Five-Year Action Plan

Broadband Equity, Access, and Deployment (BEAD) Program

State of Georgia

August 2023

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1 Executive summary

On behalf of the Governor's Office of Planning and Budget (OPB), the Eligible Entity for the State of Georgia, the Georgia Technology Authority (GTA)[1] is pleased to present this Broadband Equity, Access, and Deployment (BEAD) Program Five-Year Action Plan.

This Plan comprises a comprehensive needs assessment (including the needs of covered populations and underrepresented communities) and establishes Georgia's goal of ensuring the availability of robust high-speed internet connections for all Georgians, as well as the tools and skills to make use of opportunities enabled by broadband access.

1.1 Vision and objectives

Our vision for a fully connected Georgia is to ensure that every Georgian has reliable and affordable access to the internet along with the necessary tools and skills that unlock opportunities for educational advancement, economic success, improved health, and strengthened social ties. This will create more connected, resilient, and prosperous communities and cultivate an environment across the State where our citizens and workforce can thrive, our infrastructure can support growth, and our industries can continue to lead the way.

GTA has established the following goals and objectives for broadband and digital connectivity (referred to as digital equity by the Infrastructure Investment and Jobs Act):

1. **Ensure comprehensive high-speed internet accessibility**: Our aim is to ensure the availability of robust high-speed internet connections for all Georgians, with a particular focus on the populations most affected by limited service options. We plan to collaborate with internet service providers (ISP), community anchor institutions (CAI), local government entities, and other reputable organizations to efficiently build out broadband infrastructure to the remaining unserved/underserved locations, to track the quality of high-speed internet services and the associated costs to subscribe to services, and to help incentivize the availability of affordable connectivity options.

2. **Empower workforce advancement and economic growth in unserved and underserved communities and population groups through broadband expansion projects.** This will entail deploying funding to improve service in economically distressed areas, incentivizing the participation of small Georgia-based ISPs in funding programs, and expanding

[1] OPB is the State's administering entity ("Eligible Entity") for BEAD but will sub-award funds to GTA to implement and execute the BEAD Plan. Plan identifies resources and relationships available to GTA and the other State agencies and departments that play a role in achieving the State's broadband goals.

affordable broadband workforce training initiatives across Georgia through a State-led program.

3. **Bolster cybersecurity across State networks, foster a cyber-ready workforce, and establish lasting partnerships for collaborative action.** This will be achieved through the consistent compliance of each State agency and all BEAD-funded networks with the information security policies and standards issued by GTA. With the assistance of GTA's Office of Information Security and in collaboration with the Georgia Cyber Center, we will cultivate an environment of modern cybersecurity education, training, research, and practical application for both the private and public sectors. This goal encapsulates our overarching pursuit of a secure, informed, and collaborative digital environment.

4. **Reduce obstacles to digital connectivity (equity) and foster an environment conducive to economic growth, academic achievement, and improved healthcare outcomes.** This encompasses the identification and mitigation of technological and economic obstacles to internet access, the promotion of digital literacy programs among all age groups to optimize internet usage benefits, and support for CAIs' digital connectivity programming. To effectively serve impacted communities, we commit to assisting these institutions toward having 1 Gbps or faster internet connectivity and being equipped to deliver technology-based training and services, thereby maximizing their transformative impact.

1.2 Current state of broadband and digital connectivity (equity)

The State of Georgia has been at the forefront of broadband efforts nationwide, with robust grant programs, strategic planning, and a statewide address-level map of broadband availability—supported by established broadband personnel and inter-agency collaboration.

The Georgia Broadband Deployment Initiative (GBDI), established in 2018 by the Achieving Connectivity Everywhere (ACE) Act and jointly led by GTA and the Georgia Department of Community Affairs (DCA), calls for broadband expansion to unserved areas "to provide broadband services coverage throughout the entire State."[2]

A cornerstone of the GBDI is the Georgia Broadband Availability Map, which documents broadband availability at the street address level; Georgia became the first state to publish that level of detail when the map launched in 2020.

According to the 2022 Georgia Broadband Availability Map, 454,950 addresses in the State were unserved—about 90 percent of which are in rural areas. In February 2022 and January and June 2023, Governor Brian P. Kemp obligated a total of $661,006,306 in preliminary awards through

[2] Senate Bill 402 https://www.legis.ga.gov/legislation/52636; enacted through Georgia Code Title 50, Chapter 40, https://broadband.georgia.gov/media/6/download.

three grant programs—leveraging funding from the American Rescue Plan Act (ARPA) State and Local Fiscal Recovery Fund (SLFRF) and Capital Projects Fund (CPF)—which collectively aim to serve roughly 205,000 of these approximately 455,000 unserved locations.

The State's investment is complemented by additional hundreds of millions of dollars in private commitments through public-private partnerships Governor Kemp has helped cultivate, including through legislative efforts like the passage of Senate Bill 2 (2019),[3] which empowered electric membership cooperatives (EMC) to provide broadband service. In addition, federally administered funding has been deployed to the State through the FCC's Rural Digital Opportunity Fund, the USDA's ReConnect program, NTIA's Broadband Infrastructure Program, and NTIA's Middle Mile Program—all of which are supporting ongoing builds that are closing the digital divide.

These efforts have been successful. Based on the Federal Communications Commission's (FCC) most recent National Broadband Map data[4] and considering federal and State broadband deployment grants that have been awarded, 94.8 percent of addresses in Georgia are considered served with broadband:

- 119,278 addresses (approximately 3.2 percent) are unserved – below 25/3 Mbps
- 74,934 addresses (approximately 2 percent) are underserved – 25/3 Mbps or higher but below 100/20 Mbps
- 3,559,750 addresses (approximately 94.8 percent) are served – 100/20 Mbps or higher

As part of developing this Plan, the State conducted a comprehensive external engagement process to assess the current state of digital connectivity (see Section 5.1). This outreach identified potential partners, assets, and programs that will play a key role in the implementation of the Plan. Those engagement efforts also identified needs and gaps related to broadband adoption, especially related to the affordability of service, as well as other digital connectivity issues such as digital skills (see Section 3).

1.3 Obstacles or barriers

GTA has identified a range of potential obstacles or barriers it will seek to mitigate. As discussed in Section 4, these include:

- **Access to rights-of-way and poles** – The State anticipates that BEAD-funded deployment efforts in the State—like other large broadband infrastructure build-outs—will face obstacles in access to rights-of-way and utility poles as well as permission to install

[3] See, https://www.legis.ga.gov/legislation/54177.
[4] National Broadband Map, May 30, 2023, plus V2 fabric data.

infrastructure across railroad crossings, bridges, private roads, easements, and other restricted areas.

- **Legislative and regulatory barriers** – While the State does not anticipate obstacles from the General Assembly or executive branch, which are both strong supporters of efforts to enable broadband deployment and digital connectivity, it recognizes the importance of efforts to streamline State and local permitting.
- **Labor-related challenges** – Experts predict that the pool of skilled workers for broadband deployment is smaller than the BEAD projects will require nationwide, and the State anticipates potential labor shortages and challenges around workforce growth and diversity.
- **Supply chain issues and materials availability** – Demand for broadband deployment labor and materials has spiked due to extensive federal funding as well as planned investments by State, local, and private entities—which compounds market disruptions due to pandemic-related supply chain issues.
- **Industry participation** – Commitments by ISPs to share the cost and risk of last-mile broadband deployment throughout low-density areas in exchange for partial public funding will be an important factor in closing the State's digital divide.
- **Topography and environment** – Like other infrastructure projects in the State, broadband deployment must consider survivability in terms of natural disasters by employing resilient construction approaches.
- **Affordability** – The affordability of available service is a barrier to broadband adoption for some Georgians and an obstacle for many, particularly low-income households and other individuals in covered populations as defined by NTIA.
- **Digital literacy** – Some residents lack access to the digital training necessary to develop foundational digital skills, according to outreach to organizations serving covered populations conducted for this Plan.

1.4 Implementation plan

This Plan presents the State's estimated costs, timeline, and strategies for achieving universal service, along with strategies related to remedying inequities in digital inclusion (see Section 5).

1.4.1 Priorities

The State's priorities for broadband deployment utilizing BEAD funding reflect the State's goals and objectives (see Section 2) and are aligned with the principal focus of the BEAD Program:[5]

1. Serve 100 percent of unserved locations (i.e., below 25/3 Mbps) with a minimum of 100/20 service within five years
2. Serve 100 percent of underserved locations (i.e., between 25/3 and 100/20) with a minimum of 100/20 service within five years
3. Deliver gigabit connections to community anchor institutions that do not have that level of service within five years

Should BEAD funds remain after the first three objectives are fulfilled, the State will then focus on the next set of priorities:

4. Address challenges related to line extension costs to unserved and underserved residences determined to be extremely high-cost locations
5. Identify and connect unserved units in multiple-dwelling-unit buildings with a minimum of 100/20 Mbps service, while assessing and upgrading the internal wiring to facilitate high-speed internet access for all units simultaneously
6. Support programs that alleviate barriers to digital connectivity, enabling economic empowerment, promoting academic success, and enhancing community health

1.4.2 Estimated timeline and cost for universal service

The State of Georgia believes a total investment of $1.8 billion to $2.4 billion, including both State-administered BEAD funds and subrecipient matching funds, will enable the goal of universal service at all remaining unserved and underserved locations by the end of 2028 (i.e., within five years).

The State developed this cost calculation and timeline through ongoing internal cost modeling associated with its 2022 strategic plan and the real costs presented by winning applicants to Georgia's three broadband grant programs over the past 18 months. The timeline assumes the administration of a two-round subrecipient selection process for the State's BEAD allocation deployment.

[5] "NOFO: BEAD Program," NTIA, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, at p. 7.

1.5 Confirmation that this BEAD Five-Year Action Plan meets minimum requirements

This Five-Year Action Plan meets the minimum requirements as outlined in the BEAD NOFO and summarized in Section 7.1 of the NTIA's "Five-Year Action Plan: Guidance" document:

Requirement	Section in this Plan
1. Details of existing broadband program of office within the Eligible Entity	Section 3
2. Funding the Eligible Entity has available	Section 3.1
3. Existing efforts funded by the federal government	Section 3.1
4. Employees and contract support	Section 3.1
5. Obstacles or barriers	Section 4
6. Asset inventories	Section 3.3 Appendices
7. Description of external engagement process	Section 3 Section 5.1 Appendices
8. Broadband availability and adoption data	Section 3 Section 5
9. Broadband service needs and gaps	Section 3 Section 5
10. Comprehensive, high-level plan, including timeline and cost for universal service	Section 5
11. Digital equity and inclusion needs, goals, and implementation strategies	Section 2 Section 3 Section 5
12. Alignment of the Plan with other efforts and priorities	Section 5.7
13. Technical assistance and capacity needed for successful implementation	Section 5.8

2 Overview of the Five-Year Action Plan

The State of Georgia seeks to develop a comprehensive, data-driven understanding of its broadband deployment and adoption gaps—and to effectively use its available resources and partnerships to narrow those gaps.

This Five-Year Action Plan establishes Georgia's broadband goals and priorities and presents a comprehensive needs assessment that will inform the State's Initial Proposal.

2.1 Vision

Our vision for a fully connected Georgia is to ensure that every Georgian has reliable and affordable access to the internet along with the necessary tools and skills that unlock opportunities for educational advancement, economic success, improved health, and strengthened social ties. This will create more connected, resilient, and prosperous communities and cultivate an environment across the State where our citizens and workforce can thrive, our infrastructure can support growth, and our industries can continue to lead the way.

2.2 Goals and objectives

The Georgia Broadband Deployment Initiative (GBDI), established in the 2018 Achieving Connectivity Everywhere (ACE) Act,[6] calls for the promotion and deployment of broadband services throughout the State to unserved areas with a minimum of 25 Mbps download and 3 Mbps upload speeds.[7] Per the establishing statute, "the goal of such program shall be to provide broadband services coverage throughout the entire State."[8]

With that high-level mission as a guide, GTA has established the following broadband and digital connectivity goals and objectives:

1. **Ensure comprehensive high-speed internet accessibility**: Our aim is to ensure the availability of robust high-speed internet connections for all Georgians, with a particular focus on the populations most affected by limited service options. We plan to collaborate with internet service providers (ISP), community anchor institutions (CAI), local government entities, and other reputable organizations to efficiently build out broadband infrastructure to the remaining unserved/underserved locations, to track the quality of high-speed internet services and the associated costs to subscribe to services, and to help incentivize the availability of affordable connectivity options.

[6] Senate Bill 402, https://www.legis.ga.gov/legislation/52636; enacted through Georgia Code Title 50, Chapter 40, https://broadband.georgia.gov/media/6/download.
[7] "Georgia Broadband Deployment Initiative," DCA, https://broadband.georgia.gov/sites/default/files/documents/georgia-broadband-deployment-initiative.pdf
[8] GA Code § 50-40-81 (2021)

2. **Empower workforce advancement and economic growth in unserved and underserved communities and population groups through broadband expansion projects.** This will entail deploying funding to improve service in economically distressed areas, incentivizing the participation of small Georgia-based providers in funding programs, and expanding affordable broadband workforce training initiatives across Georgia through a State-led program.

3. **Bolster cybersecurity across State networks, foster a cyber-ready workforce, and establish lasting partnerships for collaborative action.** This will be achieved through the consistent compliance of each State agency and all BEAD-funded networks with the information security policies and standards issued by GTA. With the assistance of GTA's Office of Information Security and in collaboration with the Georgia Cyber Center, we will cultivate an environment of modern cybersecurity education, training, research, and practical application for both private and public sectors. This goal encapsulates our overarching pursuit of a secure, informed, and collaborative digital environment.

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These goals evolved from the broadband strategic goals established in the "Georgia Broadband Annual Report 2022."[9]

[9] "Georgia Broadband Annual Report 2022," Georgia Technology Authority and Georgia Department of Community Affairs, https://gta.georgia.gov/document/document/2022-broadband-annual-report/download.

3 Current state of broadband and digital connectivity (equity)

This section describes the current state of broadband and digital inclusion in Georgia, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts. It begins with an overview of the State's past and current efforts to promote broadband deployment and "digital equity" (which the State refers to as "digital connectivity" in this Plan); describes the resources and relationships available to the State; presents detailed asset inventories related to broadband deployment, adoption, affordability, and access, and digital connectivity; and presents a needs and gaps assessment.

In support of Governor Brian P. Kemp's goal to be the best state in the nation to live, work, and raise a family regardless of ZIP code, the State has increased broadband expansion efforts over the past year by deploying record levels of funding for projects throughout the State, standing up two advisory committees, and creating a comprehensive State strategy to chart a path to close the digital divide. Georgia is well positioned to continue work on broadband in the future with a service availability map, strategic plan, and active grant programs providing infrastructure funding.

The State of Georgia has been at the forefront of broadband efforts nationwide, with a detailed broadband availability map, established State broadband personnel, and robust grant funding to strengthen infrastructure and get high-speed internet to homes and businesses throughout the State. While broadband has become essential to business, education, healthcare, agriculture, and overall quality of life, high-speed internet access remains unavailable for Georgians in many communities.

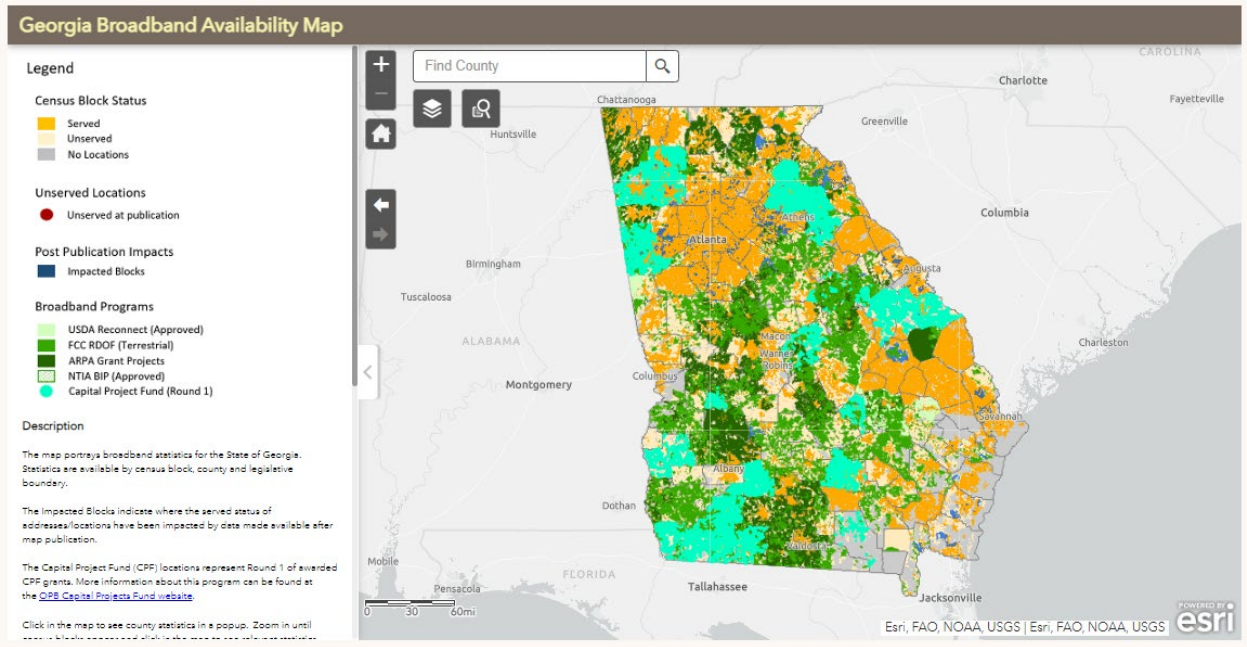
In 2018, the State launched the Georgia Broadband Deployment Initiative (GBDI) through the Achieving Connectivity Everywhere (ACE) Act.[10] The program calls for the promotion and deployment of broadband services throughout the State to unserved areas without a minimum of 25 Mbps download and 3 Mbps upload speeds (25/3) delivered via terrestrial technologies. The initiative is jointly led by the Georgia Technology Authority (GTA) and the Georgia Department of Community Affairs (DCA), which have formed a five-agency team with the Georgia Department of Transportation (GDOT), Georgia Department of Economic Development (GDEcD), and the State Properties Commission (SPC) to coordinate and collaborate with stakeholder representatives from providers and local governments in 13 projects that comprise the current implementation of the GBDI.[11]

[10] Senate Bill 402 https://www.legis.ga.gov/legislation/52636; enacted through Georgia Code Title 50, Chapter 40, https://broadband.georgia.gov/media/6/download. *See also:* OCGA 50-40, https://law.justia.com/codes/georgia/2021/title-50/chapter-40/.

[11] "Georgia Broadband Deployment Initiative," DCA, https://broadband.georgia.gov/sites/default/files/documents/georgia-broadband-deployment-initiative.pdf.

A cornerstone of the GBDI is the Georgia Broadband Availability Map,[12] which DCA updates annually based on data provided by Georgia's retail ISPs. With the launch of the map in 2020, Georgia became the first state to map broadband availability at the street address level.[13] As defined in the ACE Act,[14] a census block on the map is considered unserved if 20 percent or more of the locations in the block do not have access to fixed, terrestrial broadband service of 25 Mbps down and 3 Mbps up. The State uses these data to define eligible project areas for broadband infrastructure grant funding programs.

Figure 1: Georgia Broadband Availability Map – broadband grant programs displayed



The 2022 Georgia Broadband Availability Map documented 454,950 unserved addresses—about 90 percent of which are in rural areas. This marked an improvement from the 482,374 unserved addresses that were identified in the 2021 annual report released jointly by GTA and DCA.[15]

In February 2022, Governor Kemp obligated nearly $408 million in grant awards to serve approximately 180,000 homes and businesses—the largest State investment in high-speed internet infrastructure in Georgia's history. These 49 grant projects, leveraging American Rescue

[12] "2022 Georgia Broadband Availability Map," DCA, https://broadband.georgia.gov/2022-georgia-broadband-availability-map.
[13] "2021 Broadband Report," GTA and DCA, https://gta.georgia.gov/document/document/2021-broadband-report-final/download.
[14] O.C.G.A §50-40-1(11).
[15] "2022 Broadband Annual Report," GTA and DCA, https://gta.georgia.gov/document/document/2022-broadband-annual-report/download.

Plan Act (ARPA) State and Local Fiscal Recovery Fund (SLFRF) funds,[16] represented an investment of more than $738 million in Georgia with the contribution of matching funds.[17]

Later in the year, the State allocated Capital Projects Fund (CPF) funds to establish the Capital Projects Fund Grant Program to support the continued expansion of service.[18] The State announced more than $234 million in preliminary grant awards in January 2023; when combined with capital matches from the awardees, almost $455 million will be invested to serve more than 76,000 locations.[19]

The projects associated with these two grant programs aim to serve roughly 200,000 of the approximately 455,000 unserved locations remaining in the State. In February 2023, the State announced a second round of the CPF Grant Program, with approximately $15 million allocated.[20]

Additional hundreds of millions of dollars in private commitments are also contributing to broadband expansion as a result of the public-private partnerships Governor Kemp has helped cultivate through legislative efforts like the passage of Senate Bill 2 (2019),[21] which empowered electric membership cooperatives (EMC) to provide broadband service.[22] In 2020 and 2021, partnerships between 16 EMCs, local governments, and State partners resulted in an investment of $491 million to provide improved and reliable internet to 44 counties in the State, many in rural, unserved areas.[23]

Broadband expansion efforts in the State also received significant support through federal funding in Phase I of the Federal Communications Commission's (FCC) Rural Digital Opportunity Fund (RDOF) auction. In December 2020, 15 companies were awarded $326 million to serve more

[16] "State Fiscal Recovery Fund," Governor's Office of Planning and Budget, https://opb.georgia.gov/state-fiscal-recovery-fund.
[17] "Gov. Kemp Announces Almost $408 Million in Awards to Provide Broadband Access," State of Georgia Office of the Governor, February 1, 2022, https://gov.georgia.gov/press-releases/2022-02-01/gov-kemp-announces-almost-408-million-awards-provide-broadband-access.
[18] "Gov. Kemp Dedicates $240M for New Grant Program to Expand High-Speed Internet, Help Close Digital Divide," State of Georgia Office of the Governor, August 12, 2022, https://gov.georgia.gov/press-releases/2022-08-12/gov-kemp-dedicates-240m-new-grant-program-expand-high-speed-internet-help.
[19] "Gov. Kemp Announces Grant Funds to Expand High-Speed Internet Access in 28 Counties," State of Georgia Office of the Governor, January 4, 2023, https://gov.georgia.gov/press-releases/2023-01-04/gov-kemp-announces-grant-funds-expand-high-speed-internet-access-28.
[20] "Georgia Capital Projects Grant Program Notice of Funding Opportunity," Governor's Office of Planning and Budget, February 15, 2023, https://opb.georgia.gov/document/document/cpf-round-2-nofo/download.
[21] See, https://www.legis.ga.gov/legislation/54177.
[22] "Gov. Kemp Dedicates $240M for New Grant Program to Expand High-Speed Internet, Help Close Digital Divide," State of Georgia Office of the Governor, August 12, 2022, https://gov.georgia.gov/press-releases/2022-08-12/gov-kemp-dedicates-240m-new-grant-program-expand-high-speed-internet-help.
[23] "Gov. Kemp Op-Ed: Delivering on Our Promise to Expand Rural Broadband," Office of the Governor, June 20, 2021, https://gov.georgia.gov/press-releases/2021-06-20/gov-kemp-op-ed-delivering-our-promise-expand-rural-broadband.

than 179,000 locations in Georgia, with $82 million of that total going to EMCs.[24] In almost every region of the State, however, addresses identified as unserved by the Georgia Broadband Availability Map extend beyond the census blocks the FCC deems unserved and many were not included in the RDOF auction, per analysis conducted in 2022 for an update to the State's broadband strategic plan.

To underscore the importance of local planning for broadband expansion, in 2018 Georgia also began requiring that a broadband element be included in all communities' Comprehensive Plans. By the end of 2022, nearly every community in Georgia had updated their plans to include local coverage data, as well as specific goals and strategies for broadband in their jurisdiction.

Cities and counties that have amended their comprehensive plan to include the promotion of the deployment of broadband services and adopted a model ordinance that streamlines permitting for broadband projects[25] can apply for a Broadband Ready Community designation from DCA.[26] As of June 2023, 56 communities in the State have received the Broadband Ready designation. Many communities that have not yet been designated as Broadband Ready stated that recognition is a goal, and DCA is providing outreach to directly assist those seeking the designation.

As the State makes significant investments to bring affordable and accessible broadband to Georgians, GTA also kicked off a statewide initiative in spring 2023 to gain insight from Georgians about their experience with internet connectivity. GTA and community leaders have hosted dozens of "Let's Connect GA" Listening Sessions across the State to collect input from as many community members and critical partners as feasible. The information will aid in planning for the use of available funds.[27]

All these efforts have made a significant impact on broadband service availability in Georgia, which is now 94.8 percent, based on the FCC's National Broadband Map[28] and federal and State broadband deployment grant data. Based on a total of 3,753,962 addresses:

- 119,278 addresses (approximately 3.2 percent) are unserved – below 25/3 Mbps

[24] GTA, "2021 Broadband Report," https://broadband.georgia.gov/media/23/download.
[25] Available at https://gta.georgia.gov/broadband/support-local-governments; if DCA receives an application inclusive of an adopted ordinance that does not follow the model ordinance, the application will be made available for a public comment period of at least 30 days after such an application is received.
[26] "Support for Local Governments," GTA, https://gta.georgia.gov/broadband/support-local-governments (accessed March 10, 2023).
[27] "Let's Connect Georgia," GTA, https://gta.georgia.gov/broadband/help-consumers/lets-connect-georgia.
[28] National Broadband Map, May 30, 2023, plus V2 fabric data.

- 74,934 addresses (approximately 2 percent) are underserved – 25/3 Mbps or higher but below 100/20 Mbps
- 3,559,750 addresses (approximately 94.8 percent) are served – 100/20 Mbps or higher

3.1 Existing programs

The table below identifies GTA's current and recent activities and programs (including stakeholder engagement conducted for purposes of the BEAD Five-Year Action Plan); its previous statewide plans comprising goals for the availability of broadband; and its prior experience awarding broadband deployment grants.

Table 1: Current activities that the Georgia Technology Authority conducts

Activity name	Description	Intended outcome(s)
ACP Act Now campaign	In May 2023, GTA launched a statewide initiative in partnership with EducationSuperHighway and 100 coalition partners to promote enrollment in the FCC's Affordable Connectivity Program (ACP).[29]	Increase participation in the ACP (which provides a monthly subsidy for internet service to low-income and other eligible households) by raising awareness of the program and overcoming trust barriers to enrollment by training community members as enrollment specialists.
ARPA-funded broadband grant program	The State used part of its allocation of State and Local Fiscal Recovery Funds under the American Rescue Plan Act (ARPA) to address the lack of broadband service infrastructure in Georgia through a competitive program.	Almost $408 million in preliminary awards were announced in 2022, representing more than $738 million when matching funds are contributed. The projects targeted with the awards could serve 183,615 locations, of which 132,050 are currently unserved based on State data.
Broadband Advisory Committee	In 2018, an advisory committee was formed to aid Georgia's broadband deployment efforts, consisting of a representative group of providers, local governments, electric cooperatives, and	This collaboration has contributed to streamlining local ordinances, developing the broadband availability map, designing State grant frameworks, as well as providing

[29] "Georgia Technology Authority launches statewide initiative to increase Affordable Connectivity Program (ACP) adoption," GTA press release, May 19, 2023, https://gta.georgia.gov/news/2023-05-19/georgia-technology-authority-launches-statewide-initiative-increase-affordable.

Activity name	Description	Intended outcome(s)
	State agencies[30] and coordinated by GTA.[31]	valuable insights on various State and federal policy matters.[32]
Broadband Ready Community Certification	Demonstrates that a local unit of government has taken steps to reduce obstacles to broadband infrastructure investment by amending its comprehensive plan to include the promotion of the deployment broadband services and adopting a model ordinance created by the Department of Community Affairs (DCA).	56 communities have achieved Broadband Ready status across the State as of June 2023.
Broadband strategic plan update	During fiscal year 2022, GTA led a strategic plan update with the assistance of a broadband consulting and engineering firm.	Resulted in a comprehensive and forward-looking strategy, providing recommendations for how the State can effectively prepare and deploy federal funding allocated for use in the coming years.[33]
Capital Projects Fund Grant Program	Provides funding for Broadband Infrastructure Projects that reliably meet or exceed download and upload speeds of 100 Mbps (unless impracticable) to unserved homes and businesses in Georgia.	Over $234 million in preliminary grant awards were announced in January 2023; when combined with capital matches from the awardees, almost $455 million will be invested to serve over 76,000 locations. A second round of grant program awardees was announced in June 2023, with approximately $15 million allocated.
Digital Connectivity Advisory Committee	In 2022, an advisory committee was formed to identify digital connectivity needs and gaps and to support the State's digital equity planning and capacity development. Members were selected based on proximity to covered	Close the digital divide in Georgia; create the State's inaugural digital connectivity plan and digital connectivity grant program; enable all Georgians to

[30] "Georgia's Approach to Rural Broadband," GTA, https://gta.georgia.gov/georgias-approach-rural-broadband-1.
[31] "About Georgia Broadband," GTA, https://gta.georgia.gov/broadband/about-georgia-broadband.
[32] "Georgia's Approach to Rural Broadband," GTA, https://gta.georgia.gov/georgias-approach-rural-broadband-1.
[33] The full 150-page plan is publicly available and can be requested by contacting GTA.

Activity name	Description	Intended outcome(s)
	populations, per National Digital Inclusion Alliance (NDIA) and NTIA guidance, and subject matter experts in areas and for populations. This group advises the State on the creation of its digital connectivity vision and objectives and will assist with creating the State's digital connectivity capacity grant program.	use the internet to the highest degree feasible.
Emergency Connectivity Fund	Schools and libraries apply for funding to cover the cost of connected devices and broadband connections for students, school staff, and library patrons.	Provided approximately 480,000 connected devices, including hotspots, to 121,000 students in Georgia.[34] Aided by ECF support and GaDOE's device distribution efforts, the State had an overall student-to-device ratio of 67:100 for the 2022 school year.[35]
Georgia Broadband Availability Map – Broadband Explorer	An internal, interactive map of broadband availability in the State that has robust mapping regarding funding and federal programs, maintained by GTA and updated monthly.	State planning and project oversight.
Georgia Broadband Availability Map – Public	A public, interactive map of broadband availability in the State, created by DCA from data submitted by ISPs.	Georgia was the first state to map broadband availability at the address level; these data are used to identify the State's unserved locations and identify eligible project areas for broadband grant funding.
Georgia Broadband Program online speed test	Hosted by DCA.	Equip individuals with the clearest picture possible of internet connectivity quality in Georgia.
Georgia Cyber Center	GTA is responsible for partner coordination at the Georgia Cyber	The center is the single largest investment in a cybersecurity

[34] "The American Rescue Plan's Impact on Georgia on Two-Year Anniversary," White House Briefing Room, https://www.whitehouse.gov/wp-content/uploads/2023/03/ARP-State-by-State_Georgia.pdf.
[35] "Technology Inventory," GaDOE, https://georgiainsights.gadoe.org/Dashboards/Pages/Technology-Inventory.aspx.

Activity name	Description	Intended outcome(s)
	Center, a State-owned facility designed to promote modernization in cybersecurity technology for both the private and public sectors through unique education, training, research, and practical applications.	facility by a state government to date, with the goal to "provide our state and the nation with a decisive advantage in cyberspace."[36]
Georgia Department of Education (GaDOE) K-12 Connectivity program	GaDOE provides connectivity to each K-12 public school, supported by State funds, Governor's Emergency Relief Funds (GEER), and E-Rate funds from the FCC. GaDOE also previously used a GEER grant from the Governor's office to install external Wi-Fi antennas to extend broadband signal for K-12 public school campuses and ran a hotspot distribution program for off-campus connectivity (see below).[37]	GaDOE provides connectivity to each K-12 public school at no cost to the districts through PeachNet (Georgia's education and research fiber network). Public schools on average get internet at 400 Mbps, depending on how the school district chooses to distribute its bandwidth allotment. 99.3 percent of classrooms in the State had high-speed internet for the 2022 school year, according to GaDOE data.[38]
Georgia Student Connect Program	As part of GaDOE's K-12 Connectivity program, the first phase of the Georgia Student Connect Program connected students by providing hotspots with free internet service to households with a K-12 student living in low-income housing. The program is now expanded to help families enroll in the ACP[39] by providing support services to school districts—including a call center that can conduct	Help eligible students access adequate and affordable internet services to complete schoolwork at home. Through the GaDOE program and the FCC's Emergency Connectivity Fund, more than 144,000 hot spots with data plans were deployed to students.[41]

[36] "Vision/Mission," Georgia Cyber Innovation and Training Center, https://www.gacybercenter.org/about/vision-mission/.
[37] "Georgia K-12 Connectivity," Georgia Department of Education, https://www.gadoe.org/Technology-Services/Pages/K-12-Connectivity.aspx.
[38] "Technology Inventory," GaDOE, https://georgiainsights.gadoe.org/Dashboards/Pages/Technology-Inventory.aspx.
[39] "Georgia Student Connect," Georgia Department of Education, https://gastudentconnect.org/.
[41] "Georgia K-12 Connectivity," Georgia Department of Education.

Activity name	Description	Intended outcome(s)
	outreach to families and runs an ACP support hotline.[40]	
Public Wi-Fi Map	In response to the Covid-19 pandemic, DCA (in partnership with Governor Brian Kemp and the State Coronavirus Task Force) launched a map of free Wi-Fi options in Georgia offered by State and local governments, public libraries, telecommunications cooperatives, and other Wi-Fi providers.[42]	Provide information and resources for residents to connect to high-speed internet to support telehealth, teleworking, and remote continuity of learning.
Network Resilience and Disaster Recovery Planning Guide	GTA and the Georgia Emergency Management Agency (GEMA) led a project to analyze communications infrastructure across 15 counties in the State, supported by an award of $750,000 in Community Development Block Grant (CDBG) disaster recovery funds.[43]	A guide to inform local and State officials and help drive investment decisions to address infrastructure gaps and to leverage existing assets to improve network resiliency, particularly as it relates to public safety and disaster response.[44]
Stakeholder engagement – Ongoing outreach to industry and other stakeholders	The State broadband team conducts outreach efforts daily, including one-on-one meetings, small group discussions, and presentations to large groups such as at conferences.	Maintain an ongoing dialogue with industry and other stakeholders; inform potential partners about opportunities to collaborate on broadband deployment and digital connectivity (equity) programs; solicit insight and information to inform the State's broadband efforts.
Stakeholder engagement – Digital Connectivity and Broadband Public Listening Sessions	From February to June 2023, GTA conducted 23 in-person sessions around the State, hosted by community leaders across each of the State's 12 regions, and 14 virtual sessions to identify digital connectivity and broadband needs and	Collect input from as broad a range of community members and potential partners as feasible to aid in planning for the use of available funds (including for the benefit of covered populations).

[40] "Georgia K-12 Connectivity," Georgia Department of Education, https://www.gadoe.org/Technology-Services/Pages/K-12-Connectivity.aspx.
[42] "Georgia Internet Access for Covid-19 Update," DCA, https://broadband.georgia.gov/georgia-internet-access-covid-19-update.
[43] "Georgia's Approach to Rural Broadband," GTA, https://gta.georgia.gov/georgias-approach-rural-broadband-1.
[44] "Georgia's Approach to Rural Broadband," GTA.

Activity name	Description	Intended outcome(s)
	challenges and solicit input from local stakeholders (see Section 5.1).	Meetings have the dual purpose of providing communities with resources they can utilize and gauging feedback that helps shape GTA programs.
Stakeholder engagement – workforce development	In spring 2023, GTA facilitated a series of virtual sessions with expert stakeholders from organizations, including those representing covered populations, on specific topics addressed in the BEAD and Digital Equity Planning NOFOs.	Collect input from critical partners to aid in planning for the use of available funds.
Stakeholder engagement – ISPs	In spring 2023, GTA facilitated a series of virtual sessions with expert stakeholders from organizations, including those representing covered populations, on specific topics addressed in the BEAD and Digital Equity Planning NOFOs.	Collect input from critical partners to aid in planning for the use of available funds.
Stakeholder engagement – local and regional governments	In spring 2023, GTA facilitated a series of virtual sessions with expert stakeholders from organizations, including those representing covered populations, on specific topics addressed in the BEAD and Digital Equity Planning NOFOs.	Collect input from critical partners to aid in planning for the use of available funds.
Stakeholder engagement – community anchor institutions (CAI)	In spring 2023, GTA facilitated a series of virtual sessions with expert stakeholders from CAIs on specific topics addressed in the BEAD and Digital Equity Planning NOFOs.	Collect input from critical partners to aid in planning for the use of available funds.
Stakeholder surveys (written and virtual)	In spring 2023, GTA collected information from stakeholder organizations in the following areas: 1) community anchor institution internet access, 2) workforce development needs and programs for broadband deployment, 3) digital connectivity programs inventory, 4) vulnerable populations barriers and obstacles assessment, 5) infrastructure inventory for assets that can support broadband deployment.	Input will provide detailed information for the State's broadband and digital connectivity planning efforts.

Activity name	Description	Intended outcome(s)
Statewide resident phone survey	Conducted in spring 2023, this resident survey assesses broadband access and digital connectivity participation.	Gather data to support the development of measurable objectives in the areas of broadband access and adoption, devices and technical support, digital skills and literacy, and data privacy and cybersecurity.

GTA has managed strategic studies, needs assessments, grant programs, public-private partnerships, and other efforts to identify and close the State's digital divide for many years. The tables below identify the current and planned full- and part-time employees and contractors who will assist in implementing and administering BEAD-funded activities and programs to achieve GTA's goals and objectives.

Table 2: Current and planned full-time and part-time employees

Current/ planned	Time	Position	Description of role
Current	FT	Director – Governor's Office of Planning and Budget (OPB)	Provides operational and administrative leadership and support to agency programs. Advises the Governor on revenue projections and agency financial and performance data. Liaisons with the General Assembly and the legislative budget offices.
Current	FT	Grants Division Director – Governor's Office of Planning and Budget	Leads team responsible for the implementation and management of all grant programs administered by OPB.
Current	FT	Grants Manager – Governor's Office of Planning and Budget	Implements and manages grant programs administered by OPB. Works with associated agencies and local officials to present information related to current grant programs.
Current	FT	Deputy CIO & Executive Director, Georgia Broadband Program	Oversees broadband development and other projects as Georgia continues to invest in new infrastructure to bring opportunity to all constituents, no matter their ZIP code.
Current	FT	Director of Broadband Program Operations	Implements Georgia's broadband deployment strategy and connectivity funding mechanisms while supporting local communities and providers in their

Current/ planned	Time	Position	Description of role
			expansion efforts. Coordinates with stakeholders, hosts meetings with telecom partners, oversees data analysis on broadband deployment and digital connectivity metrics, and is responsible for overall program and project evaluation and success.
Current	FT	Digital Connectivity Manager	Directs day-to-day project activities to manage the digital connectivity (equity) project as well as completion of final project deliverables (the Georgia Digital Equity Plan). Coordinates with stakeholders, hosts meetings with telecom partners, conducts data analysis on digital connectivity metrics, interprets the data, and is responsible for overall program and project evaluation and success.
Planned	FT	Broadband Infrastructure Manager	Assists in the implementation of the State's broadband strategy and manages related projects for GTA. Primary responsibilities include the administration of the Georgia Broadband Advisory Committee, broadband funding program(s) management, and external engagement with funding recipients to track program progress and reporting.

