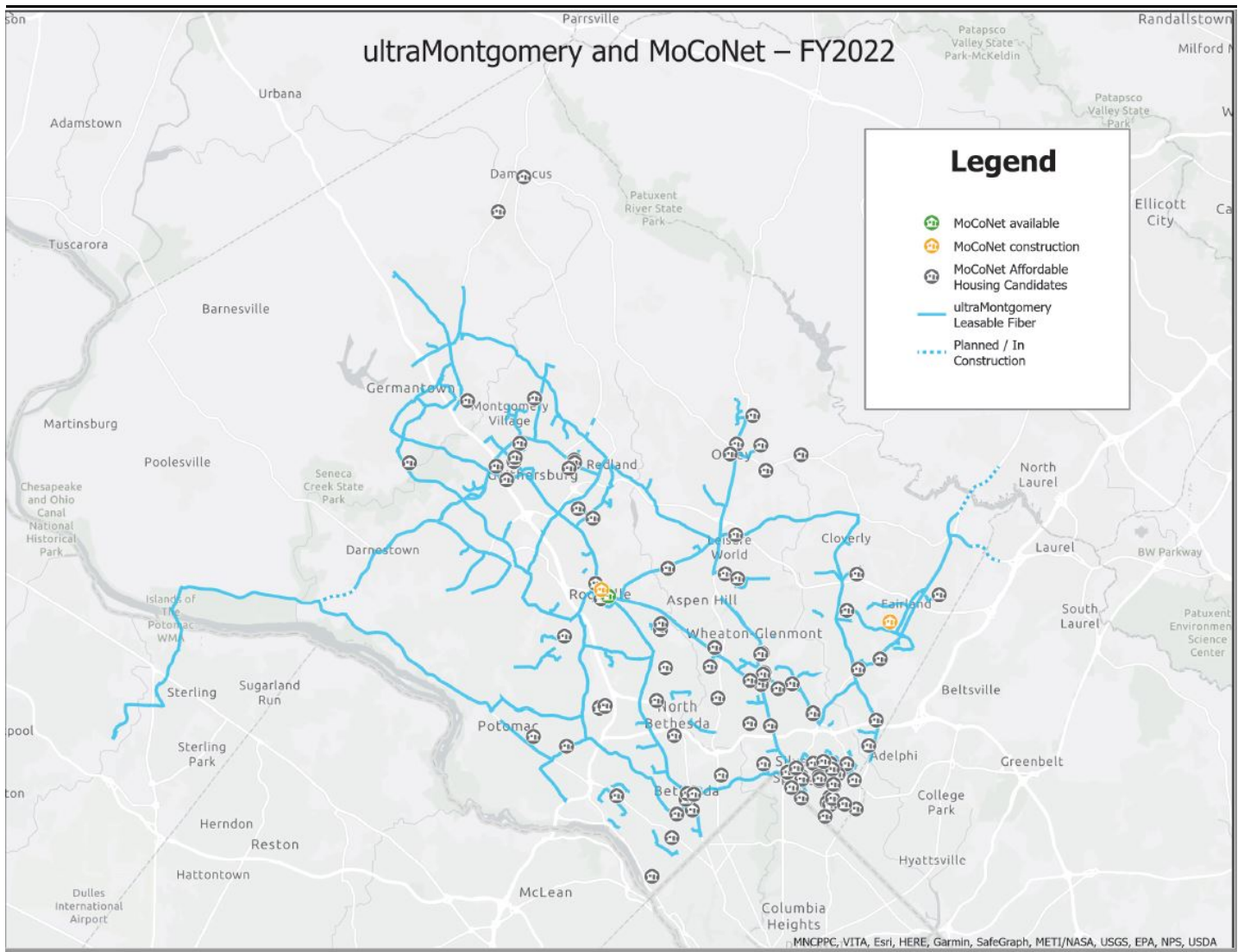
In 2021, the Great Seneca Fiber Hwy was completed to provide shortest distance, low latency connection between Great Seneca and Ashburn, Virginia data centers. Phase 2 of the East County Fiber Highway to provide regional north-south interconnections between White Oak and Howard County and east-west connections between Burtonsville and WSSC in Laurel will be completed in 2023. In response to COVID-19, funding for rural broadband is being provided through state and federal broadband grants and the Digital Equity - Montgomery Connects project pivoted to focus County broadband deployment on providing to service to low-income affordable housing developments where residents do not have access to or have difficulty affording robust broadband service. Engineering, planning, and design work provided by the Digital Equity - Montgomery Connects CIP has been instrumental in preparing state grant applications. Because other resources can support rural broadband deployment, funding from the Digital Equity - Montgomery Connects CIP for low-income affordable housing is being prioritized over rural broadband.

DISCLOSURES

The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

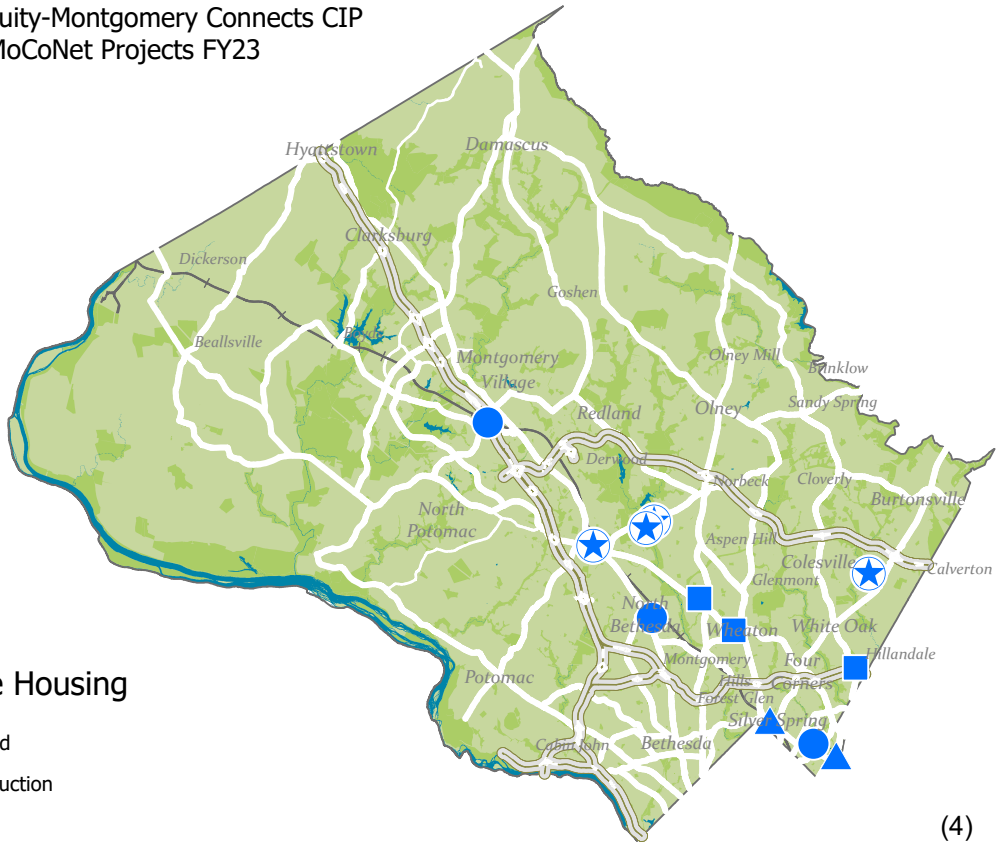
COORDINATION

FiberNet (P509651); Purple Line Department of Transportation; Maryland-National Capital Park and Planning Commission; Montgomery College; WSSC; Information Technology Policy Coordination Committee; Montgomery County Economic Development Corporation; and affordable housing developers in Montgomery County.