Table 3: Current and planned contractor support

Current/ planned	Time	Position	Description of role
Current	PT	Carl Vinson Institute of Government	Conduct asset mapping to update the State's location-level broadband availability map.
Current	PT	CostQuest	Vendor for the master address list to support asset mapping via NTIA contract.
Current	PT	Senior Engineer	Support asset mapping and grant program design and operation.

Current/ planned	Time	Position	Description of role
Current	PT	Junior Engineer	Support asset mapping and grant program design and operation.
Current	PT	GIS Analyst	Support asset mapping and grant program design and operation.
Current	PT	Senior Consultant	Support asset mapping and grant program design and operation.
Current	PT	Call Center Supervisor	Conduct a statistically valid survey.
Current	PT	Call Center Staff	Conduct a statistically valid survey.
Current	PT	Strategy Consulting – Principal	Support all project deliverables and activities as needed.
Current	PT	Strategy Consulting – Program Manager	Support all project deliverables and activities as needed.
Current	PT	Strategy Consulting – Senior Consultant	Support all project deliverables and activities as needed.
Current	PT	Strategy Consulting – Consultant	Support all project deliverables and activities as needed.
Current	PT	Strategy Consulting – Analyst	Support all project deliverables and activities as needed.

The table below identifies currently available federal and State funding for broadband deployment and other broadband-related activities in the State of Georgia. Nearly all current funds utilized for broadband planning and support come from federal sources. Additional funds that support the State's broadband team staffing and operations are issued from State accounts.

In summary, the State obligated approximately $415 million in grant funds for broadband infrastructure through the ARPA State Fiscal Recovery Fund in February 2022. The State obligated approximately $250 million in grant funds for broadband infrastructure through two rounds of its ARPA Capital Projects Fund in January 2023 and June 2023.

The table also includes significant federal broadband funding to entities within the State: RDOF awards, Connecting Minority Communities Pilot Program grants, ReConnect awards, and Enabling Middle-Mile Broadband Infrastructure Program grants.

Table 4: Broadband funding

Source	Purpose	Total	Obligated/ expended	Available
U.S. Department of the Treasury, State Fiscal Recovery Fund	Broadband deployment	$414,909,962.14	$414,909,962.14	$0
FCC Rural Digital Opportunity Fund (RDOF)	Broadband deployment	$279,389,940[45]	Estimated: $39,779,781	Estimated: $239,610,159
Governor's Emergency Education Relief (GEER) funds	Pandemic shift to digital learning	$29,300,000	$30,000,000	$0
NTIA Broadband Infrastructure Program (BIP)/Windstream	Broadband deployment	$5,172,043 ($3,236,198 from BIP and $1,935,845 from Windstream)	$5,172,043	$0
NTIA Connecting Minority Communities Pilot Program	Albany State University	$2,997,777[46]	$0	$2,997,777
NTIA Connecting Minority Communities Pilot Program	Atlanta Technical College	$2,997,232[47]	$0	$2,997,232
NTIA Connecting Minority Communities Pilot Program	Fort Valley State University	$2,997,558[48]	$0	$2,997,558

[45] https://fundingmap.fcc.gov/data-download/funding-data. Because GTA does not have access to reported project expenditures, expended and available amounts are estimates as of July 1, 2023, based on estimated project start date 120-month period of performance, and total funding amounts as provided through the FCC's publicly available resources.

[46] NTIA, "Biden Administration Announces More Than $2.9 Million in Internet for All Grant to Albany State University," Internet For All, November 2, 2022, https://ntia.gov/press-release/2022/biden-administration-announces-more-29-million-internet-all-grant-albany-state.

[47] NTIA, "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," Internet For All, February 23, 2023, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.

[48] NTIA, "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," Internet For All, February 23, 2023, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.

Source	Purpose	Total	Obligated/ expended	Available
NTIA Connecting Minority Communities Pilot Program	Morehouse School of Medicine	$4,231,058[49]	$0	$4,231,058
NTIA Enabling Middle-Mile Broadband Infrastructure Program – West and Northwest Georgia Middle Mile Broadband Backbone[50]	Middle-mile infrastructure deployment – DoveTel Communications, LLC. dba SyncGlobal Telecom	$12,234,350	$0	$12,234,350
NTIA Enabling Middle-Mile Broadband Infrastructure Program – Dallas to Atlanta Middle Mile[51]	Middle-mile infrastructure deployment – Zayo, LLC	$13,688,241	$0	$13,688,241
USDA ReConnect	Broadband deployment	$93,859,727[52]	Estimated: $32,340,451	Estimated: $61,519,276
U.S. Department of the Treasury, Capital Projects Fund	Broadband deployment	$246,096,344[53]	$246,096,344	$0

[49] NTIA, "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," Internet For All, February 23, 2023, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.

[50] Zayo was also awarded funding through this program for a project spanning five states that will primarily serve Texas but includes six counties in Georgia. Zayo was awarded $13,688,241 in total funding, and the total cost of its project is $19,554,630.

[51] NTIA, "Funding Recipients," https://broadbandusa.ntia.doc.gov/funding-programs/enabling-middle-mile-broadband-infrastructure-program/funding-recipients. The project spans five states that will primarily serve Texas but includes six counties in Georgia. Total project cost is $19,554,630.00.

[52] Includes eight awards in Rounds I through IV, as of June 2023. Total is inclusive of grant and loan awards; "ReConnect Loan and Grant Program," USDA, https://www.usda.gov/reconnect. Because GTA does not have access to project status, expended and available amounts are estimates as of July 1, 2023, based on estimated project start date, 60-month period of performance, and total funding amounts as provided through the FCC's publicly available resources.

[53] Governor Kemp, "Gov. Kemp Announces Additional Broadband Grants to Expand High-Speed Internet," February 17, 2023, https://gov.georgia.gov/press-releases/2023-02-17/gov-kemp-announces-additional-broadband-grants-expand-high-speed-internet; Governor Kemp, "Gov. Kemp Announces Grant Funds to Expand High-Speed Internet Access in 28 Counties," January 4, 2023, https://gov.georgia.gov/press-releases/2023-01-04/gov-kemp-announces-grant-funds-expand-high-speed-internet-access-28.

Source	Purpose	Total	Obligated/ expended	Available
NTIA Broadband Equity, Access & Deployment Grant Program	Expand last-mile broadband to unserved locations, includes non-deployment broadband-related planning activities	$1,307,214,371	$4,999,994.65	$1,302,214,376.35
NTIA Digital Equity planning funds	Non-deployment digital equity-related planning activities	$1,429,212.96	$1,429,212.96[54]	$0

3.2 Partnerships

The Georgia Broadband Program has regularly convened State agencies to share information, strategize, and develop deployment initiatives. Active participants include DCA, GTA, and GDOT, as well as the Departments of Education and Public Health, the University System of Georgia, the Technical College System of Georgia, the Georgia Emergency Management Agency, the Georgia State Properties Commission, and the Department of Economic Development.

The table below identifies GTA's current and potential future partners in the development and implementation of this Plan. These partners include organizations already engaged in broadband deployment and digital connectivity (equity) efforts (e.g., local governments, K-12 schools, higher education, ISPs) and entities GTA has identified as potential future collaborators.

Table 5: Partners

Partners	Description of current or planned role in broadband deployment and adoption
AARP Georgia	Digital Connectivity Advisory Committee member
Altamaha EMC	Recipient of broadband funding from the State
Association of County Commissioners of Georgia	Broadband Advisory Committee member; Digital Connectivity Advisory Committee member
Atlanta Housing	Digital Connectivity Advisory Committee member

[54] These planning funds have been committed to activities related to the development of this Plan and related efforts and deliverables.

Partners	Description of current or planned role in broadband deployment and adoption
AT&T	Broadband Advisory Committee member
Bank On Georgia	Digital Connectivity Advisory Committee member
Black Churches 4 Digital Equity Coalition	Digital Connectivity Advisory Committee member
Blue Ridge Telco (TDS)	Recipient of broadband funding from the State
Catholic Charities Atlanta	Digital Connectivity Advisory Committee member
Central Georgia EMC (Conexon)	Recipient of broadband funding from the State
Charter Communications	Recipient of broadband funding from the State; Broadband Advisory Committee member
Chickamauga Telco	Recipient of broadband funding from the State
City of Elberton	Recipient of broadband funding from the State
Comcast	Recipient of broadband funding from the State; Broadband Advisory Committee member; Digital Connectivity Advisory Committee member
Compudopt	Potential partner for digital connectivity efforts
Cox Communications	Recipient of broadband funding from the State
Department of Corrections	State partner agency; Digital Connectivity Advisory Committee member
Department of Public Health	State partner agency
Department of Economic Development	State partner agency
Ellijay Telco	Recipient of broadband funding from the State
Flint EMC (Conexon)	Recipient of broadband funding from the State
Georgia Board of Regents	State partner agency, governs the University System of Georgia – 26 public institutions of higher learning in the State.[55]
Georgia Cable Association	Broadband Advisory Committee member
Georgia Electric Membership Association	Broadband Advisory Committee member. Electric membership cooperatives (EMCs) are member-owned, not-for-profit utilities that serve approximately 4.4 million of Georgia's 10 million residents and 73 percent of the State's land area. Georgia's EMCs employ more

[55] University System of Georgia, https://www.usg.edu/regents/.

Partners	Description of current or planned role in broadband deployment and adoption
	than 6,000 workers and operate by far the largest distribution network in the State, with 195,256 miles of electric power lines.[56]
Georgia Emergency Management Agency	State partner agency
Georgia Department of Community Affairs	State partner agency; Broadband Advisory Committee member
Georgia Department of Education (GaDOE)	State partner agency; Digital Connectivity Advisory Committee member. Affiliated with PeachNet, a critical statewide education network that connects 2,300 locations and can potentially be leveraged by the State. GaDOE also offers digital equity programming via GTA's title programs, workforce development through GTA's career pathways, fiber security tools for the State's districts and schools, and digital literacy training.
Georgia Department of Education-Office of Rural Education and Innovation	State partner agency; Digital Connectivity Advisory Committee member
Georgia Department of Transportation	State partner agency; Broadband Advisory Committee member
Georgia Municipal Association	Broadband Advisory Committee member; Digital Connectivity Advisory Committee member
Georgia Piedmont Technical College	Digital Connectivity Advisory Committee member
Georgia Public Library Service	State partner agency; Digital Connectivity Advisory Committee member
Georgia State Properties Commission	State partner agency
Georgia Institute of Technology-Constellations Center for Equity in Computing	Digital Connectivity Advisory Committee member
Georgia's Rural Telephone and Broadband Association (GTBA)[57]	Broadband Advisory Committee member

[56] Georgia Electric Membership Corp., https://georgiaemc.com/.
[57] Formerly the Georgia Telecommunications Association (GTA).

Partners	Description of current or planned role in broadband deployment and adoption
Glenwood Telco	Recipient of broadband funding from the State
Goodwill of North Georgia	Potential partner for digital connectivity efforts
Grady EMC (Conexon)	Recipient of broadband funding from the State
Hargray (Cable One)	Recipient of broadband funding from the State
Highline	Recipient of broadband funding from the State
Inspiredu	Digital Connectivity Advisory Committee member
Local governments	Participants in Broadband Ready program
Mediacom	Recipient of broadband funding from the State
Microsoft Foundation	Digital Connectivity Advisory Committee member
Mitchell EMC (Conexon)	Recipient of broadband funding from the State
Morehouse College	Digital Connectivity Advisory Committee member
Ocmulgee EMC (Conexon)	Recipient of broadband funding from the State
Oconee EMC (Conexon)	Recipient of broadband funding from the State
Office of Planning & Budget	State partner agency; State's administering entity ("Eligible Entity") for BEAD; sub-awards funds to GTA to implement and execute the BEAD Plan
Partnership for Inclusive Innovation	Digital Connectivity Advisory Committee member
Partnership for Southern Equity	Digital Connectivity Advisory Committee member
PCs for People Georgia	Digital Connectivity Advisory Committee member
Pineland Telco	Recipient of broadband funding from the State
Planters Telco	Recipient of broadband funding from the State
Public Service Commission	State partner agency
Regional Commissions	Georgia's twelve regional commissions are public agencies created and established by the Georgia Planning Act (O.C.G.A. 50-8-32) to assist local governments on a regional basis and to develop, promote and assist in establishing coordinated and comprehensive planning in the State. DCA contracts annually with the Regional Commissions to primarily foster effective local and regional planning and

Partners	Description of current or planned role in broadband deployment and adoption
	implementation of those plans. Regional Commissions may also administer other State and federal programs.[58]
Satilla Rural EMC (Conexon)	Recipient of broadband funding from the State
Southern Rivers Energy	Recipient of broadband funding from the State
Technical College System of Georgia	State partner agency; Digital Connectivity Advisory Committee member
Technology Association of Georgia Bridge Builders	Digital Connectivity Advisory Committee member
Trenton Telco	Recipient of broadband funding from the State
TruVista	Recipient of broadband funding from the State
University of Georgia-Carl Vinson Institute of Government	Broadband Advisory Committee member
University System of Georgia	State partner agency
Urban League of Greater Atlanta	Digital Connectivity Advisory Committee member
US Department of Commerce NTIA Office of Internet Connectivity & Growth	Digital Connectivity Advisory Committee member
Verizon	Digital Connectivity Advisory Committee member
Washington EMC (Conexon)	Recipient of broadband funding from the State
Windstream	Recipient of broadband funding from the State; Broadband Advisory Committee member

3.3 Asset inventory

This section catalogs and describes broadband deployment (infrastructure), broadband adoption, broadband affordability, broadband access, and digital connectivity asset/activities across the State of Georgia. These inventories comprise hard assets, such as utility poles and land, and soft assets such as programs and activities that aim to close the digital divide. These sections

[58] "Regional Commissions," DCA, https://www.dca.ga.gov/local-government-assistance/planning/regional-planning/regional-commissions.

are not exhaustive in their scope; rather, they focus on key assets GTA believes can be readily leveraged to implement the Plan.

3.3.1 Broadband deployment

The table below lists examples of State-owned structures, land, rights-of-way, utility poles, conduit, fiber, and other assets that might be leveraged to implement the Five-Year Action Plan. A discussion of available and needed workforce assets is in Section 3.4.1.

Table 6: Broadband deployment assets

Asset name	Description
Accelecom Georgia (formerly Georgia Public Web)[59]	This open-access middle-mile network, formerly known as the Georgia Public Web system, was acquired by Accelecom in October 2022. The network was originally established and funded by 36 towns to enable economic development and connectivity to institutions in the founding member towns. In stakeholder interviews conducted for the "Georgia Broadband Strategy" (2022), Georgia Public Web officials noted that the infrastructure was intended to enable connectivity in areas without any other option.
PeachNet	The PeachNet system[60] is a statewide education network that connects public education facilities and several of other public entities in the State,[61] run by the University System of Georgia (USG) and affiliated with the Department of Education. This system ensures that higher education institutions, K-12 public school districts, public charter schools, and the three State schools for the deaf and blind have the connectivity they need to meet the needs of students, staff, and faculty. It is the mission-critical foundation that connects all USG institutions and is the basis for the USG's Integrated Learning Environment (ILE). PeachNet also provides internet to each K-12 school district, which the district distributes to its schools; public schools on average are served at 400 Mbps, with high schools tending toward higher bandwidth and elementary schools tending toward lower bandwidth.[62] The Technical College System of Georgia also has technical college locations on the network and is considering moving all campuses onto the network.

[59] "GPW Landing Page – Accelecom," https://accelecom.net/gpw-landing-page/.
[60] "PeachNet," University System of Georgia, https://www.usg.edu/peachnet/.
[61] Fiber map available at https://www.usg.edu/peachnet/network/fiber_map.
[62] PeachNet has tools to monitor usage at the school district level. School districts' utilization rapidly increased over the course of the pandemic, which PeachNet addressed with a four-fold increase in bandwidth. Since then, demand continues to increase but at a much slower pace, and the network appears to have sufficient capacity for most districts' needs for the next couple of years. PeachNet has access to dark fiber capacity to support 1 Gbps to each K-12 school, but some smaller, rural school districts do not have a 1 Gbps pipe as their last mile connection. An assessment is needed to determine what additional equipment would be required to support lit services.

Asset name	Description
Rights-of-way	Rights-of-way controlled by GDOT and the Department of Natural Resources (DNR) may be available for placement of fiber, huts, or other broadband infrastructure
State-owned buildings	Buildings owned by the GDOT or other State entities (including the DNR and the State Properties Commission) may be available for placement of huts or other broadband infrastructure
State-owned fiber	Fiber strands may be available on portions of the State's fiber routes
State-owned land	Land owned by the Georgia Department of Transportation (GDOT) or other State entities (including the DNR) and the State Properties Commission) may be available for placement of huts or other broadband infrastructure
State-owned towers	Towers owned by GDOT or other State entities may be available for placement of antennas or other broadband infrastructure
West and Northwest Georgia Middle-Mile Broadband Backbone	DoveTel Communications, LLC (dba SyncGlobal Telecom) was awarded approximately $12 million in June 2023 through the NTIA Enabling Middle-Mile Broadband Infrastructure Program to construct a 185-mile fiber route passing through eight counties in the State, at a total project cost of approximately $32 million. There are no known commercial dark fiber options within the areas associated with the route and service footprint.[63]
Zayo Dallas to Atlanta Middle Mile	Zayo was awarded approximately $13.7 million in June 2023 through the NTIA Enabling Middle-Mile Broadband Infrastructure Program to create new access points along its 822-mile middle-mile fiber route serving five states, including Georgia. Although the primary state the project will serve is Texas, six Georgia counties (Cobb, Paulding, Douglas, Fulton, Haralson, and Carroll) are also included. Zayo states that the project will "provid[e] a highly resilient alternative to the aerial fiber used currently, which is subject to outages, to provide better service to unserved and underserved areas."[64]

The Georgia Broadband Program's annual reports (mandated by SB 402)[65] highlight tools and resources developed by the Georgia Broadband Program to assist local communities and

[63] "Funding Recipients," NTIA, https://broadbandusa.ntia.gov/funding-programs/enabling-middle-mile-broadband-infrastructure-program/funding-recipients.
[64] "Funding Recipients," NTIA, https://broadbandusa.ntia.gov/funding-programs/enabling-middle-mile-broadband-infrastructure-program/funding-recipients.
[65] Senate Bill 402 https://www.legis.ga.gov/legislation/52636; enacted through Georgia Code Title 50, Chapter 40, https://broadband.georgia.gov/media/6/download.

providers in planning broadband deployment. The State has primarily focused on educating local leaders—for whom broadband planning may be daunting—and facilitating connections with providers. One important tool for communities and providers alike is the Georgia Broadband Availability Map, along with cost data that provides detailed information tailored to a local community.

Examples of broadband deployment projects undertaken by local communities with assistance from the Georgia Broadband Program include: [66]

- The City of Woodbury operates a wireless internet service at $35 per month
- Monroe County used $700,000 in special-purpose local-option sales tax (SPLOST) funds and the local school board contributed an additional $300,000 to deploy fiber across the county
- Haralson County and Comcast announced a $9 million project to serve over 3,000 households throughout the county

GDOT continues the longstanding policy that non-profit utility providers, including electricity and telecommunications providers, do not pay any fees. This policy will be especially helpful for the electric membership cooperatives (EMC) that were awarded more than $82 million from the FCC's RDOF reverse auction to build high-speed internet to more than 60,000 rural Georgia households[67]—as well as the EMCs awarded approximately $171 million to serve approximately 80,000 locations[68] through the State's ARPA-funded grant program and Capital Projects Fund Grant Program.[69] [70]

GDOT improved the fee structure for wireline and wireless carriers to utilize the State's roadway rights-of-way for locating physical plant through an overhaul in 2022. Among other benefits, the revision simplifies and reduces costs to utility and telecommunications providers in rural areas, such that fees are no longer based on distance but rather a single small annual assessment per permit. This is intended to encourage broadband deployment with lower upfront and ongoing

[66] GTA, "2021 Broadband Report," https://broadband.georgia.gov/media/23/download.
[67] "2021 Broadband Report," GTA and DCA, https://broadband.georgia.gov/media/23/download.
[68] Additional awards were made to applications supported by collaboration with EMCs.
[69] Terri Statham, "EMCs Receive $130 Million for Broadband Expansion," Georgia Electric Membership Corp., February 8, 2022, https://georgiaemc.com/news/594945/EMCs-Receive-130-Million-for-Broadband-Expansion.htm.
[70] Walter Jones, "EMCs Win Grants to Expand Rural Broadband," Georgia Electric Membership Corp., January 5, 2023, https://georgiaemc.com/news/627311/EMCs-Win-Grants-to-Expand-Rural-Broadband.htm.

permitting expenses. The new fee structure also defines low-cost parameters for small-cell facilities for modern wireless telecommunications (i.e., 5G).[71]

As outlined in the ACE Act, GDOT also began an evaluation of a long-term policy plan for strategic use of the State's roadway rights-of-way, particularly limited access facilities, such as interstate highways. As GDOT develops an investment plan for broadband deployment for transportation purposes, GDOT will coordinate with GTA to identify opportunities to advance rural broadband buildout at a lower cost, particularly to support cost reductions for deployment of State-administered funds allocated to last-mile rural broadband projects.[72]

3.3.2 Broadband adoption

This section describes the current state of broadband adoption (i.e., the percentage of residents who have adopted broadband) and identifies broadband adoption assets.

The U.S. Census Bureau's American Community Survey (ACS) tracks internet adoption and device ownership. Per the most recent ACS five-year estimates, 13.8 percent of households in Georgia do not subscribe to an internet service, and 6.8 percent do not have a computer.[73] Given the total number of households in the State,[74] these percentages represent approximately 536,181 households and 264,205 households, respectively.

The table below lists programs that promote broadband adoption—such as through digital literacy and digital skills training, public computing labs, device and hotspot loans, K-12 schools with one-to-one computer programs, computer refurbishing efforts, and other broadband awareness and outreach efforts.

Table 7: Broadband adoption assets

Asset name	Description
Broadband Ready Community designation	This designation, offered by DCA, recognizes communities that have taken proactive steps to attract providers by reducing investment obstacles—such as streamlining right-of-way and permitting processes. To date, 56 communities in the State have received this designation.

[71] "2022 Broadband Annual Report," GTA and DCA, https://gta.georgia.gov/document/document/2022-broadband-annual-report/download.
[72] "2022 Broadband Annual Report," GTA and DCA, https://gta.georgia.gov/document/document/2022-broadband-annual-report/download.
[73] "QuickFacts: Georgia," U.S. Census Bureau, https://www.census.gov/quickfacts/fact/table/GA,US/PST045221 (accessed March 28, 2023).
[74] "QuickFacts: Georgia," U.S. Census Bureau, https://www.census.gov/quickfacts/fact/table/GA,US/PST045221 (accessed March 28, 2023).

Asset name	Description
Cobb County Libraries Digital Literacy Workshops	Cobb County Libraries offer Digital Literacy Workshops[75] sponsored by AT&T on a variety of topics including cybersecurity, internet basics, and classes in software and on using devices.
Compudopt	This national device refurbisher, which has a location in Atlanta, provides free computers to low-income households with students through its giveaway program and helps connect families to low-cost internet services. In Atlanta, it will also offer free Wi-Fi service to selected families through a partnership with Santander Consumer USA.[76] Compudopt offers free online digital skills classes in English and Spanish, as well as free technology education programming designed for K-12 students.
Digital Learners to Leaders (DLL) program	Georgia State University has in the past run this program, among similar programs, to help students improve their digital skills.[77]
Fulton County Schools Student-focused Learning Plan	The U.S. Department of Education (U.S. DOE) has a Digital Equity & Opportunity vision[78] which includes providing devices to students, teaching digital literacy, and creating an open education ecosystem populated by instructional materials that are not subject to copyright laws, proprietary systems, or other access barriers. Now supported by the U.S. DOE, Fulton County Schools, serving approximately 96,000 students, has since 2014 been developing a "Student-focused Learning"[79] plan that includes providing digital devices to every student, subject to a Readiness Assessment.
Georgia Department of Education – Restart Guide for Connectivity and Devices	Georgia's Restart Guide for Connectivity and Devices supplied school districts and teachers with important information to address digital and hybrid learning environments.[80]
Goodwill of North Georgia	Goodwill of North Georgia offers free access to computers, printers, and fax machines at its 14 career centers,[81] as well as job search and

[75] Cobb County Government, Cobb County Public Library, "Learn to Use Devices and the Internet Better," September 20, 2022, https://www.cobbcounty.org/library/news/learn-use-devices-and-internet-better.
[76] "Compudopt Atlanta Location," Compudopt, https://www.compudopt.org/atlanta-wifi.
[77] Georgia State University, "Professional Training & Digital Literacy," https://technology.gsu.edu/technology-services/technology-professional-training/; Georgia State University, "Digital Learners to Leaders, Center For Excellence In Teaching, Learning and Online Education (CETLOE)," https://dei.gsu.edu/program/digital-learners-to-leaders/.
[78] Department of Education, Office of Educational Technology, "Digital Inclusion," https://tech.ed.gov/priorities/#digital-inclusion.
[79] Fulton County Schools, "Student-focused Learning," https://www.fultonschools.org/studentfocusedlearning.
[80] Georgia DOE, Georgia Insights, "Georgia's K-12 Restart Guide," https://www.georgiainsights.com/connectivity-restartguide.html.
[81] "Explore Our Career Centers," Goodwill of North Georgia, https://goodwillng.org/putting-people-to-work/explore-our-career-centers/.

Asset name	Description
	employment skills training and resources—including a 16-week Technology Careers Program in partnership with TechBridge.[82]
Hotspot distribution programs for students	More than 144,000 hot spots with data plans were deployed to students through the Georgia Department of Education (GaDOE) K-12 Connectivity Program and districts' use of the FCC's Emergency Connectivity Fund.[83]
Inclusion of broadband in community comprehensive plans	As of 2022, nearly all Georgia communities have engaged and demonstrated a commitment to pursuing broadband expansion by formalizing their connectivity goals in their comprehensive plan.[84] (Per SB 402 in 2018, all communities are required to include a broadband element in their comprehensive plans; DCA sets the minimum requirements for this element.)
Inspiredu digital literacy programs	Inspiredu is an Atlanta-based empowerment organization whose offerings include digital literacy and device distribution programs.[85]
Morehouse College tablets for students program	In a partnership with Microsoft for the 2020-2021 academic year, Morehouse College, a historically black college or university (HBCU), provided newly enrolled students with Microsoft Surface 2-in-1 tablets.[86]
PCs for People Georgia	This national nonprofit with a statewide reach recycles, refurbishes, and resells computers at a low cost to qualifying low-income customers, as well as offering low-cost 4G LTE internet service plans to eligible customers. It also offers digital skills training and workforce development programs.[87]
Public library hotspot and device lending program	Patrons can check out mobile hotspots and Chromebooks from many of Georgia's public libraries.[88]
Senior Planet/Older Adults Technology Services (OATS) from AARP	As a charitable affiliate of AARP, OATS' online digital skills classes and digital inclusion programming are available and promoted to Georgia AARP members. In May 2023, OATS and GTA were featured in an online

[82] "Technology Career Program," Goodwill of North Georgia, https://goodwillng.org/putting-people-to-work/get-job-training/training-programs/technology-career-program/.
[83] "Georgia K-12 Connectivity," Georgia Department of Education, https://www.gadoe.org/Technology-Services/Pages/K-12-Connectivity.aspx.
[84] "2022 Broadband Annual Report," GTA and DCA, https://gta.georgia.gov/document/document/2022-broadband-annual-report/download.
[85] Inspiredu, https://www.iuatl.org/.
[86] "Morehouse and Microsoft Bridge Digital Divide with Surface Tablets for Newly Enrolled Students," Inside: The Official Blog of Morehouse College, April 25, 2020, https://inside.morehouse.edu/news/news-inside/morehouse-and-microsoft-bridge-digital-divide-with-surface-tablets-for-newly-enrolled-students.html. Similarly, Moolah Wireless provided tablets to students at two Georgia colleges for the 2022-2023 academic year: Paine College in partnership with musician CeeLo Green and Morris Brown College in partnership with musician T.I. Joe Hotchkiss, "Paine College, musician CeeLo Green gift entire student body with Android tablets," *Augusta Chronicle*, August 27, 2022, https://www.augustachronicle.com/story/news/local/2022/08/27/paine-ceelo-green-gift-entire-student-body-android-tablets/7905608001/.
[87] "Locations – Atlanta, GA," PCs for People, https://www.pcsforpeople.org/locations/atlanta/.
[88] "Information Technology Services in Libraries," Georgia Public Library Service, https://georgialibraries.org/librarytech/.

Asset name	Description
	event hosted by AARP Georgia to share information about the ACP and resources for seniors to learn about technology.[89]
Technology Inventory	For the past 20 years, GaDOE has collected data on schools' technology inventories and infrastructure and presented that data on a publicly accessible tool powered by Microsoft Power BI, fulfilling the technology inventory planning requirements established by the Schools and Library Division for the E-Rate program as well as requirements for online assessments.[90]
Thrive Regional Partnership – Connected Communities	Thrive oversees programs that address availability and affordability of internet for individuals who live in covered households (i.e., household income is lower than 150 percent of the poverty level). With a budget of under $25,000, the organization served 26-50 people in 2022 and has a target to serve 101-250 people over the life of the project.
Thrive Regional Partnership – Regional Broadband Alliance programs	Thrive Regional Partnership serves five counties in Northwest Georgia (Dade, Walker, Catoosa, Whitfield, and Murray). Through both the Regional Broadband Alliance and the Connected Communities program, Thrive promotes the availability and affordability of internet, digital literacy, and online accessibility and inclusivity. It served more than 100 people in 2022, with a target of over 500 people over the life of the project.
Training session on digital rights and digital literacy	On November 16, 2022, the Institute for the Development of Freedom of Information (IDFI) and the research institute Gnomon Wise held a training on digital rights and digital literacy at the University of Georgia.[91]

3.3.3 Broadband affordability

In Georgia, 576,430 households were enrolled in the ACP as of March 2023,[92] out of a total 1,571,000 eligible (based on a 2022 estimate).[93] Therefore, 36.7 percent of households who could potentially receive the subsidy are participating in the program.

[89] "A Broadband & Digital Connectivity Conversation," https://vekeo.com/event/aarpgeorgia-83179/.
[90] Georgia DOE, Georgia Insights, "Technology Inventory," https://www.georgiainsights.com/technology-inventory.html.
[91] IDFI, "IDFI's Training on Digital Rights and Digital Literacy," November 17, 2022, https://idfi.ge/en/idfis_training_on_digital_rights_and_digital_literacy.
[92] "ACP Enrollment and Claims Tracker," USAC, last updated March 27, 2023, https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/ (accessed March 28, 2023).
[93] "Bipartisan Infrastructure Law Fact Sheet: Georgia," White House Briefing Room, July 2022, https://www.whitehouse.gov/wp-content/uploads/2022/08/Georgia-BIL-Fact-Sheet.pdf.

In May 2023, GTA launched a statewide initiative with the nonprofit EducationSuperHighway and more than 100 coalition partners—including local governments, community organizations, businesses, and service providers—to raise awareness about the ACP and promote enrollment.[94]

GTA will use State outreach channels to raise awareness about the ACP, as well as collaborating with municipalities and trusted community organizations and institutions to overcome awareness, trust, and other barriers that can prevent eligible households from enrolling in the program.

To support these organizations, GTA is partnering with EducationSuperHighway to train community members as ACP enrollment specialists through a free virtual certification course. The course will equip participants to assist with enrolling in the subsidy and selecting an internet plan. As of the writing of this report, GTA is planning to host a virtual ACP Enrollment Certification Drive with the goal of recruiting 200 participants. EducationSuperHighway will also provide outreach tools to help with the enrollment process, including a virtual mobile assistant[95] that provides support in four languages.

The table below identifies a sampling of ISPs' discounted service and device programs for low-income subscribers and related broadband affordability assets in the State.

Table 8: Broadband affordability assets

Asset name	Description
Access from AT&T plan	Eligible low-income households can receive up to 100 Mbps symmetrical speeds[96] through the Access from AT&T plan for $30 per month, or at no cost with the ACP subsidy.[97] Qualifying DSL customers who have speeds of 10 Mbps or less available may be able to get this plan at a lower cost ($5-10 per month, with a data cap.)[98]
Comcast Internet Essentials program	Comcast, an ISP, offers the Internet Essentials plan, priced at $9.95 per month, which is available to qualifying low-income and other households in Georgia.[99] Comcast Internet Essentials delivers speeds up to 50 Mbps and Comcast Internet Essentials Plus delivers up to 100 Mbps for $29.95

[94] "ACP Pre-Enrollment Wizard," https://getacp.org/Georgia.
[95] Available at https://getacp.org/Georgia.
[96] "New 'Access from AT&T' Plan + New Federal Benefit = Free Internet," AT&T News Release, February 7, 2022, https://about.att.com/story/2022/new-access-plan-plus-new-federal-benefit.html.
[97] "Access from AT&T – Low-Cost Internet Service," AT&T, https://www.att.com/internet/access/.
[98] "New 'Access from AT&T' Plan + New Federal Benefit = Free Internet," AT&T News Release, February 7, 2022, https://about.att.com/story/2022/new-access-plan-plus-new-federal-benefit.html.
[99] Comcast, application for Internet Essentials plan, https://apply.internetessentials.com/.

Asset name	Description
	per month.[100] Households that subscribe to Internet Essentials can purchase a new Dell laptop or Chromebook for $149.99 plus tax.[101]
Cox Communications ConnectAssist and Connect2Compete plans	Cox Communications (Cox) offers two low-cost plans for qualifying low-income customers: ConnectAssist for any eligible household, and Connect2Compete for eligible households with at least one K-12 student. ConnectAssist offers up to 100/3 Mbps for $30 per month, effectively $0 with the application of the ACP subsidy. Connect2Compete offers the same speeds for $9.95 per month (effectively at no cost with the ACP subsidy).[102] Both plans also offer access to educational resources through Cox Digital Academy.[103]
GaDOE ACP enrollment support	GaDOE provides ACP enrollment support services to school districts through the K-12 Connectivity Program. Districts can perform their own outreach using resources provided by GaDOE or utilize a call center created through the program; the call center also runs an ACP enrollment support hotline for families.
Spectrum Internet Assist plan	Spectrum Internet Assist offers qualifying low-income customers 30/4 Mbps service for $19.99 per month, or no cost with the ACP subsidy.[104]

3.3.4 Broadband access

The following table identifies examples of broadband assets that either provide direct access to robust services for end users such as public Wi-Fi networks and cellular connectivity (mobile broadband), or assets that facilitate last mile applications and public networks. Note that middle-mile networks are listed in Table 6. These assets are available, or will be available upon project completion, to all covered populations either directly or by facilitating projects that will support access to covered populations.

[100] Comcast, "Internet Essentials," https://www.xfinity.com/learn/internet-service/internet-essentials.
[101] Comcast, "Low-Cost Computer," https://internetessentials.com/low-cost-computer.
[102] "Affordable Internet Options from Cox," Cox Communications, https://www.cox.com/residential/internet/low-cost-internet-plans.html.
[103] "Which Affordable Internet Program Are You Eligible For?" Cox Communications, https://www.cox.com/residential/articles/things-to-know-about-affordable-internet.html.
[104] "Low Income Internet Service | Spectrum Internet Assist Program," Spectrum, https://www.spectrum.com/internet/spectrum-internet-assist.

Table 9: Broadband access assets

Asset name	Description
AT&T cellular service (mobile broadband)	AT&T delivers cellular connectivity (mobile broadband) throughout most of Georgia.
Connectivity to county health departments	Georgia's Department of Public Health (DPH) engaged the broadband team to help equip all 159 county health departments with high-speed connectivity, to enable patient access.[105]
GaDOE K-12 Connectivity Program	As previously mentioned in section 3.1, GaDOE provides connectivity to each K-12 public school at no cost to the districts. GaDOE also installed external Wi-Fi antennas to extend broadband signal for K-12 public school campuses.[106]
Georgia Department of Transportation – Capital Projects	Fiber optic interconnection capital projects in various locations in the Atlanta area and around the State.
Public Wi-Fi	Some municipalities in the State offer free Wi-Fi in public spaces such as parks or downtown areas, including the City of Atlanta,[107] City of Dublin,[108] City of Conyers,[109] Columbia County,[110] and the City of Decatur.[111] In response to the Covid-19 pandemic, DCA created an online map of locations where free public Wi-Fi is available.[112]
T-Mobile cellular service (mobile broadband)	T-Mobile delivers cellular connectivity (mobile broadband) throughout most of Georgia.
Verizon Wireless cellular service (mobile broadband)	Verizon Wireless delivers cellular connectivity (mobile broadband) throughout most of Georgia.

[105] GTA, "Georgia's Approach to Rural Broadband," https://gta.georgia.gov/georgias-approach-rural-broadband-1.
[106] "Georgia K-12 Connectivity," Georgia Department of Education, https://www.gadoe.org/Technology-Services/Pages/K-12-Connectivity.aspx.
[107] "City of Atlanta Wi-Fi," City of Atlanta, https://www.atlantaga.gov/government/departments/atlanta-information-management/city-of-atlanta-wi-fi.
[108] "Dublin Wi-Fi," City of Dublin, https://www.cityofdublin.org/department/telecommunications/wireless.php.
[109] "Wi-Fi," City of Conyers, https://www.conyersga.com/residents/wi-fi.
[110] "Columbia County Wi-Fi," Columbia County, https://www.columbiacountyga.gov/community/public-wifi.
[111] "Decatur Wi-Fi," City of Decatur, https://www.decaturga.com/administration/page/decatur-wifi.
[112] "Free Public Wi-Fi," Georgia Broadband Program, https://broadband.georgia.gov/free-public-wifi.

Asset name	Description
Wi-Fi at public libraries	All of Georgia's public libraries offer free high-speed Wi-fi, which patrons can access from outside when the building is closed;[113] a map of locations is available on the library system's website.[114]

According to research conducted for the "Georgia Broadband Strategy" (2022), infrastructure owned, operated, or leased by utilities and the private sector comprises the great majority of Georgia's broadband backbone. Significant middle-mile infrastructure is owned by electric utilities—including the State's electric membership cooperatives (EMCs)—which use the infrastructure to enable smart grid technologies and day-to-day operations, and to enable last-mile residential deployment. In all, nine out of 41 (or 22 percent) of the State's EMCs are currently providing last-mile broadband service, according to a survey of their websites.

3.3.5 Digital equity (digital connectivity)

The following table identifies representative digital connectivity assets in the State, including workforce development training and employment services related to broadband adoption; technical assistance programs aimed at supporting digital connectivity (equity); and partnerships and coalitions that work toward digital connectivity. For a full inventory, see Appendix A: Asset inventory data – digital connectivity assets.

Table 10: Digital equity (digital connectivity) assets

Asset name	Description
4-H Tech Changemakers	The 4-H Tech Changemakers project uses an adult-youth partnership model to empower teens as teachers of digital literacy in areas lacking broadband internet access. Georgia 4-H Tech Changemakers held 91 hands-on classes, workshops, and trainings led by 88 trained 4-H'ers from 15 counties during the 2021-22 grant cycle. The most popular topics included responsible online behavior, email communication, online safety tips and video conference communication. Partners include Microsoft and UGA Extension.[115]
Accelerate: Atlanta	Accelerate: Atlanta brings together civic, learning, and corporate partners to provide skills across the spectrum of digital proficiency to build a more inclusive workforce for all. The program empowers

[113] "Information Technology Services in Libraries," Georgia Public Library Service, https://georgialibraries.org/librarytech/.
[114] "Library Resources You Can Use Everywhere," Georgia Public Library Service, https://georgialibraries.org/library-everywhere/.
[115] "Digital Ambassadors," Georgia 4-H, https://georgia4h.org/programs/focus-areas/agriculture-stem/science-technology-engineering-math/digital-ambassadors/.

Asset name	Description
	underserved communities to close the digital divide in the growing workforce. It provides digital skills to promote economic uplift for Atlanta's populations with the highest susceptibility to automation and the lasting impact of Covid-19. Digital fluency will ensure that they can keep up with advances in AI and machine learning.
Albany State University – Connecting Minority Communities programs	Albany State University received a $2.9 million Connecting Minority Communities grant in 2022 from NTIA to address the growing demand for broadband connectivity in the Albany community while establishing a foundation for future distance learning at the University.[116]
Atlanta Housing Authority – Achieving Connectivity to Create Equity and Self Sufficiency (ACCESS)	This Housing Authority of the City of Atlanta program connects those in need to training from private partners.[117]
Atlanta Housing Authority – Digital Leadership Academy	This free education and certification program teaches high-demand technology skills, greatly increasing the employability of each graduate in the information technology sector. This 16-week pilot program launched in February 2021 and provides students with the devices and connectivity needed to create a fully immersive educational experience. Partners include TechBridge, Diversity Cyber Council, Braintrust, WrightNow Solutions, and Generation USA.
Atlanta Technical College "Connecting Minority Communities Pilot Program"	The College received a $3 million award from NTIA in 2023 through the Connecting Minority Communities Pilot Program to improve its broadband infrastructure, increase the number of devices available to students through its lending program, and offer digital skills training for senior citizens in the community through its Continuing Education Division.
Clark Atlanta University	The University offers a STEM enrichment program in partnership with Verizon Wireless' Verizon Innovative Learning initiative.[118]
Clayton County – Office of Digital Equity County Digital	Clayton County (population: 297,100; 18.9 percent of population in poverty)[119] has an Office of Digital Equity[120] and has created a

[116] NTIA, "Biden Administration Announces More Than $2.9 Million in Internet for All Grant to Albany State University," Internet For All, November 22, 2022, https://ntia.gov/press-release/2022/biden-administration-announces-more-29-million-internet-all-grant-albany-state.
[117] "Digital Inclusion," Atlanta Housing, https://www.atlantahousing.org/digitalinclusion/.
[118] "STEM enrichment program at Clark Atlanta lights the way," Verizon press release, October 5, 2021, https://www.verizon.com/about/news/stem-enrichment-program-clark-atlanta.
[119] U.S. Census, "QuickFacts: Clayton County, Georgia," https://www.census.gov/quickfacts/claytoncountygeorgia.
[120] "Clayton County's Digital Equity Initiative," Clayton County, https://digitalequity.claytoncountyga.gov/.

Asset name	Description
Equity and Broadband Strategic Plan	Broadband and Digital Equity Plan. The Office helps county residents access the ACP and offers digital literacy training.
Clayton County – various programs	Clayton County offers several programs through its community institutions, as detailed in its Digital Equity and Broadband Strategic Plan. The Clayton County Public Library offers technical assistance for devices and software, access to Wi-Fi and devices, a Bookmobile with Wi-Fi, and hotspot borrowing. Clayton County Public Schools extend learning beyond the classroom through college and career preparation. Clayton County Senior Services supports adult literacy by offering computer tablets for seniors' home use.
Columbus Technical College – Adult Education Northstar Digital Literacy	The College provides digital literacy training, desktop computers, laptops, and tablets and technical support for adult education students obtaining a high school diploma/equivalency. The nearly $25,000 budget is funded by the office of Adult Education. The program serves Muscogee, Talbot, Stewart, Quitman, Harris, and Chattahoochee counties. With over 100 people served in 2022, the target is to serve over 500 people over the life of the project.
Columbus Technical College – Student Laptop Loan Program	This program provides desktop computers, laptops, and tablets and technical support for individuals with disabilities and students at Columbus Technical College. It serves Muscogee, Talbot, Stewart, Quitman, Harris, and Chattahoochee counties. Over 100 people were served in 2022, with a target to serve over 500 people over the life of the project.
Comcast Lift Zones – various locations throughout the State	21 Comcast Lift Zones located throughout the State combine 1 Gbps connectivity to community centers with digital equity programming, available to users at numerous sites:[121] (For the full list, see Table 16 in Appendix A: Asset inventory data – digital connectivity assets.)
Communications Workers of America (CWA)	CWA offers courses for its members in telecommunications, cabling, and related fields through CWA's National Education and Training Trust and other educational partners.
Fort Valley State University (FVSU) "Communi-versity: Piloting an Ecosystem for Digital Equity"	With a $3 million Connecting Minority Communities grant received in 2023 from NTIA, FVSU will work with community organizations to expand broadband connectivity and provide digital skills training for students and residents in Peach County, including establishing local "broadband hubs" staffed with TechNavigators.

[121] "Lift Zones," Comcast, https://corporate.comcast.com/impact/digital-equity/lift-zones.

Asset name	Description
Emory University School of Medicine – telehealth	The Emory University School of Medicine offers support through access to telehealth. This planned effort will include programs addressing digital navigators, broadband access, and creating accessible and inclusive internet content. Key components include: 1) access to health information, 2) telehealth and remote healthcare, 3) online health support communities, and 4) health tracking and remote patient monitoring. The program will also include remote education and training for healthcare professionals, and health promotion and preventive measures.
Empower Southwest Georgia – American Connection Corp. Fellow to support ACP	The Fellow will support applicants to the Affordable Connectivity Program (ACP), conduct a leadership forum, organize workshops for builders and construction leadership for broadband, serve as a public advocate, educate consumers on broadband access, host learning sessions, and assist local elected officials with planning and processing permits and educating voters. The Fellow will also work to establish a similar group with the county administrators in the region.
Empower Southwest Georgia – broadband community outreach	The organization applied to American Connection Corp. (ACC) for a $150,000 grant to develop paid staff consisting of three people—an intern, a manager, and a field director—to conduct community organizing and community outreach including for broadband. It also submitted a Host Organization application to ACC for an ACC Fellow.
Empower Southwest Georgia – various programs	This nonprofit organization provides many services to its area's constituents, including supporting applicants for the ACP, hosting Leadership Forums for ISPs and community members, broadband workforce development, and educating consumers about internet subsidies and plans for the community.
Fulton County Schools – Student-focused Learning Plan	The U.S. Department of Education (U.S. DOE) Digital Equity & Opportunity vision[122] includes providing devices to students, teaching digital literacy, and creating an open education ecosystem populated by instructional materials that are not subject to copyright laws, proprietary systems, or other access barriers. Now supported by the U.S. DOE, Fulton County Schools, serving approximately 96,000 students, has since 2014 been continuously developing a "Student-focused Learning"[123] program that includes providing digital devices to every student, subject to a Readiness Assessment.

[122] "Priorities," U.S. Department of Education Office of Educational Technology, https://tech.ed.gov/priorities/.
[123] "Student Focused Learning," Fulton County Schools, https://www.fultonschools.org/studentfocusedlearning.

Asset name	Description
Georgia Center of Innovation – telehealth programs	The Georgia Center of Innovation helps startups in telehealth and related areas to increase innovation.[124]
Georgia Department of Corrections (GDC) – various programs	GDC provides digital skills and literacy training, data privacy and cybersecurity instruction, devices (laptops, computers, tablets), and broadband access to incarcerated individuals in State prisons. It provides training for teachers of broadband skills and digital literacy, as well as developing and distributing accessible content directed at populations with specific needs.
Georgia Department of Education – GeorgiaStandards.Org (GSO)[125]	GaDOE maintains a free, public website delivering access to Georgia's educational standards, including standards for digital literacy for school-age children.[126]
Georgia Department of Education – various programs	GaDOE provides support for the ACP, devices, hotspots, digital skills and digital literacy training, and digital accessibility to its clients. GaDOE also provides funding to support programs that provide broadband infrastructure, devices, and/or subsidies to support broadband affordability. In addition, GaDOE has 17 career clusters that provide paths for districts to use with their students. In 2021, the Department also established an Office of Rural Education and Innovation, which will work with low-wealth school districts in high poverty/distressed regions of Georgia to tackle barriers that impact academic outcomes and opportunities for students—including lack of broadband access.[127]
Georgia Hispanic Chamber of Commerce – various programs	The Chamber promotes and supports the domestic and international economic development of Hispanic businesses and individuals and serves as a link between non-Hispanic entities and the Hispanic market.[128] It offers numerous relevant programs including "CRECER para mujeres" (growth for women), a program to support small businesses owned by women.[129]
Georgia Library Service for the Blind and Print Disabled – various programs	Georgia Library Service for the Blind and Print Disabled (GLS) [formerly Georgia Libraries for Accessible Statewide Services – GLASS] promotes the use of assistive technology and accessible reading materials for

[124] Center of Innovation, "Digital Health Support & Training in Georgia," https://www.georgia.org/center-of-innovation/areas-of-expertise/information-technology/digital-health.
[125] "Georgia Standards of Excellence," Georgia Department of Education, https://www.georgiastandards.org/.
[126] Georgia Department of Education, "K-5 Digital Literacy," https://www.georgiastandards.org/Georgia-Standards/Pages/ELA-K-5-Webinar-Digital-Literacy.aspx; Georgia Department of Education, "6-12 Digital Literacy," https://www.georgiastandards.org/Georgia-Standards/Pages/ELA-6-12-Webinar-Digital-Literacy.aspx.
[127] "Rural Education and Innovation," GaDOE, https://www.gadoe.org/rural.
[128] GHCC, "About GHCC," https://ghcc.org/en/about-ghcc/.
[129] GHCC, "CRECER para Mujeres," https://ghcc.org/en/crecer-para-mujeres/; translated page at https://ghcc-org.translate.goog/en/crecer-para-mujeres/?_x_tr_sl=auto&_x_tr_tl=en&_x_tr_hl=en.

Asset name	Description
	those who are blind or whose physical abilities require the use of books and magazines in audio format or in braille.
Georgia Public Library Service – Digital equity in Georgia	The Georgia Public Library Service offers statewide programs to address internet availability and affordability, as well as providing digital literacy, data privacy and cybersecurity, and online accessibility and inclusivity programs. With a budget of under $25,000, it served over 100 people in 2022 and has a target of serving over 500 people over the life of the project.
Global Partnership for Telehealth (GPT)	Georgia is home to one of the largest nonprofit telehealth networks in the U.S. Founded in 2007 as the Georgia Partnership for Telehealth, GPT initially managed a statewide telehealth network initiated through grant funding in 2004 with the goal of improving underserved communities' access to healthcare services. GPT has since grown to support clinical and nonclinical sites in 10 states as well as international projects through its telehealth platform Pathways, training, and other services. The organization facilitates roughly 40,000 telehealth engagements per year.[130]
Goodwill of North Georgia – Goodwill Career Accelerator and South DeKalb Career Center	Goodwill of North Georgia supports internet availability and affordability by providing digital literacy training; desktop computers, laptops, or tablets; and technical support. The program serves all covered populations except seniors. It has a budget of between $250,000 and $499,999 and served over 100 people in 2022, with a target of serving more than 500 people over the life of the project.
Inspiredu – Learning Spark Initiative	Inspiredu is an Atlanta-based empowerment organization whose offerings include digital literacy programs. It drives digital connectivity and literacy for Georgia families, communities, and schools. The Learning Spark Initiative partners with Georgia schools to facilitate interactive workshops that leverage technology to help families responsibly access and utilize digital tools for learning. This program also helps families learn about and apply for internet subsidies like the ACP. The program provides digital literacy support; desktop computers, laptops, or tablets; and technical support for individuals who primarily reside in a rural area, members of a racial or ethnic minority group, and individuals who live in a covered household (i.e., household income is below 150 percent of the poverty level).
Integrity Transformations Community Development	Atlanta-based Integrity CDC's Digital Skills Development class is an entry-level course designed to introduce users to basic computer principles. This basic course requires little to no previous experience. The class

[130] Global Partnership for Telehealth, https://gpth.org/.

Asset name	Description
Corporation (CDC) – Digital Skills Development	provides basic information technology (IT) literacy and ensures one understands the different terminology and the functionality of the basic Microsoft Office Suite. Students learn how to access the software and their documents from a desktop, laptop, or their personal phone.
Latin American Association (LAA) – Latino Digital Equity Centers Program	The Latino Digital Equity Centers Program provides ESL, digital literacy, digital skills, and workforce development programs to Latino communities. LAA also offers courses and workshops for girls and young women through the Tech4Girls program, designed to encourage the pursuit of careers in STEM and provide female entrepreneurs with digital skills to grow their businesses.[131]
Legacy Harvest Foundation	Equips communities across Georgia with the financial resources, economic development, and career coaching they need to break down barriers of opportunity. Provides Digital Skills @ 50+ AARP Foundation, in collaboration with Older Adults Technology Services (OATS), Step Into Your Future (SIYF)-Youth Program (16-24 Year Olds), and workforce apprenticeship programs.
Literacy Action	Based in Atlanta, digital literacy skills and other literacy skills and workforce training. The Success Center located in Peachtree Plaza is a digitally focused, student-centric adult literacy campus. Provides OATS programs for digital inclusion.
Morehouse School of Medicine (MSM) – "From Survivor to Innovator: Digital Health Equity and Community Impact"	MSM received a $4.2 million Connecting Minority Communities grant in 2023 from NTIA to understand the impact increasing technological access and literacy will have on digital health equity. The overall goal of this project is to lead and advance digital health equity.[132]
Northstar Digital Literacy	Northstar Digital Literacy is a program that defines the basic skills needed to use a computer and the internet in daily life, employment, and higher education. Northstar Digital Skills classes are offered both in-person and online. There are over 75 Northstar locations across the State (see Appendix A for the full list).
Piedmont Regional Library System – Computer training and technology checkout	The Piedmont Regional Library System offers computer training and device checkout at all 10 libraries in the regional system. Its programs address digital literacy, device access, and online accessibility and inclusivity. The system provides computer training and technology checkout in all 10 libraries in the regional system. Programs address digital literacy; desktop computers, laptops, or tablets and technical

[131] "Computer Classes," Latin American Association, https://thelaa.org/computer-literacy-classes/.
[132] NTIA, "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," Internet For All, February 23, 2023, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.

Asset name	Description
	support; and online accessibility and inclusivity. With a budget of under $25,000, it served over 100 people in 2022.
Technical College System of Georgia (TCSG) – technical training certification and other programs	Fiber optic technical training certification curricula has been developed and learning programs are available through the 22 TCSG schools throughout the State.
Technology Association of Georgia Education (TAG-Ed) – digital workforce development	TAG-Ed provides professional development and workforce development programs statewide.
University of Georgia Cooperative Extension – various programs	UGA Extension provides a wide range of programs for youth development, families, and those living in rural areas. The Extension began offering select programming virtually during the Covid-19 pandemic and continues to host online classes available to participants statewide and nationally.[133] It is also a partner in the 4-H Tech Changemakers program.
Urban League of Greater Atlanta – computer training	The Urban League provides computer training and workforce development programs.[134]
Wiregrass Georgia Technical College	Part of the Technical College System of Georgia, Wiregrass provides certified Fiber Optic Technician (CFOT) Certification.

3.4 Needs and gaps assessment

This section describes the gaps between the current state of broadband and digital inclusion and the needs of residents and community anchor institutions in Georgia, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts.

3.4.1 Broadband deployment

Based on the Federal Communications Commission's (FCC) most recent National Broadband Map data [135] and considering federal and State broadband deployment grants that have been awarded, 94.8 percent of addresses in Georgia are served with broadband:

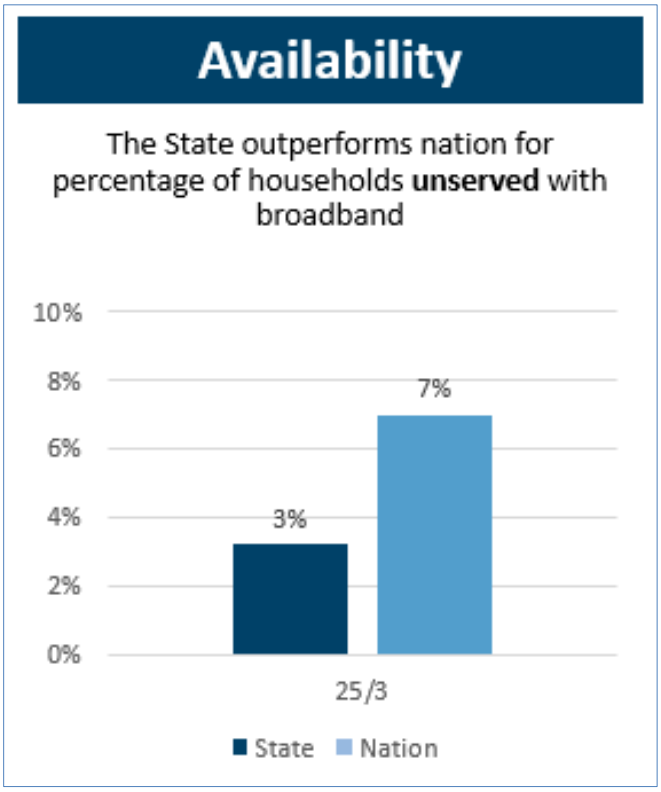
- 119,278 addresses (approximately 3.2 percent) are unserved – below 25/3 Mbps

[133] Joshua Paine and Maria Lameiras, "Extension sees high demand for digital delivery," University of Georgia news release, June 4, 2020, https://news.uga.edu/extension-high-demand-online-programs/.
[134] "Computer Training," Urban League of Greater Atlanta, https://ulgatl.org/computer-training/.
[135] National Broadband Map, May 30, 2023, plus V2 fabric data.

- 74,934 addresses (approximately 2 percent) are underserved – 25/3 Mbps or higher but below 100/20 Mbps
- 3,559,750 addresses (approximately 94.8 percent) are served – 100/20 Mbps or higher

Georgia's broadband availability rate outperforms the national average.

Figure 2: Georgia availability compared to national average



While GTA acknowledges the general accuracy of the FCC National Broadband Map data for unserved and underserved address counts, it also anticipates that given the accuracy of the State's data collection, the numbers of unserved and underserved addresses in Georgia may turn out to be higher than stated on the FCC's Map. Additionally, the State will have more specific data related to current grant-funded locations once awardees report FCC Fabric ID Numbers for funded locations.

Figure 3 shows all federal and State broadband deployment grant project areas either planned or under construction (including projects with awards from the FCC's Rural Digital Opportunity Fund, the U.S. Department of Agriculture's ReConnect program, and the American Rescue Plan Act's State Fiscal Recovery Fund and Capital Projects Fund programs administered by the U.S. Treasury).

Figure 3: Federal and State grant areas

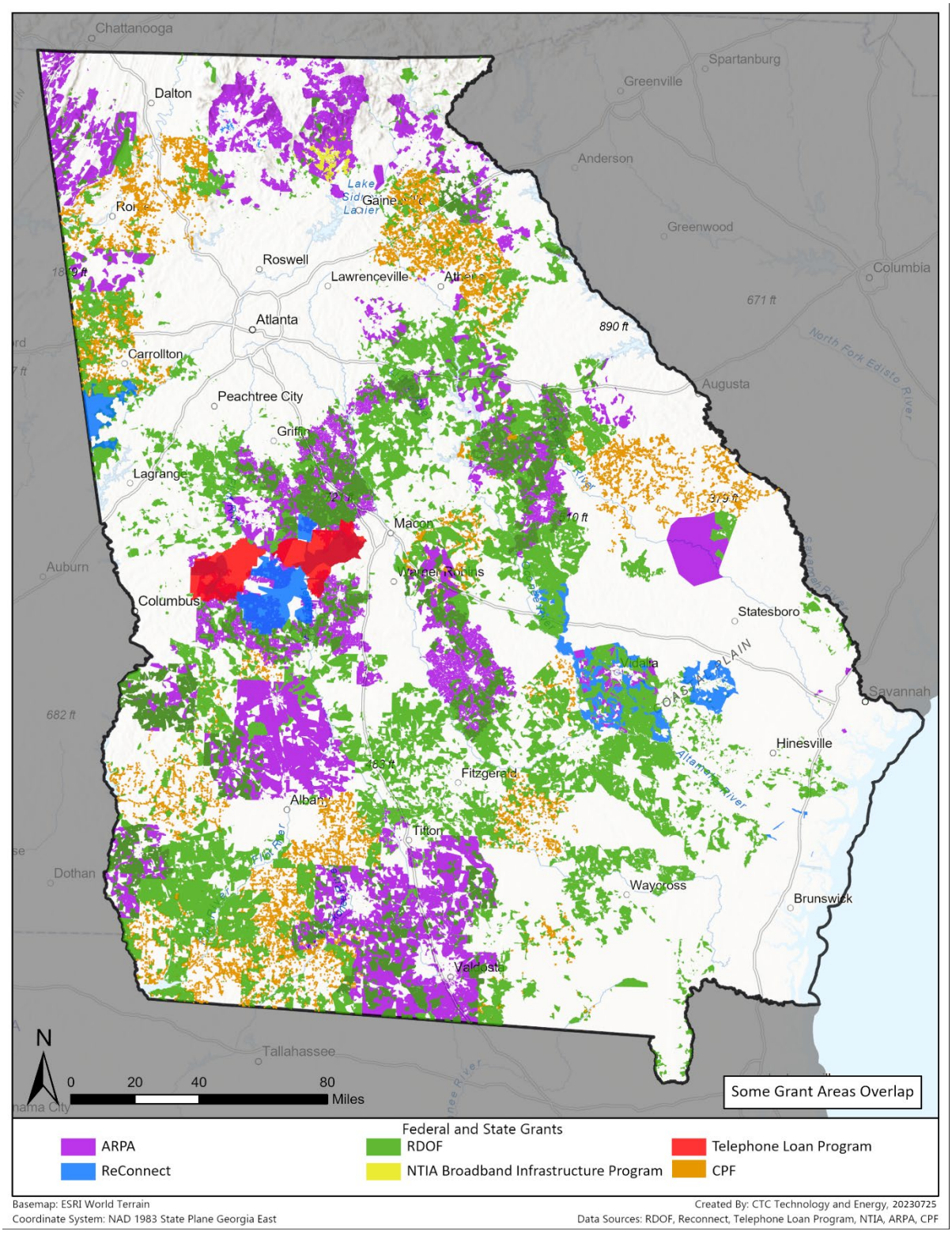


Figure 4 shows unserved locations per census block after considering current and planned federal and State-funded broadband infrastructure projects in the State.

Figure 4: Percent of unserved locations after grants

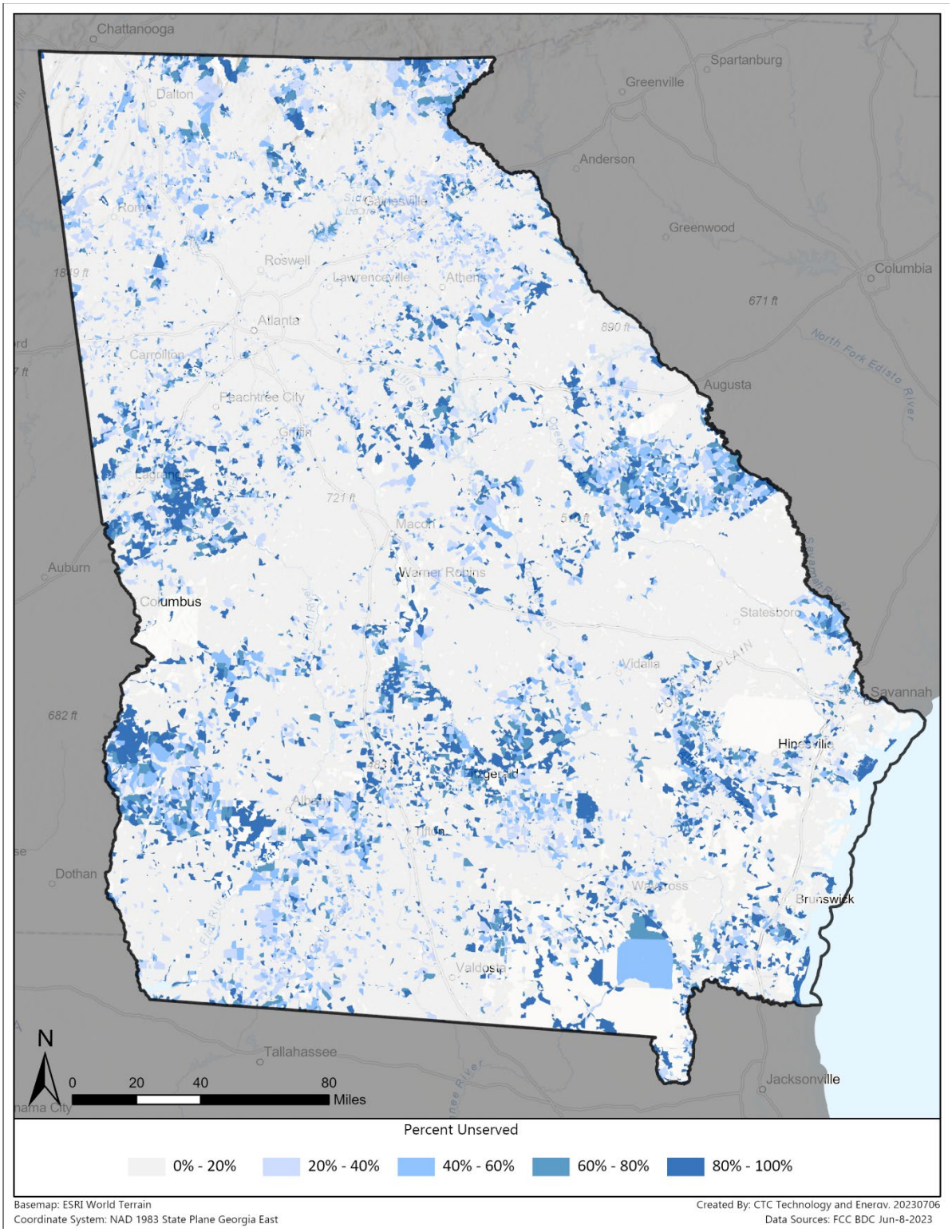


Figure 5 shows underserved locations per census block after considering current and planned federal and State-funded broadband infrastructure projects in the State.

Figure 5: Percent of underserved locations after grants

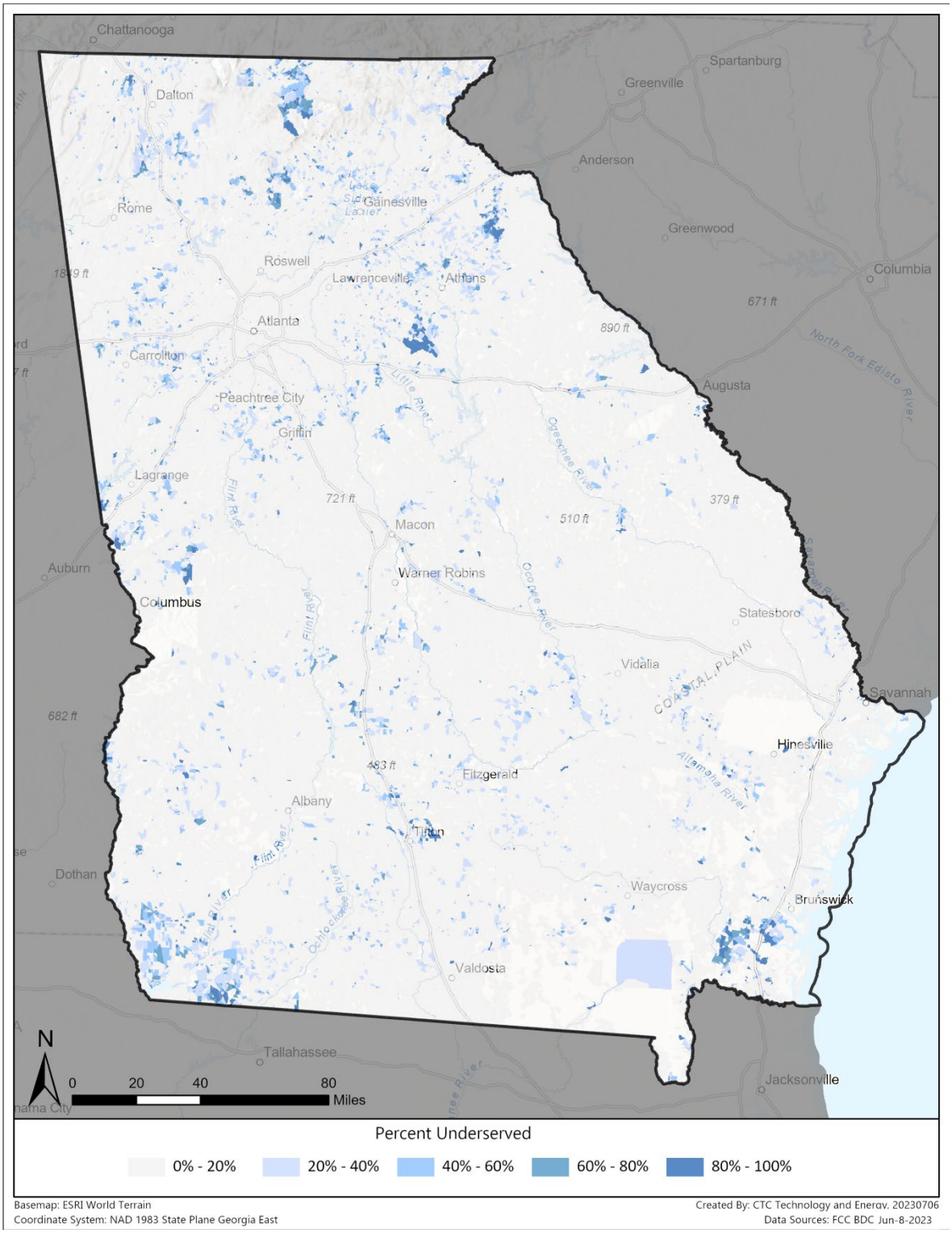
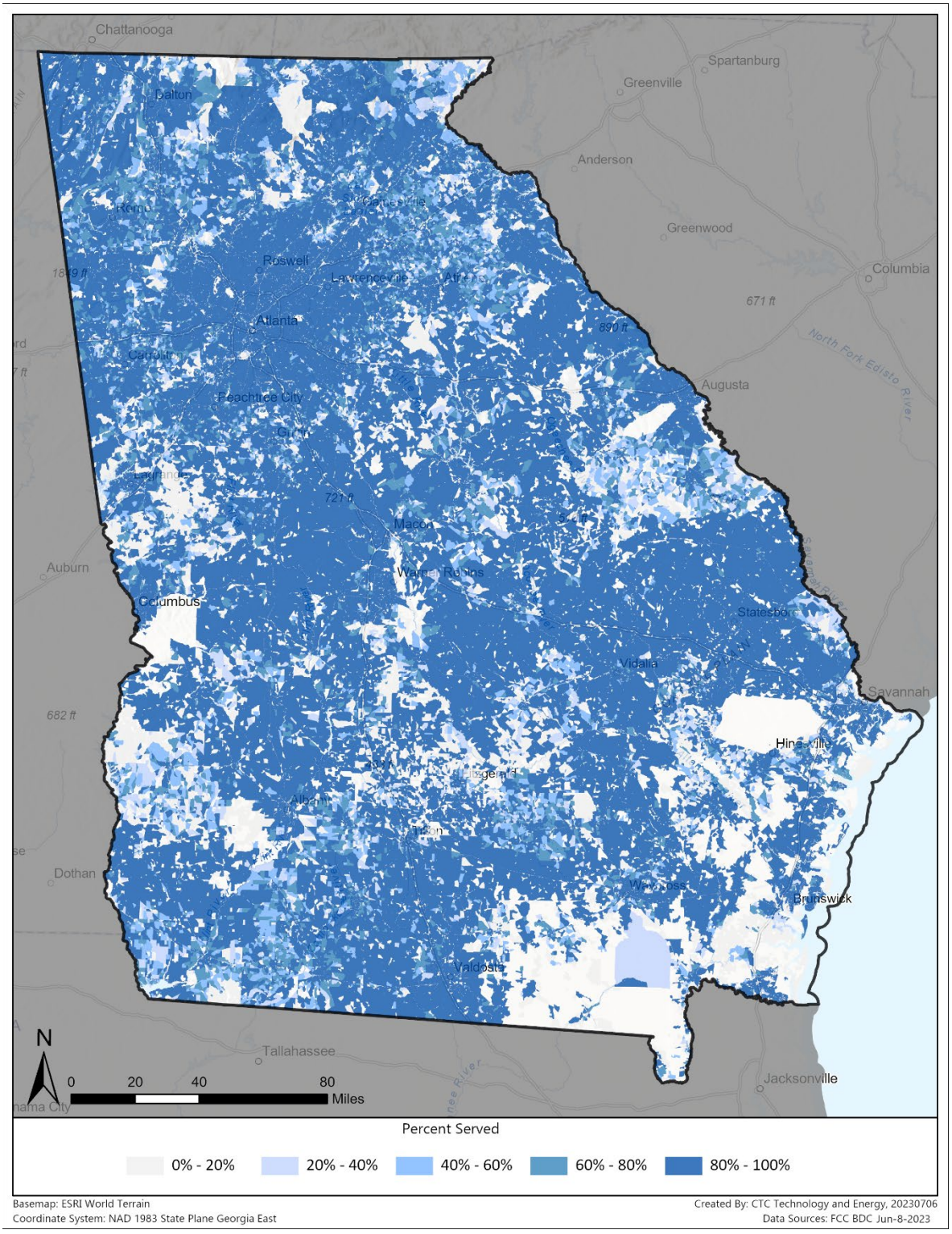


Figure 6 shows served locations per census block after considering current and planned federal and State-funded broadband infrastructure projects in the State.

Figure 6: Percent of served locations after grants



The next two figures highlight the relationship between incomes and a lack of digital access geographically across the State. Figure 7 indicates that the largest numbers of unserved households lie in the $49,000 to $75,000 income range (approximately 56,000) and the under $49,000 income range (approximately 43,000), compared to less than 20,000 unserved locations in income ranges over $75,000.