This map shows the location of affordable housing developments in the County that would be served if ultraMontgomery receives the requested funding.

Digital Equity-Montgomery Connects CIP MoCoNet Projects FY23



Affordable Housing

-  Connected
-  In Construction
-  Planned
-  Candidate

Montgomery Connects

Montgomery County's Digital Equity Program

January 2023

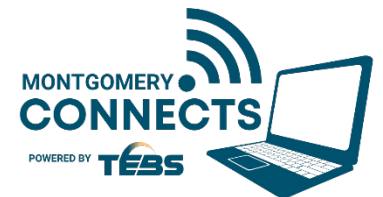
www.montgomerycountymd.gov/montgomeryconnects

Montgomery Connects

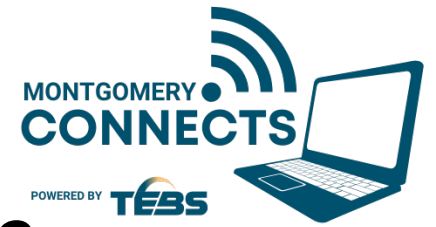
Mitsuko.Herrera@montgomerycountymd.gov 240-777-2928

Connect For Broadband

jbookee@gmail.com 301-452-2270

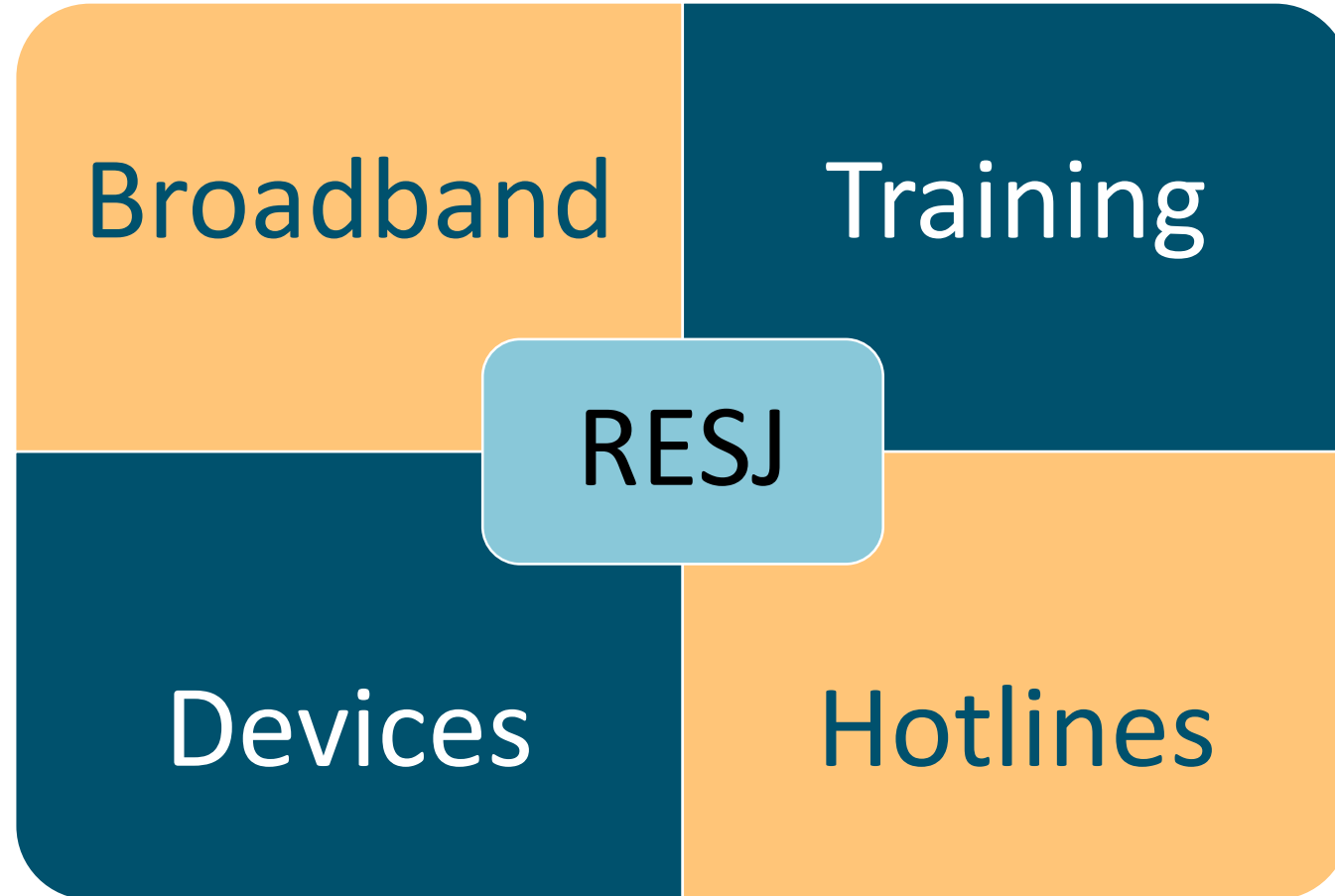


Montgomery Connects is the County's Digital Equity Program



We work through a racial equity and social justice lens to achieve **Digital Equity**

We strategically expand access in **Four Areas** to enable County residents and small businesses to participate in the digital world



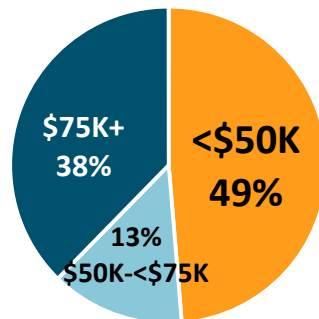
Digital Equity Strategy

Reach intended residents by **building partnerships with organizations** providing outreach to these communities and host **geographically targeted events**.

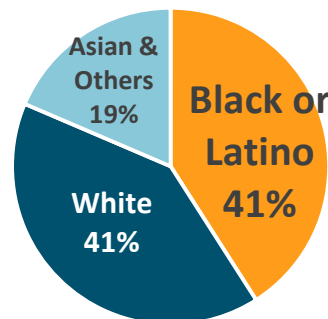
- Host digital equity programs in low-income areas to enhance outcomes and address transportation issues
- Partner with organizations engaging with underserved communities for effective outreach and engagement

Montgomery County Digital Equity Data

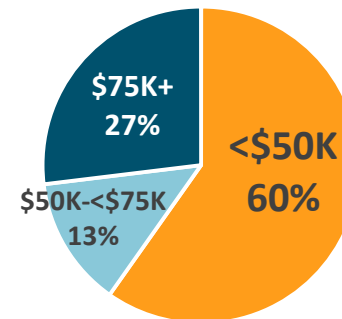
No Broadband Households
By Income



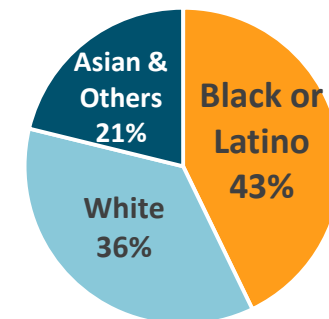
No Broadband Households
By Race



No Computer Households
By Income



No Computer Households
By Race

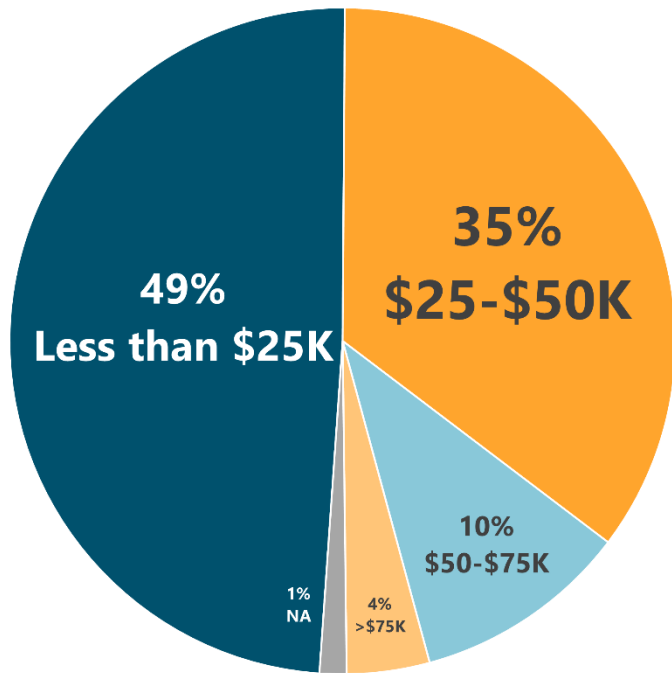


FY22-23 Achievements

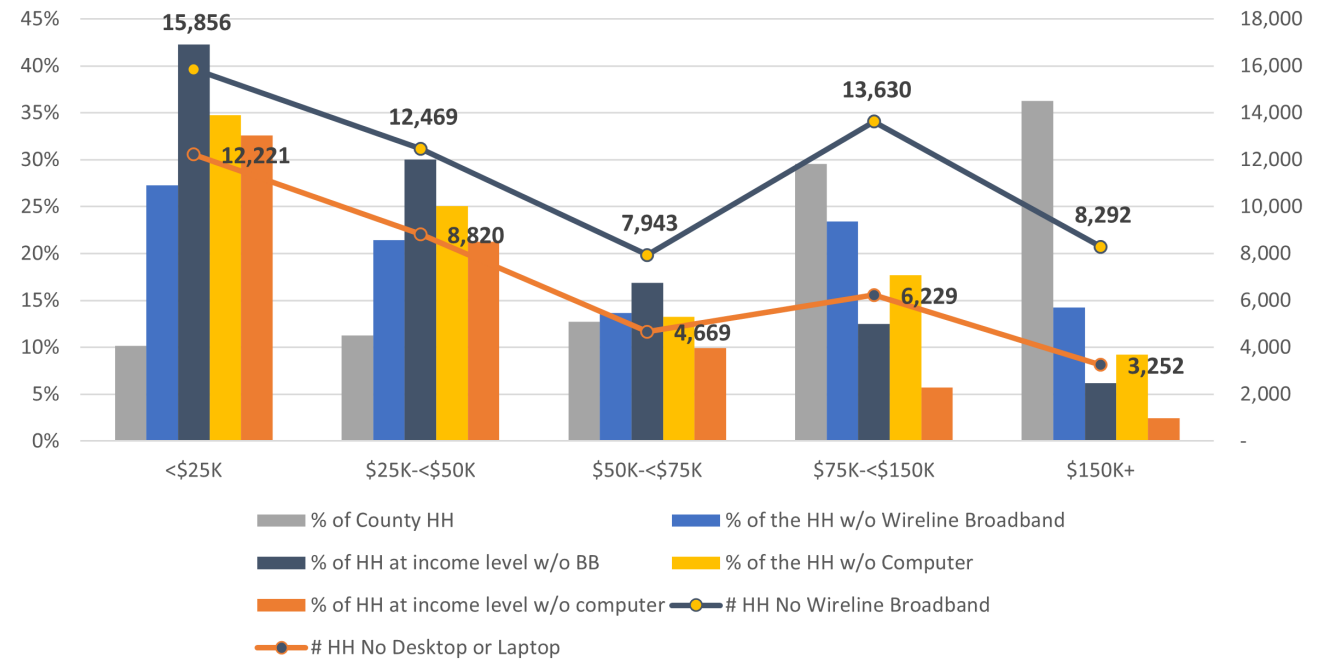
- Over 38,000 laptops distributed
- 84% to households earning less than \$50,000/year

Households earning less than \$50,000 per year are 21% of County population, but comprise 60% of County households without computers