Figure 7: Unserved locations per median household income

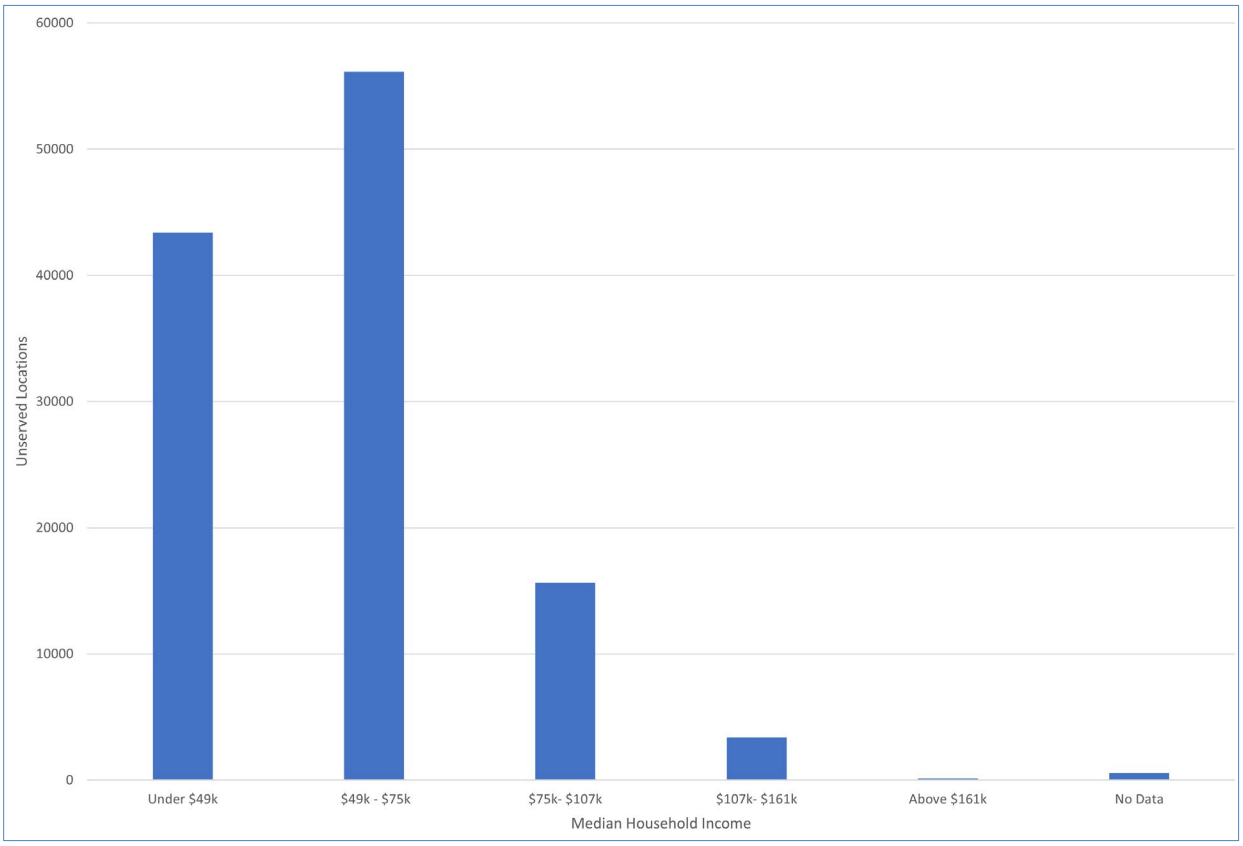
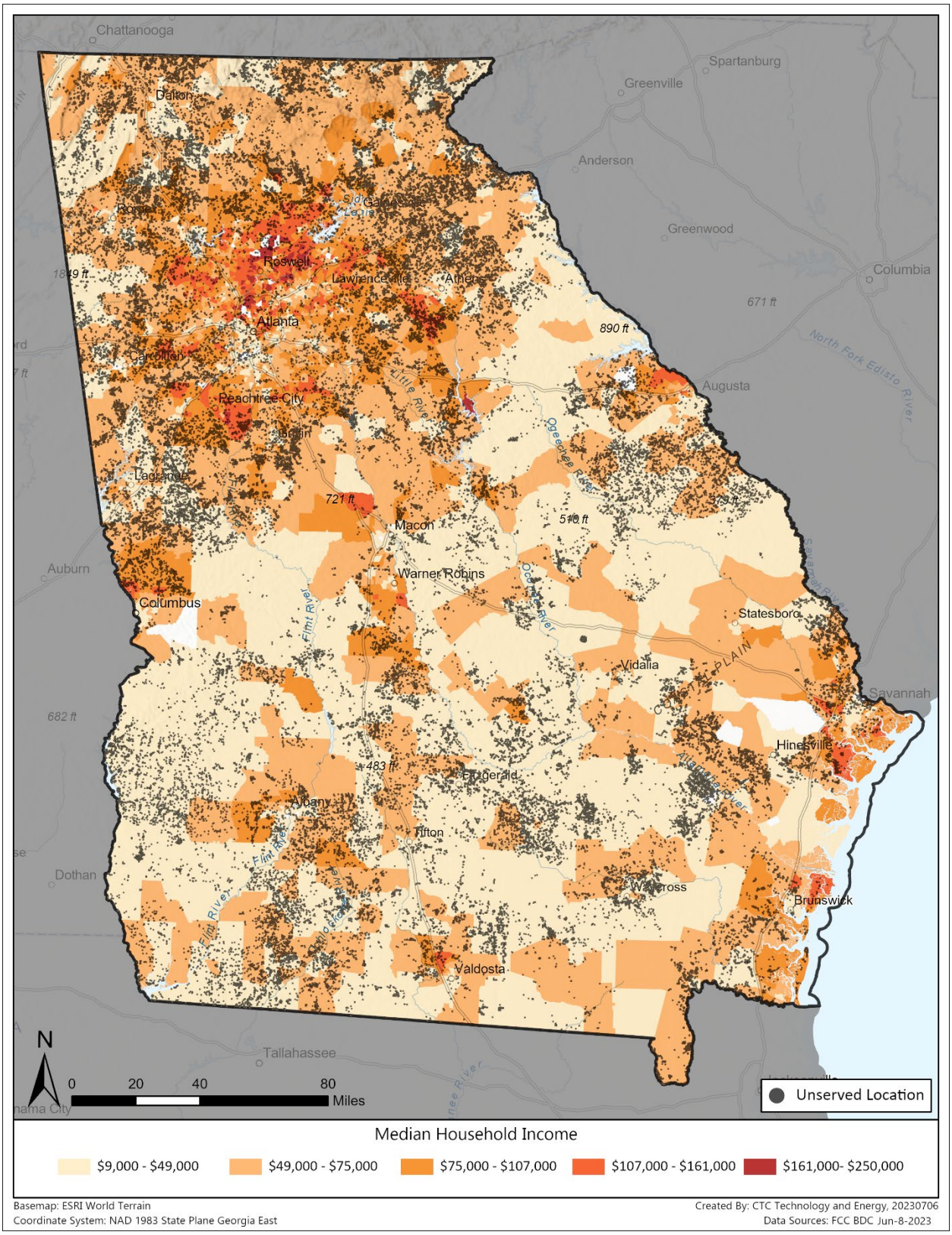


Figure 8 shows median household income per census tract overlaid with unserved locations. The figure highlights the distribution of unserved locations throughout the south and central parts of the State, many of which are in lower income areas, as well as the density of unserved locations across the north and northwest regions, many of which are in middle income areas.

Figure 8: Median household income per census tract and unserved locations



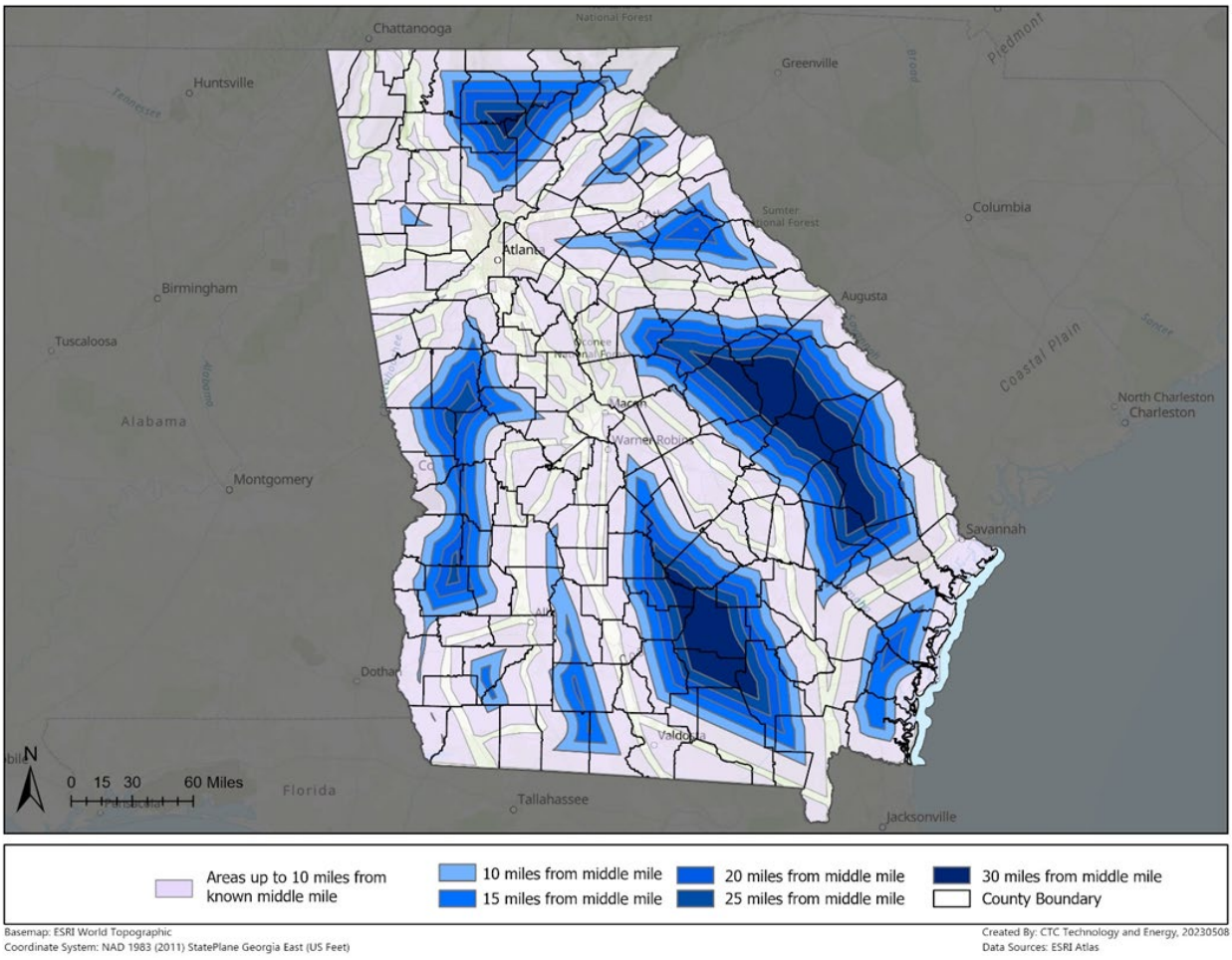
Areas may be underserved or unserved by broadband due to a combination of factors, but population density generally has the greatest impact on deployment patterns. Given high deployment costs, the density of customers is the main driver of private sector investment and deployment decisions.

Like many states with significant rural areas, Georgia is also challenged by a lack of middle-mile availability in sparsely populated areas. During stakeholder interviews conducted for the State's 2022 broadband strategic plan, representatives of smaller ISPs and EMCs cited lack of accessible middle-mile as a barrier to last-mile broadband deployment. Representatives of the Georgia Public Web (now Accelecom) network[136] confirmed that numerous municipalities and potential customers had asked them to build middle-mile to areas with known gaps—which, due to the high cost of deploying middle-mile, they were typically not able to accommodate.

Figure 9 illustrates these gaps by showing the range of residents' proximity to known middle-mile infrastructure, analyzed by census block.

[136] Interviews were conducted with previous leadership; Georgia Public Web was acquired by Accelecom, a private wholesale fiber provider, in October 2022.

Figure 9: Distance of residences from known middle-mile



In June 2023, two entities—Zayo and DoveTel Communications, LLC. dba SyncGlobal Telecom—were awarded grants under the NTIA's Enabling Middle-Mile Broadband Infrastructure Program to construct or enhance middle-mile networks in the State. SyncGlobal Telecom's West and Northwest Georgia Middle Mile Broadband Backbone project will construct a 185-mile fiber route through eight counties in an area of the State that has no known commercially available dark fiber options. Zayo plans to create new access points along an existing 822-mile route that primarily serves Texas, but also includes six counties (Cobb, Paulding, Douglas, Fulton, Haralson, and Carroll) in Georgia.[137]

The State and its local governments are taking steps to mitigate broadband deployment gaps. For example, as of 2018, all Georgia communities are required to include a broadband element in their Comprehensive Plans—which they are required to submit to DCA every 10 years. A county

[137] NTIA, "Funding Recipients," https://broadbandusa.ntia.doc.gov/funding-programs/enabling-middle-mile-broadband-infrastructure-program/funding-recipients#G

and its cities are encouraged to create a joint plan, although they may choose to create their own separate plans.

Many of the State's regional commissions have also incorporated broadband into recent strategic plans. For example, the Southwest Georgia Regional Commission—which serves a region where three counties are majority unserved and one county is completely unserved—documented broadband-related needs in its most recent Regional Plan (2022), Comprehensive Economic Development Strategy (2022), and Economic Recovery and Strategic Plan (2021).

In its 2022 Annual Report, the River Valley Regional Commission states that, based on the State's broadband strategic plan issued that year, it used EDA grant funding to improve broadband infrastructure in the region. It also provided technical assistance for municipalities and providers, attracting an investment of $82 million in ARPA funding in the region. Economic development strategy reports released in 2022 by the Northwest Georgia Regional Commission and the Georgia Mountains Regional Commission also identify a need for broadband expansion.

Workforce development needs are a related issue the State and its partners are attempting to mitigate. Significant investment in the broadband deployment sector will place intense demands on the State's labor market, which is already strained according to public and private stakeholders in Georgia. Hiring a sufficient workforce for some of the key roles required to execute this work—like communications line workers—will require a concerted recruitment and training effort across the public and private sectors, according to GTA's 2022 Georgia Broadband Annual Report.[138]

The State also expects to build on the success of existing workforce-related programs. For example, Clark Atlanta University (based in Atlanta), an historically black college or university (HBCU), has a longstanding partnership with Verizon Wireless "designed to give CAU students valuable business experience in the wireless industry."[139] Recognizing this potential obstacle of a shortage of workers for broadband deployment, the State has also begun planning to invest a portion of its expected BEAD funding to support the creation of training programs within the Technical College System of Georgia and the Georgia Department of Education.

The Southeast Lineman Training Center, a nationally recognized institution located in Trenton, Georgia, that offers electric lineworker and communications lineworker training year-round, also produces 150 to 200 trained communications lineworkers per year. About 15 to 20 percent of

[138] GTA, "2022 Georgia Broadband Annual Report," https://broadband.georgia.gov/media/35/download.
[139] Press Release, "Verizon Wireless Partners With Clark Atlanta University To Provide Students Work Experience In Wireless Industry," October 25, 2011, https://www.verizon.com/about/news/vzw/2011/10/pr2011-10-25c; "Partners in Education," Clark Atlanta University, https://www.cau.edu/institutional-advancement/Partners-in-Education.html.

trainees come from Georgia. Notably, however, as demand for these jobs spikes across the country, most trainees come from out of state and then leave to work elsewhere.[140]

The labor union Communications Workers of America also reported during stakeholder outreach for the development of this Plan that it is expanding its workforce development efforts nationally to support historic investment in fiber broadband. The organization states that it is "committed to supporting equity-oriented broadband technician training programs across the country but requires partnership from states and industry to be successful."[141]

3.4.2 Broadband adoption

Some Georgia households do not use broadband even when the infrastructure is available to them—whether because the service cost is a barrier, they do not have a computer, they lack the skills to use the internet, or other reasons.

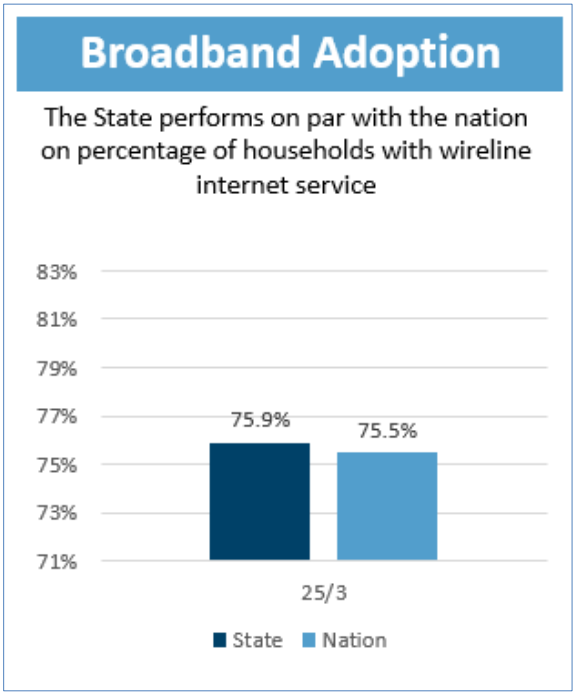
Rates of internet subscription, as well as rates of computer ownership, are tracked by the U.S. Census Bureau's American Community Survey (ACS). According to the most recent ACS five-year estimates, 13.8 percent of Georgia's households do not subscribe to an internet service, and 6.8 percent do not have a computer.[142]

Broadband adoption rates in the State correlate with income; analysis for the State's 2022 broadband strategic plan showed that households in areas with higher average median household incomes, such as Atlanta, Savannah, and Macon, tend to show higher levels of internet access and broadband adoption. A statewide analysis of ACS data by county showed that broadband subscription rates tend to increase as median household income increases.[143]

Georgia's broadband adoption rate is slightly above the national average.

[140] According to conversations with SLTC during the development of the State's broadband strategic plan.
[141] CWA response to broadband workforce development stakeholder survey conducted by GTA, May 2023
[142] U.S. Census, "Computer and Internet Use," American Community Survey, https://www.census.gov/acs/www/about/why-we-ask-each-question/computer/.
[143] Analysis from Georgia Broadband Strategy (2022), available upon request.

Figure 10: Georgia adoption compared to national average



The State has identified multi-sectoral needs to increase broadband adoption rates to achieve benefits in terms of economic development, education, and telemedicine.

GTA believes investments in broadband infrastructure and other efforts to increase broadband adoption will create long-term economic benefits. Per analysis conducted for the State's 2022 broadband strategic plan, should an additional 210,000 to 351,000 households enroll in broadband (corresponding to a 30 or 50 percent reduction in the number of nonadopters), Georgia could see an increase of $120 million to $223 million in household income. There could also be 15,800 to 19,500 new jobs resulting in $1.1 billion to $1.4 billion in additional earnings. In sum, the total estimated economic impact of expanded broadband adoption over 10 years, not including the direct impact of spending on construction, could exceed $5 billion.[144]

Improving broadband adoption rates will enable more residents to access telehealth, which in turn will present opportunities for better outcomes for patients, and savings to patients and providers alike. Telehealth offers access to care for residents who are limited by access to transportation, health needs, or even busy schedules. It also decreases no-shows, saving hospitals money, and decreases road miles that need to be driven to appointments.

Telecommunications systems in Georgia are a critical foundation to improving health outcomes for Georgians and the overall efficiency of our healthcare system. According to the analysis in the

[144] GTA, "2022 Georgia Broadband Annual Report," https://broadband.georgia.gov/media/35/download.

State's broadband strategic plan, healthcare savings in the State with the adoption of telemedicine could range from $1.2 billion to $2 billion, and the consumer surplus value over 10 years is an estimated $2.8 billion to $4.6 billion.[145] The State has an important resource for these efforts in the Global Partnership for Telehealth (GPT), one of the largest nonprofit telehealth networks in the U.S. (discussed in Section 3.3.5).

Georgia's rural communities face disparities in access to care and health outcomes. In 2018, the State awarded grant funding to Mercer University School of Medicine to establish the Georgia Rural Health Innovation Center,[146] which partners with the State's rural counties on a range of targeted initiatives to address the complex healthcare challenges facing their communities. Through a partnership with GPT, the Center has provided telehealth access to 40 providers in rural areas of the State.[147]

In the education sector, it is expected that K-12 school districts now or in the future may rely more on a combination of in-person and "in the cloud" teaching, including assigning homework where students must collaborate on shared files. In that light, increasing broadband adoption will pay dividends in terms of education.

In addition to conducting more classes online, a growing number of schools are providing curriculum about digital skills that are necessary for many 21st century jobs, like coding and computer science. These courses can start at a young age and require a computer and internet connection to practice and learn.

To meet students' bandwidth and connection needs, a recent report recommends speeds of at least 25 Mbps (download) and 12 Mbps (upload) per student, rather than per household.[148] And as with other applications, broadband speeds sufficient today will likely not be sufficient in years to come.

Recognizing that many students in the State's rural areas lack adequate access to broadband, technology, and devices, the Georgia Department of Education's (GaDOE) Office of Rural Education and Innovation (established in 2021) has made connectivity one of its key priorities. The Office's initiatives include increasing broadband access and adoption through awarding technology grants to rural school districts and promoting ACP enrollment, providing

[145] GTA, "2022 Georgia Broadband Annual Report," https://broadband.georgia.gov/media/35/download.
[146] Georgia Rural Health Innovation Center, https://www.georgiaruralhealth.org/about/.
[147] "Grand Challenges," Georgia Rural Health Innovation Center, https://www.georgiaruralhealth.org/grand-challenges/.
[148] David Nagel, "Landmark Study Calls for Increased Bandwidth for At-Home Learning," *The Journal: Transforming Education through Technology*, May 4, 2021, https://thejournal.com/articles/2021/05/04/landmark-study-calls-for-increased-bandwidth-for-at-home-learning.aspx.

cybersecurity training and tools, and ensuring equitable access to 21st century learning and devices.[149]

While GaDOE data indicate that statewide, more than 99 percent of classrooms had high-speed internet access for the 2022 school year and the school systems had more devices than students—with a ratio of 67:100 for all devices—significant gaps exist in some districts. Notably, three school districts in the coastal area between Savannah and Brunswick have schools with no high-speed internet, as do a handful of other districts across the State. In several Clayton County schools, approximately 35 percent of classrooms do not have high-speed internet access.[150]

3.4.3 Broadband affordability

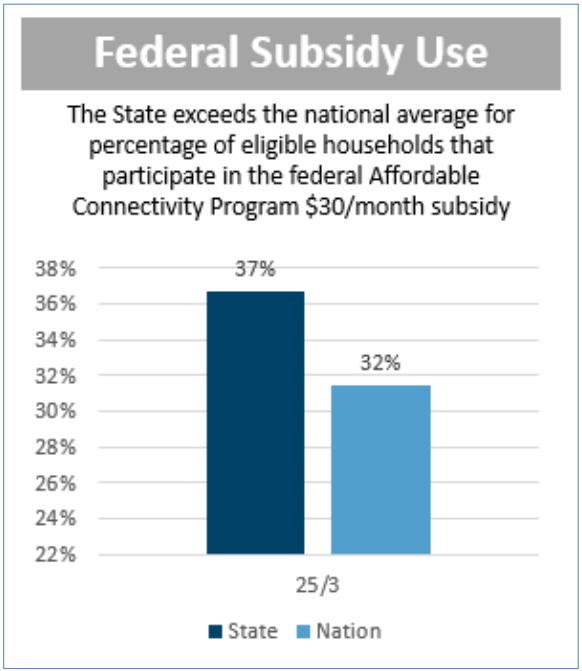
Affordability is a barrier to broadband adoption in Georgia for some and an obstacle for many, and while discounted services and subsidy programs are available there is low awareness of and participation in these programs.

According to stakeholder outreach, some residents pay a high cost for service (especially DSL) that is not adequate to complete schoolwork or to work from home. Parents described choosing between completing adult education coursework or having their child participate in class because their home internet connection speed is inadequate to support both users.

While some households may need additional support as discussed above, the Affordable Connectivity Program (ACP) represents one of the most important programs to assist households struggling to afford the cost of broadband. Georgia's percentage of households that participate in federal subsidies is higher than the national average. However, a significant number of households in the State may not be taking advantage of the program. As of March 2023, 576,430 households in Georgia are enrolled in the ACP[151] out of a total 1,571,000 eligible, per a 2022 estimate[152]—representing a participation rate of 36.7 percent.

[149] "Rural Education and Innovation presentation," GaDOE, https://shealy-my.sharepoint.com/:p:/g/personal/bronwyn_ragan-martin_doe_k12_ga_us/EVNQvk9O94NIjLoS2WyDpJoB9aT8i7wSHHuoaWUlxtO3vw?e=Il8NPA.
[150] "Technology Inventory," GaDOE, https://georgiainsights.gadoe.org/Dashboards/Pages/Technology-Inventory.aspx.
[151] "ACP Enrollment and Claims Tracker," USAC, last updated March 27, 2023, https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/ (accessed March 28, 2023).
[152] "Bipartisan Infrastructure Law Fact Sheet: Georgia," White House Briefing Room, July 2022, https://www.whitehouse.gov/wp-content/uploads/2022/08/Georgia-BIL-Fact-Sheet.pdf.

Figure 11: Georgia residents' federal subsidy (ACP) use compared to national average (March 2023)[153]



This enrollment rate shows an improvement as compared to the statewide participation rates in the Emergency Broadband Benefit (EBB) program, the predecessor to the ACP. An estimated 27 percent of potentially eligible Georgia households subscribed to the EBB.[154] It should be noted that the ACP has broader eligibility requirements.

In a survey of organizations serving NTIA-defined covered populations conducted in 2023 for the development of this Plan, most respondents (32 of 57) either disagreed or strongly disagreed—with over half (18) strongly disagreeing—that available internet service is affordable. Respondents saw affordability as a particular issue for covered populations.

During public listening sessions, some residents in covered households reported that covering other monthly bills such as electricity is a key concern even with a subsidy, compounded by incremental increases in the cost of service—and households who have past-due bills with an ISP are unable to enroll in the ACP. Stakeholders also identified that affordability is a particular concern in areas of the State with a majority of Black residents, and that Hispanic families in rural areas lack support around this issue.

[153] "ACP Enrollment and Claims Tracker," USAC, last updated March 27, 2023, https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/ (accessed March 28, 2023).
[154] Represents the percentage of households who were eligible for Lifeline that were enrolled in the EBB, as the program's eligibility was aligned with eligibility for Lifeline; analysis from Georgia Broadband Strategy (2022).

During the preparation of the State's 2022 broadband strategic plan, the Director of IT for GaDOE discussed many of the challenges in helping eligible families enroll for the EBB, including the substantial "paperwork" (virtual) required and some families' distrust of federal government programs. They noted that outreach from trusted local sources, such as schools, libraries, and community organizations, was key to encouraging enrollment.[155] Stakeholder engagement conducted for this Plan also identified that eligible individuals in the State who are English language learners and/or non-English speakers may not be aware of the program and may have difficulty filling out the online forms to enroll.

As discussed in Section 3.3.3, GTA has partnered with the nonprofit EducationSuperHighway and more than 100 municipalities, community organizations or institutions, businesses, and ISPs on a statewide initiative to increase participation in the ACP. The initiative is designed to raise awareness and overcome trust barriers to enrollment by training community members to become enrollment specialists and digital navigators.

3.4.4 Broadband access

For covered populations, broadband access is a key issue. In a 2023 survey conducted for the development of this Plan, representatives from organizations serving covered populations as defined by NTIA were asked if households they serve have access to "some type" of internet service at home. Out of 57 respondents, only 14 agreed or strongly agreed. 22 were neutral, and 21 disagreed or strongly disagreed. When asked whether households had more than one choice of provider for "high-speed, reliable, and affordable broadband," respondents were more emphatic: 39 of 57 either disagreed or strongly disagreed, 8 were neutral, and 10 agreed.

In an additional survey of community anchor institutions, several also indicated that 1 Gbps symmetrical service was not available at all their locations. Out of 33 respondents, six said service was not available, and two were unsure; 12 reported such service at all locations, and 13 did not select a response. (An additional respondent selected "yes" for this question but responded that service was not available when asked if their organization's internet service met their needs.)

3.4.5 Digital equity (digital connectivity)

According to the State's broadband map and other internal data sources that reflect service availability, areas that are currently shown as unserved and underserved also have a lack of digital connectivity programs—as well as a significant number of covered populations. This correlation means that increasing digital connectivity programs in these areas can help address the digital divide and further the State's policy and service goals by helping improve educational outcomes, health outcomes, and employment opportunities for individuals in these areas.

[155] Georgia Broadband Strategy (2022).

According to stakeholder outreach conducted for the development of the State's Digital Equity Plan, residents in rural areas of the State struggle not only with accessing internet service at home, but also with limited connectivity in community anchor institutions—both of which compound gaps in digital literacy. Meanwhile, many rural communities prioritize delivering broadband access and are not focused on developing digital connectivity (equity) programs. According to stakeholders, individuals in these areas have few such programs available in nearby communities and are not catered to by applicable programs in more urban and suburban areas.

Stakeholders report that the lack of connectivity in rural areas particularly impacts the ability of individuals with disabilities to access State library content and programs, as well as making it more difficult for seniors in these areas to access benefit programs which are offered online.

In areas where service is available, residents may face other barriers to digital connectivity. As discussed in Section 3.4.3, affordability is a particular concern for some individuals who live in low-income households, who can be faced with a high cost for inadequate service. Stakeholders also noted a need for resources and digital training for individuals at senior centers, and that only libraries in certain counties have devices that assist with accessibility for individuals with disabilities.

Nationwide and in Georgia, digital connectivity in terms of the availability of digital skills for employment is a particularly important issue. The Brookings Institution calls it "digitalization"—the transformation of employment opportunities to require some level of digital skills and comfort with technology.[156] Brookings finds that as of 2020, 77 percent of employment in the United States has either a medium or high digitalization level.[157] Brookings also finds that the fastest growing employment sectors have the highest demand for digital skills.

The FCC 2020 Broadband Deployment Advisory Committee Report also finds growth in professions with high digitalization, finding for example that jobs in cybersecurity have increased by 43 percent in 2022, compared to just an 18 percent increase in the more general labor market during the same time frame.[158] This trend toward requiring increased digital skills even for "low tech" employment opportunities in warehouses, construction sites, and retail further exacerbates the digital divide.

[156] Mark Muro and Sifan Liu, The Brookings Institution, "As the digitalization of work expands, place-based solutions can bridge the gaps," February 7, 2023, https://www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/.
[157] Mark Muro and Sifan Liu, The Brookings Institution, "As the digitalization of work expands, place-based solutions can bridge the gaps," February 7, 2023, https://www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/.
[158] FCC BDAC Report, p.5, citing Brent Parton, U.S. Department of Labor Blog, "Strengthening and Diversifying the Cybersecurity Workforce," September 19, 2022, https://blog.dol.gov/2022/09/19/strengthening-and-diversifying-the-cybersecurity-workforce.

Statistics further show that people of color are underrepresented in employment with high levels of digitalization.[159] Where the digital divide is greatest, the digitalization of employment creates a larger digital divide by leaving those without the opportunity to gain digital skills farther behind.

It is also the case that increased digitalization brings with it increased productivity and increased pay levels. Brookings finds that the "wage premium" for jobs with high digitalization levels as compared to those jobs requiring medium digital skills is 47 percent.

Thus, communities with a concentration of employment opportunities with high demand for digital skills—which tend to be concentrated in urban and metro areas and on the east and west coast—have overall increased pay levels than those with lower digital skills jobs and more opportunity for workers to develop the necessary digital skills.[160] Creating a workforce with increased digital skills will not only help to close the digital divide, but create socioeconomic opportunities to support families and communities.

USDA further notes that closing the digital divide is critical to rural workforce development, as well as economic development with telehealth and remote work.[161]

The BEAD program's investment in expanding broadband access will lead to significant "indirect" job creation, which will require digital skills for those employees that intend to take advantage of these new jobs.

For example, the National Governors Association has a program called the Workforce Innovation Network and members of that Network have created the State Digital Equity Scorecard.[162] This tool tracks how states are meeting digital workforce needs through trainings, apprenticeships, funding programs. Estimates from a 2016 Deloitte report suggest that just a 10 percent penetration in broadband access would create 800,000 jobs over three years.[163]

[159] Mark Muro and Sifan Liu, The Brookings Institution, "As the digitalization of work expands, place-based solutions can bridge the gaps," February 7, 2023, https://www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/.
[160] Mark Muro and Sifan Liu, The Brookings Institution, "As the digitalization of work expands, place-based solutions can bridge the gaps," February 7, 2023, https://www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/.
[161] U.S. Department of Agriculture, "USDA Resource Guide for Rural Workforce Development: Together, America Prospers," June 2021, https://www.rd.usda.gov/sites/default/files/060721-ic-ruralworkforceguide-final508.pdf.
[162] National Governors Association, Commentary, "Governors' Broadband Investments Are Creating Jobs," September 13, 2021, https://www.nga.org/news/commentary/governors-broadband-investments-are-creating-jobs/.
[163] Jack Fritz and Dan Littmann, Deloitte Consulting LLP, "Broadband for all: charting a path to economic growth," April 2021, https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-charting-a-path-to-economic-growth.pdf.

The Federal Reserve Bank of Philadelphia issued a report finding that providing access to a computer and broadband services could bring 400,000 new job seekers into the market in the top 25 metropolitan areas in the country.[164]

[164] Alvaro Sanchez and Adam Scavette, Federal Reserve Bank of Philadelphia, "Broadband Subscription, Computer Access, and Labor Market Attachment Across U.S. Metros," June 2021, https://www.philadelphiafed.org/-/media/frbp/assets/community-development/reports/broadband-subscription-computer-access-and-labor-market-attachment-across-us-metros.pdf.

4 Obstacles or barriers

This section describes known or potential obstacles or barriers that might impede the successful implementation of Georgia's BEAD Plan—as well as the State's plan to address these challenges.

4.1 Access to rights-of-way and poles

Large-scale fiber optic deployment efforts require access to rights-of-way and utility poles, as well as permission to install infrastructure across railroad crossings, bridges, private roads, easements, and other restricted areas. The State anticipates that BEAD-funded fiber deployment efforts in the State—just like every other large broadband infrastructure build-out—will face these obstacles, and that its grantees and other entities involved in implementing the construction will follow industry best practices to plan and execute the project. The State has also taken several steps to facilitate access to rights-of-way and utility poles for the purposes of broadband expansion.

Taken as a whole, Georgia's electric membership cooperatives (EMC) operate the largest electric distribution network in the State, serving 73 percent of Georgia by land area and over four in 10 residents.[165] In 2019, Senate Bill 2[166] authorized EMCs to provide broadband services and/or enter partnerships to do so with the goal of supporting broadband expansion in unserved rural areas.

To help broadband providers better plan for infrastructure buildouts, in 2020 the Georgia General Assembly passed House Bill 244, which asked the Public Service Commission (PSC) to standardize the rates and rules associated with pole attachments agreements between EMCs and telecommunications service providers. These charges have historically been unregulated except in the case of Georgia Power, whose pole rates are regulated by the FCC.

Voting on December 15, 2020, the PSC implemented the following fee structure that went into effect on July 1, 2021. EMCs are now required to charge a simple $1-per-year fee for entities to attach utility service to poles in areas unserved by broadband (as determined by the Georgia Broadband Map published by DCA). The $1 fee would be set for six years. Pole rates in areas currently served by broadband were set at $27.71 per pole per year. According to the PSC, this rate represents an at-cost fee to cover service and upkeep of the poles.

Additionally, GDOT recently improved the fee structure for wireline and wireless carriers to utilize the State's roadway rights-of-way for locating physical plant.[167] The right-of-way fee structure now accomplishes two goals simultaneously. First, GDOT's previous 30-year-old fee structure was outdated and did not reflect how the telecommunications industry has evolved. The revision also

[165] "Georgia's EMCs," Georgia Electric Membership Corporation, https://georgiaemc.com/page/GeorgiasEMCs.
[166] See, https://www.legis.ga.gov/api/legislation/document/20192020/187618.
[167] See, https://rules.sos.ga.gov/gac/672-11.

simplifies and reduces costs to utility and telecommunications providers in rural areas, such that fees are no longer based on distance but rather a single small annual assessment per permit. This is intended to encourage broadband deployment with lower upfront and ongoing permitting expenses. Fees are waived for EMCs submitting an application with the sole purpose of providing broadband service.

GDOT has also begun an evaluation of a long-term policy plan for strategic use of State's roadway rights-of-way, particularly limited access facilities such as interstate highways, as outlined in Georgia's Achieving Connectivity Everywhere (ACE) Act (2018). As GDOT develops an investment plan for broadband deployment for transportation purposes, GDOT will coordinate with GTA to identify opportunities to advance rural broadband buildout at a lower cost, particularly to support cost reductions for deployment of ARPA funds allocated to last-mile rural broadband projects.

GTA anticipates providing technical assistance to help local communities navigate broadband deployment, including issues related to right-of-way and pole access. If questions or differences arise, GTA can potentially convene partners to resolve them.

4.2 Legislative and regulatory barriers

The State does not anticipate any legislative barriers to achieving the goals established in this Plan; the Legislature is a strong supporter of efforts to enable broadband deployment and digital connectivity.

The State recognizes the importance of efforts to streamline State and local permitting in such a way as to protect the State's interests while also ensuring effective and efficient broadband construction permitting.[168] Small local governments, in particular, may face challenges related to the need to process large numbers of permit applications.

To that end, the Georgia Department of Community Affairs (DCA) drafted a Model Ordinance[169] for use by local community governments to streamline permitting by creating a single point of contact for permits, creating a standard timeline for the review of permits, and standardizing and limiting the fees charged for permits, among other measures.

[168] Lindsay McKenzie, "NTIA chief says states have 'homework assignments' on broadband permits," *State Scoop*, https://statescoop.com/alan-davidson-ntia-state-broadband-permits/.

[169] DCA, "An ordinance for a broadband ready community," https://broadband.georgia.gov/media/4/download. See also, DCA, "Georgia Broadband Program: General Information," https://broadband.georgia.gov/general-information ("The purpose of the model ordinance is to signal a local unit of government has taken steps to reduce obstacles to broadband infrastructure investment. The broadband model ordinance has been developed through collaboration with representatives of local governments and providers").

4.3 Labor-related challenges

The State has identified labor-related challenges for broadband deployment, top among them a potential labor shortage. The following subsections describe these obstacles in more detail. The State will seek to understand these issues in greater depth and determine strategies to effectively address or ameliorate them in its Workforce Development Plan as part of its Initial Proposal.

These challenges are corroborated by stakeholder engagement conducted as part of the development of this Plan (described in Section 5), including outreach to more than 60 organizations engaged in training and workforce development. Continued engagement with these organizations will inform the development of the State's Workforce Development Plan.

As a general strategy, the State plans to use new and existing relationships to promote workforce development efforts and to use its grant program to encourage service providers to hire and train employees as part of their BEAD projects. Workforce development efforts supported by Digital Equity Act funding will further enhance BEAD projects by providing a larger, more diverse pool of talent.

4.3.1 Labor shortage

The pool of skilled workers for broadband deployment is smaller than experts predict is necessary for the broadband projects that BEAD will fund nationwide. This analysis compounds the State's *general* labor shortage; the U.S. Chamber of Commerce reports that Georgia has only "47 available workers for every 100 open jobs."[170]

4.3.1.1 National workforce analysis

The GAO's December 2022 analysis of the telecommunications workforce states that, "thousands of additional skilled workers will be needed to deploy broadband and 5G" as a result of eight federal broadband funding programs, including the investment from BEAD.[171] The GAO focused on eight "key broadband deployment occupations" for its analysis of growth and wages including line technicians and repair, fiber splicers, network engineers, field technicians, general construction laborers, heavy equipment operators, on-site home repair personnel, and central office personnel.

In January 2023, the FCC's Telecommunications Workforce Interagency Group analyzed similar industry labor categories and found a "profound skills gap" in the telecommunications industry

[170] "The Worker Shortage Across America," U.S. Chamber of Commerce, interactive map accessed March 21, 2023, https://www.uschamber.com/workforce/the-states-suffering-most-from-the-labor-shortage?state=ga.
[171] https://www.gao.gov/assets/gao-23-105626.pdf.

workforce that is created, in part, by the "vast new investment" in advanced communication infrastructure of the IIJA BEAD $42.6 billion investment.[172]

In 2020, prior to the IIJA allocation, an FCC Broadband Deployment Advisory Committee (BDAC) report suggested that "considerable doubt has arisen among broadband infrastructure industry stakeholders as to whether they can meet build-out projects due to current workforce challenges."[173] That report had found there were 29,000 broadband-related technicians in the U.S. and that there would be a demand to hire 20,000 more technicians over the next 10 years.[174]

In comparison, a 2021 Brookings Institution analysis of an earlier version of the IIJA discusses the impact of a proposed $80 billion Congressional allocation of funding toward high-speed broadband. While the actual IIJA investment in broadband infrastructure is almost half as much as that, the Brookings analysis introduces a model that assumes every $1 million in broadband investment results in the creation of 2.5 direct job opportunities.[175] By applying this Brookings analysis, planning for the IIJA's $42 billion of broadband investment will result in the creation of an additional 105,000 broadband-related jobs over the next five years.

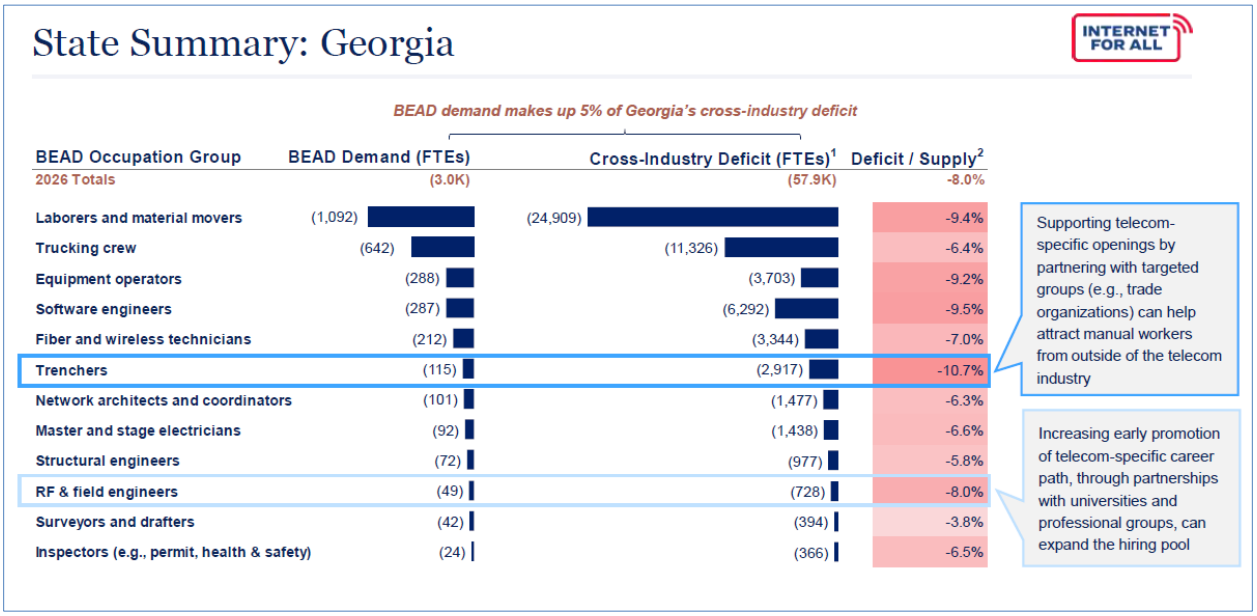
4.3.1.2 Occupational trend analysis in Georgia

To supplement this nationwide analysis, the State evaluated needs within Georgia for specific occupations related to broadband deployment in 2021 and is evaluating workforce analysis that NTIA provided to the State in July 2023.

Figure 12 shows the estimated demand BEAD will have on the workforce in Georgia by 2026. The State will need approximately 3,000 full-time employees across the 12 identified occupational groups required for broadband deployment. When compared to the cross-industry deficit, the highest occupational group deficits for Georgia are trenchers (-10.7 percent), software engineers (-9.5 percent), laborers and material movers (-9.4 percent), equipment operators (-9.2 percent), and RF and field engineers (-8.0 percent).

[172] FCC Telecom Interagency Working Group Report on Workforce (January 2023), https://docs.fcc.gov/public/attachments/DOC-390665A1.pdf (p. 4).
[173] https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf (p. 6).
[174] BDAC, Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group Report, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf (p. 7).
[175] Brookings, Marcela Escobari, Dhruv Gandhi, and Sebastian Strauss, "How federal infrastructure investment can put America to work," March 17, 2021, https://www.brookings.edu/research/how-federal-infrastructure-investment-can-put-america-to-work/ (p. 12) citing to a Univ of Mass, Amherst Political Economy Research Institute 2020 study of the impact of a $6 trillion 10-year economic stimulus package that includes broadband projects. https://peri.umass.edu/publication/item/1297-job-creation-estimates-through-proposed-economic-stimulus-measures.

Figure 12: BEAD workforce impact summary – Georgia



The State's 2022 Broadband Strategic Plan update contained an analysis of projected workforce needs in Georgia assuming potential broadband construction investments of $1.5 billion, $3 billion, or $4 billion (Table 11). This analysis addresses broadband deployment jobs created by direct investment, not jobs created by indirect or induced effects on the economy; it focuses on the top 15 occupational categories.

Table 11: Estimated workforce requirements for top 15 broadband deployment occupations

Occupation	Currently employed in Georgia	$1.5B Investment		$3B Investment		$4B Investment	
		New workers needed	% Increase	New workers needed	% Increase	New workers needed	% Increase
Construction Laborers	61,435	331	0.50%	663	1.10%	883	1.40%
Personal Service Managers	95,192	162	0.20%	324	0.30%	432	0.50%
Electrical Power-Line Installers and Repairers	4,414	157	3.60%	314	7.10%	419	9.50%
First-Line Supervisors of Construction Trades	25,287	150	0.60%	300	1.20%	400	1.60%
Operating Engineers and Other Construction Operators	14,752	147	1.00%	294	2.00%	392	2.70%
First-Line Supervisors of Mechanics and Installers	18,091	120	0.70%	239	1.30%	319	1.80%
Electrical, Electronic, and Electromechanical Assemblers	4,254	117	2.70%	234	5.50%	312	7.30%
Telecommunications Equipment Installers and Repairers	11,022	114	1.00%	228	2.10%	305	2.80%
Electricians	23,259	108	0.50%	216	0.90%	288	1.20%
Construction Managers	23,759	97	0.40%	194	0.80%	259	1.10%
Telecommunications Line Installers and Repairers	3,585	84	2.30%	167	4.70%	223	6.20%
Customer Service Representatives	116,220	78	0.10%	156	0.10%	208	0.20%
Sales Representatives of Services	42,969	71	0.20%	142	0.30%	190	0.40%
Project Management and Business Operations Specialists	65,282	68	0.10%	136	0.20%	181	0.30%
Miscellaneous Assemblers and Fabricators	55,807	68	0.10%	135	0.20%	181	0.30%

Source: Emsi Datarun 2021.3

While many of the top 10 occupational categories projected to see the most growth have a relative level of concentration in Georgia equivalent to the national average, some are well below—indicating scarcity and therefore roles that may be difficult to fill. Electrical, electronic, and electromechanical assemblers and telecommunications line installers and repairers are of particular concern based on this analysis, emphasizing the need for workforce development in those occupations.

It is also important to note that while many of the occupations projected to be in most demand saw growth between 2016 and 2021, some have shrunk in numbers: electrical powerline installers (down 23 percent), telecommunications installers (down 5 percent), and construction laborers (down 11 percent).

Looking at unemployment data as of July 2021, occupations in construction and extraction, and in installation, maintenance, and repair, have an extremely low rate of unemployment in the State (1 percent each), suggesting a potential labor shortage that could be exacerbated by increased

broadband deployment—and the shortage is likely more severe in Georgia than nationwide, as the percentage of unemployed workers in these categories is higher nationally than in the State. On the other hand, management and production occupations (i.e., construction managers and electrical, electronic, and electromechanical assemblers) represent a higher Statewide percentage of unemployed workers, and the number of unemployed workers is high compared to what will be needed for broadband deployment. Jobs in these categories, then, may be easier to fill.

4.3.2 Other workforce growth and diversity challenges

In addition to a labor shortage for broadband deployment, the State must also address the following key workforce challenges—many of which were identified by the 2020 FCC Broadband Deployment Advisory Committee (BDAC). Subsequent reports, including the January 2023 FCC Working Group Report as well as the GAO 2022 analysis, reinforce the FCC's 2020 findings as they update the analysis to factor in IIJA BEAD project demands.

Lack of upward mobility: Broadband workers are more likely to be employed than the general workforce but lack upward mobility.[176] The U.S. Department of Labor states that the "increasing share of people ages 65 and older contributes to a projected labor force growth rate that is slower than much of recent history, as well as a continued declined in the labor force participation rate…"[177] The broadband industry is not immune as statistics show that broadband workers are getting older and close to retirement while there are fewer younger workers to take their place.[178] Even for positions that require significant on-the-job training like field technicians and line workers, there is significant turnover making it difficult for employers to maintain workforce levels and justify investing in further training.[179]

Impact of Covid and aging workforce: The 2020 FCC BDAC workforce report discussed several workforce challenges that create barriers to meeting the expected demand for skilled workers caused by the increase in broadband projects. For example, it noted that the impact of Covid and the "Great Resignation" must be considered when analyzing the market for low- and medium-

[176] Compared to the general workforce, broadband workers are more male, older, have less formal education; they are also better paid, more likely to work full-time, more likely to be covered by a union, and face lower barriers to entry. Compared to the current unemployed and underemployed population, they are also more likely to be white. On the flip side, broadband occupations offer limited pathways to higher-paying jobs and are expected to grow less over the next decade than most other occupations."

[177] https://www.bls.gov/news.release/ecopro.htm#:~:text=The%20increasing%20share%20of%20people,compared%20with%20younger%20age%20groups.

[178] https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf (p. 11).

[179] https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf (p.11).

wage workers, including the increased retirement of older workers and workers being squeezed out due to childcare or elder care obligations.[180]

Lack of awareness about broadband jobs: The FCC BDAC also found that there is a lack of awareness among job seekers of the opportunities for strong employment in the broadband infrastructure industry caused in part by a lack of training and certification programs offered by either educational institutions or industry stakeholders.[181]

The FCC provided a countervailing argument to the impact of Covid and lack of awareness by noting that the importance of broadband and the increased reliance on broadband services during Covid, as well as the treatment of broadband workers as essential during that time, gives the industry an opportunity to expand awareness about the broadband labor market and demand.

This is an area of opportunity for the State and its partners to ameliorate the potential broadband deployment workforce shortage.

Lack of standardized training: A lack of standardized training and coordination of employment opportunities in the industry fails to create clear career pathways and broader skill sets among broadband workers that can be more generally applicable which, in turn, inhibits a flow of broadband workers to meet immediate demands for specific types of workers, as well as inhibiting career advancement and changes.

Moreover, both the FCC and a more recent paper by America Achieves found a growing credentialing environment with multiple organizations developing individual credentialling and training programs. These certifications include multiple certification agency programs within several employment classifications including cable splicing, tower technician, outside plant engineer, and several others.[182]

Recruitment challenges in rural areas: The GAO analysis further noted that recruiting necessary workers into rural areas may be more complicated due to the lower population density and remoteness of those communities, as well as statistics that suggest only 10 percent to 15 percent

[180] https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf (page 6); See also https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf (page 8-9); See also Brookings, Marcela Escobari, Dhruv Gandhi, and Sebastian Strauss, "How federal infrastructure investment can put America to work," March 17, 2021, https://www.brookings.edu/research/how-federal-infrastructure-investment-can-put-america-to-work/ (p.1)
[181] FCC, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf.
[182] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf (p. 48).

of telecommunications workers travel beyond 200 miles from their homes to work on remote projects.[183]

Difficulty in hiring and retaining broadband workers: The FCC also found that these positions are difficult to hire and retain due to the uncertainty and project-based nature of the work, the requirement to be on-call and ready to report to work on a new job without much notice, and requirements to travel to a different city for long-term stays during a job, as well as delays in employment and requirements to stop work due to external factors like weather and material supply shortages.[184]

ISPs across the State have made it abundantly clear that they will need a workforce after projects have been built to focus on the maintenance and operation of the expanded networks. The State will work with TCSG and GaDOE to make it known to interested students that broadband-related jobs do not necessarily end once construction concludes. With this knowledge, and by incentivizing the hiring of localized workforces by awarded subrecipients, the State believes that new workforce members will be able to weather this issue.

Lack of diversity in the broadband workforce: The National Governors Association notes that 83 percent of telecommunications line installers are white and only 6 percent are women, making it even more difficult to recruit workers if they do not see themselves in the positions.[185]

Increased competition from other broadband infrastructure projects: America Achieves and the GAO note there will be increased competition for workers from other broadband infrastructure projects just getting under way with funding from the ARPA grant programs and USDA and RDOF programs, as well as additional competition for trades such as construction, electricians, and other labor categories that support large infrastructure projects as a result of the IIJA's other investments in transportation, water, and other infrastructure.[186]

The growth of fixed wireless and 5G installation could be viewed as competition for some of these labor categories, or as an opportunity and synergy to bring new workers into the telecommunications industry more generally. Experts note a boom in demand for high-wage, high-skilled workers for these jobs, many of which have crossover and adjacent skills to support wireline fiber broadband projects.[187]

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[183] https://www.gao.gov/assets/gao-23-105626.pdf at p. 14.
[184] FCC, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf.
[185] https://www.nga.org/news/commentary/governors-broadband-investments-are-creating-jobs/.
[186] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf (page 8-9); See also, GAO Report on Telecommunications Workforce (p.14), https://www.gao.gov/assets/gao-23-105626.pdf.
[187] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf (p. 26).

Because of Georgia's past investment of more than $625 million in broadband projects, ISPs already have committed sizeable workforce teams to the State and intend to keep those teams in the State should they compete for BEAD funds. In addition, building on past grant programs and robust public support to quickly deploy BEAD funds, Georgia is well-positioned to be an early state in standing up its BEAD grant—which will help convince contractors and ISPs to invest their personnel resources in the State.

No broadband-specific job codes: Gathering necessary statistics is made difficult by the fact that the U.S. Department of Labor has no broadband-specific job codes. Experts suggest there are 15 different Department of Labor job codes that could be included in the analysis of the broadband workforce market—ranging from general categories such as construction laborers and managers, miscellaneous assemblers, and sales representatives to more specific roles including telecommunications equipment installers and telecommunications line installers.[188]

4.4 Supply chain issues and materials availability

The extensive funding allocated to broadband infrastructure deployment by Congress—and the current and planned investments by State and local governments and ISPs nationwide[189]—has caused a spike in demand for labor and materials. This increased demand compounds an already disrupted market as Covid-19 caused factory closures and other issues in the supply chain.

Supply chain challenges in general reached unprecedented levels during the Covid-19 pandemic and have not completely disappeared. "Given that there are multiple new risk factors on the horizon, it is hard to envision trust in the system being restored to pre-Covid-19 levels any time soon," according to a 2023 S&P Global Intelligence report,[190] citing both geopolitical risks such as Ukraine and Taiwan and transportation risks including labor unrest and unanticipated cargo surges.

According to recent research, delays on orders of new fiber are decreasing, but are still challenging.[191] The allocation of BEAD funding may exacerbate the situation once again.

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[188] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf (p. 24).

[189] Diana Goovaerts, "Editor's Corner: Is the fiber hangover real?" *Fierce Telecom*, March 15, 2023, https://www.fiercetelecom.com/broadband/editors-corner-fiber-hangover-real.

[190] Peter Tirschwell, S&P Global Market Intelligence, "Risk Will Define Supply Chains for Years To Come," January 13, 2023, https://www.spglobal.com/en/research-insights/featured/special-editorial/look-forward/risk-will-define-supply-chains-for-years-to-come.

[191] "Fiber Broadband Association Reports Dramatic Improvements to Supply Chain," Fiber Broadband Association, May 2, 2023, https://fiberbroadband.org/2023/05/02/fiber-broadband-association-reports-dramatic-improvements-to-supply-chain/, reporting significantly improved lead times in several broadband categories, with delays down to approximately five weeks, depending on the category (though handholes were still registering delays of eight to 14 weeks as of March 2023).

During 2023, inflation remains a potential barrier. "Even though inflation started to cool toward the end of 2022, it is still unclear how long it will take to return to its long-run average—that is, if currently high inflation will persist," the Federal Reserve Bank of St. Louis said.[192]

For example, the fiber optic cable producer price index from the Federal Reserve Bank of St. Louis rose more than 20 percent between April 2020 and April 2023, as shown below.[193]

Figure 13: Fiber optic cable producer price index, January 2020 to April 2023

The State will address these supply chain and materials challenges—including limited availability and higher prices—through advanced planning and effective procurement processes. The State will also advise ISPs and other stakeholders on best practices, for example from the Fiber Broadband Association.[194]

4.5 Industry participation

As the State's experience in broadband grant-making illustrates, industry participation—that is, commitments by ISPs to share the cost and risk of last-mile broadband deployment in exchange for partial public funding—will be an important factor in closing the State's digital divide.

The stakeholder outreach the State conducted in preparation of this Plan indicates that ISPs in the State intend to be collaborative partners in future broadband deployment efforts (see Section

[192] Michael McCracken and Trần Khánh Ngân, Federal Reserve Bank of St. Louis, *On the Economy Blog*, "Will High Inflation Persist?" January 10, 2023, https://www.stlouisfed.org/on-the-economy/2023/jan/will-high-inflation-persist.

[193] "Producer Price Index by Industry: Fiber Optic Cable Manufacturing: Fiber Optic Cable, Made from Purchased Fiber Optic Strand (PCU3359213359210)" for the period January 2020 to April 2023, Federal Reserve Bank of St. Louis, .The latest available data is at https://fred.stlouisfed.org/graph/fredgraph.png?g=14Kos. Because the URL links to the latest available data, the data accessible via the link may be more recent the data in the graph above. The series data is available at https://fred.stlouisfed.org/series/PCU3359213359210.

[194] Fiber Broadband Association Reports Dramatic Improvements to Supply Chain," Fiber Broadband Association, May 2, 2023, https://fiberbroadband.org/2023/05/02/fiber-broadband-association-reports-dramatic-improvements-to-supply-chain/.

5.1). As part of its comprehensive stakeholder engagement process in winter and spring 2023, the State engaged ISPs in public listening sessions, as well as five dedicated virtual engagements for ISPs in which more than 100 representatives from over 40 organizations participated—including Georgia Cable Association members, Georgia Rural Telephone and Broadband Association members, and Georgia Electric Membership Corp. members (i.e., rural electric municipal corporations and cooperatives). The State also distributed a survey/asset inventory to the full list of ISP stakeholders.

These findings align with the State's findings in the "Georgia Broadband Strategy" (2022). In that study, GTA noted that private sector investment in broadband has also undergone a dramatic shift in line with the availability of federal funding (and, even before that, a growing interest in long-term telecommunications infrastructure as a category). The biggest shift has been that, from private equity to Wall Street, investors are embracing fiber-to-the-premises deployments like never before.

A few years ago, ISP and investor excitement was focused on 5G deployments; however, investors (and policymakers, to some extent) realized that 5G was not performing as well as anticipated with customers and in real-world deployments. These investments will continue—especially by large wireless carriers—but substantial energy has turned from promoting 5G to promoting fiber-to-the-premises.

When investors turned to fiber-to-the-premise-based opportunities, several patterns emerged. For one, private equity purchased or invested in small, competitive fiber providers across the country. These providers, which may previously have been building to 10,000 premises a year, received infusions of capital or were purchased outright, and are now being pushed to deploy to 500,000 premises per year or more.

Second, investors also bought or provided significant cash infusions to incumbent local exchange carriers (ILEC) like Consolidated Communications, OTELCO, and others to accelerate fiber deployments using utility poles or pole licenses they already owned.

Lastly, cable incumbents like Charter Communications have started building fiber-only networks (as opposed to coaxial cable or hybrid fiber-coaxial infrastructure) in new deployments. Charter Spectrum's Rural Digital Opportunity Fund-awarded territories across the country are all slated to be built with fiber-to-the-premises—drawing on public funding and significant investment of the company's own capital as well.

Private investment in fiber-to-the-premises deployments may total $40 billion to $60 billion in the next seven to 10 years. As is natural for these investments, deployments of private capital are targeting locations that will provide the highest return on investment. For the most part, this means investing in wealthier urban downtown areas and suburbs. By targeting affluent families

with multiple children, disposable income, and higher bandwidth needs, fiber-based ISPs hope to win customers back from cable as efficiently as possible.

This focus on return on investment also implies that grant programs designed to use public sector resources to leverage private investment must create the conditions for private entities to earn a similar or greater return in the sparsely populated, rural areas as they would in the suburban and urban areas where they would otherwise build. Strategies to ensure that public and private capital can be brought to bear on unserved areas.

In addition to collaborating on broadband deployment, the State has also engaged ISPs to identify its service gaps. The Georgia Broadband Availability Map was launched with data contributed and verified by 44 of Georgia's retail broadband service providers, and the map is updated annually with the full participation of providers. The GTA and DCA teams are in regular contact with ISPs, including multiple touch points throughout the year to ensure data accuracy.[195]

4.6 Topography and climate

Georgia's climate features long summers with high temperatures and humidity followed by typically mild winters, because of its location at subtropical latitudes near the warm waters of the Atlantic Ocean and the Gulf of Mexico. The Chattahoochee River divides the State into separate climatic regions with the mountain region to the northwest being cooler than the rest of the State. Georgia experiences significant precipitation—as much as 70 inches per year to the northeast, and roughly 45 inches in southeastern and central areas. Thunderstorms are common in the spring and summer and can cause severe flooding and tornadoes. Hurricanes rarely make direct landfall, but the remnants of tropical storms can bring heavy rain and winds as they pass over the State.[196]

Topography thus presents a potential obstacle to broadband deployment to the extent that construction methods need to consider survivability in terms of natural disasters. Given that this is a known concern, both the State and private deployers have a demonstrated history of successfully mitigating this issue through resilient construction approaches.

For example, the Georgia Department of Transportation (GDOT) has incorporated current and future weather- and climate-related resiliency into its Statewide infrastructure policies. GDOT begins evaluating climate and weather hazards at the concept and development phase and integrates a proactive approach to anticipate, respond, and recover from climate and weather events throughout and after deployment.

[195] "2021 Broadband Report," GTA and DCA, https://gta.georgia.gov/document/document/2021-broadband-report-final/download.
[196] NOAA National Centers for Environmental Information, "Georgia," https://statesummaries.ncics.org/chapter/ga/.

To identify potential risks, GDOT partnered with the Georgia Institute of Technology in a three-year study to create the Climate Hazard Exposure Index. The Climate Hazard Exposure Index utilizes Spatial Hazards Events and Losses Database for the United States (SHELDUS) mapping and observant data collected by the University of Arizona to assess climate hazards at a county level. The data cover the period from 1960 to 2020 and is updated every two to three years. The Climate Hazard Exposure Index accounts for High-Risk (Tornado, Inland Flooding, Hurricane Wind, Severe Storm, Hail, Lightning, Coastal Flooding), Medium-Risk (Drought, Severe Winter Weather, Wildfire, Wind, and Extreme Heat), and Low-Risk (Fog and Landslides) hazards. It also considers single hazards (hazard count), multiple hazards (diversity of hazards), and the evolution of hazards over time through hotspot analysis (projected to the year 2050) with the Multi-Hazard Assessment Tool.

The Georgia Department of Community Affairs (DCA) has also recently completed an extensive planning process to develop a roadmap for improvements in critical communications infrastructure—recognizing the importance of resilient fiber broadband deployment to enable public safety. The report, completed in 2022, was chartered in response to natural disasters that occurred in 2017, when 15 counties in the Southern Georgia region experienced 41 tornados, followed by Hurricane Irma and Hurricane Michael.

Following these events, DCA developed a planning document that set future goals in planning and development for the counties receiving funding to mitigate against future disasters.[197] A major finding in the planning process was that many of the affected counties lacked a highly resilient communications network for public safety. DCA analyzed existing communications infrastructure, identified approaches to reduce risks and future losses, and developed planning guides that provide an overview of areas of risk and opportunities to reinforce vulnerable communications infrastructure.

4.7 Affordability

Affordability is a barrier to broadband adoption in Georgia for some and an obstacle for many, and while discounted services and subsidy programs are available there is low awareness of and participation in these programs.

The 2022 Georgia Broadband Strategy report[198] found that affordability was a barrier to broadband adoption, in that higher levels of broadband adoption are seen in areas of the State with higher median household incomes, such as Atlanta, Savannah, and Macon. Analysis also

[197] Georgia Department of Community Affairs, "State of Georgia: CDBG-MIT Action Plan," June 2, 2020, https://www.dca.ga.gov/sites/default/files/cdbg-mit_hud_approved_ap_0.pdf.
[198] The full 150-page plan is publicly available and can be requested by contacting GTA.

indicated that as a county's median household income increases, broadband subscription rates generally increase.

Organizations working with covered populations report that affordability is a particular issue for the communities they serve, according to a survey conducted in early 2023 during the development of this Plan; 32 of 57 respondents disagreed or strongly disagreed that available internet service is affordable, with more than half of respondents (18) strongly disagreeing.

Similarly, research indicates there is low awareness nationwide of the federal Affordable Connectivity Program (ACP), which provides a $30 monthly subsidy for broadband services to low-income and other eligible households.[199] As of March 2023, a total of 576,430 Georgia households are enrolled in the ACP,[200] out of 1,571,000 eligible households (per a 2022 estimate)[201]—which means that 63.3 percent of households that might be able to sign up for free or low-cost service through the program are not taking advantage of the opportunity.

The State considers affordable broadband as a significant means to increase the number of connected individuals, organizations, and businesses in Georgia. The State intends to address these affordability issues in a range of ways, including promoting residents' enrollment in the ACP and adding affordability questions to the BEAD subrecipient application and scoring metrics.

During the preparation of the State's 2022 broadband strategic plan, the Director of IT for the Georgia Department of Education (GaDOE) noted that outreach from trusted sources was key to helping households enroll in the Emergency Broadband Benefit, the predecessor to the ACP.

Recognizing that school districts are well-positioned to assist in this process as they have established relationships with parents, GaDOE's Georgia Student Connect program provides support services to school districts to help enroll families in the ACP. Services include a call center that can conduct outreach to households and act as an "ACP hotline" to assist with the enrollment process.

In May 2023, GTA also launched a statewide initiative in partnership with the non-profit EducationSuperHighway and more than 100 coalition partners—including local governments, community organizations, businesses, and ISPs—to increase participation in the ACP. Knowing that awareness as well as trust of the program can present obstacles, the initiative will conduct

[199] "Half of ACP-Eligible Households Still Unaware of the Program," Benton Institute for Broadband & Society, March 17, 2023, https://www.benton.org/blog/half-acp-eligible-households-still-unaware-program.
[200] "ACP Enrollment and Claims Tracker," USAC, last updated March 27, 2023, https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/ (accessed March 28, 2023).
[201] "Bipartisan Infrastructure Law Fact Sheet: Georgia," White House Briefing Room, July 2022, https://www.whitehouse.gov/wp-content/uploads/2022/08/Georgia-BIL-Fact-Sheet.pdf.

outreach and train community members as enrollment specialists who can help households navigate the process and select an internet service plan.

Further showing its commitment to affordable broadband, GTA required all awarded grantees under Georgia's Capital Projects Fund grant program to participate in the ACP. In addition, GTA provided additional points to CPF grant applicants who committed to providing a low-cost offering. GTA is considering using similar practices for its upcoming BEAD grant program.

The State may also, for example, develop an initiative to educate residents about the availability of low-cost internet programs offered by incumbent ISPs, and to assist residents with enrollment.

4.8 Digital literacy

Many Georgia residents who are members of covered populations lack access to digital training, according to a 2023 online survey of organizations serving covered populations. GTA conducted the survey in the development of this Plan. Of 55 organizations responding, only one organization felt that the population they covered had access to "convenient and comprehensive digital literacy training."

Many residents could benefit from online safety training, a key component of digital literacy coursework. Of the 50 organizations that expressed an opinion regarding Georgia residents' cybersecurity capabilities, only three agreed that individuals know how to protect their information online or that they can recognize a phishing scam or other types of scams and illegal activity.

Only four organizations stated that the populations they serve take the basic step of using anti-virus and anti-malware software on their computers.

The State intends to work with partner organizations that have established digital literacy training programs, as well as potential new programs, to mitigate the digital literacy gaps among covered populations and other residents.

5 Implementation plan

This section describes the State's comprehensive stakeholder engagement process; its priorities, planned activities, and strategies in terms of implementing the BEAD Five-Year Action Plan; and the estimated cost and timeline for achieving universal service in Georgia.

5.1 Stakeholder engagement process

This section describes the comprehensive external engagement process GTA conducted in preparation of this Plan. The stakeholder engagement effort, comprising statewide meetings and surveys with a complete range of stakeholders, demonstrated collaboration with local and regional entities (governmental and non-governmental). It reflects GTA's effort to facilitate an inclusive and effective engagement model. The stakeholder engagement process also included the covered populations[202] that have been identified as core stakeholder groups.

The external engagement process undertaken while GTA developed this Plan will be the model for engagement that will be undertaken following submission of the Plan to support ongoing collaboration with stakeholders throughout the BEAD program.

The Georgia Technology Authority (GTA) developed a plan to engage a fully diverse and comprehensive set of stakeholders throughout the State of Georgia through:

1) Email, phone, social media outreach, and printed and electronic flyers,
2) The use of statewide broadband advisory and digital connectivity (i.e., "digital equity" in the IIJA's parlance) advisory committees,
3) In-person public listening sessions in all regions of the State,
4) Virtual facilitated sessions with expert stakeholders on specific topics addressed in the BEAD and Digital Equity Planning Notices of Funding Opportunity (NOFO),
5) A statewide phone survey of Georgia residents regarding internet usage,

[202] Per NOFO Section I.C.g, referencing IIJA Section 60302(10), the covered populations are:
1. Individuals who live in covered households;
2. Aging individuals;
3. Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;
4. Veterans;
5. Individuals with disabilities;
6. Individuals with a language barrier, including individuals who—
    a. Are English learners; and
    b. Have low levels of literacy;
7. Individuals who are members of a racial or ethnic minority group; and
8. Individuals who primarily reside in a rural area.

6) The use of surveys and asset inventories to obtain required information and expert input from stakeholder organizations,

7) Ongoing virtual and in-person meetings with stakeholder groups throughout the State,

8) Coordination with partners in the Affordable Connectivity Plan (ACP) and other digital connectivity program outreach, and

9) Participating in statewide conferences related to broadband and digital connectivity, outreach conducted by NTIA in Georgia, and regional and national conferences regarding broadband and digital connectivity.

GTA has acted successfully on all aspects of this outreach and engagement plan.

GTA began its stakeholder engagement upon release of the BEAD and Digital Equity planning NOFOs by coordinating a meeting with the Broadband Advisory Committee. Engagement efforts will continue throughout the planning, deployment, and project oversight cycles of the BEAD and Digital Equity planning and Digital Capacity grant programs.

Details of GTA's public and stakeholder outreach and engagement include:

1. Email, telephone, social media outreach, and printed and electronic flyers

    a. Development of extensive stakeholder organization lists; notifying stakeholders about GTA- and partner-coordinated ACP campaigns; and inviting stakeholders to participate in regional public listening sessions, developed and distributed flyers on the BEAD and Digital Equity programs, FCC Map Challenge, and surveys; virtual facilitated sessions, one-on-one and small group meetings, and data collection efforts.

    b. Our e-mail list has 2,663 subscribers and we have a 37% open rate for our e-mails. We also utilized Eventbrite for event RSVP tracking but did not require electronic registration.

2. Statewide advisory committees

    a. Broadband Advisory Committee – established in 2020, meets quarterly.

    b. Digital Connectivity Advisory Committee – established in January 2023 to identify needs and gaps of digital connectivity in Georgia and to support the State's digital connectivity (equity) planning and capacity development. The 30 members were selected per NDIA and NTIA guidance based on proximity to covered populations. Members are subject matter experts in their professional area or discipline and

experienced and knowledgeable regarding the covered populations they serve. The committee's first meeting was held in February 2023, and meetings are held monthly.

3. 23 public listening sessions ("Let's Connect GA" Public Listening Sessions)

    a. Conducted in communities throughout the State from February through June 2023 across the State's 12 planning regions.

    b. Participants included State, county, and municipal government officials; regional planning commissions; technical colleges; universities; internet service providers (ISP); industry, civic, and governance associations; local schools; regional and local libraries; regional and local housing authorities; regional and local nonprofits; digital equity organizations; organizations serving covered populations; and private citizens.

    c. Intended to share broadband and digital connectivity program/funding information and to hear in person from organizations and community leaders about communities' needs and experiences around accessing and using the internet.

4. Virtual sessions with expert stakeholders from companies, governments, and organizations, including those representing covered populations:

    a. Workforce development – Participants included State agencies, technical colleges, workforce training organizations, labor unions, OFS Optics (a fiber manufacturer), the Fiber Broadband Association, the Fiber Optic Association, and ISPs. (3 sessions – over 60 participants)

    b. ISPs – including Georgia Cable Association members, Georgia's Rural Telephone and Broadband Association members, the Georgia Electric Membership Corporation and member cooperatives, and other independent ISPs. (5 sessions – more than 100 participants)

    c. Local and regional governments – including regional planning commissions, State government officials, county government officials, and municipal government officials. (2 sessions – nearly 70 participants)

    d. Community anchor institutions (CAI) – including State, county, and municipal governments and education leaders; and digital equity organizations providing access to computing devices, digital literacy and financial training, and health-related services. (4 sessions – over 20 participants)

5. Individual meetings with organizations
    a. In addition to virtual sessions, GTA has conducted one-on-one and small group meetings with a range of broadband and digital equity stakeholders, including those representing covered populations:
        i. Health support organizations
        ii. Workforce organizations
        iii. Unincorporated communities
        iv. Historically Black Colleges and Universities (HBCU)
        v. State and regional library systems
        vi. Digital skills training organizations
        vii. Device distribution organizations
        viii. Accessibility organizations
        ix. Business organizations
        x. Arts and culture and arts education organizations
        xi. Faith-based organizations
        xii. Youth and family serving organizations
        xiii. K-12 educators and technologists
        xiv. Financial services organizations and coalitions
        xv. Philanthropic organizations
6. Speaking at statewide conferences and organization meetings in 2023
    a. Atlanta Digital Connections Symposium – March 2023
    b. Statewide Accessibility Conference – March 2023
    c. Family Connections of Partnerships Georgia – April 2023
    d. Georgia Association of Regional Commissions Monthly Meeting – April 2023

e. National Summit on State Planning for Digital Equity and Economic Inclusion – April 2023

f. National Coalition of Adult Basic Education Conference – April 2023

g. AARP statewide Tele-Town Hall – May 2023

h. Fiber Network Alliance Conference – May 2023

i. Southern Georgia Regional Commission Council Meeting – May 2023

j. Atlanta Black Chamber of Commerce – May 2023

k. Georgia's Rural Telephone and Broadband Association Conference – June 2023

l. Georgia Municipal Association Small Cities Conference – August 2023 (planned)

m. Georgia Cable Association Annual Meeting – Fall 2023 (planned)

7. The Internet access and usage phone survey was conducted with Georgia residents during April – May 2023

    a. The phone survey yielded 1,555 responses from residents of Georgia. Survey responses, in analysis, were weighted by the respondent's region, household income, age, and ethnicity to correct for potential bias since lower-income households, racial or ethnic minority, and younger individuals were less likely to respond.

8. Stakeholder surveys and asset inventories, which were promoted to stakeholder organizations through the GTA website at https://gta.georgia.gov/broadband/let-us-hear-you

    a. Workforce development – what organizations are doing to provide or facilitate training for jobs in broadband-related fields.

    b. Digital connectivity programs – organizations' digital connectivity programs, plans, and coalitions to provide community members the skills and tools for participating in broadband-related opportunities.

    c. Community anchor institutions – what community institutions/organizations are doing to advance Georgians' opportunities to use broadband to work, learn, receive health care, and participate in civic events.

d. Agency asset inventory – infrastructure-related assets that a government entity owns or manages (conduit, fiber, structures, real estate, poles, etc.) and broadband-related workforce development efforts in place.

e. Covered population barriers – identifies unique obstacles to broadband access faced by vulnerable populations an organization serves.

f. Internet service providers – identifies recruiting and hiring for broadband-related positions, broadband development strategies, and collaboration with communities to close the digital divide.

g. Distribution and promotion

    i. Surveys/inventory tools were posted on GTA's website and made available to all stakeholders by March 24, 2023. ISP and Workforce Development surveys were made available in late February 2023.

    ii. Stakeholders were notified in public listening sessions, virtual stakeholder sessions, one-on-one meetings, and through printed flyers that were distributed at in-person meetings and electronically through e-mail. Not all surveys apply to each organization, but an organization may be able to complete more than one survey, depending on the organization's role, mission, and the services it provides.

    iii. Data collection will continue at least through completion of the State Initial Proposal.

9. Other communications outreach GTA has conducted – traditional and/or social media campaigns:

    a. ACP outreach and training. On May 18th we distributed a press release and garnered support from over 100 partners. The campaign utilized digital and print outreach channels to directly raise awareness about the ACP among households, and provide outreach resources to local governments, community-based organizations, and trusted institutions. The goal was to reach unconnected Georgians and ensure they have access to the benefits of the ACP.

    b. We conducted a two-week enrollment specialist drive to equip community leaders and their staff with the necessary knowledge to assist others in enrolling for the ACP and subscribing to high-speed home internet plans. Participants completed free virtual training sessions and became certified ACP enrollment specialists. We also participated in the Online for All campaign where we continued our outreach

efforts to promote the ACP alongside hundreds of other organizations across the country during June 14-June 22.

c. FCC challenges – individuals and communities.

5.1.1 Full geographic coverage

From February through June 2023, GTA conducted 23 public listening sessions in 21 counties throughout the State with at least one in each of the State's 12 regional planning districts. Each session attracted an average of 20 people (Appendix B).

Understanding the importance of ongoing stakeholder engagement throughout the life of the program, we have adopted an inclusive approach. In addition to scheduling additional public meetings as necessary, we are implementing a 30-day public comment period. This will offer stakeholders an open platform to voice their opinions, concerns, and suggestions about the program. Insights gathered from the public comment period will be reviewed and used as crucial input to identify areas of improvement, align our strategies more closely with stakeholder needs, and continuously refine and strengthen our program.

Additionally, we have made it easier for community members to involve us directly in their discussions. We have added a form on our website through which they can invite us to their in-person or virtual meetings. These meetings are an opportunity for us to directly address topics related to our programs, broadband, digital equity, and hear their concerns first-hand.

Through these measures, we aim to keep stakeholders updated on the BEAD program's progress and foster an environment of transparency and collaborative dialogue, ensuring our plans are tailored to the evolving needs and expectations of the community.

GTA coordinated its outreach to communities around the State with local cities and counties, the Georgia Municipal Association, the Association of County Commissions of Georgia, the Georgia Public Library System, and the State's 12 Regional Commissions.

The goals of the public listening sessions, which were typically two hours in length, were two-fold. First, information was shared with community leaders, community-based organizations, and the public about 1) foundational broadband technology concepts and terminology, 2) federal BEAD and Digital Equity (DE) and State-funded broadband programs, and 3) opportunities for individuals to act (for example, signing up for the Affordable Connectivity Program (ACP) and submitting FCC map challenges if relevant to them) and how communities can support State broadband and digital connectivity planning efforts. The second purpose of these sessions was to hear from community leaders and members about their challenges and experiences both as individuals and as representatives of organizations serving constituents and covered populations in the community.

Specific information shared by GTA in each of these sessions included a broadband technology overview; a description of BEAD and Digital Equity program requirements, funding, and timelines; a description of current State broadband and digital connectivity efforts; and details on ACP and FCC map challenge processes.

Example questions posed to attendees during these sessions included:

1. What strengths and opportunities do you see in your community regarding the following principal areas of digital connectivity: access and using the internet, accessing a computer, digital skills training and technical support, engaging with online content (particularly with government services), and community organizations that support digital connectivity?
2. What concerns are being raised about broadband and connectivity efforts across your constituency?
3. What is the current state of internet service provider relationships? What concerns or issues are being discussed?
4. What opportunities do you see for the State's broadband and digital connectivity programs to support advancing workforce initiatives?
5. What resources and guidance are needed for the future?
6. What is the primary driver of the digital divide within your community?
7. What resources are needed to support connectivity programs among underrepresented populations, including ethnic communities and lower-income areas (e.g., staffing, meeting space, curriculum, devices, funding, etc.)?
8. With current workforce shortages, do you currently have sufficient staff with the capacity and technical skills to implement connectivity programs?