Montgomery Connects Distribution by Income



Households by income without wireline broadband and/or computers

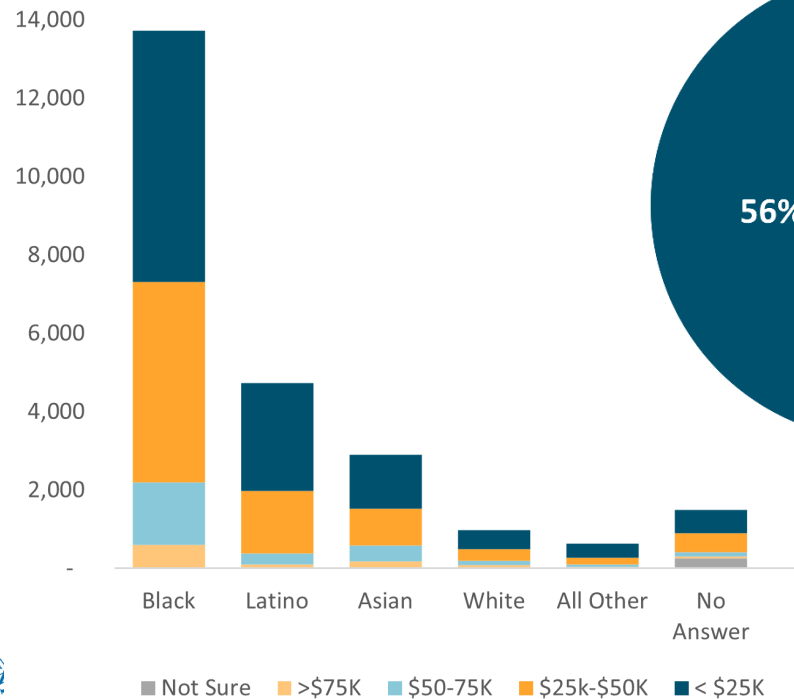


FY22-23 Achievements

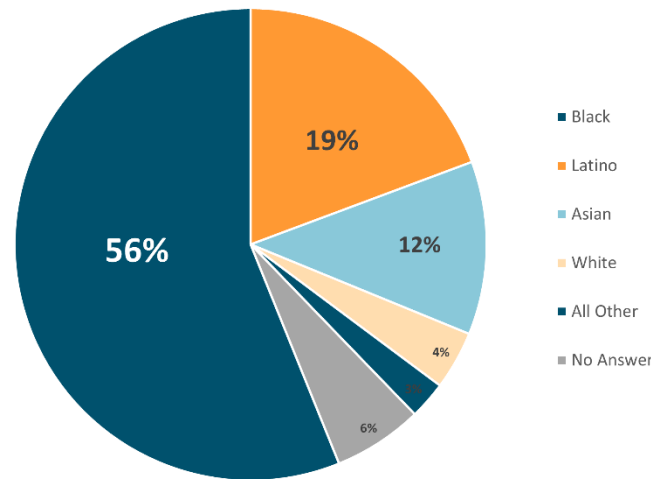
- 77% to Black and Latino residents
- 65% to Blacks & Latinos earning <\$50,000 per year

Black and Latino households are 29% of County households, but are 43% of households without computers

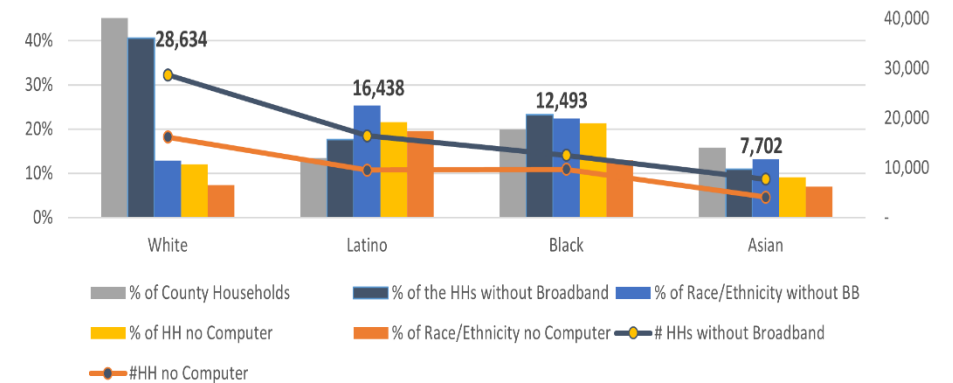
Distribution by Race and Income



Montgomery Connects Computer Distribution By Race

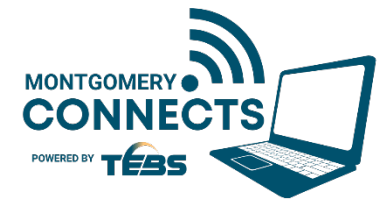
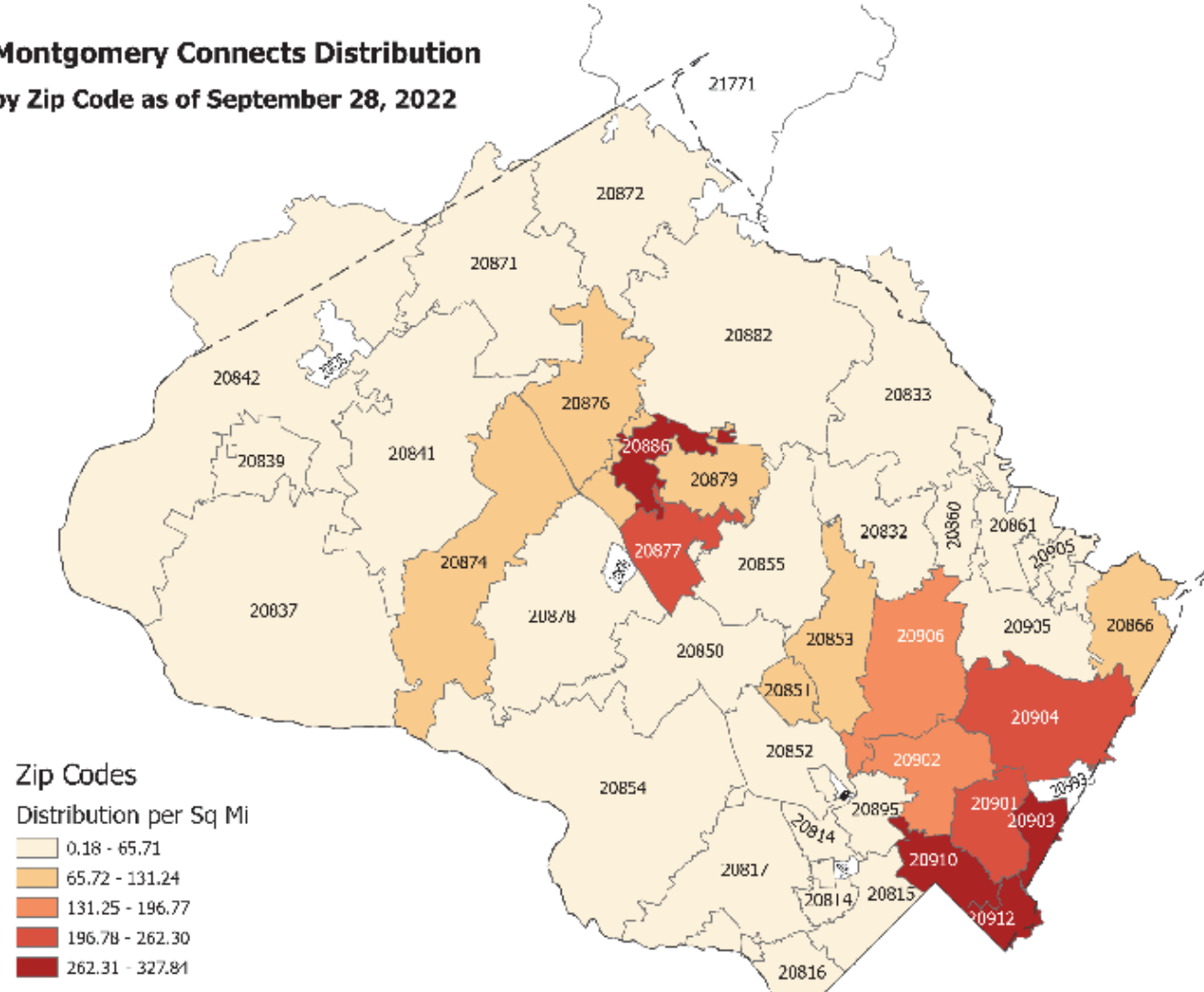


Households by race/ethnicity without wireline broadband and/or computers

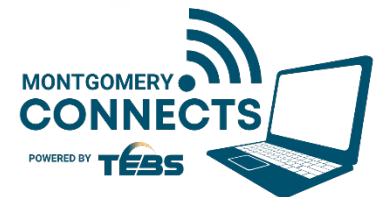


Geographic Distribution

Montgomery Connects Distribution
by Zip Code as of September 28, 2022



FY22-FY23 PARTNERSHIPS



Funding

Covid-Relief programs provided unique opportunities;
More is needed to cultivate new resources

FY22-FY23 Funding	FY23-24 Funding Goals
\$20 million in federal and state grants for 50,000 computers (22,000 laptops remaining to distribute)	Need \$20 million from federal grant, County, or business philanthropy for 50,000 more computers
Federal & state \$45/month ACP subsidy for families enrolled in benefit programs (no outreach funding); \$155,000 HHS grant for ACP outreach to seniors	Leverage MD laptop program (1 per ACP-eligible HH) for MC Pell Grant students and seniors; and seek federal grants and County funding to support enrollment assistance and targeted outreach
\$175,000 training grants from Truist Bank to expand Senior Planet in Montgomery tech training	Develop healthcare partnerships to expand funding for technology training for older adults
\$961,00 MoCoNet residential broadband – County funding to expand to 3 locations; State grants to expand to 4 more (9 total)	Seek \$9M-12M in State grants to expand to HOC bldgs (bldgs owned by others not eligible)



Challenges & Opportunities

- People are 34x more motivated for free laptops than to enroll in ACP broadband subsidy
 - 661,374 computer website visits in 6 months vs 19,520 visits for broadband subsidy in 18 months

• 65% of computer recipients subscribe to broadband and are ACP-eligible, **but 69% are not enrolled in ACP**

• An estimated 97,000 County families are ACP-eligible but only 15,000 are enrolled

• 89% of computer recipients over 18 years own a smartphone but **only 39% subscribe to mobile broadband**

• Families enrolled in a benefit program (SNAP, Medicaid, Free School Lunch) or earning 200% of poverty rate are eligible for ACP