GTA also conducted surveys at the sessions, which respondents could take either on paper or via a phone app. GTA received 75 survey responses out of a total of approximately 300 people who attended the public sessions. (See Appendix E for findings.)

5.1.2 Meaningful engagement and outreach to diverse stakeholder groups

GTA reached out to a wide range of diverse stakeholder groups that included all covered populations in the Digital Equity NOFO and all underrepresented populations and stakeholder groups identified in the BEAD NOFO. GTA utilized in-person public listening sessions, virtual expert stakeholder sessions, one-on-one engagements, email campaigns, social media notifications, flyers, and statewide and regional conference platforms.

At each stage of planning and engagement, several strategies were implemented to ensure that the State's broadband goals are inclusive and feedback-driven:

1. GTA initiated its digital equity strategy for stakeholder engagement by hiring a Digital Connectivity Manager to lead the planning process.

2. GTA engaged with the State's digital equity stakeholder organizations to establish a 29-member, statewide Digital Connectivity Advisory Committee. The Committee includes organizations that represent covered populations, State agencies, universities, faith-based organizations, civil rights organizations, housing authorities, internet service providers, and civic organizations.

3. GTA considered participants' level of familiarity with broadband to best enable the public and stakeholders to make informed insights about their and their constituents' broadband and digital equity needs. GTA provided custom overviews of the history, use, and technology of broadband ("Broadband 101"). Additionally, GTA reviewed the major broadband initiatives and funding opportunities for both infrastructure and digital equity made available through BEAD.

4. GTA developed and distributed printed and online surveys to better understand:

    a. The barriers and obstacles to broadband access faced by individuals and the vulnerable populations these organizations serve.

    b. Individuals' and organizations' ability to access broadband and how that enables them to achieve their mission and goals.

5. GTA developed an inventory tool and distributed it to stakeholders to collect statewide data about stakeholders' existing digital equity program assets, plans, and coalitions and to measure current organizational capacity.

When engaging the public, GTA took specific steps to collect meaningful data on covered populations. Public engagements were held in person at local community anchor institutions to encourage community participation by hosting events in locations that are both familiar and accessible. GTA also made itself available to attend additional organization and community meetings in all parts of the State on a requested basis.

GTA also developed a resident survey to assess the needs and barriers of the public. The sampling strategy enabled the State to make meaningful estimates for each covered population.

5.1.3 Multiple awareness and participation mechanisms

GTA conducted public in-person, virtual, one-on-one, and small group meetings with stakeholders. GTA also attended statewide and regional conferences.

GTA maintains a robust email contact list of every person who was invited to or attended any of its engagements.

GTA conducts outreach via email, GTA website, printed and electronic flyers, press releases and social media channels through its own mechanisms and in coordination with partner agencies, including the Georgia Public Library System.

5.1.4 Clear procedures to ensure transparency

GTA took significant steps to ensure compliance with all applicable laws and best practices to maintain standardized and transparent procedures.

All public in-person meetings were listed on publicly available State and regional government sites, including Eventbrite, GTA's website, Georgia.gov, and regional county websites. GTA's website contains up-to-date, thorough, and accessible information about broadband, GTA's mission, and ways that the public and stakeholders can get involved in digital connectivity efforts. GTA's website also hosted all stakeholder surveys so that those unable to attend the stakeholder meetings could provide insight and feedback.

In developing its email contact lists for public in-person meetings, GTA consulted the Georgia Municipal Association, the Association County Commissions of Georgia, the Technical College System of Georgia, the Georgia Department of Community Affairs, the Georgia Department of Education, the University of Georgia Cooperative Extension Office, Family Connections Partnerships and other statewide organizations with stakeholder networks.

Contact information was collected from online event registration. Although participants were not obligated to provide their actual name or email, the intent to include the participants in future stakeholder outreach efforts was clearly communicated during meetings. To facilitate feedback and ensure transparency, registered participants received a copy of the virtual stakeholder presentation slide deck after the meeting. The Digital Connectivity public listening sessions meeting slide deck was also made available on the GTA website for the public to access.

5.1.5 Outreach and engagement of unserved and underserved communities

GTA proactively contacted and engaged representatives of and organizations that serve unserved and underserved communities utilizing the following strategies:

1. GTA initiated the digital connectivity (equity) planning process by identifying and engaging with the State's regional stakeholder organizations. These engagements

informed the development of the statewide Digital Connectivity Advisory Committee, a 29-member organization that includes organizations that represent covered populations as well as State agencies, universities, faith-based organizations, civil rights organizations, housing authorities, service providers, and civic associations.

2. Covered populations received particular focus in the resident survey, which informs a needs assessment and barriers analysis. The sampling strategy was designed to provide meaningful estimates and insights for each covered population to inform how GTA can best serve these populations.

3. As part of the 23 in-person Digital Connectivity public listening sessions, GTA engaged communities difficult to reach by hosting a session at the Georgia Public Library System Accessibility Conference.

4. GTA developed and distributed two online inventory tools: the first allowed stakeholder organizations to provide data about their organizational capacity, digital equity program assets, plans, and coalitions; the second aimed to better understand the barriers and obstacles to broadband access faced by vulnerable and covered populations and the organizations that serve them. The tools were hosted publicly online to make them widely available and easily accessible, with the goal of enabling populations that may be historically underrepresented to express their goals, barriers, and plans easily and efficiently.

5. GTA additionally engaged underserved and unserved communities by providing information and materials from stakeholder engagements by making materials and information easily available to all participants. Registered participants received a copy of the virtual stakeholder presentation slide deck, and the Digital Connectivity Public Listening meeting slide decks were available publicly.

5.2 Priorities

The Georgia Technology Authority will work to ensure that every Georgian has reliable and affordable access to the internet along with the necessary tools and skills that unlock opportunities for educational advancement, economic success, improved health, and strengthened social ties.

The State's high-level priorities for broadband deployment reflect the State's goals and objectives (see Section 2) and are aligned with the principal focus of the BEAD Program:[203]

[203] "NOFO: BEAD Program," NTIA, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, at p. 7.

1. Serve 100 percent of unserved locations (i.e., below 25/3 Mbps) with minimum 100/20 service within five years
2. Serve 100 percent of underserved locations (i.e., between 25/3 and 100/20) with minimum 100/20 service within five years
3. Deliver gigabit connections to community anchor institutions that do not have that level of service within five years

Should BEAD funds remain after the first three objectives are fulfilled, the State will then focus on the next set of priorities:

4. Address challenges related to line extension costs to unserved and underserved residences determined to be extremely high-cost locations
5. Identify and connect unserved units in multiple-dwelling-unit buildings to a minimum broadband speed of 100/20 Mbps, while assessing and upgrading the internal wiring to facilitate high-speed internet access for all units simultaneously
6. Support programs that alleviate barriers to digital connectivity, enabling economic empowerment, promoting academic success, and enhancing community health

The following table identifies the types of detail-level priorities GTA will consider as it develops and implements this Five-Year Action Plan.

Table 12: Priorities for broadband deployment and digital connectivity (equity)

Priority	Description
Use of public-private partnerships or cooperatives in addressing the needs of Georgia's residents	Government-owned broadband projects are legal and eligible in the State of Georgia. Electric cooperatives can also get involved in the broadband ecosystem. In fact, many EMCs have already made the choice to pursue providing broadband services to their members, with a good handful of these EMCs already receiving grant funding from State-administered programs. That said, about a dozen or more Georgia EMCs have not yet chosen to pursue broadband services. The State of Georgia supports true public-private partnerships where the local government owns the infrastructure, and a private company provides internet service across it. Lastly, the State acknowledges the importance this has on successful funded projects and has incentivized considerable cooperation between local governments and ISPs in its past three grant rounds by committing significant scoring points to the issue. The State would look to mirror this for the Georgia BEAD program.
Ensure comprehensive high-speed internet accessibility	Our aim is to provide robust high-speed internet connections for all Georgians, with a particular focus on the populations most

Priority	Description
	affected by limited-service options. We plan to collaborate with internet service providers (ISP), community anchor institutions (CAI), local government entities, and other reputable organizations to efficiently build out broadband infrastructure to the remaining unserved/underserved locations, to track the quality of high-speed internet services and the associated costs to subscribe to services, and to help incentivize the availability of affordable connectivity options.
Empower workforce advancement and economic growth in unserved and underserved communities and population groups through broadband expansion projects	This will entail deploying funding to improve service in economically distressed areas, incentivizing the participation of small Georgia-based providers in funding programs, and expanding affordable broadband workforce training initiatives across Georgia through a State-led program.
Bolster cybersecurity across State networks, foster a cyber-ready workforce, and establish lasting partnerships for collaborative action.	This will be achieved through the consistent compliance of each State agency and all BEAD subrecipients with the information security policies and standards issued by GTA. With the assistance of GTA's Office of Information Security and NTIA and in collaboration with the Georgia Cyber Center, we will cultivate an environment of modern cybersecurity education, training, research, and practical application for both private and public sectors. This goal encapsulates our overarching pursuit of a secure, informed, and collaborative digital environment.
Reduce obstacles to digital connectivity (equity) and foster an environment conducive to economic growth, academic achievement, and improved healthcare outcomes.	This encompasses the identification and mitigation of technological and economic obstacles to internet access, the promotion of digital literacy programs among all age groups to optimize internet usage benefits, and support for CAIs' digital connectivity programming. To effectively serve impacted communities, we commit to assisting these institutions toward acquiring 1 Gbps or higher internet connectivity and equipping them to deliver technology-based training and services, thereby maximizing their transformative impact.

5.3 Planned activities

At a high level, the State has the following planned activities for its Five-Year Action Plan:

1. Develop broadband investment and deployment strategies for unserved and underserved areas through continually engaging the broadband ecosystem, local governments, and covered populations

2. Leverage all federal sources of broadband funding and subrecipient capital to ensure that the networks that are built have a sustainable business plan and provide reliable, futureproof, and affordable broadband access to end users across the State

3. Develop and strengthen partnerships with business stakeholders, particularly in the areas of telehealth, agriculture, education, and small business

4. Develop and strengthen partnerships with local government stakeholders to help local entities achieve their goals, particularly in public safety and digital government services[204]

5. Via the implementation of Georgia's State Digital Equity Plan,[205] in development,[206] provide opportunities for all Georgia residents to achieve digital literacy, including awareness of, and the use of, measures to secure online privacy and cybersecurity—as well as access to affordable consumer devices and technical support for those devices—and develop and strengthen partnerships with and between entities that support digital connectivity

6. Develop and strengthen partnerships with and between entities that can work together to create targeted workforce development programs to support future broadband expansion efforts, maintenance, and technical support

More specifically, GTA's plan for ensuring reliable, affordable broadband service to all residents may include the following activities, among others that are developed as the State collects more data and stakeholder input:

Table 13: Planned activities

Planned activity	Description
Provision of grant funding to potential ISP partners to achieve full service at unserved/underserved locations	Use BEAD funding to award competitive grants to potential subrecipients to construct futureproof networks to unserved and underserved address locations as identified by the FCC data fabric and certified by the State's challenge process. This activity will be complemented by the State's previously awarded broadband deployment grants.
Award competitive grants to achieve 1 Gigabit connection speeds for community anchor institutions (CAI)	Use remaining BEAD funding, after unserved and underserved address locations are awarded for buildout, for competitive grants to potential subrecipients to supply fiber 1 gigabit connection speeds to identified CAIs that do not currently have such service today and are certified by the State's challenge process.

[204] GTA will also support local governments. For example, GTA has published a Model Ordinance to assist local entities in making broadband deployment more efficient in their area: https://broadband.georgia.gov/media/4/download.

[205] The IIJA uses the term "digital equity" while Georgia uses the term "digital connectivity."

[206] As an Eligible Entity that is also utilizing funding from the SDEPG Program, Georgia will ensure that the BEAD and DE programs and plans are coordinated and that its visions for BEAD and SDEPG Programs are closely linked and aligned.

5.4 Key strategies

Ensuring affordable, reliable, high-speed broadband service throughout the State of Georgia requires a comprehensive set of key strategies, all of which will work together and complement each other in both their formulation and execution. As such, GTA will continue to focus on three key strategies over the next five years to reach full service and achieve the State's goals and objectives (see Section 2).

The first set of strategies focuses on the use of public-private partnerships to drive down construction cost outlay and to deploy broadband infrastructure. In concert with the physical buildout must also be the successful utilization of partnerships to increase broadband adoption among residents, with a special emphasis on identified Covered Populations. The third key strategy focuses on strong workforce development programs that will power the broadband ecosystem with skilled labor. Each of these three strategies is discussed in greater detail below.

5.4.1 Developing public-private partnerships to drive construction and deployment

GTA will develop a public-private partnership model for the BEAD program for the construction and deployment of high-speed, affordable broadband service. This will be accomplished through the creation and administration of a subrecipient grant program that GTA will develop in the forthcoming Initial Proposal.

5.4.2 Successfully utilizing partnerships to increase broadband adoption

The State is a leader when it comes to creating strong partnerships with community stakeholders to address broadband affordability issues. This includes working with stakeholders to conduct outreach, education, and enrollment initiatives into the Affordable Connectivity Program (ACP).

5.4.3 Reducing affordability as a barrier to broadband adoption

The State's goal is to reduce affordability as a barrier to participation in the digital economy or digital experience. The strategies to achieve this goal include:

1. Maximizing, to the greatest degree possible, eligible residents' participation in the ACP by working with local governments and other entities to support outreach and enrollment programs

2. Making affordability an important scoring criterion of all State-administered broadband grant programs

3. Working collaboratively with ISPs to encourage them to create plans in the event the ACP is not extended, such that there will be robust and adequate low-income products offered at reasonable price by ISPs to low-income residents

4. Giving additional points in grant program scoring to entities that make commitment to offer adequate and reasonable low-income products statewide, not only on newly funded infrastructure

This affordability agenda will be expanded further and analyzed with appropriate data in the State's Digital Equity Plan.

5.4.4 Creating and supporting strong workforce development programs to power the broadband ecosystem

GTA recognizes that a strong and talented workforce will minimize potential disruptions in the recruitment of needed labor by subrecipients (and their contractors and subcontractors).

GTA is identifying best practices and strategizing for effective workforce development that will meet the unique needs of the State. GTA will explore existing workforce development programs that can be executed by partners, with curriculum that allows for trainees to rapidly enter the market and establish a lasting career in telecommunications. Workforce development efforts will be further documented in the State's forthcoming Initial Proposal.

The State of Georgia is committed to developing a robust workforce to drive the broadband ecosystem, reaching from urban areas to rural committees. To achieve this, the State plans to leverage the strengths of its diverse educational institutions, which include 10 historically black colleges and universities (HBCU), more than 10 minority-serving institutions (MSI), 22 institutions in the Technical College System of Georgia, and 26 institutions in the University System of Georgia. These institutions offer a plethora of degrees and programs across relevant fields including computer science, engineering, cybersecurity, and business, as well as specialized training in installation and fiber optics equipping students with the skills and knowledge necessary to enter a variety of roles in the broadband industry.

In addition to formal education, the State plans to collaborate with non-profit education programs and career centers like Goodwill of North Georgia, offering continuous learning, reskilling, and upskilling opportunities. This will ensure Georgia's workforce remains adept with the evolving needs of the industry.

Georgia is home to a multitude of telecommunications and technology companies from major corporations to local ISPs and innovative start-ups. The State aims to foster partnerships with these companies to provide work-based learning opportunities, creating a seamless pathway from education to gainful employment.

The State understands the unique challenges and opportunities presented by workforce development in rural communities, which will be significant areas for broadband infrastructure development. Institutions such as Albany State University, University of Georgia Cooperative

Extensions, and technical colleges such as the Wiregrass Technical College are ready to serve these rural areas. Partnerships with local ISPs providing services in rural Georgia can offer hands-on training and job opportunities to residents.

Key positions within the broadband ecosystem, such as network engineers, cybersecurity specialists, broadband technicians, data analysts, and telecommunications equipment installers are instrumental in designing, installing, maintaining, managing, and safeguarding broadband networks. Additionally, customer service representatives, sales and marketing professionals, planners and project managers help ensure efficient delivery and project implementation. By prioritizing specialized training and skill development, the State will ensure the proficiency of its workforce to be prepared for these roles and able to support the growth and stability of the sector.

5.4.5 Enabling ACP outreach to address affordability

In May 2023, GTA launched a statewide initiative with the nonprofit EducationSuperHighway and more than 100 coalition partners—including local governments, community organizations, businesses, and service providers—to raise awareness about the ACP and promote enrollment.

GTA will continue to outreach channels to raise awareness about the ACP, as well as collaborate with local governments and trusted community organizations and institutions to overcome awareness, trust, and other barriers that can prevent eligible households from enrolling in the program.

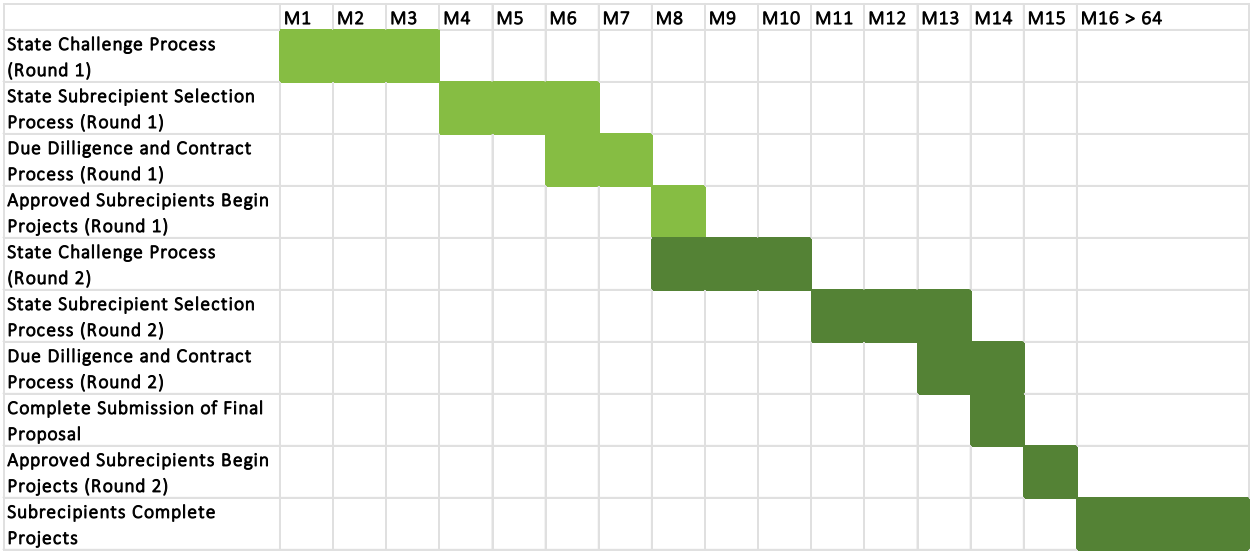
To support these organizations, GTA is promoting the training of community members as ACP enrollment specialists through a free virtual certification course, LearnACP. The course equips participants to assist with enrolling in the subsidy and selecting an internet plan. Through a two-week enrollment certification drive, 40 community members received their certification. GTA continues to support ACP outreach and enrollment by providing outreach tools to help with the enrollment process, including a virtual mobile assistant [207] that provides support in four languages.

5.5 Estimated timeline for universal service

GTA developed a comprehensive timeline to estimate the administration of a two-round subrecipient selection process for the State's BEAD allocation deployment. By following this timeline and process, the State will seek to ensure reliable, high-speed internet services will be available to all currently unserved and underserved locations across Georgia within five years (see Figure 14).

[207] Available at https://getacp.org/Georgia.

Figure 14: Preliminary timeline for universal service



5.6 Estimated cost for universal service

This section presents the State's estimated costs for providing access to reliable broadband service to unserved and underserved locations in Georgia. These estimates are based on an analytical model that incorporates local labor and material unit costs; the location of existing infrastructure that can be used as a starting point; and surveys of a statistically valid sample of unserved and underserved areas.

GTA estimates the total five-year deployment cost to be approximately $1.8 billion (Table 14) to reach the estimated 119,278 unserved locations. This estimate assumes a timeframe of 60 months for the buildout of primary FTTP infrastructure passing each unserved home, with deployment activities related to customer activations, including subscriber activation costs continuing through the five-year period of performance.

Table 14: Estimated deployment costs to reach all unserved addresses (5-year performance period)

Cost component	Estimated cost
Physical fiber plant construction – FTTP distribution network	$1,525,600,000
Core and distribution network electronics	$50,000,000
Subscriber activation costs	$229,500,000
Total	**$1,805,100,000**

A more comprehensive plan to address the State's broadband access needs by reaching the estimated 119,278 unserved locations and 74,934 underserved locations would cost

approximately $2.43 billion (Table 15). In this scenario, the buildout of primary FTTP infrastructure and customer activations extends through the five-year performance period.

Table 15: Estimated deployment costs to reach al unserved and underserved addresses (5-year performance period)

Cost component	Estimated cost
Physical fiber plant construction – FTTP distribution network	$1,992,500,000
Core and distribution network electronics	$82,100,000
Subscriber activation costs	$358,700,000
Total	**2,433,300,000**

While GTA acknowledges the general accuracy of the FCC National Broadband Map data for unserved and underserved address counts, it also anticipates that given the accuracy of the State's data collection, the numbers of unserved and underserved addresses in Georgia may turn out to be higher than stated on the FCC's Map. Additionally, the State will have more specific data related to current grant-funded locations once awardees report FCC Fabric ID Numbers for funded locations.

5.7 Alignment

The vision, goals, and proposed supporting actions within Georgia's Five-Year Action Plan are fully aligned with the State's priorities of expanding broadband deployment and adoption. GTA has a goal of connecting all homes and businesses in the State to reliable, high-speed broadband. This vision is consistent with the Five-Year Action Plan's goal of providing complete service throughout the State.

The proposed Five-Year Action Plan takes other federal funding programs into account so as not to duplicate these efforts when identifying the unserved and underserved addresses to be served with BEAD-funded efforts. This approach is informed by guidance from the U.S. Government Accountability Office (GAO) in a May 2023 testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, which found that federal support for broadband is "fragmented and overlapping," encompassing more than 133 funding programs from 15 agencies. GAO notes that, "[h]aving numerous broadband programs can be helpful to address a multifaceted issue like broadband access, but this fragmentation and overlap can lead to the risk of duplicative support."[208]

[208] GAO-23-106818, Statement of Andrew Von Ah, Director, Physical Infrastructure, May 10, 2023, see, "Broadband: A National Strategy Needed to Coordinate Fragmented, Overlapping Federal Programs," https://www.gao.gov/assets/gao-23-106818.pdf.

The BEAD requirements also align with GTA's expertise and its ability to coordinate with the efforts of other State agencies to successfully enact this program.

The State will continue to use best practices developed through other broadband deployment and digital equity programs, including by maintaining active and open channels of communication with likely ISP partners; and establishing significant partnerships with community anchor institutions, local governments, and other organizations that may be both beneficiaries and stakeholders of BEAD-funded projects.

5.8 Technical assistance

Although Georgia does not anticipate requiring technical assistance, we are in regular contact with our Federal Program Officer and the NTIA Technical Assistance leadership to ensure there is an existing channel of communication in case needs arise.

6 Conclusion

This Five-Year Action Plan establishes Georgia's broadband goals and priorities—and presents a comprehensive needs assessment that will inform the State's Initial Proposal.

The Georgia Technology Authority will work to ensure that every Georgian has reliable and affordable access to the internet along with the necessary tools and skills that unlock opportunities for educational advancement, economic success, improved health, and strengthened social ties. This will create more connected, resilient, and prosperous communities.

The State's priorities for broadband deployment reflect the State's goals and objectives (see Section 2) and are aligned with the principal focus of the BEAD Program:[209]

1. Serve 100 percent of unserved locations (i.e., below 25/3 Mbps) with minimum 100/20 service within five years
2. Serve 100 percent of underserved locations (i.e., between 25/3 and 100/20) with minimum 100/20 service within five years
3. Deliver gigabit connections to community anchor institutions that do not have that level of service within five years

Should BEAD funds remain after the first three objectives are fulfilled, the State will then focus on the next set of priorities:

4. Address challenges related to line extension costs to unserved and underserved residences determined to be extremely high-cost locations
5. Identify and connect unserved units in multiple-dwelling-unit buildings to a minimum broadband speed of 100/20 Mbps, while assessing and upgrading the internal wiring to facilitate high-speed internet access for all units simultaneously
6. Support programs that alleviate barriers to digital connectivity, enabling economic empowerment, promoting academic success, and enhancing community health

The State of Georgia has been at the forefront of broadband efforts nationwide, with a detailed broadband availability map, established State broadband personnel, and robust grant funding to provide high-speed internet access to homes and businesses across the State. However, broadband access remains unavailable to many. BEAD funding will allow the State to achieve its

[209] "NOFO: BEAD Program," NTIA, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, at p.7.

goal of delivering robust high-speed internet connections to all Georgians, with a particular focus on the populations most affected by limited service options.

On behalf of the State of Georgia, GTA submits this Five-Year Action Plan—continuing the State's commitment of operating under a strong and unified guiding vision and through the lens of full transparency. GTA looks forward to next submitting the State's Initial Proposal.

Appendix A: Asset inventory data – digital connectivity assets

The following table details entities that have digital equity assets including digital literacy and workforce development programs.

Table 16: Digital connectivity assets

Asset name	Description
4-H Tech Changemakers	The 4-H Tech Changemakers project uses an adult-youth partnership model to empower teens as teachers of digital literacy in areas lacking broadband internet access. Georgia 4-H Tech Changemakers held 91 hands-on classes, workshops, and trainings led by 88 trained 4-H'ers from 15 counties during the 2021-22 grant cycle. The most popular topics included responsible online behavior, email communication, online safety tips and video conference communication. Partners include Microsoft and UGA Extension.[210]
Accelerate: Atlanta	Accelerate: Atlanta brings together civic, learning, and corporate partners to provide skills across the spectrum of digital proficiency to build a more inclusive workforce for all. The program empowers underserved communities to close the digital divide in the growing workforce. It provides digital skills to promote economic uplift for Atlanta's populations with the highest susceptibility to automation and the lasting impact of Covid-19. Digital fluency will ensure that they can keep up with advances in AI and machine learning.
Albany State University – Connecting Minority Communities programs	Albany State University received a $2.9 million Connecting Minority Communities grant in 2022 from NTIA to address the growing demand for broadband connectivity in the Albany community while establishing a foundation for future distance learning at the University.[211]
Athens Community Council on Aging	Digital skills, education, workforce, and OATS training programs for older adults in addition to basic social services.
Atlanta Housing Authority – Achieving Connectivity to Create Equity and Self Sufficiency (ACCESS)	This Housing Authority of the City of Atlanta program connects those in need to training from private partners.[212]
Atlanta Housing Authority – Digital Leadership Academy	This free education and certification program teaches high-demand technology skills, greatly increasing the employability of each graduate in the information technology sector. This 16-week pilot program launched in February 2021 and provides students with the devices and connectivity needed to create a fully immersive educational experience. Partners include TechBridge, Diversity Cyber Council, Braintrust, WrightNow Solutions, and Generation USA.

[210] "Digital Ambassadors," Georgia 4-H, https://georgia4h.org/programs/focus-areas/agriculture-stem/science-technology-engineering-math/digital-ambassadors/.
[211] NTIA, "Biden Administration Announces More Than $2.9 Million in Internet for All Grant to Albany State University," Internet For All, November 22, 2022, https://ntia.gov/press-release/2022/biden-administration-announces-more-29-million-internet-all-grant-albany-state.
[212] "Digital Inclusion," Atlanta Housing, https://www.atlantahousing.org/digitalinclusion/.

Asset name	Description
Atlanta Technical College "Connecting Minority Communities Pilot Program"	The College received a $3 million award from NTIA in 2023 through the Connecting Minority Communities Pilot Program to improve its broadband infrastructure, increase the number of devices available to students through its lending program, and offer digital skills training for senior citizens in the community through its Continuing Education Division.
Carroll County Schools – Device programs	Provides desktop computers, laptops, or tablets and technical support, as well as supporting online accessibility and inclusivity for students who lack devices. The budget is under $25,000 and over 100 people were served in 2022, with a target of 101-250 people over the life of the project.
Clark Atlanta University	The University offers a STEM enrichment program in partnership with Verizon Wireless' Verizon Innovative Learning initiative.[213]
Clayton County – Office of Digital Equity County Digital Equity and Broadband Strategic Plan	Clayton County (population: 297,100; 18.9 percent of population in poverty)[214] has an Office of Digital Equity[215] and has created a Broadband and Digital Equity Plan. The Office helps county residents access the ACP and offers digital literacy training.
Clayton County Public Library – various programs	Provides access to Wi-Fi and devices, with PCs available at branches and devices available for checkout. The Library's Bookmobile is outfitted with Wi-Fi. Offers one-on-one technical help for residents to learn how to use devices and software The Library provides hotspot devices for use with patron's personal devices.
Clayton County Public Schools	Through a remote “extending learning beyond the classroom” program, schools support college and career preparation.
Clayton County Senior Services – Adult literacy	Provides computer tablets for seniors' home use.
Clayton County – various programs	Clayton County offers several programs through its community institutions, as detailed in its Digital Equity and Broadband Strategic Plan. The Clayton County Public Library offers technical assistance for devices and software, access to Wi-Fi and devices, a Bookmobile with Wi-Fi, and hotspot borrowing. Clayton County Public Schools extend learning beyond the classroom through college and career preparation. Clayton County Senior Services supports adult literacy by offering computer tablets for seniors' home use.
Cobb County Libraries – Digital Literacy Workshops	Offer Digital Literacy Workshops sponsored by AT&T on a variety of topics including cybersecurity, internet basics, and classes in software and on using devices.
Columbus Technical College – Adult Education Northstar Digital Literacy	The College provides digital literacy training, desktop computers, laptops, and tablets and technical support for adult education students obtaining a high school diploma/equivalency. The nearly $25,000 budget is funded by the office of Adult Education. The program serves Muscogee, Talbot, Stewart, Quitman, Harris, and Chattahoochee counties. With over 100

[213] “STEM enrichment program at Clark Atlanta lights the way,” Verizon press release, October 5, 2021, https://www.verizon.com/about/news/stem-enrichment-program-clark-atlanta.
[214] U.S. Census, “QuickFacts: Clayton County, Georgia,” https://www.census.gov/quickfacts/claytoncountygeorgia.
[215] “Clayton County’s Digital Equity Initiative,” Clayton County, https://digitalequity.claytoncountyga.gov/.

Asset name	Description
	people served in 2022, the target is to serve over 500 people over the life of the project.
Columbus Technical College – Student Laptop Loan Program	This program provides desktop computers, laptops, and tablets and technical support for individuals with disabilities and students at Columbus Technical College. It serves Muscogee, Talbot, Stewart, Quitman, Harris, and Chattahoochee counties. Over 100 people were served in 2022, with a target to serve over 500 people over the life of the project.
Comcast Lift Zones – various locations throughout the State	21 Comcast Lift Zones located throughout the State combine 1 Gbps connectivity to community centers with digital equity programming, available to users at the following sites:[216] • Las Plaza Americas • Girls Inc • Raising Expectations Inc, Washington Learning Pod • Boys & Girls Club Saint Simons Island • Boys & Girls Club SE Georgia – Glynn Villa • Boys & Girls Club SE Georgia – Terry Thomas Club • Finish Strong Learning Pod Lift Zone at Siloam Church International • Inspiredu • Flint River Community Center Boys & Girls Club in Riverdale • Urban League of Great Atlanta – At Promise Youth Center • Gathering Place Community Center • Boys & Girls Club, E.W. Hagler Club in Augusta • Boys & Girls Club, Dogwood Terrace Club in Augusta • Boys & Girls Club, McDuffie County Club in Thomson • Paralyzed Veterans of America SE Chapter at Hephzibah • Frank Callen Boys and Girls Club Savannah, GA • Lost-N-Found Youth Center • Mercy Housing • Hosea Helps • Center for Pan Asian Community Services
Communications Workers of America (CWA)	CWA offers courses for its members in telecommunications, cabling, and related fields through CWA's National Education and Training Trust and other educational partners.
Compudopt Atlanta – Digital inclusion and devices	Programs serve to eliminate limited access to computers, facilitate growth in technical and digital literacy skills, help provide no- or low-cost high-speed internet options, and support the future of youth and their communities.
Designstyles & Co, Dream Center	Business incubator in Morrow, GA, designed with space amenities and resources that allow young people and adults in underserved communities. Provides youth programs and OATS digital skills training for adults 50 and over.

[216] "Lift Zones," Comcast, https://corporate.comcast.com/impact/digital-equity/lift-zones.

Asset name	Description
Divine Reach Education and Counsel	Adult literacy and other programs for youth and adults. Provides OATS programs for seniors.
Dodge County – Digital equity	The County is developing a digital equity program for broadband access and technical support.
Evans County Charter School System – Wi-Fi on the Go	Supports internet availability and affordability by providing parents of students and school employees with a hotspot and unlimited data for $50 per month.[217]
Forsyth County Senior Services	Various programs for seniors. Provides OATS programs for digital inclusion.
Fort Gaines, City of – accessible online content	Develops and distributes accessible online content directed at populations with specific needs, such as seniors, low-income residents, those with low-literacy, and those whose first language is not English.
Fort Valley State University (FVSU) "Communi-versity: Piloting an Ecosystem for Digital Equity"	With a $3 million Connecting Minority Communities grant received in 2023 from NTIA, FVSU will work with community organizations to expand broadband connectivity and provide digital skills training for students and residents in Peach County, including establishing local "broadband hubs" staffed with TechNavigators.
Emory University School of Medicine – telehealth	The Emory University School of Medicine offers support through access to telehealth. This planned effort will include programs addressing digital navigators, broadband access, and creating accessible and inclusive internet content. Key components include: 1) access to health information, 2) telehealth and remote healthcare, 3) online health support communities, and 4) health tracking and remote patient monitoring. The program will also include remote education and training for healthcare professionals, and health promotion and preventive measures.
Empower Southwest Georgia – American Connection Corp. Fellow to support ACP	The Fellow will support applicants to the Affordable Connectivity Program (ACP), conduct a leadership forum, organize workshops for builders and construction leadership for broadband, serve as a public advocate, educate consumers on broadband access, host learning sessions, and assist local elected officials with planning and processing permits and educating voters. The Fellow will also work to establish a similar group with the county administrators in the region.
Empower Southwest Georgia – broadband community outreach	The organization applied to American Connection Corp. (ACC) for a $150,000 grant to develop paid staff consisting of three people—an intern, a manager, and a field director—to conduct community organizing and community outreach including for broadband. It also submitted a Host Organization application to ACC for an ACC Fellow.
Empower Southwest Georgia – various programs	This nonprofit organization provides many services to its area's constituents, including supporting applicants for the ACP, hosting Leadership Forums for ISPs and community members, broadband workforce development, and educating consumers about internet subsidies and plans for the community.

[217] "Wi-Fi on the Go," Evans County Charter School System, https://www.evans.k12.ga.us/article/506223.

Asset name	Description
Fulton County Schools – Student-focused Learning Plan	The U.S. Department of Education (U.S. DOE) Digital Equity & Opportunity vision[218] includes providing devices to students, teaching digital literacy, and creating an open education ecosystem populated by instructional materials that are not subject to copyright laws, proprietary systems, or other access barriers. Now supported by the U.S. DOE, Fulton County Schools, serving approximately 96,000 students, has since 2014 been continuously developing a "Student-focused Learning"[219] program that includes providing digital devices to every student, subject to a Readiness Assessment.
Gainesville City Schools – Chromebooks for Students	Provide desktop computers, laptops, or tablets and technical support for individuals with a language barrier, including individuals who are English learners and/or have low levels of literacy. The school system also provides families with information about the ACP. With a budget of over $500,000, the program served 100 people in 2022 and has a target to serve over 500 people over the life of the project.
Georgia Center of Innovation – telehealth programs	The Georgia Center of Innovation helps startups in telehealth and related areas to increase innovation.[220]
Georgia Department of Corrections (GDC) – various programs	GDC provides digital skills and literacy training, data privacy and cybersecurity instruction, devices (laptops, computers, tablets), and broadband access to incarcerated individuals in State prisons. It provides training for teachers of broadband skills and digital literacy, as well as developing and distributing accessible content directed at populations with specific needs.
Georgia Department of Corrections – Washington State Prison	At the Washington State Prison, GDC provides cybersecurity training and training, equipment, subsidized services, or other resources to facilitate access to telehealth and telemedicine services. It also trains teachers of broadband skills and digital literacy and provides hotspots and free or subsidized internet access.
Georgia Department of Education – GeorgiaStandards.Org (GSO)[221]	GaDOE maintains a free, public website delivering access to Georgia's educational standards, including standards for digital literacy for school-age children.[222]
Georgia Department of Education – various programs	GaDOE provides support for the ACP, devices, hotspots, digital skills and digital literacy training, and digital accessibility to its clients. GaDOE also provides funding to support programs that provide broadband infrastructure, devices, and/or subsidies to support broadband affordability. In addition, GaDOE has 17 career clusters that provide paths

[218] "Priorities," U.S. Department of Education Office of Educational Technology, https://tech.ed.gov/priorities/.
[219] "Student Focused Learning," Fulton County Schools, https://www.fultonschools.org/studentfocusedlearning.
[220] Center of Innovation, "Digital Health Support & Training in Georgia," https://www.georgia.org/center-of-innovation/areas-of-expertise/information-technology/digital-health.
[221] "Georgia Standards of Excellence," Georgia Department of Education, https://www.georgiastandards.org/.
[222] Georgia Department of Education, "K-5 Digital Literacy," https://www.georgiastandards.org/Georgia-Standards/Pages/ELA-K-5-Webinar-Digital-Literacy.aspx; Georgia Department of Education, "6-12 Digital Literacy," https://www.georgiastandards.org/Georgia-Standards/Pages/ELA-6-12-Webinar-Digital-Literacy.aspx.

Asset name	Description
	for districts to use with their students. In 2021, the Department also established an Office of Rural Education and Innovation, which will work with low-wealth school districts in high poverty/distressed regions of Georgia to tackle barriers that impact academic outcomes and opportunities for students—including lack of broadband access.[223]
Georgia Hispanic Chamber of Commerce – various programs	The Chamber promotes and supports the domestic and international economic development of Hispanic businesses and individuals and serves as a link between non-Hispanic entities and the Hispanic market.[224] It offers numerous relevant programs including "CRECER para mujeres" (growth for women), a program to support small businesses owned by women.[225]
Georgia Library Service for the Blind and Print Disabled – various programs	Georgia Library Service for the Blind and Print Disabled (GLS) [formerly Georgia Libraries for Accessible Statewide Services – GLASS] promotes the use of assistive technology and accessible reading materials for those who are blind or whose physical abilities require the use of books and magazines in audio format or in braille.
Georgia Public Library Service – Digital equity in Georgia	The Georgia Public Library Service offers statewide programs to address internet availability and affordability, as well as providing digital literacy, data privacy and cybersecurity, and online accessibility and inclusivity programs. With a budget of under $25,000, it served over 100 people in 2022 and has a target of serving over 500 people over the life of the project.
Georgia State University – Digital Learners to Leaders (DLL) program	Provides professional development opportunities to Georgia State students seeking both four-year and two-year degrees, including those at Perimeter College.[226]
Gilmer County Board of Education – Chromebook 1-to-1 program	Provides desktop computers, laptops, or tablets and technical support, and has a budget of between $100,000 and $249,999.
Global Partnership for Telehealth (GPT)	Georgia is home to one of the largest nonprofit telehealth networks in the U.S. Founded in 2007 as the Georgia Partnership for Telehealth, GPT initially managed a statewide telehealth network initiated through grant funding in 2004 with the goal of improving underserved communities' access to healthcare services. GPT has since grown to support clinical and nonclinical sites in 10 states as well as international projects through its telehealth platform Pathways, training, and other services. The organization facilitates roughly 40,000 telehealth engagements per year.[227]

[223] "Rural Education and Innovation," GaDOE, https://www.gadoe.org/rural.
[224] GHCC, "About GHCC," https://ghcc.org/en/about-ghcc/.
[225] GHCC, "CRECER para Mujeres," https://ghcc.org/en/crecer-para-mujeres/; translated page at https://ghcc-org.translate.goog/en/crecer-para-mujeres/?_x_tr_sl=auto&_x_tr_tl=en&_x_tr_hl=en.
[226] "Digital Learners to Leaders Internship Course," GSU Technology, https://technology.gsu.edu/technology-services/technology-professional-training/digital-learners-to-leaders-program/#:~:text=Develop%20and%20apply%20digital%20skills,year%20degrees%2C%20including%20Perimeter%20College.
[227] Global Partnership for Telehealth, https://gpth.org/.

Asset name	Description
Goodwill of North Georgia – Goodwill Career Accelerator and South DeKalb Career Center	Goodwill of North Georgia supports internet availability and affordability by providing digital literacy training; desktop computers, laptops, or tablets; and technical support. The program serves all covered populations except seniors. It has a budget of between $250,000 and $499,999 and served over 100 people in 2022, with a target of serving more than 500 people over the life of the project.
Inspiredu – Learning Spark Initiative	Inspiredu is an Atlanta-based empowerment organization whose offerings include digital literacy programs. It drives digital connectivity and literacy for Georgia families, communities, and schools. The Learning Spark Initiative partners with Georgia schools to facilitate interactive workshops that leverage technology to help families responsibly access and utilize digital tools for learning. This program also helps families learn about and apply for internet subsidies like the ACP. The program provides digital literacy support; desktop computers, laptops, or tablets; and technical support for individuals who primarily reside in a rural area, members of a racial or ethnic minority group, and individuals who live in a covered household (i.e., household income is below 150 percent of the poverty level).
Institute for the Development of Freedom of Information (IDFI) – Digital rights and digital literacy	On November 16, 2022, IDFI and the research institute Gnomon Wise held a training on digital rights and digital literacy at the University of Georgia.
Integrity Transformations Community Development Corporation (CDC) – Digital Skills Development	Atlanta-based Integrity CDC's Digital Skills Development class is an entry-level course designed to introduce users to basic computer principles. This basic course requires little to no previous experience. The class provides basic information technology (IT) literacy and ensures one understands the different terminology and the functionality of the basic Microsoft Office Suite. Students learn how to access the software and their documents from a desktop, laptop, or their personal phone.
Latin American Association (LAA) – Latino Digital Equity Centers Program	The Latino Digital Equity Centers Program provides ESL, digital literacy, digital skills, and workforce development programs to Latino communities. LAA also offers courses and workshops for girls and young women through the Tech4Girls program, designed to encourage the pursuit of careers in STEM and provide female entrepreneurs with digital skills to grow their businesses.[228]
Legacy Harvest Foundation	Equips communities across Georgia with the financial resources, economic development, and career coaching they need to break down barriers of opportunity. Provides Digital Skills @ 50+ AARP Foundation, in collaboration with Older Adults Technology Services (OATS), Step Into Your Future (SIYF)-Youth Program (16-24 Year Olds), and workforce apprenticeship programs.
Literacy Action	Based in Atlanta, digital literacy skills and other literacy skills and workforce training. The Success Center located in Peachtree Plaza is a

[228] "Computer Classes," Latin American Association, https://thelaa.org/computer-literacy-classes/.

Asset name	Description
	digitally focused, student-centric adult literacy campus. Provides OATS programs for digital inclusion.
Macon Housing Authority – Computer Classes	This citywide program, which addresses internet availability and affordability, digital literacy, data privacy and cybersecurity, has a budget of under $25,000. It served 25 people in 2022, with a target to serve 500 people over the life of project.
Macon-Bibb Mayor's Literacy Alliance	Program helps increase the graduation rate, decrease the drop-out rate, and lower the adult illiteracy rate by 50 percent over the next 10 years.
Morehouse College – tablets for students program	In a partnership with Microsoft for the 2020-2021 academic year, Morehouse College, a historically black college or university (HBCU), provided newly enrolled students with Microsoft Surface 2-in-1 tablets.
Morehouse School of Medicine (MSM) – "From Survivor to Innovator: Digital Health Equity and Community Impact"	MSM received a $4.2 million Connecting Minority Communities grant in 2023 from NTIA to understand the impact increasing technological access and literacy will have on digital health equity. The overall goal of this project is to lead and advance digital health equity.[229]
Northstar Digital Literacy	Northstar Digital Literacy is a program that defines the basic skills needed to use a computer and the internet in daily life, employment, and higher education. Northstar Digital Skills classes are offered both in-person and online. There are over 75 Northstar locations across the State: • 100 Black of Men of Atlanta Inc. • Albany Technical College • Albany Career Center • Athens Technical College Adult Education Program • Atlanta Public Schools Atlanta WorkSource Georgia, Adult Education Center • Augusta Technical College • Catholic Charities Chamblee Office • Center for Pan Asian Community Services • Central Georgia Technical College Bibb, Baldwin, Houston • Chattanooga Goodwill – Mack Gaston Community Center • Chattahoochee Technical College – North Metro, Canton • Clayton County Adult Education • Coastal Pines Technical College • Cobb County Adult Education Center • DigitalCrafts • Georgia Piedmont Technical College – DeKalb, Newton, Starnes, South DeKalb • GNTC – Gordon County Adult Education, Whitfield Murray Adult Education, Floyd County Adult Education

[229] NTIA, "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," Internet For All, February 23, 2023, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.

Asset name	Description
	• Goodwill of North Georgia – Career centers as Smyrna, Old National, Stockbridge, Decatur, Woodstock, East Athens, Oakwood, Cornelia, Rome, Cartersville, Dawsonville • International Rescue Committee • Lanier Tech – Hall County, Wimberly Center (Barrow County) • Literacy Action • Midtown Career Center, Midtown Training Center • Newnan Career Center • North Georgia Technical College – East, West • Oconee Fall Line Technical College – North, South • Ogeechee Technical College • Opportunity Center at Goodwill SEGA • LaGrange Career Center • Savannah Technical College-Army Education Center, Effingham, White Bluff • South Georgia Technical College • Southeastern Technical College • Southern Regional Technical College – Thomasville • Thomas Crossroads Training Center • Valdosta Career Center, Valdosta Training Center • West Georgia Technical College Coweta, Douglas, Murphy, Troup • Wiregrass Georgia Technical College – Valdosta, Coffee, Ben Hill-Irwin
Northwest Georgia Housing Authority, Rome GA – Digital equity	The Housing Authority is developing a digital equity program and wants to expand to provide programs for digital skills and literacy, devices (laptops, computers, tablets), Digital Navigators, and broadband access.
Northwest Georgia Housing Authority, Rome GA – Digital Skills +50	This citywide digital literacy program for residents over 50 has a budget of under $25,000. It served under 25 people in 2022, with a target of over 50 people for the life of project.
PCs for People – Devices and internet access	This Atlanta-based national nonprofit social enterprise works to get low-cost quality computers and internet into the homes of individuals, families, and nonprofits with low income.
Piedmont Regional Library System – Computer training and technology checkout	The Piedmont Regional Library System offers computer training and device checkout at all 10 libraries in the regional system. Its programs address digital literacy, device access, and online accessibility and inclusivity. The system provides computer training and technology checkout in all 10 libraries in the regional system. Programs address digital literacy; desktop computers, laptops, or tablets and technical support; and online accessibility and inclusivity. With a budget of under $25,000, it served over 100 people in 2022.
Savannah Public School System – various programs	Through various countywide programs, schools provide desktop computers, laptops, or tablets and technical support; and address digital literacy, data privacy and cybersecurity, and online accessibility and

Asset name	Description
	inclusivity. The budget is over $500,000, and programs offered to parents are free. Over 100 people were served in 2022, with a target of over 500 people over the life of the project.
Technical College System of Georgia (TCSG) – technical training certification and other programs	Fiber optic technical training certification curricula has been developed and learning programs are available through the 22 TCSG schools throughout the State.
Technology Association of Georgia Education (TAG-Ed) – digital workforce development	TAG-Ed provides professional development and workforce development programs statewide.
Twin Oaks Elementary School – Device programs	Offers loans or donations of devices (i.e., computers, tablets) to access the internet, and trains teachers of broadband skills and digital literacy.
University of Georgia Cooperative Extension – various programs	UGA Extension provides a wide range of programs for youth development, families, and those living in rural areas. The Extension began offering select programming virtually during the Covid-19 pandemic and continues to host online classes available to participants statewide and nationally.[230] It is also a partner in the 4-H Tech Changemakers program.
Urban League of Greater Atlanta – computer training	The Urban League provides computer training and workforce development programs.[231]
Westside Works – Digital skills	Westside Works is a neighborhood-based workforce collaborative looking to transform the Westside community and Greater Metro Atlanta through increased digital skills development.
Wheeler County School District – Hotspots and laptops	Offers hotspots for families and devices for students as needed. The countywide program has a budget of between $50,000 and 99,999. It served up to 100 people in 2022 and is targeted to serve up to 500 people.

[230] Joshua Paine and Maria Lameiras, "Extension sees high demand for digital delivery," University of Georgia news release, June 4, 2020, https://news.uga.edu/extension-high-demand-online-programs/.
[231] "Computer Training," Urban League of Greater Atlanta, https://ulgatl.org/computer-training/.

Appendix B: Stakeholder survey instruments

The State published targeted stakeholder surveys in conjunction with the stakeholder outreach efforts and continued to promote the surveys and encourage stakeholders to submit responses for an extended time during preparation of this Plan. The surveys aligned with the key categories identified in the Plan and included a focus on digital connectivity issues (i.e., "digital equity" in the IIJA's parlance). The surveys were:

1. Workforce development – what organizations are doing to provide or facilitate training for jobs in broadband-related fields.

2. Digital connectivity programs – organizations' and local governments' digital connectivity programs, plans, and coalitions to provide community members skills and tools for participating in broadband-related opportunities.

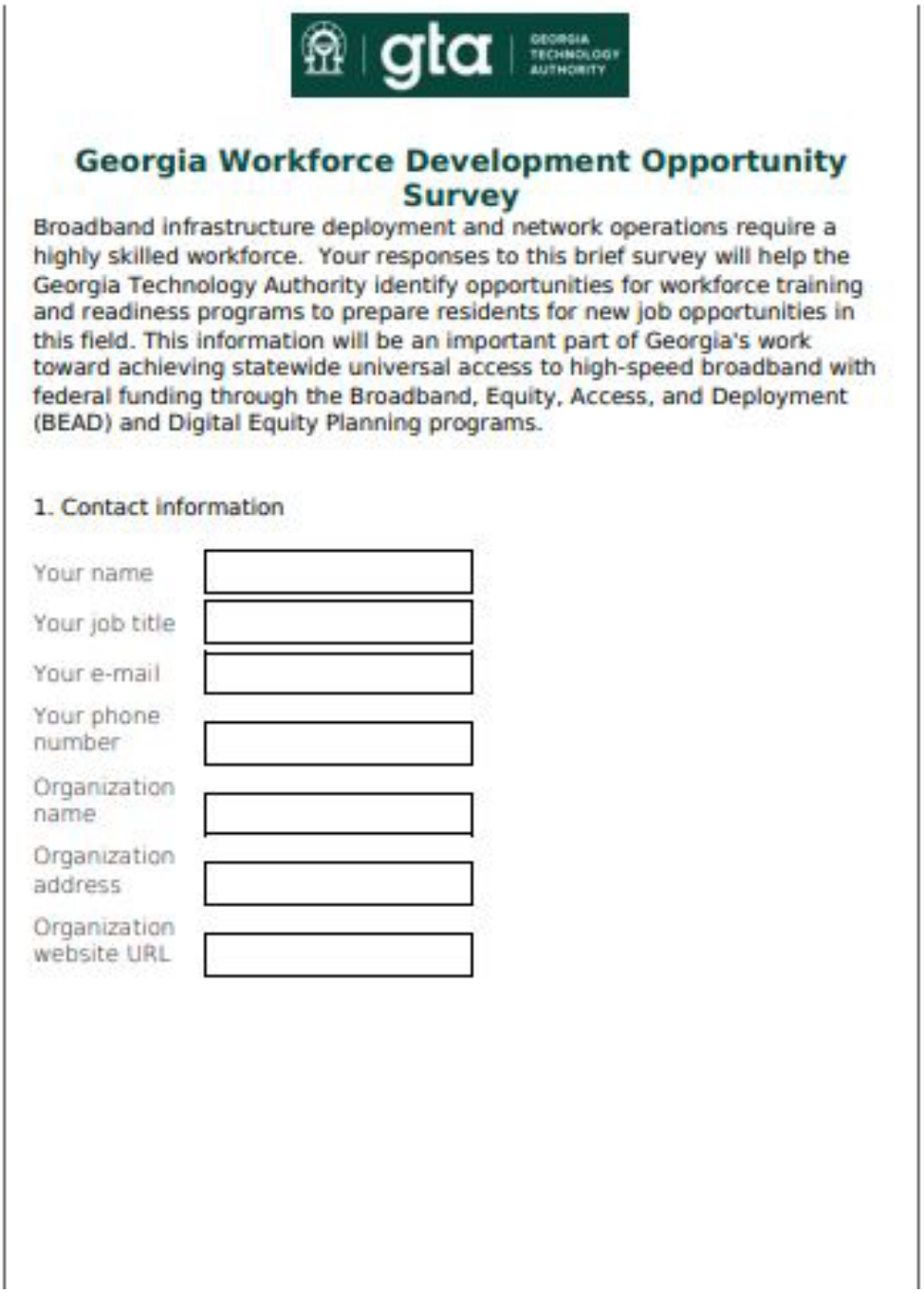
3. Community anchor institutions – what community institutions/organizations are doing to advance Georgians' opportunities to use broadband to work, learn, receive health care, and participate in civic events.

4. Agency asset inventory – infrastructure-related assets that a government entity owns or manages (conduit, fiber, structures, real estate, poles, etc.) and broadband-related workforce development efforts in place.

5. Covered population barriers – identifies unique obstacles to broadband access faced by vulnerable populations and the organizations that serve them.

6. Internet service providers – identifies recruiting and hiring for broadband-related positions, broadband development strategies, and collaboration with communities to close the digital divide.

Workforce development opportunity survey



Georgia Workforce Development Opportunity Survey

Broadband infrastructure deployment and network operations require a highly skilled workforce. Your responses to this brief survey will help the Georgia Technology Authority identify opportunities for workforce training and readiness programs to prepare residents for new job opportunities in this field. This information will be an important part of Georgia's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

1. Contact information

Your name	
Your job title	
Your e-mail	
Your phone number	
Organization name	
Organization address	
Organization website URL	

2. Type of organization (one selection only)

- ○ Internet service provider (ISP)
- ○ Labor union
- ○ Trade association
- ○ Industry certification or standards body
- ○ Government agency (state, county, local, tribal, or regional consortia)
- ○ Economic development association or agency
- ○ Regional or local workforce development board or agency
- ○ K-12 education (private, charter, public)
- ○ Higher education organization (all levels, public or private)
- ○ Trade, technical or vocational school (public, nonprofit, or for-profit)
- ○ Community based or nonprofit organization

Georgia Workforce Development Opportunity Survey

3. Do you offer workforce development programs for job placement and training in the communications industry in Georgia?

- ○ Yes
- ○ No

4. Do you offer training in any of the following industries that have transferable skills that can be applied to communications network deployment? (Select all that apply)

- ☐ Utilities such as electricity
- ☐ HVAC
- ☐ Computer science
- ☐ Cybersecurity
- ☐ General electrician
- ☐ General construction
- ☐ Other (please specify)

5. If you answered no to Question 3, are you interested in developing programs specifically targeted at employment opportunities in the communications industry?

☐ Yes

☐ No

Please describe your interest in developing these programs

Georgia Workforce Development Opportunity Survey

6. What type of workforce development programs do you offer? (Select all that apply)

- ☐ On-the-job training placement
- ☐ Standards certification and safety programs
- ☐ Training programs through a public or private K12 school
- ☐ Training programs through a school of higher education
- ☐ Trade or vocational certificate programs
- ☐ Job placement and recruiting services
- ☐ Formal apprenticeship opportunities

7. Which of the following communications designations are included in your programs? (Select all that apply)

- ☐ Construction laborers and heavy equipment operators
- ☐ Tower, line, equipment, maintenance, and testing specialists
- ☐ Supervisors / project managers
- ☐ Network design roles
- ☐ Locators

8. Does your program specifically reach out to any of the following populations for participation in your programs? (Select all that apply)

- ☐ Veterans or current military personnel
- ☐ People with disabilities
- ☐ Seniors
- ☐ Incarcerated or formerly incarcerated
- ☐ Those in low-income households or without reliable housing
- ☐ Those with a language barrier including English learners
- ☐ Those with a low level of literacy
- ☐ Specific racial or ethnic minority group(s)
- ☐ Those living in rural communities

9. How would you characterize your current capacity for developing and offering training programs to meet current workforce demands in the communications industry? (Select one)

- ○ Underutilized
- ○ Adequately utilized
- ○ At capacity

10. How would you characterize your plans for developing and offering additional programs to meet future workforce demands in the communications industry? (Select one)

- ☐ We have plans to add capacity
- ☐ We have no plans to add capacity
- ☐ We are reducing our training capacity
- ☐ We are interested in adding capacity, but do not have resources to do so

Please describe your plans for additional or expanded programs or explain what additional resources you would need to add capacity.

11. What are the sources of funding for your training programs? (Select all that apply)

- ☐ Federal agencies and programs
- ☐ State agencies and programs
- ☐ County or local funding and programs
- ☐ Private foundations
- ☐ Fundraising and community grants
- ☐ Partnerships with employers
- ☐ Partnerships with unions or trade associations
- ☐ Fee-based services
- ☐ Other (please specify)

12. Do you serve "rural" communities?

☐ Yes

☐ No

What types of incentives are effective to recruit both skilled and manual labor to your rural community?

13. Please describe barriers to developing a diverse, skilled workforce in your community that can fill employment opportunities in the communications industry. Additionally, please provide examples or ideas of incentives or programs that can mitigate those barriers to create a diverse pool of highly skilled workers.

Georgia Workforce Development Opportunity Survey

14. Do you provide any in-house skills training, workforce development, or apprenticeship programs for your employees to support a highly skilled workforce?

- ○ Yes
- ○ No

15. If you answered yes above, please identify the types of programs. (Select all that apply)

- ☐ Mentorship
- ☐ Certification programs
- ☐ Apprenticeship
- ☐ Internship
- ☐ Sponsorships/scholarships for third-party training and classes
- ☐ Other (please specify)

16. In addition to any programs you directly provide, what other sources or programs do you use in Georgia to train and support workforce readiness among your employees? (Select all that apply)

- ☐ Standards certification and safety programs
- ☐ Training programs through a public or private K-12 school
- ☐ Training programs through a school of higher education
- ☐ Trade or vocational certificate programs
- ☐ Formal apprenticeship programs

17. What sources or programs do you use to recruit and hire employees, including technicians, linemen, construction laborers and managers, and similar positions? (Select all that apply)

- ☐ Internet-based employment posting sites
- ☐ Workforce development and community job placement centers
- ☐ Communications industry specific training classes
- ☐ Third-party hiring and recruitment firms
- ☐ Advertisements in relevant trade association publications and websites
- ☐ Incentivizing employee referrals

18. Do you have programs or incentives to support diversity among your employees when considering methods to attract, retain, and promote a skilled workforce?

19. Please describe your vision for workforce readiness programs, recruitment practices, and wrap around services to support broadband expansion in Georgia over the next five years.

Digital connectivity program inventory survey

* 1. Which category best describes your organization? Please select all that apply.

- ☐ K - 12 school
- ☐ Community college and institution of higher education
- ☐ Library
- ☐ Medical and health care provider
- ☐ State government
- ☐ County government
- ☐ Municipal government
- ☐ Council of governments (COG) or regional authority
- ☐ Tribal government
- ☐ Public housing authority
- ☐ Civil rights organization
- ☐ Workforce development and adult literacy organization
- ☐ Internet Service Provider (ISP)
- ☐ Business
- ☐ Regional or industry association or commission
- ☐ Non-profit organization that represents individuals with disabilities
- ☐ Non-profit organization that represents veterans
- ☐ Non-profit organization that represents aging individuals
- ☐ Non-profit organization that represents incarcerated individuals
- ☐ Non-profit organization that represents English learners

2. Has your organization created a broadband and/or digital equity plan?

- ◯ Yes
- ◯ No

3. Is your organization part of a broadband coalition?

- ◯ Yes
- ◯ No

* 4. Please provide the information for a point of contact in your organization.

Name	
Organization name	
Address	
Address 2	
City/Town	
State/Province	
ZIP/Postal Code	
Email Address	
Phone Number	

Georgia Technology Authority Digital Connectivity Program Inventory

Program Details

Digital equity programs aim to ensure that communities have the skills, technology, and capacity to fully engage in the digital economy. Certain programs focus on populations which include low-income, seniors, veterans, people with disabilities, incarcerated, English learners, ethnic minorities, and people in rural areas. Examples of digital equity programs include those that promote computer skills, internet access, and computing device access.

5. Does your organization offer digital equity programs?

- ◯ Yes
- ◯ No

Georgia Technology Authority Digital Connectivity Program Inventory

Program Details

6. What is the name of the program? (Please note there will be opportunities to provide information on additional programs below. Answers should only pertain to a single program)

Program name

7. What aspects of digital equity does the program address? Please select at least one.

- [ ] Availability and affordability of internet
- [ ] Digital literacy
- [ ] Data privacy and cybersecurity
- [ ] Desktop computers, laptops, or tablet and technical support
- [ ] Online accessibility and inclusivity

8. Does the program focus on certain populations? Check all that apply.

- ☐ Individuals with disabilities
- ☐ Veterans
- ☐ Aging individuals (60 and above)
- ☐ Incarcerated individuals
- ☐ Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- ☐ Individuals who primarily reside in a rural area
- ☐ Individuals who are members of a racial or ethnic minority group
- ☐ Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- ☐ No particular focus on a population
- ☐ Other (please specify)

9. What is the project budget?

- ◯ $1 to $24,999
- ◯ $25,000 to $49,999
- ◯ $50,000 to $99,999
- ◯ $100,000 to $249,999
- ◯ $250,000 to $499,999
- ◯ Over $500,000

10. How much does the program cost to the participant?

Cost in dollars

11. Please give us a sense of the geography you serve.

- ◯ State-wide
- ◯ County-wide
- ◯ City-wide
- ◯ Neighborhood-wide
- ◯ Other (please specify)

12. How long has the program been active, in months?

Program length in **months**

13. How many people were served by the program in the 2022 calendar year?

- ◯ Under 25 people
- ◯ 26 to 50 people
- ◯ 51 to 100 people
- ◯ More than 100 people

14. How many users do you expect to serve over the life of the program?

- ◯ 1 to 50
- ◯ 51 to 100 people
- ◯ 101 to 250 people
- ◯ 251 to 500 people
- ◯ More than 500 people

15. If you had the resources, would you want to scale the project to serve more communities and people?

- ◯ Yes
- ◯ No

16. Does your organization have another digital equity program?

- ◯ Yes
- ◯ No

Georgia Technology Authority Digital Connectivity Program Inventory

Program Details

17. What is the name of the program? (Please note there will be opportunities to provide information on additional programs below. Answers should only pertain to a single program)

Program name

18. What aspects of digital equity does the program address? Please select at least one.

- [ ] Availability and affordability of internet
- [ ] Digital literacy
- [ ] Data privacy and cybersecurity
- [ ] Desktop computers, laptops, or tablet and technical support
- [ ] Online accessibility and inclusivity

19. Does the program focus on certain populations? Check all that apply.

- ☐ Individuals with disabilities
- ☐ Veterans
- ☐ Aging individuals (60 and above)
- ☐ Incarcerated individuals
- ☐ Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- ☐ Individuals who primarily reside in a rural area
- ☐ Individuals who are members of a racial or ethnic minority group
- ☐ Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- ☐ No particular focus on a population
- ☐ Other (please specify)

20. What is the project budget?

- ◯ $1 to $24,999
- ◯ $25,000 to $49,999
- ◯ $50,000 to $99,999
- ◯ $100,000 to $249,999
- ◯ $250,000 to $499,999
- ◯ Over $500,000
- ◯ N/A

21. How much does the program cost to the participant?

Cost in dollars

22. Please give us a sense of the geography you serve.

- ◯ State-wide
- ◯ County-wide
- ◯ City-wide
- ◯ Neighborhood-wide
- ◯ Other (please specify)

23. How long has the program been active, in months?

Program length in **months**

24. How many people were served by the program in the 2022 calendar year?

- ◯ Under 25 people
- ◯ 26 to 50 people
- ◯ 51 to 100 people
- ◯ More than 100 people

25. How many users do you expect to serve over the life of the program?

- ◯ 1 to 50
- ◯ 51 to 100 people
- ◯ 101 to 250 people
- ◯ 251 to 500 people
- ◯ More than 500 people

26. If you had the resources, would you want to scale the project to serve more communities and people?

- ◯ Yes
- ◯ No

27. Does your organization have another digital equity program?

- ◯ Yes
- ◯ No

Georgia Technology Authority Digital Connectivity Program Inventory

Program Details

28. What is the name of the program? (Please note there will be opportunities to provide information on additional programs below. Answers should only pertain to a single program)

Program name

29. What aspects of digital equity does the program address? Please select at least one.

- [ ] Availability and affordability of internet
- [ ] Digital literacy
- [ ] Data privacy and cybersecurity
- [ ] Desktop computers, laptops, or tablet and technical support
- [ ] Online accessibility and inclusivity

30. Does the program focus on certain populations? Check all that apply.

- ☐ Individuals with disabilities
- ☐ Veterans
- ☐ Aging individuals (60 and above)
- ☐ Incarcerated individuals
- ☐ Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- ☐ Individuals who primarily reside in a rural area
- ☐ Individuals who are members of a racial or ethnic minority group
- ☐ Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- ☐ No particular focus on a population
- ☐ Other (please specify)

31. What is the project budget?

- ◯ $1 to $24,999
- ◯ $25,000 to $49,999
- ◯ $50,000 to $99,999
- ◯ $100,000 to $249,999
- ◯ $250,000 to $499,999
- ◯ Over $500,000
- ◯ N/A

32. How much does the program cost to the participant?

Cost in dollars

33. Please give us a sense of the geography you serve.

- ◯ State-wide
- ◯ County-wide
- ◯ City-wide
- ◯ Neighborhood-wide
- ◯ Other (please specify)

34. How long has the program been active, in months?

Program length in **months**

35. How many people were served by the program in the 2022 calendar year?

- ◯ Under 25 people
- ◯ 26 to 50 people
- ◯ 51 to 100 people
- ◯ More than 100 people

36. How many users do you expect to serve over the life of the program?

- ◯ 1 to 50
- ◯ 51 to 100 people
- ◯ 101 to 250 people
- ◯ 251 to 500 people
- ◯ More than 500 people

37. If you had the resources, would you want to scale the project to serve more communities and people?

- ◯ Yes
- ◯ No

Georgia Technology Authority Digital Connectivity Program Inventory

Planned Programs

38. Is your organization in the process of developing a digital equity program?

- ◯ Yes
- ◯ No

39. What kind of digital equity program(s) is your organization developing? Please select the categories that best fits the program type.

- ☐ Digital skills and literacy
- ☐ Data privacy and cybersecurity
- ☐ Devices (Laptops, computers, tablets)
- ☐ Technical support
- ☐ Digital navigators
- ☐ Broadband access
- ☐ Creating accessible and inclusive internet content

Other (please specify)

40. Does your organization want to develop a digital equity program?

- ◯ Yes
- ◯ No

41. What kind of digital equity program(s) is your organization interested in developing? Please select the categories that best fits the program type.

- ☐ Digital skills and literacy
- ☐ Data privacy and cybersecurity
- ☐ Devices (Laptops, computers, tablets)
- ☐ Technical support
- ☐ Digital navigators
- ☐ Broadband access
- ☐ Creating accessible and inclusive internet content

Georgia Technology Authority Digital Connectivity Program Inventory

42. Please describe how access to affordable, reliable, and secure high-speed broadband by the communities that you serve may impact programmatic outcomes of your organization?

43. Do you have metrics to measure progress on your programmatic outcomes?

- [ ] Yes
- [ ] No

If yes, please describe or provide a URL link with documentation.

Please provide examples or a discussion of metrics that you believe would be useful to track broadband related inputs and outcomes that are relevant to your mission, programs, and services.

44. Economic and workforce development outcomes - input and outcome metrics

45. Educational outcomes - input and outcome metrics

46. Health outcomes - input and outcome metrics

47. Civic and social engagement outcomes - input and outcome metrics

48. Delivery of other essential services outcomes - input and outcome metrics

Community anchor institution survey

Georgia Technology Authority Community Anchor Institution Survey

Community anchor institutions play a critical role in facilitating greater use of broadband by underserved and vulnerable populations. Your responses to this brief survey will help the Georgia Technology Authority identify programs to advance residents' opportunities to use broadband to work, learn, receive health care, and participate in civic events. This information will be an important part of Georgia's work toward achieving statewide access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

* 1. Contact information

Your name	
Your job title	
Your e-mail	
Your phone number	
Organization name	
Organization address	
Organization website URL	
Organization's number of employees	
Please indicate if your organization serves statewide, regionally, or locally	

2. Choose the option that best describes your organization. Select the one that best applies.

- ◯ K-12 school
- ◯ Higher education entity
- ◯ Library
- ◯ Health clinic, health center, hospital, or other medical provider
- ◯ Public safety entity
- ◯ Public housing organization (including HUD-assisted housing and tribal housing organizations)
- ◯ Neighborhood organization and community center
- ◯ Faith-based organization
- ◯ Community support organization that facilitates use of broadband service by low-income or other underserved populations

3. Which of the following programs or services do you offer to facilitate the use of broadband services by your constituents or clients? Select all that apply.

- [ ] Support for applicants to broadband subsidy programs such as the Affordable Connectivity Program (ACP)
- [ ] Loans or donations of devices (computers, tablets) to access the internet
- [ ] Hotspots and free or subsidized internet access
- [ ] Cybersecurity training
- [ ] Other digital literacy training
- [ ] Training, equipment, subsidized services, or other resources to facilitate access to telehealth and telemedicine services
- [ ] Training teachers of broadband skills and digital literacy
- [ ] Developing and distributing accessible online content or devices designed for us by persons with disabilities
- [ ] Developing and distributing accessible online content directed at populations with specific needs, such as seniors, low-income residents, those with low-literacy, and those whose first language is not English
- [ ] Broadband internet access services at community centers or other gathering spaces used by clients and constituents
- [ ] Funding of programs that provide any of the above programs, including broadband infrastructure, devices, and subsidies to support affordability
- [ ] Program development and planning of internet-related services
- [ ] Advocacy for digital inclusion, affordability, and the internet-related needs of vulnerable populations
- [ ] Emergency and disaster relief services such as evacuation centers, charging stations, replacement equipment, and information on grants, loans, and services to those impacted by disasters
- [ ] My organization does **not** offer programs that facilitate the use of broadband internet services
- [ ] Other (please specify)

Georgia Technology Authority Community Anchor Institution Survey

4. Is your organization located on Tribal land, affiliated with a Tribal or Native entity, or primarily serving Tribal or Native populations?

- ◯ Yes
- ◯ No

5. Does your organization conduct outreach or tailor its internet-related services to the needs of any of the following communities or groups? Select all that apply.

- ☐ Veterans or current military personnel
- ☐ People with disabilities
- ☐ Seniors
- ☐ Incarcerated or formerly incarcerated residents
- ☐ Those in low-income households or without reliable housing
- ☐ Other (please specify)
- ☐ Those with a language barrier including English learners
- ☐ Those with a low level of literacy
- ☐ Specific racial or ethnic minority group(s)
- ☐ Those living in rural communities
- ☐ Not applicable

6. Based on your organization's observations and experience, please describe the barriers and obstacles (e.g. affordability, lack of digital literacy, language barriers) that prevent members of the communities your organization serves, including Tribal and Native populations, from accessing or using broadband internet services.

7. Do all of your organization's locations, offices, or community centers have access to broadband internet speeds of at least 1 Gigabit per second (Gbps) symmetrical (both upload and download)?

- ☐ Yes
- ☐ No
- ☐ I don't know

If **no**, please provide the addresses of the locations where your organization does not have access to broadband internet services of at least 1 Gbps symmetrical.

8. If your organization does not have access to, or does not purchase, service with symmetrical speeds of at least 1 Gbps, please describe why. Select all that apply.

- ☐ Service is unavailable
- ☐ Service is unreliable
- ☐ Service is expensive
- ☐ Customer service is inadequate
- ☐ Our operations do not require Gigabit-level services
- ☐ I do not know if 1 Gbps service is available at my location
- ☐ Other (please specify)

9. Does your current internet service meet the needs of your organization to deliver broadband-related programs to your clients and constituents?

- ☐ Yes
- ☐ No, service is unavailable
- ☐ No, service is unreliable
- ☐ No, service is expensive
- ☐ No, customer service is inadequate
- ☐ No, service is too complicated to set up and/or maintain
- ☐ Redundant connectivity necessary for our operations is too expensive/unavailable
- ☐ Other (please specify)

10. How essential is symmetrical Gigabit connectivity at your facilities to your ability to deliver your broadband-related services?

1 - Not important	2	3	4	5 - Critically important
○	○	○	○	○

11. Does your organization provide access to broadband internet services to clients, constituents, or visitors at each of your locations?

- ☐ Yes
- ☐ No

If **yes,** does your broadband internet service provide sufficient capacity to accommodate peak demand for such services at all of your locations? If **no,** is a lack of access to adequate internet services at your location preventing you from serving users?

12. Is it critical to your organization's mission and service delivery to maintain communications with **critical facilities** such as hospitals, schools, data centers, and public safety agencies during natural disasters and emergencies?

- [ ] Yes
- [ ] No

Please briefly describe your organization's need to remain connected to critical facilities and whether you believe your organization's current communications services meet this need.

13. Has your organization been consulted on disaster planning, emergency communications, or disaster recovery by your communications service provider or a local/regional government agency?

- [ ] Yes
- [ ] No

If yes, please briefly describe any plans or reports you think would be useful to the State's broadband and emergency communications planning efforts.

14. If you operate or sponsor any workforce development or training programs in the fields of telecommunications or technology, please select all that apply.

- [ ] We do not sponsor programs
- [ ] Mentorships
- [ ] Certification programs
- [ ] Registered apprenticeships
- [ ] Unregistered apprenticeships
- [ ] Pre-apprenticeships
- [ ] Internships
- [ ] Digital literacy training for specific employment opportunities
- [ ] Job placement and recruitment services
- [ ] Sponsorships/scholarships for third-party training and classes
- [ ] Other (please specify)

15. Would your organization offer additional broadband-related services or programs to its constituents or clients if it had additional resources?

☐ Yes

☐ No

If yes, please describe those additional broadband-related services and the additional resources your organization would need to offer them (e.g. funding, skilled workforce, access to broadband internet services with faster speeds or more capacity).

16. Please describe how your organization can collaborate with the Georgia Technology Authority and participate in its efforts to achieve statewide access to high-speed broadband.

Agency asset inventory survey

Georgia Technology Authority Agency Asset Inventory Survey

By completing this short questionnaire, you will help the Georgia Technology Authority identify infrastructure-related assets that may potentially help facilitate broadband deployment in Georgia. As the State engages with Internet Service Providers (ISPs) to extend network footprints and services, this information will support Georgia's goal of optimizing federal Broadband Equity, Access, and Deployment (BEAD) funding to achieve statewide access to high-speed broadband.

*** 1.** Please provide your contact information

Agency name	
Government level (State, regional, county, local, tribal)	
Name of jurisdiction	
First and last name	
Title	
Email	
Phone number	
Agency website URL (if any)	

2. Does your agency own or manage physical assets (i.e. conduit, fiber, structures, real estate, poles, etc.) that are available for lease to Internet Service Providers (ISP) for broadband deployment?

☐ Yes

☐ No

What information about these leasable assets would you like the State to include in its broadband planning and communications with ISPs?

3. Will your agency oversee capital construction projects between now and 2027 that include opportunities for the placement of communications facilities by your agency, other state or local agencies, regional or local consortia, or ISPs?

☐ Yes

☐ No

What information about these projects (i.e. scope, location, schedule) would you like included in State broadband planning and in communications with ISPs?

4. Has your agency analyzed workforce readiness (i.e., the availability of skilled labor) in Georgia as it may impact State broadband policies and deployment goals?

☐ Yes

☐ No

Please provide a URL link where relevant documents, presentations, or analyses are located or send to the following email address: GTAbroadband@ctcnet.us

5. Does your agency have a role in workforce development that would support wired or wireless broadband deployment (including training and recruitment for equipment technicians, cable installation and repair, and construction jobs)?

☐ Yes

☐ No

Please describe programs or initiatives that your agency operates or supports or relevant programs operated by other agencies.

6. Are you aware of, or does your agency have reason to track and monitor frequent or widespread broadband or other communications outages that have significant impact on your community (or, if you represent a statewide organization, on the communities in Georgia)?

☐ Yes

☐ No

If yes, please describe your agency's role in monitoring or tracking communications reliability in your community and discuss the impact of significant outages.

7. Are you aware of, or is your agency involved in, planning efforts or development of regulations related to reliable and resilient emergency-level broadband or other communications services, especially services for critical facilities in Georgia (e.g. hospitals, schools, evacuation sites, utilities, data centers, public safety locations)?

☐ Yes

☐ No

Please provide a URL link to any publicly available materials relating to these issues and briefly describe the relevant issues related to critical facilities, including planning for climate and weather-related hazards. You may also email these materials to GTAbroadband@ctcnet.us

8. Has your agency developed any policies, regulations, or guidance regarding emergency communications, network redundancy, climate resilience, disaster preparedness, or disaster recovery planning applicable to the broadband and communications industry in Georgia?