Montgomery Connects Video

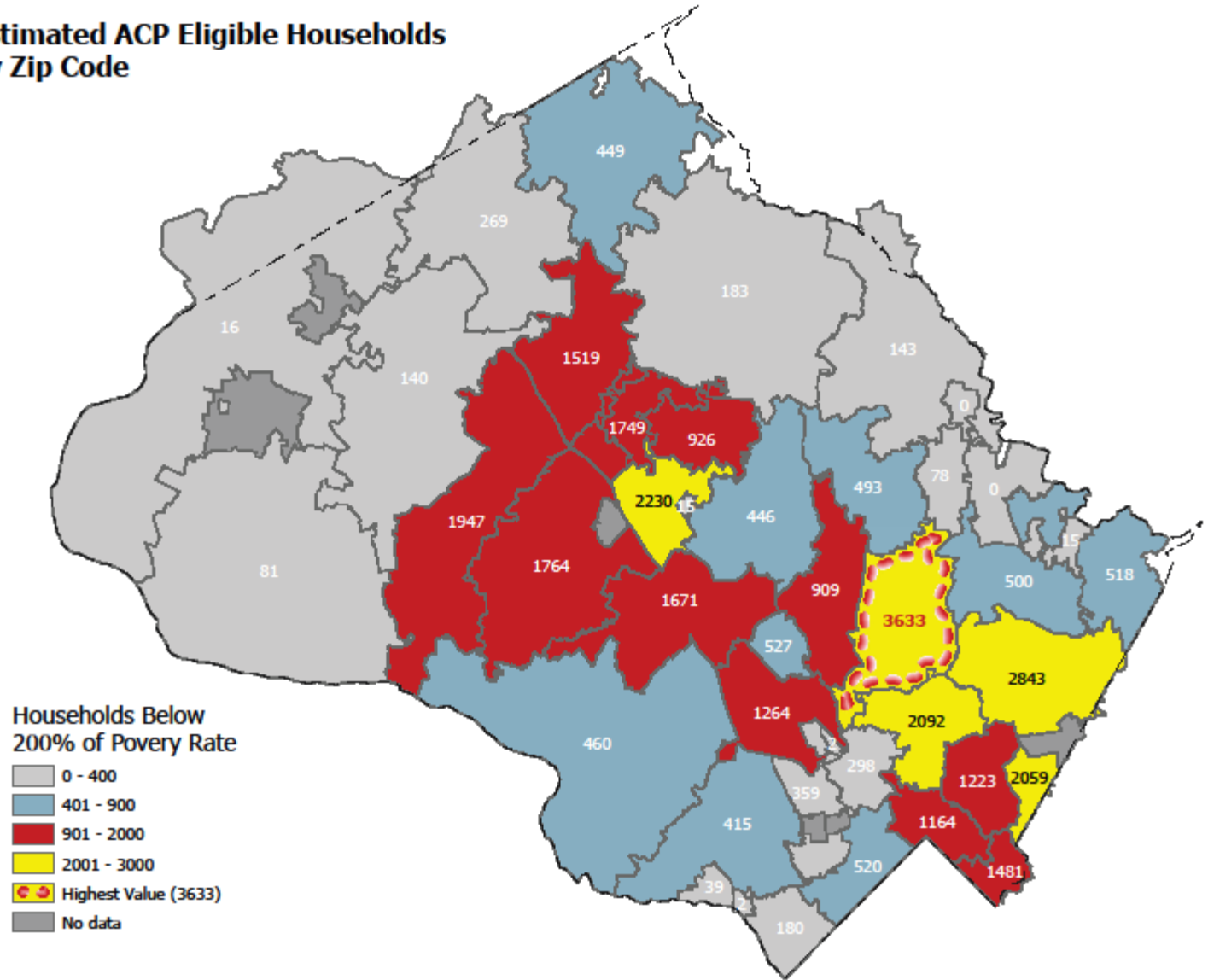


<https://youtu.be/n8vSN7W13h0>



ACP Broadband Subsidy Eligibility

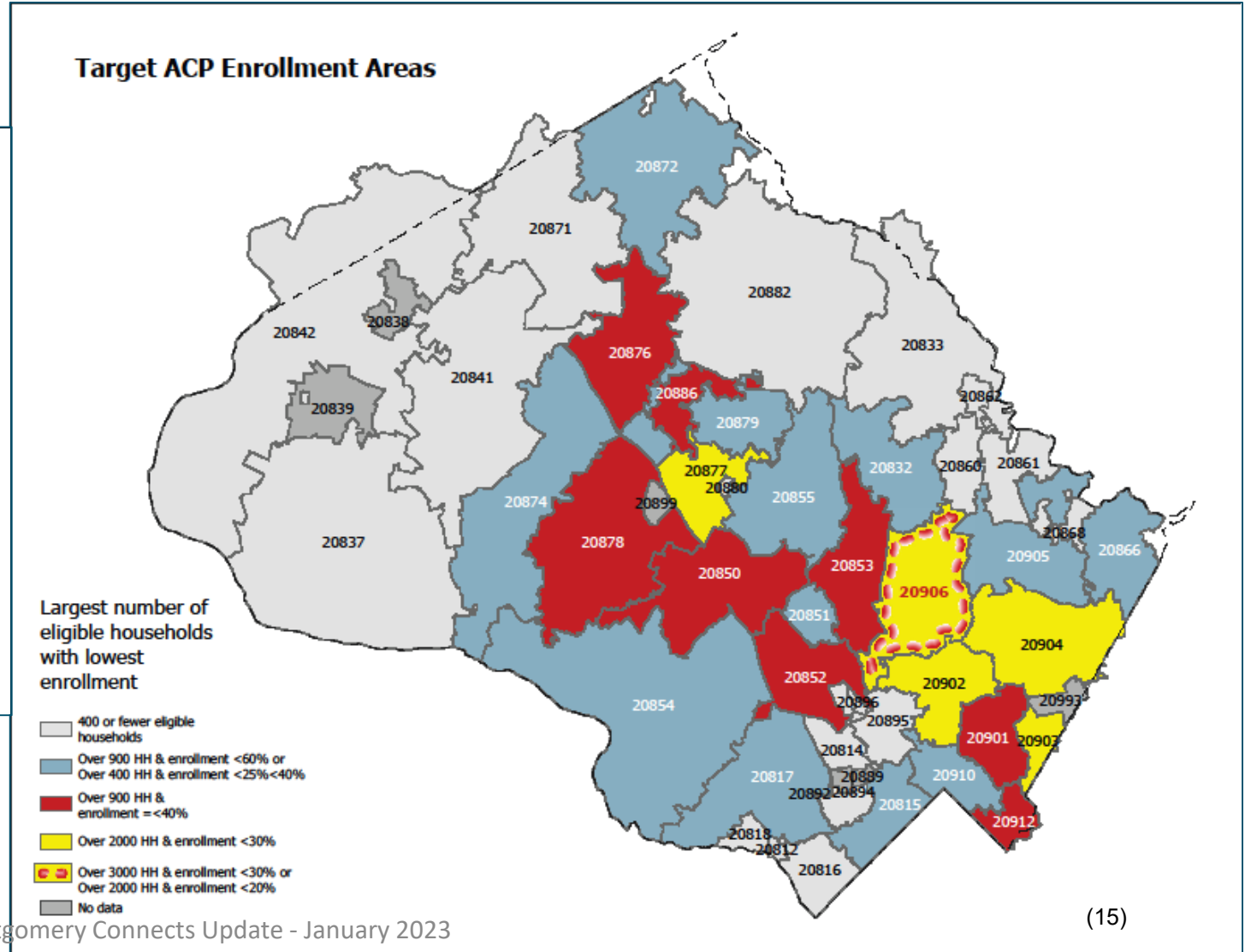
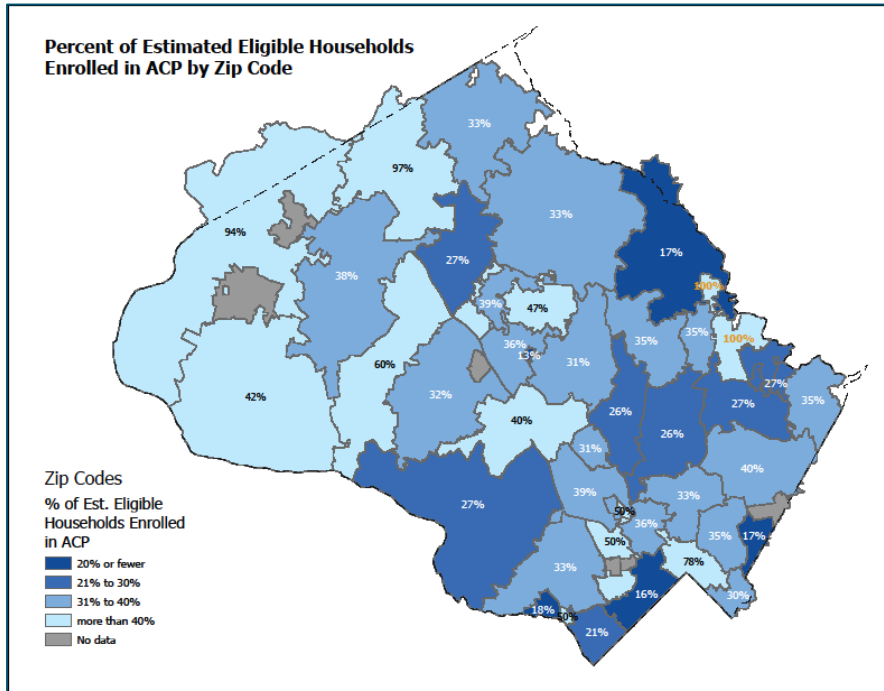
Estimated ACP Eligible Households
by Zip Code



Montgomery Connects Update - January 2023



Target ACP Enrollment



FY23-FY24 Strategies

OUTREACH

- Expand partnerships
- Implement media outreach campaign
- Target on-site program geographically

FUNDING

- Focus on impact stories
- Leverage computer grants to increase impact of ACP outreach grants
- Identify County leadership with relationship to corporate philanthropy funders



*Eden Ngoune –
“Why Everyone Needs A Chromebook”*

https://youtu.be/_DHJ448JDTc



MONTGOMERY CONNECTS BROADBAND & DIGITAL EQUITY GRANT UPDATE



Montgomery Connects. The Department of Technology & Enterprise Business Solutions (TEBS) directs the County's digital equity program, Montgomery Connects. Digital Equity is the state in which all residents have access to robust and affordable broadband service, a home computing device, the skills to use Internet and technology to participate in the digital world, and a tech support hotline. The Digital Divide is the gap between residents who have broadband, devices, and skills for daily living, online education and employment, and civic engagement, and those that do not.