- [ ] Yes
- [ ] No

Please provide a URL link to any publicly available documents and briefly describe policies and other materials that you believe would be helpful to Georgia's broadband planning efforts. You may also email these materials to GTAbroadband@ctcnet.us

9. Has your agency developed policies or strategic planning documents that will facilitate broadband access efforts in Georgia (e.g. publicly available information that directly addresses digital equity, infrastructure deployment, economic development, network resilience, partnerships, business planning, or other related efforts)?

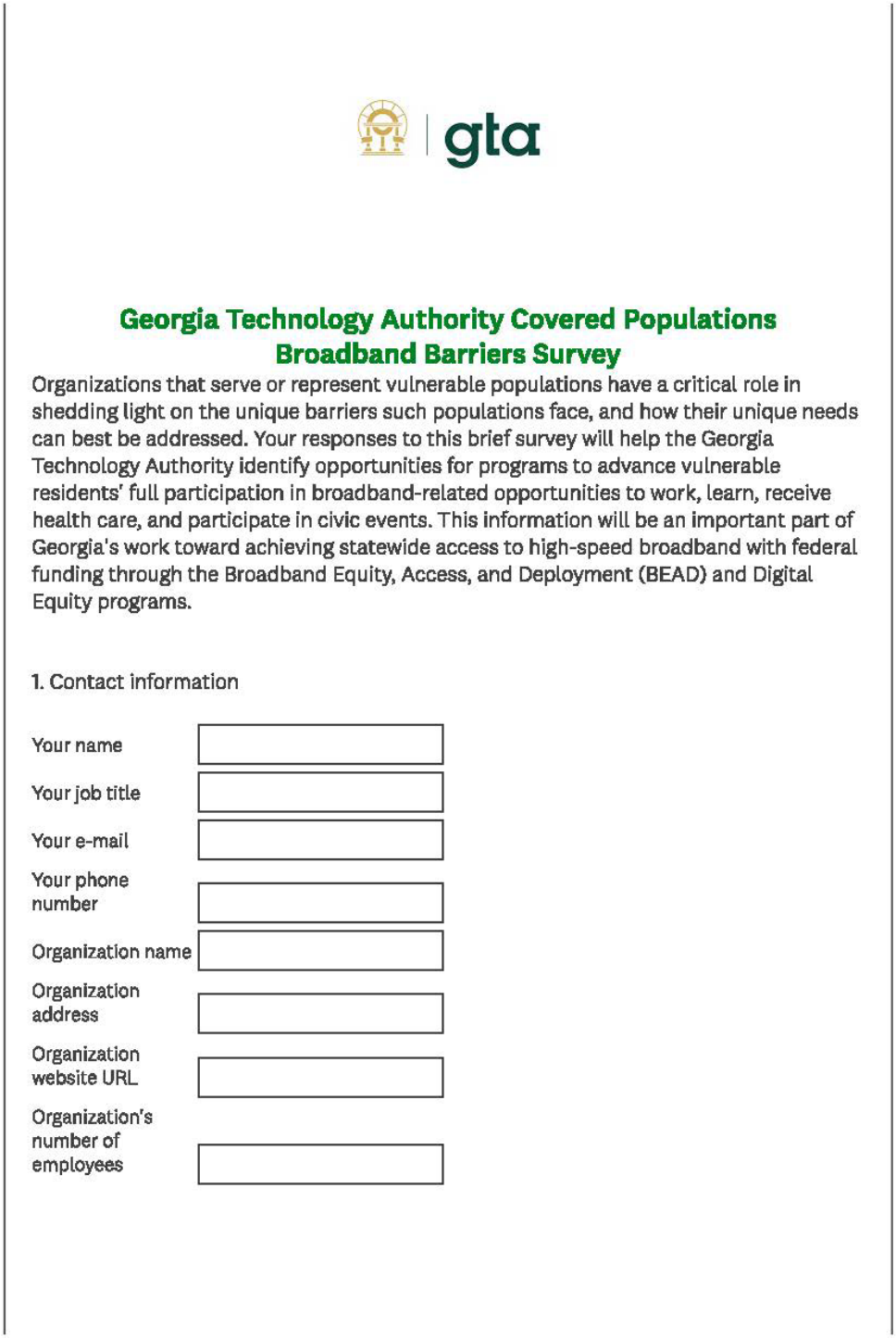
- [ ] Yes
- [ ] No

Please briefly summarize the material and provide a URL link or email information to GTAbroadband@ctcnet.us

10. If applicable please share information regarding broadband-related planning efforts of other Georgia state and local agencies or contact information for agencies involved in broadband-related planning efforts, that you believe would be helpful to GTA's broadband planning efforts.

11. Please describe how your agency can collaborate with GTA and participate in its efforts to achieve statewide universal access to high-speed broadband.

Covered population barriers survey



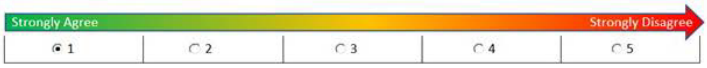
Georgia Technology Authority Covered Populations Broadband Barriers Survey

Organizations that serve or represent vulnerable populations have a critical role in shedding light on the unique barriers such populations face, and how their unique needs can best be addressed. Your responses to this brief survey will help the Georgia Technology Authority identify opportunities for programs to advance vulnerable residents' full participation in broadband-related opportunities to work, learn, receive health care, and participate in civic events. This information will be an important part of Georgia's work toward achieving statewide access to high-speed broadband with federal funding through the Broadband Equity, Access, and Deployment (BEAD) and Digital Equity programs.

1. Contact information

Your name	
Your job title	
Your e-mail	
Your phone number	
Organization name	
Organization address	
Organization website URL	
Organization's number of employees	

Georgia Technology Authority Covered Populations
Broadband Barriers Survey
Digital Literacy and Digital Skills



Georgia Technology Authority Covered Populations Broadband Barriers Survey

Accessible Content

2. Does your organization provide programs and services that are primarily targeted to any of the following communities? (Select all that apply)

- ☐ Individuals with disabilities
- ☐ Veterans or current military personnel
- ☐ Aging individuals
- ☐ Incarcerated individuals
- ☐ Individuals with low levels of literacy
- ☐ Individuals with a language barrier
- ☐ Individuals who primarily reside in a rural area
- ☐ Individuals who are members of a racial or ethnic minority group
- ☐ No particular focus on a population or community
- ☐ Other (please specify)

Georgia Technology Authority Covered Populations Broadband Barriers Survey

Internet Service

3. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Their households have access to some type of home internet service	◯	◯	◯	◯	◯
The available internet service is high-speed, sufficient for their needs, and reliable	◯	◯	◯	◯	◯
The available internet service is affordable.	◯	◯	◯	◯	◯
Their households can choose from among more than one provider for high-speed, reliable, and affordable broadband service	◯	◯	◯	◯	◯

4. Are there unique barriers to reliable, affordable, and high-speed internet service for the population(s) you serve?

☐ Yes

☐ No

Please describe these barriers to accessing reliable, affordable, and high-speed internet service:

Georgia Technology Authority Covered Populations
Broadband Barriers Survey

Access to Computers

5. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
There are computers capable of utilizing highspeed internet services in the household of the populations we serve or represent.	○	○	○	○	○
The households can troubleshoot computer issues.	○	○	○	○	○
The households can afford computer repairs or service.	○	○	○	○	○
The households have enough devices to serve their needs.	○	○	○	○	○
There are public computers that are convenient to use and close by to these households.	○	○	○	○	○

6. Are there unique barriers to accessing home computers for the population(s) you serve?

☐ Yes

☐ No

Please describe these barriers to accessing computers and similar devices:

7. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Individuals can find, understand, evaluate, create, and communicate digital information.	○	○	○	○	○
Individuals can use technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information.	○	○	○	○	○
Individuals can use the internet to support education, employment, health, and personal needs.	○	○	○	○	○
Individuals have access to convenient and comprehensive digital literacy training.	○	○	○	○	○

8. Are there unique barriers to digital skills for the population(s) your serve?

☐ Yes

☐ No

Please describe these barriers to acquiring necessary digital skills:

9. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Individuals have access to meaningful website content that is written in plain language and is appropriate for the targeted user or audience.	○	○	○	○	○
Individuals have access to meaningful website content that is accurately translated into necessary languages.	○	○	○	○	○
Individuals have access to meaningful website content that can be read by a screen reader.	○	○	○	○	○
Individuals have access to meaningful website content with closed captioning.	○	○	○	○	○
Individuals have access to adequate and appropriate assistive technologies to support access to the internet and use of website content by people with disabilities.	○	○	○	○	○

Georgia Technology Authority Covered Populations
Broadband Barriers Survey
Data Privacy and Cyber Security

11. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Individuals know how to protect their information online.	◯	◯	◯	◯	◯
Individuals can recognize a phishing scam or other types of scams and illegal activity.	◯	◯	◯	◯	◯
Individuals use anti-virus and anti-malware software on their computers.	◯	◯	◯	◯	◯

12. Are there unique barriers to data privacy and cyber security for the population(s) your serve?

- [ ] Yes
- [ ] No

Please describe these barriers to acquiring literacy in data privacy and cyber security:

Georgia Technology Authority Covered Populations Broadband Barriers Survey

Initiatives to Address Barriers

Thinking about the unique barriers you discussed:

13. What types of programs and initiatives would you recommend to address these barriers?

14. Does your organization currently offer any of these types of programs or initiatives?

- [ ] Yes
- [ ] No

If yes, please describe if you are interested in expanding your programs and, if so, what types of resources would you need to expand:

15. Would your organization be interested in adding new programs to its current portfolio?

- [ ] Yes
- [ ] No

If yes, what types of resources do you believe would be necessary to add new programs to your current portfolio?

Georgia Technology Authority Covered Populations Broadband Barriers Survey

Programmatic Impact of Broadband Access

16. Please describe how access to affordable, reliable, and secure high-speed broadband by the communities that you serve may impact the programmatic outcomes of your organization.

17. Do you have metrics to measure progress on your programmatic outcomes?

- [ ] Yes
- [ ] No

If yes, please describe:

Please provide examples or a discussion of metrics that you believe would be useful to track broadband related inputs and outcomes that are relevant to your mission, programs, and services.

18. Economic and workforce development outcomes - input and outcome metrics

19. Educational outcomes - input and outcome metrics

20. Health outcomes - input and outcome metrics

21. Civic and social engagement outcomes - input and outcome metrics

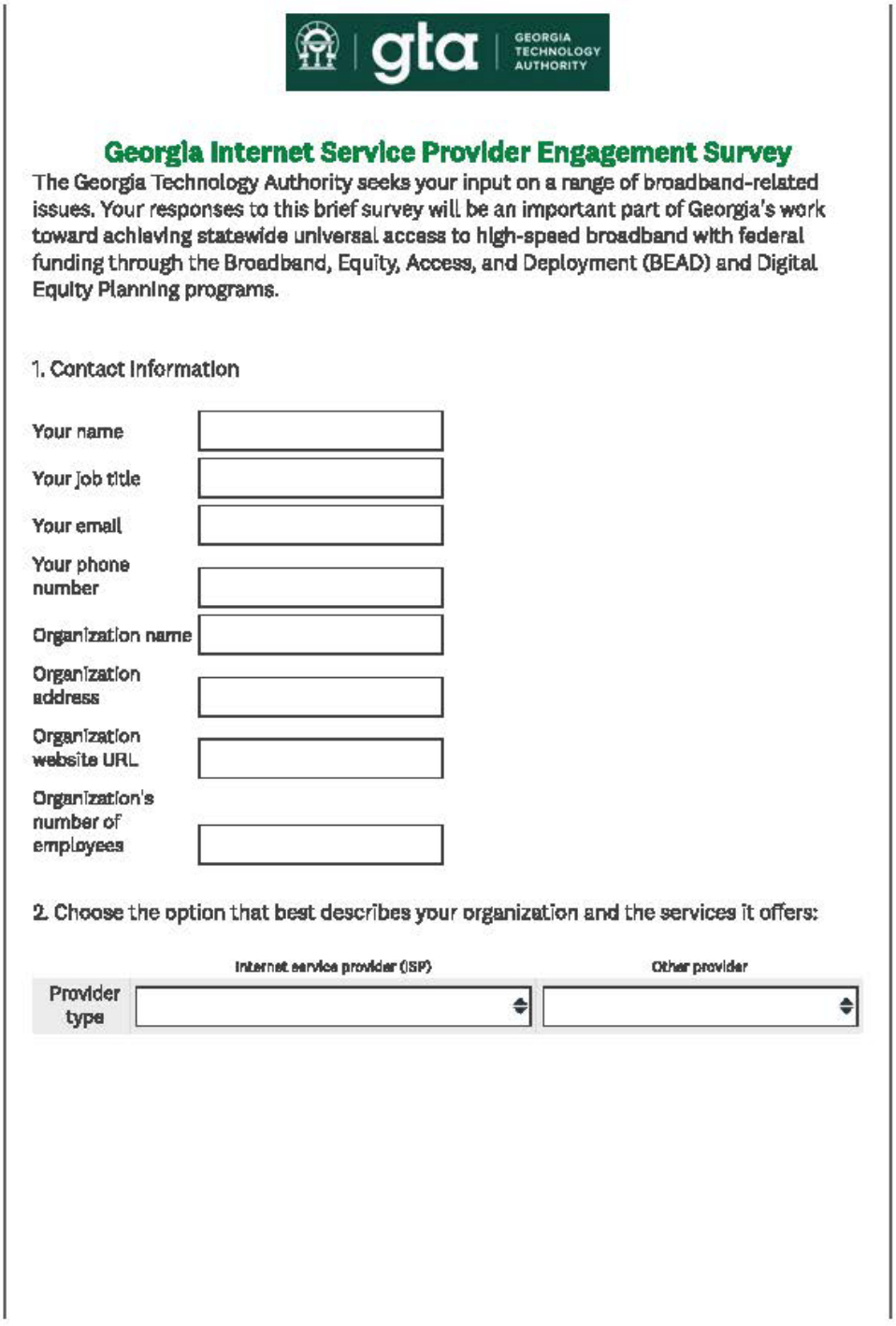
22. Delivery of other essential services outcomes - input and outcome metrics

10. Are there unique barriers to accessible content for the population(s) your serve?

- [ ] Yes
- [ ] No

Please describe these barriers to accessible content:

Internet service provider engagement survey



Georgia Internet Service Provider Engagement Survey

The Georgia Technology Authority seeks your input on a range of broadband-related issues. Your responses to this brief survey will be an important part of Georgia's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

1. Contact Information

Your name	
Your job title	
Your email	
Your phone number	
Organization name	
Organization address	
Organization website URL	
Organization's number of employees	

2. Choose the option that best describes your organization and the services it offers:

	Internet service provider (ISP)	Other provider
Provider type		

3. What recruitment and hiring sources does your organization use to hire technicians, lineworkers, engineers, construction laborers and managers, and similar positions? (Select all that apply)

- [ ] Internet-based employment posting sites
- [ ] Workforce development and community job placement centers
- [ ] Communications industry-specific training classes
- [ ] Third-party hiring and recruitment firms
- [ ] Advertisements in trade association publications and websites
- [ ] Incentivizing employee referrals

4. Does your organization offer, sponsor, or participate in any workforce development or apprenticeship programs?

- ◯ Yes
- ◯ No

5. If you answered yes to Q.4, please specify the type of programs. (Select all that apply)

- [ ] Mentorship
- [ ] Certification programs
- [ ] Apprenticeship
- [ ] Internship
- [ ] Sponsorships/scholarships for third-party training and classes
- [ ] Other (please specify)

6. How would you propose to work with Georgia on workforce development issues related to broadband deployment, including programs to support diversity among your organization's employees?

7. Does your organization participate in the Affordable Connectivity Program (ACP)?

- ◯ Yes
- ◯ No

Georgia Internet Service Provider Engagement Survey

8. What is the monthly post-subsidy price of your lowest-price ACP-eligible tier for participating subscribers?

- ◯ $0
- ◯ $1 - $10
- ◯ $11 - $20
- ◯ $21 - $30
- ◯ More than $30

9. What is the speed of your lowest-price ACP-eligible tier?

- ◯ 25/3 Mbps
- ◯ Up to 50/5 Mbps
- ◯ Up to 100/20 Mbps
- ◯ Greater than 100/20 Mbps but less than 100/100 Mbps
- ◯ 100/100 Mbps or more

10. How do you advertise or promote your participation in the ACP?

11. Does your organization offer other programs for low-income customers?

- [ ] Yes
- [ ] No

Please provide service speeds, monthly pricing, and a description of your low-income or discounted offerings.

12. Does your organization have programs to support consumer broadband skills or use of the internet?

- [ ] Yes
- [ ] No

If yes, please describe and provide URL links to relevant materials.

13. Does your organization have programs to support internet adoption?

- [ ] Yes
- [ ] No

If yes, please describe and provide URL links to relevant materials.

14. Please describe how your organization can collaborate with local communities on efforts to close the digital divide and, if applicable, please provide specific examples where you have done this successfully.

15. What strategies has your organization used to deploy broadband in the areas of Georgia that are most expensive to serve?

16. Please discuss your continuity and disaster recovery plans in the event of a natural disaster or human error, such as a fiber cut, and whether any of your plans target specific geographic areas.

Appendix C: Stakeholder engagement schedule of sessions

The State's comprehensive stakeholder outreach and engagement efforts specifically through its "Let's Connect GA" tour included in-person public listening sessions throughout winter and spring 2023 across the State:

- February 20 – Columbus – Columbus Technical College
- February 22 – Griffin – Southern Crescent Technical College
- February 23 – Augusta – Georgia Cyber Center
- March 6 – Flowery Branch – Spout Springs Library
- March 6 – Gainesville – North Hall Community Center and Park
- March 7 – Calhoun – Georgia Northwest Technical College
- March 8 – Jonesboro – Clayton County International Park Lakeview Event Center
- March 9 – Athens – University of Georgia Center for Continuing Education and Hotel
- March 13 – Garden City / Savannah – Woodville-Thompkins High School
- March 14 – Jekyll Island – Georgia Accessibility Conference
- March 15 – Valdosta – Wiregrass Technical College
- March 16 – Albany – Albany State University West Campus Event Center
- March 20 – Vidalia – Southeastern Technical College
- March 21 – Macon – Buck Melton Community Center
- March 22 – Clarkston – Georgia Piedmont Technical College
- April 4 – Atlanta – National Coalition of Adult Basic Education Conference
- April 11 – Eastman – Eastman-Dodge Chamber of Commerce
- April 14 – Athens – Georgia Internet for All Meeting with NTIA
- April 18 – Cuthbert – Andrew College
- May 10 – Macon – Mercer University – Rural Healthcare Access
- June 7 – Chubbtown – Community Technology Meeting
- June 8 – Covington – Montecillo and Covington Community Leaders Digital Connectivity Listening Session
- June 14 – Augusta – Central Savannah Regional Area with Paine College (HBCU)
- **Additional In-person stakeholder meetings:**
    - March 23 – Atlanta – Digital Connections Symposium
    - April 27-28 – Atlanta – National Summit on State Planning for Digital Equity and Economic Inclusion

Appendix D: Stakeholder engagement schedule of virtual meetings

The State's comprehensive stakeholder outreach and engagement efforts included virtual meetings aligned with the key categories identified in the Plan and included a focus on digital connectivity issues:

- February 24 – Virtual – Workforce Development
- March 3 – Virtual – Workforce Development
- March 10 – Virtual – Internet Service Providers
- March 17 – Virtual – Internet Service Providers
- March 24 – Virtual – Local and Regional Government
- March 27 – Virtual – Local and Regional Government
- March 28 – Virtual – Education (Early, K-12, Higher Ed)
- March 29 – Virtual – Education (Early, K-12, Higher Ed)
- March 30 – Virtual – Community Organizations (non-profits, libraries, health, housing, etc.)
- March 31 – Virtual – Community Organizations (non-profits, libraries, health, housing, etc.)
- April 13 – Virtual – Internet Service Providers session I
- April 13 – Virtual – Internet Service Providers session II
- April 17 – Virtual – Family Connections Partnership Network Meeting
- May 2 – Virtual – Central Savannah Regional Area with Paine College
- May 3 – Virtual – Atlanta Black Chamber of Commerce
- May 4 – Virtual – Internet Service Providers
- May 8 – Audio – AARP Tele-Townhall
- May 16 – Virtual – Family Connections Region 6 Network Meeting
- **Additional Virtual Stakeholder Engagements**
    - May 6 – Georgia Radio Reading Service – The ScottLite Show – Blind/Print Disabled virtual show
    - June 6 – Tuesdays with Tootle – Disability Community Virtual Show
    - June 15 – Community Advisory Board Meeting for Connecting Minority Communities – Fort Valley State University (HBCU)

Appendix E: Stakeholder engagement list of participants

Participants in the State's comprehensive stakeholder outreach and engagement efforts included representatives of the following organizations:

Table 17: Stakeholder engagement outreach list

Entity name	Entity type
A2D	Internet Service Providers
AARP Georgia	Organizations that Represent and Support Aging Populations
Accelecom	Internet Service Providers
Accord Technologies	Industry Related Entities
Albany State University	HBCUs
Albany Technical College	Community Colleges
Alma Telephone Company	Internet Service Providers
Altamaha EMC cooperative	Internet Service Providers
Association County Commissions of Georgia	Association
AT&T	Internet Service Providers
ATC Broadband	Internet Service Providers
Athens Clarke County government	Government
Atlanta Housing	Public Housing Authorities or Owners of HUD-assisted Housing
Atlanta Public Schools	K-12 Schools
Baker County Government	Government
Bank On Georgia	Non-profit
Bartow County Schools	K-12 Schools
BEAM CTY	Internet Service Providers
Berrien County Schools	K-12 Schools
Black Churches 4 Digital Equity Coalition	Organizations that Represent and Support Racial and Ethnic Minorities
Bleckley County Government	Government
BorderHawk	Industry Related Entities
Brantley Telephone Company	Internet Service Providers
Bulloch County Rural Telephone Cooperative	Internet Service Providers
Cable One, Inc.	Internet Service Providers
Calhoun Times	Industry Related Entities
Candler County Board of Commissioners	Government
Canoochee EMC	Internet Service Providers
Carl Vincent Institute of Government – UGA	Universities
Carroll EMC	Internet Service Providers
Catholic Charities Atlanta	Non-profit
Central Georgia EMC	Internet Service Providers
Central Georgia Technical College	Community Colleges
Charter Communications	Internet Service Providers
Chatham County	Government
Chattooga County Schools	K-12 Schools
Chickamauga Telephone Company	Internet Service Providers

Entity name	Entity type
City of Albany	Government
City of Albany-Telecommunications Network	Government
City of Arlington	Government
City of Atlanta	Government
City of Augusta	Government
City of Calhoun	Government
City of Calhoun City Council	Government
City of Camden	Government
City of Clarkston	Government
City of Climax	Government
City of College Park	Government
City of Colquitt	Government
City of Dublin	Government
City of Eastman	Government
City of Eastman-Downtown Development Authority	Economic Development Agencies and Organizations
City of Fort Gaines	Government
City of Glennville	Government
City of Griffin Schools	Government
City of Griffin-fiber network	Internet Service Providers
City of Jonesboro	Government
City of Kennesaw	Government
City of LaFayette	Government
City of Lakeland	Government
City of Loganville	Government
City of Meigs	Government
City of Metter-Georgia Grown Innovation Center	Government
City of Molena	Government
City of Morrow	Government
City of Norcross	Government
City of Savannah	Government
City of Shady Dale	Government
City of South Fulton	Government
City of Statham	Government
City of Thomasville	Government
City of Tucker	Government
City of Warner Robins	Government
City of Waynesboro	Government
City of Woodstock	Government
Clayton County Board of Commissioners	Government
Clayton County Government	Government
Clayton County Library	Libraries
Clinch County Government	Government
Clinch Memorial Hospital	Hospitals
Coastal Area Agency on Aging	Organizations that Represent and Support Aging Populations
Coastal Electric Cooperative	Internet Service Providers

Entity name	Entity type
Cobb County Government	Government
Coffee Regional Medical Center	Hospitals
Columbia County Government	Government
Columbus Technical College	Community Colleges
Comcast	Internet Service Providers
Communications Workers of America	Labor Unions
Compudopt	Non-profit
Connecting Kids	Non-profit
Cox Communications	Internet Service Providers
Culture Wireless	Internet Service Providers
Dade County Schools	K-12 Schools
Darien Telephone Company	Internet Service Providers
De Soto Trail Regional Library	Libraries
DeKalb County Government	Government
DeKalb Neighborhood Association	Non-profit
Diverse Power	Industry Related Entities
Diversity Cyber Council	Non-profit
Dodge County Government	Government
Dooly County Chamber	Chambers of Commerce
Dougherty County Commission	Government
Dougherty County Government	Government
Dougherty County Public Library	Libraries
Eastman-Dodge County Chamber of Commerce	Chambers of Commerce
Echols County Schools	K-12 Schools
Ellijay Telephone Company	Internet Service Providers
Emanuel County Schools	K-12 Schools
Emory University Medical Center	Hospitals
ETC Now	Internet Service Providers
Evans County Government	Government
Evans County Schools	K-12 Schools
Fail Telecommunications	Internet Service Providers
Federal Deposit Insurance Corporation	Government
Feiler Park Neighborhood Association	Non-profit
Fiber Broadband Association	Association
Fiber Network Alliance	Association
FiberOptics.com	Industry Related Entities
Flint EMC	Internet Service Providers
Fort Valley State University	HBCUs
FTC	Internet Service Providers
FTE Leaders	Non-profit
Fulton County Government	Government
Garden City	Government
Georgia Building Authority	Government
Georgia Cable Association	Association
Georgia College and State University	Universities
Georgia Department of Agriculture	Government

Entity name	Entity type
Georgia Department of Community Affairs	Government
Georgia Department of Corrections	Government
Georgia Department of Early Care and Learning	Government
Georgia Department of Education	K-12 Schools
Georgia Department of Education-Technology Services	K-12 Schools
Georgia Department of Education-Office of Rural Education and Innovation	K-12 Schools
Georgia Department of Labor	Government
Georgia Department of Public Health	Government
Georgia Department of Public Safety	Government
Georgia Department of Transportation	Government
Georgia Electric Membership Corporation	Internet Service Providers
Georgia Municipal Association	Association
Georgia Partnership for Telehealth	Non-profit
Georgia Piedmont Technical College	Community Colleges
Georgia Public Library Service	Government
Georgia Public Library Service-Blind and Disabled Services	Organizations that Represent and Support People with Disabilities
Georgia Public Safety Training Center	State Public Safety
Georgia Radio Reading Service	Organizations that Represent and Support People with Disabilities
Georgia State Assembly	Government
Georgia State Board of Pardons and Paroles	Government
Georgia System Operations Corporation	Industry Related Entities
Georgia Institute of Technology	Universities
Georgia Tech University-Constellations Center for Equity in Computing	Universities
Georgia Telecom Broadband Association	Association
Georgia Telecommunications Association	Association
Glenwood Telephone Company	Internet Service Providers
Global Partnership for Telehealth	Healthcare Community
Glynn County Government	Government
Goodwill Industries	Non-profit
Goodwill of North Georgia	Non-profit
Gordon County Schools	K-12 Schools
Governor's Office	Members of the State Legislature or their staff
Governor's Office of Planning and Budget	Government
Grady EMC	Internet Service Providers
Greater Valdosta United Way	Non-profit
Griffin Spalding Schools	K-12 Schools
Gwinnett County Government	Government
Gwinnett County Public Libraries	Libraries
Habersham EMC	Internet Service Providers
Hall County Government	Government
Hall County Library	Libraries

Entity name	Entity type
Hall County Schools	K-12 Schools
Hart Telephone Company	Internet Service Providers
Healing Bridge Clinic	Non-profit
Henry County Government	Government
Highline	Internet Service Providers
Inspiredu	Non-profit
Inspiritus	Communities Who Have Language Barriers
Irwin EMC	Internet Service Providers
Jackson County Government	Government
Jackson EMC	Internet Service Providers
James Bates Brannan Groover LLP	Industry Related Entities
Jeff Davis Hospital	Hospitals
John Staurulakis, Inc.	Industry Related Entities
Johnson County	Government
Jones County Board of Education	Government
Jones County Family Connection	Non-profit
JSI Telecom	Industry Related Entities
Kajeet	Industry Related Entities
Kendrick Advisory and Advocacy Group	Industry Related Entities
Lee County Government	Government
Live Oak Fiber	Internet Service Providers
Live Oak Public Libraries	Libraries
Lowndes County Government	Government
Lowndes County Schools	K-12 Schools
Macon Black tech	Non-profit
Macon City Mayor	Government
Macon Housing Authority	Public Housing Authorities or Owners of HUD-assisted Housing
Macon Transit Authority	Government
Macon-Bibb Commission	Government
Macon-Bibb County Board of Tax Assessors	Government
Macon-Bibb County Economic Opportunity Council	Economic Development Agencies and Organizations
Macon-Bibb County Government	Government
Macon-Bibb County Transit Authority	Government
Macon-Bibb Economic Development Office	Economic Development Agencies and Organizations
Macon-Bibb Planning and Zoning Commission	Government
Madison County Board of Commissioners	Government
MARTA	State Departments Dealing with Infrastructure (e.g., Transportation)
Meals on Wheels Middle Georgia	Non-profit
Mediacom	Internet Service Providers
Mercer University	Universities
Microsoft Foundation	Industry Related Entities
Middle Georgia EMC	Internet Service Providers
Middle Georgia Regional Commission	Economic Development Agencies and Organizations
Middle Georgia State University	Universities

Entity name	Entity type
Miller County Hospital	Hospitals
Mitchell EMC	Internet Service Providers
Montgomery County Board of Commissioners	Government
Morehouse College	Colleges
Muscogee County Democratic Committee	Non-profit
MUST Ministries	Non-profit
NAACP-Georgia State Conference	Civil Rights Organizations
National Federation of Blind of Georgia	Organizations that Represent and Support People with Disabilities
National Institute of Minority Economic Development	Organizations that Represent and Support Racial and Ethnic Minorities
North Georgia EMC	Internet Service Providers
Northeast Georgia Regional Educational Service	Government
Northwest Georgia Housing Authority	Public Housing Authorities or Owners of HUD-assisted Housing
Northwest Georgia Regional Commission	Economic Development Agencies and Organizations
Northwest Georgia Regional Educational Service Agency	Government
Northwest Georgia Technical College	Community Colleges
Ocmulgee EMC	Internet Service Providers
Oconee EMC	Internet Service Providers
"Office of Internet Connectivity & Growth (OICG)	
National Telecommunications & Information Administration (NTIA)"	
OFS Optics	Industry Related Entities
Okefenokee Regional Library System	Libraries
Operation Hope	Non-profit
Outpost Plus	Internet Service Providers
PAC Fiber	Internet Service Providers
Partnership for Inclusive Innovation	Non-profit
Partnership for Southern Equity	Organizations that Represent and Support Racial and Ethnic Minorities
PCs for People Georgia	Non-profit
Pembroke Advanced Communications	Internet Service Providers
Phoebe Health	Hospitals
Pickens County Schools	K-12 Schools
Piedmont Regional Library System	Libraries
Pineland Telco	Internet Service Providers
Planters Broadband Cooperative	Internet Service Providers
Pooler Chamber of Commerce	Chambers of Commerce
Public Service Telephone	Internet Service Providers
Pulaski County Commission	Government
Quitman County Schools	K-12 Schools
Rabun County Public Library	Libraries
Relyant Communications	Internet Service Providers
Representative – Georgia State Assembly	Members of the State Legislature or their staff

Entity name	Entity type
River Edge Behavioral Health Center	Hospitals
River Valley Regional Commission	Economic Development Agencies and Organizations
Rome Floyd Chamber of Commerce	Chambers of Commerce
Rural4g	Internet Service Providers
Satilla REMC	Internet Service Providers
Savannah Chatham Public School System	K-12 Schools
Slash Pine	Internet Service Providers
Social Circle Schools	K-12 Schools
South Georgia Regional Library	Libraries
Southeast Lineman Training Center	Industry Related Entities
Southeastern Technical College	Community Colleges
Southern Oak Advisory	Industry Related Entities
Southern Crescent Technical College	Community Colleges
Southern Georgia Regional Commission	Economic Development Agencies and Organizations
Southern Telecom	Internet Service Providers
Southwest Georgia Regional Commission	Economic Development Agencies and Organizations
Spalding County Government	Government
State Road and Tollway Authority	State Departments Dealing with Infrastructure (e.g., Transportation)
Sumter County Government	Government
Sumter EMC	Internet Service Providers
T-Cubed Thoroughbred Technology and Telecommunications – Norfolk Southern Railroad	Industry Related Entities
TDS Telecom	Internet Service Providers
Technical College System of Georgia	Community Colleges
Technology Association of Georgia (TAG) Bridge Builders	Association
TechSmart for Seniors	Organizations that Represent and Support Aging Populations
Telfair County Commission	Government
Terrell County Schools	K-12 Schools
The Clubhouse/Tech for Success	Non-profit
Thomas County Schools	K-12 Schools
Three Rivers Regional Commission	Economic Development Agencies and Organizations
Thrive Regional Partnership	Non-profit
Toombs County schools	K-12 Schools
Town of Cohutta	Government
Town of Sharpsburg	Government
Town of Toomsboro	Government
Trailwave Fiber	Internet Service Providers
Trenton Telephone Company	Internet Service Providers
Tri-County EMC	Internet Service Providers
TruVista	Internet Service Providers
Tucker Northlake Community Improvement District	Community Development Groups and Organizations
Turner County Schools	K-12 Schools
United Way of Central Georgia	Non-profit

Entity name	Entity type
United Way of the Coastal Empire	Non-profit
United Way of the CSRA	Non-profit
United Way of Greater Atlanta	Non-profit
United Way of Southeast Georgia	Non-profit
United Way of Southwest Georgia	Non-profit
University of Georgia	Universities
University of Georgia-Carl Vinson Institute of Government	Universities
University of West Georgia	Universities
University System of Georgia	Universities
Urban League of Greater Atlanta	Non-profit
US Congressman Rep. Buddy Carter	Congressional Field Representatives
US Congressman Rick Allen	Congressional Field Representatives
US Department of Commerce NTIA	Government
US Senator Warnock	Congressional Field Representatives
Utopian Academy for the Arts	K-12 Schools
Valdosta City Schools	K-12 Schools
Valdosta Times	Industry Related Entities
Verizon	Internet Service Providers
Walker County Government	Government
Walton County Government	Government
Washington EMC	Internet Service Providers
We thrive on Riverside Renters Association	Non-profit
White County Government	Government
Whitesburg City Hall	Government
WideOpenWest	Internet Service Providers
Wilkes Telephone & Electric Co	Internet Service Providers
Windstream	Internet Service Providers
Wiregrass Technical College	Community Colleges
Workforce Evolved	Workforce Development Agencies and Organizations

Appendix F: Public listening session survey responses

As part of its 15 in-person public meetings around the State from February 20, 2023, to March 22, 2023, Georgia Technology Authority (GTA) conducted surveys that respondents could complete on paper or by phone. GTA received 75 survey responses from a total of approximately 300 people who attended the public sessions.

Many different types of organizations attended and responded to the survey, including library systems, K-12 school systems, higher education facilities, local governments, telehealth organizations, non-profits, faith-based organizations, and communications companies.

Survey questions

1. How important is competition among internet service providers for ensuring the availability of reliable broadband service? (Very important, Somewhat important, Neutral, Somewhat unimportant, Not important at all)

2. Who should be leading the efforts to ensure our residents have the digital skills they need? (State governments, Local governments, Schools, Employers, Nonprofits)

3. What do you think is the biggest obstacle to increasing high-speed internet subscriptions in Georgia?

4. Are you satisfied with your internet service connection at your home and/or place of work? If not, please explain why this is. (I.e., price, speed, reliability, lack of quality device to connect to the internet, etc.)

5. What stakeholder organization(s) or group(s) do you want to make sure we include in these broadband engagement meetings?

Asked about the importance of competition among internet service providers for ensuring the availability of reliable broadband service, 57 of the respondents selected the option “very important.” 14 respondents felt that it was “somewhat important.” Only two respondents felt that it was “not important at all,” and one respondent had no opinion.

When asked about who should lead efforts to ensure Georgia’s residents have the digital skills they need, the respondents were provided with five options. The results are as follows:

- State governments: 24
- Local governments: 22
- Schools: 15
- Non-profits: 8
- Employers: 2

Notably, a few paper surveys circled more than one option, and several of these paper surveys circled all the provided options. In addition, four respondents did not select any of the provided options.

Respondents were asked about what they think is the biggest obstacle to increasing high-speed internet subscriptions in Georgia. The most common response among respondents mentioned funding, cost, or price. Some of these responses also detailed that the high cost of reliable internet services made those services inaccessible to low-income residents of Georgia. Respondents also noted that the lack of competition contributed to this barrier.

Several respondents noted that the rurality of communities was an obstacle. These respondents noted that the distance between homes was a barrier to getting these homes connected. Respondents that mentioned rurality as an obstacle also tended to mention the lack of infrastructure as another barrier.

Respondents also noted that lack of digital literacy and devices was a barrier to increasing high-speed internet subscriptions in Georgia. These respondents mentioned that educating Georgia citizens on both the value and the uses of high-speed internet services would be beneficial to getting these citizens connected.

Respondents were asked if they were satisfied with their internet services both at home and at work. Responses to this question varied widely. Some were completely satisfied both at home and at work, some were satisfied with the internet service at one location but not the other, and some were not satisfied with services at either location. Others noted that they were satisfied with the service at both locations but knew of someone who was not satisfied, or that they were dissatisfied with the community's internet service in general. Some noted that while they were satisfied, this satisfaction came at a high end-user cost. Finally, respondents who were completely satisfied at both locations noted that they lived in metropolitan areas; those who were dissatisfied noted that they lived in rural areas.

Of these respondents, 4 were satisfied only at home, 1 was satisfied only at work, 27 were satisfied both at home and at work, and 21 were dissatisfied at home and at work.

Responses also varied widely when presented with the question, "What stakeholder organization(s) or group(s) do you want to make sure we include in these broadband engagement meetings?" Respondents tended to mention stakeholder groups that were related to their own organizations. For example, library systems tended to mention public libraries, and school systems tended to mention local and State boards of education. Some respondents mentioned stakeholder groups they thought GTA could have missed including farmers, faith-based organizations, small businesses, youth representation groups, military/veteran communities, non-English speakers, centers related to aging (nursing homes, senior centers, councils on aging),

State-run behavioral health services, homeowner associations (HOA), social service providers, healthcare providers, and community cultural centers. Specific organizations mentioned included: NAACP, Urban Outreach Association, Spalding Emergency Agency, SOWEGA Council on Aging, Georgia Department of Education, Altamaha EMC, Techbridge, Boys and Girls Clubs of America, and Georgia Piedmont Technical College.