Goal. Montgomery Connects works strategically through a racial equity and social justice lens to target scarce resources to communities that have the greatest need:

- Households earning less than \$50,000 per year (which less than half the County median household income)¹ are 21% of County households but are disproportionately 60% of County households without computers and 49% of households without home broadband.
- Black and Latino households are 29% of County households, but 43% of households without computers and 41% of households without home broadband.
- 42% of people age 65 and older lack wireline broadband at home and 25% seniors are not online.
- 90% of County households earning less than 200% of federal poverty are concentrated in 50% of the County's zip codes (21 of 42).

Strategy. Our strategy is to partner with trusted community organizations to reach underserved residents, to host geographically targeted events and programs, and leverage County investments to attract federal and state grants to support expanding programs. Montgomery Connects programs include MoCoNet, the County's residential broadband service program at affordable housing developments, our grant-funded computer distribution programs, work to enroll residents in the Affordable Connectivity Program (ACP) broadband subsidy program², operation of Senior Planet in Montgomery free technology training programs for older adults and promotion of free MCPL training resources, and promotion of third-party technology support hotlines.

Grants. The need for connectivity during Covid has resulted in unprecedented funding for digital equity. The following information is an update for the Montgomery County Executive, the County

¹ Montgomery County 2017-2021 median household income is \$117,345 in 2021 dollars. A household with a median income of \$50,000 per year earns 42% of the County median household income.

² Households earning 200% or less of the Federal Poverty Guidelines are eligible for \$45 per month Affordable Connectivity Program broadband subsidies. 200% of the 2022 guidelines are: \$27,180 for a family of 1; \$36,620 for a family of 2; \$46,060 for a family of 3; \$55,500 for a family of 3; \$9,440 for each additional person.

Council, and department leadership regarding grants received, current applications, and upcoming opportunities.

GRANTS AWARDED

DEVICES

- 1. \$15.9M ECF Computer Grant.** TEBS, in partnership with MCPL, received two federal Emergency Connectivity Fund grants to purchase and distribute 40,000 Montgomery Connects loaner computers to people who certified they did not have computers. Council approved a \$15.9M Supplemental Grant on June 28, 2022, to authorize TEBS to implement these grants.
 - Through January 31, 2023, 38,600 computers have been provided, primarily to low-income households: 84% of recipients have an annual household income of less than \$50,000, and 35% of these recipients have an annual income of less than \$25,000; 77% have been distributed to Black and Latino residents, with 65% distributed to Black and Latino residents in households earning less than \$50,000. 86% of computers have been distributed within the 50% of County's zip codes where 90% of County households earning less than 200% of federal poverty are concentrated.
 - Montgomery Connects is providing in-person ACP enrollment assistance at every computer distribution event, enrolling over 1,000 families in ACP (saving them over \$540,000 per year). But more investment in enrollment assistance programs is needed. Among computer recipients earning less than \$25,000 per year, 53% subscribed to home internet and 30% to mobile broadband, but 70% were not enrolled in ACP even though they were eligible. Montgomery Connects estimates 97,105 households are eligible for ACP: as of December 31, 2022, 15,282 households have enrolled.
- 2. \$5.9M MD Emergency Education Relief Grant (MEER).** In September 2022, TEBS was awarded 8 grants totaling \$1.3 million to purchase 1,000 laptops with software for use by 28 non-profit agencies and departments working with K-12 students, and an additional 21 grants totaling over \$4 million to purchase an additional 10,000 Chromebooks for students. The State had unspent educational grant money that needed to be implemented by September 2022 which created the opportunity for Montgomery County. TEBS will seek an FY23 Supplemental Budget Appropriation. Distribution decisions to non-profits are being finalized and TEBS is reaching out to plan a public event with CEX, Council, and the non-profits. The Chromebooks are being distributed on the same terms as the ECF computers and distribution is expected to be completed by June 2023.

TRAINING

- 3. \$175,000 Truist Bank EPIC Grant.** \$175,000 was awarded in July 2022 to provide Senior Planet Montgomery technology training to seniors receiving free 100 Mbps MoCoNet residential broadband at HOC's Residences on the Lane in Rockville and Bauer Park, and APAH's Snowden's Ridge in Fairland. This program concluded in December 2022.
- 4. \$155,000 HHS ARPA Senior Planet Montgomery Grant.** As part of HHS's ARPA Supplemental Appropriation, HHS, OMB, and the Maryland Dept. of Aging have approved \$155,000 for TEBS to host

ACP broadband subsidy enrollment events and Senior Planet Montgomery training at senior housing developments. Grant implementation is underway with HHS. Computer distribution and ACP enrollment events are expected to start in April 2023.

- 5. \$1M Federal Earmark.** \$1 million for 5G Training Bootcamp in collaboration with Montgomery College and WorkSource Montgomery. A formal application required by DOL will be submitted in February 2023 and the grant is expected to be awarded approximately 60 days later. Montgomery County will manage the grant, with Montgomery College and WorkSource Montgomery providing the majority of work to train underemployed Latino and Black workers, women, and veterans to install fiber optic and 5G equipment, and to work with industry to create a pipeline of jobs for trained workers.

BROADBAND

- 6. \$961,000 MD GAPS Grants.** In June 2022, 4 grants totaling \$961,000 were awarded to construct four MoCoNet projects, to provide free 100 Mbps broadband service at affordable housing locations. These projects are being revised based on changed construction schedules. Work is being completed at MHP's Hillwood Manor and planning is underway for N. Frederick Apartments. The new housing project at the former Dept. of Recreation Headquarters at 4010 Randolph Rd is expected to comprise 2 of the grants. A fourth grant location is being finalized. TEBS will request an FY23 Supplemental Budget to implement this grant. TEBS has a temporary project manager and is seeking a full-time contractor funded by future construction grants to manage the MoCoNet construction and project planning.

PENDING GRANT APPLICATIONS

DEVICES

- 1. Maryland Connected Devices.** The State of Maryland has purchased 135,000 Chromebook laptops to distribute 1 per address eligible for ACP. Montgomery Connects applied for 32,400. The State only received requests for 91,000 devices so we anticipate award of this grant in February 2023. The State will provide \$6 per laptop as a distribution stipend to the County. These devices will be used to provide computers to low-income seniors as part of implementation of the HHS grant. Montgomery Connects intends to leverage these computers to incentivize enrollment in ACP. Additional funding is being sought from the FCC grant program to support ACP enrollment and outreach as part of this program.

BROADBAND

- 2. FCC ACP Navigator Pilot Grant.** \$250,000 grant request submitted January 2023; award decision expected March 2023. Montgomery Connects submitted an application to be one of 20 national pilot locations to provide expanded in person enrollment support for the \$45 per month ACP broadband subsidy. If selected the County would provide direct mail to 16,033 ACP-eligible Federal Housing Voucher and college Pell grant recipients, and to 27,143 households living in senior and family affordable housing developments (19% of these families are estimated to be eligible for ACP). 110 events providing hands on enrollment support at senior and affordable housing developments would

also be held. The goal is to have 3,511 event participants, provide information of 1,700 eligible households who were previously unaware of ACP, and to enroll 1,413 new ACP enrollees (saving families \$763,020 annually). Enrolling Montgomery County residents into ACP, providing access to high-speed broadband is transformative for families and the community alike – it serves as an economic development driver as well.

- 3. FCC Affordable Connectivity Outreach Grants.** \$186,000 grant request submitted January 2023, award decision expected March 2023. If awarded, this grant would provide funding to provide hands-on enrollment support at computer distribution events for the Maryland Connected Devices program. Targeted direct mail would be provided to 97,856 households, of which 91% are in benefit programs that make them eligible for ACP broadband subsidies. Recipients will be provided ACP info, easy to use self-help ACP enrollment instructions, and invitations to hands-on ACP enrollment assistance events. If a separate Maryland computer grant is awarded, the County will also offer 1 free computer per ACP-eligible household (households must be ACP-eligible as condition of the Maryland grant). The County will partner with trusted community partners to promote awareness and participation in 66 large-scale, hands-on ACP assistance events designed to serve approximately 37,787 households. All messaging will be multilingual in English and Spanish, with targeted use of Mandarin, Amharic, French, Korean, and Vietnamese; include QR codes to facilitate use of mobile phones to enroll in ACP; and be distributed in print and through email, text, and WhatsApp. The County has also identified zip codes with the highest number of ACP-eligible households and lowest ACP enrollment rates.
- 4. Maryland Neighborhood Network Grants (Rural).** TEBS and the Office of Agriculture worked with Comcast to support Comcast's December 2022 application to extend broadband to 70 unserved occupied properties in the Agricultural Reserve. Comcast has stated 7 previously underserved properties are now serviceable. 13 remaining properties were not included in the grant application because of the length of driveways (1/2 mile long) or because no structure was found during the grant planning process. The MD Office of Statewide broadband is planning a future grant to fund driveway extension and TEBS is waiting for this development. Information from online rural survey was included as part of the grant. All other properties in the Agricultural Reserve are either served by Comcast or Verizon or are in Verizon's federal CAF-II grant area. NOTE: TEBS also submitted challenges in December 2022 to the FCC broadband maps for all known underserved rural properties.

FUTURE GRANT OPPORTUNITIES

- 1. Maryland Municipal Broadband Grants.** Maryland has appropriated \$45 million for municipal grants to expand broadband to affordable housing. Grant rules will be released in early 2023 and are expected to limit application to properties owned by the County or HOC. It is not known whether grants will be limited to retrofitting properties with new broadband wiring, or whether installing MoCoNet in newly constructed or renovated properties will be permitted. Informally, the MD Office of Statewide Broadband has said that match requirement may be reduced from 25% to 5% and expenditures for digital equity and ACP enrollment will count toward the match. Montgomery Connects will seek approval to submit \$9-\$12M in grant applications and work through the CIP process to request a match

and support for projects that would not be eligible for this grant program in the Digital Equity-Montgomery Connects CIP. Engineering, cost estimating, financial sustainability analysis, surveys of current broadband speeds, and engagement with housing development partners are underway. MoCoNet's free 100 Mbps residential service has 200 subscribers, is available to 330 units at Main Street Apt, Residences on the Lane, Snowden's Ridge, and Bauer Park, and will be at Elizabeth House and Hillwood Manor later this year.

MARYLAND BEAD AND DEA GRANT OPPORTUNITIES

The Infrastructure Investment and Jobs Act (IIJA), as known as the Bipartisan Infrastructure Law (BIL), created several large broadband programs. The two largest provide formula-based funding to states and territories, who must submit a plan and coordinate with local governments to receive funds over 5-years.

1. State Planning Digital Equity Planning and Capacity Grant Programs. These grants are designed to help internet adoption and technology skills programs.

- \$60 million is available nationally for planning, with \$966,659 (1.61%) awarded to Maryland to develop a Digital Equity Plan within one year (likely due October 2023).*
- \$1.44 billion will be awarded for capacity grants over 5 years to implement the Digital Equity Plans. If Maryland receives the same 1.61%, and Montgomery County receives 11% (based on the percentage of unserved in the County), the County would receive \$510,396 annually for 5 years. However, the State may reduce funding to local programs to support statewide tech hotline and navigator programs instead.
- Montgomery County is working with OIR to organize a Large County Digital Equity Coalition to identify shared digital equity goals and programs among the largest Maryland Counties.
- \$1.25 billion will be available in 2025 Competitive Digital Equity Grants (local govts could apply). These grants fund programs developed after creation of state Digital Equity Plans.

2. Broadband Equity, Access, and Deployment Program (BEAD). Every state will receive at least \$100 million and competitively pick subgrantees. Subgrantees must contribute at least a 25% match and projects with larger subgrantee matches will be prioritized. \$5 million can be used to create a Five-Year Action Plan, which must include and coordinate with the state's Digital Equity Plan.

- FCC maps to be released in November will be used to create formula-based state awards. Grant priorities will be for unserved (less than 25/3 Mbps), underserved (less than 100/20 Mbps), and then community anchor institutions such as schools, libraries, and rec centers (1/1 Gbps).
- Five Year Action Plan will likely be due in June 2023.³ Based on Digital Equity Plan funding distribution, Maryland could receive \$684 million for broadband infrastructure.

³ *Note: Montgomery County-based, woman-owned company, CTC Energy and Technology, is expected to be hired to create the Maryland BEAD 5-Year Plan and Digital Equity Plan.

CYBERSECURITY GRANT OPPORTUNITIES

1. **State and Local Cybersecurity Grant Program (SLCGP).** Approximately \$20 million in federal SLCGP grants will be distributed to Maryland over 3 years, with 80% going to local governments for cyber governance, assessments, mitigation, and cybersecurity workforce. Montgomery County's top priority is funding for workforce. Funding cycles run on the federal fiscal year (FFY, Oct 1 to Sept 30).
 - FFY23 is a planning year: Maryland has received \$2 million and formed a planning committee which includes Montgomery County's CISO (Chief Information Security Official) Keith Young. No funding will be provided to Montgomery County in FFY23. The MD SLCGP Committee is sending questionnaires to local governments to get input on what should be in the State's SLCGP Cybersecurity Plan. The plan will be submitted in FFY23 and FFY24 funding rules are expected in fall 2023.
 - SLCGP grant funds will require a match of 10% in FFY23, 20% in FFY24, 30% in FFY25, and 40% in FFY26.
 - The State of Maryland is promoting a shared services model and incident response team, and to have local governments buy services through this contract. There is some concern about the State's ability to recruit quality candidates for State positions given the much higher compensation available to contractors in the private sector.

2. **Maryland HB1205 Local Cybersecurity Fund.** Maryland legislation created the Local Cybersecurity Fund (LCF) which will provide \$6 million for financial assistance to local governments to improve cybersecurity preparedness. The Maryland Dept. of Emergency Management (MDEM) will administer the funding. However, MDEM is awaiting for appropriation and funding is not expected to be released to local governments until FY24.