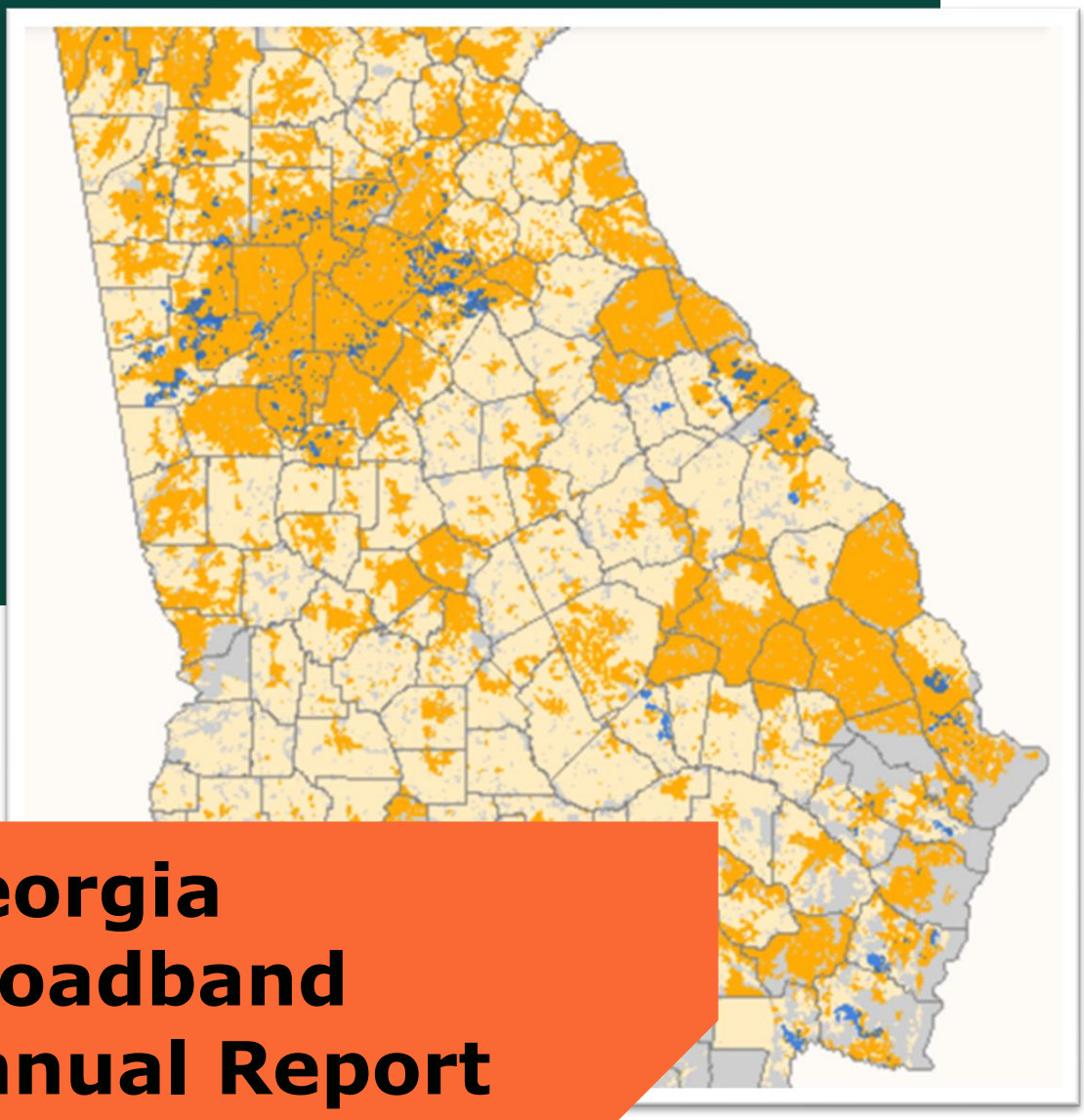

Georgia Broadband Annual Report 2022

GEORGIA TECHNOLOGY AUTHORITY

Georgia® Department of Community Affairs

We are honored to submit this annual report highlighting the efforts of the state broadband program. Since legislation established the state's broadband initiative in 2018, the Georgia Department of Community Affairs (DCA) and Georgia Technology Authority (GTA) have been hard at work to close the digital divide in Georgia.

Charged with creating Georgia's statewide broadband expansion strategy, GTA conducted a six-month engagement with industry experts which included dozens of meetings with Georgia stakeholders to update the state's strategy. Many of the findings and recommendations from this effort are summarized within this report. Additionally, the broadband team continues to improve the Georgia Broadband Availability Map to keep up with a dynamic broadband landscape, including new internet service providers' networks, evolving technology standards, and other updates to facilitate research and planning. The high-quality service availability map and updated state strategy provides the team necessary information to guide funding programs to support broadband infrastructure projects throughout the state.

Under Governor Brian P. Kemp's leadership, the state broadband team provided technical support to the Governor's Office of Planning and Budget, which announced over $400 million in awards in February 2022. Building on the successes of the first program, Governor Kemp directed that a second grant program will deploy approximately $250 million in additional funding for broadband infrastructure projects by the end of 2022.

While there is still work to be done, Georgia is well positioned to continue this work in the future with a respected service availability map, new strategic plan, and active grant programs providing infrastructure funding. Thanks to your continued support of this important initiative, Georgia's digital future appears bright.

Respectfully,

G. Christopher Nunn
Commissioner, DCA

Shawnzia Thomas
Executive Director, GTA

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EXECUTIVE SUMMARY

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 funding for projects throughout the state and creating a comprehensive state strategy to chart a path to close the digital divide.

The funding that has been allocated will assist with exceedingly high costs to deploy broadband networks into many of the remaining communities, primarily in rural areas of the state, that are unserved (lacking access to terrestrial broadband at speeds of at least 25 Mbps download and 3 Mbps upload).

Broadband connectivity is a necessary tool for citizens across the state to be able to work remotely, participate in virtual learning, have access to telemedicine, and many other important day-to-day uses. This reality was underscored during the COVID-19 pandemic with millions of Georgians leaving their offices to work from home, students participating in their classroom studies from their living rooms, and health care institutions limiting in-person interactions.

PROGRAM OBJECTIVES[1]

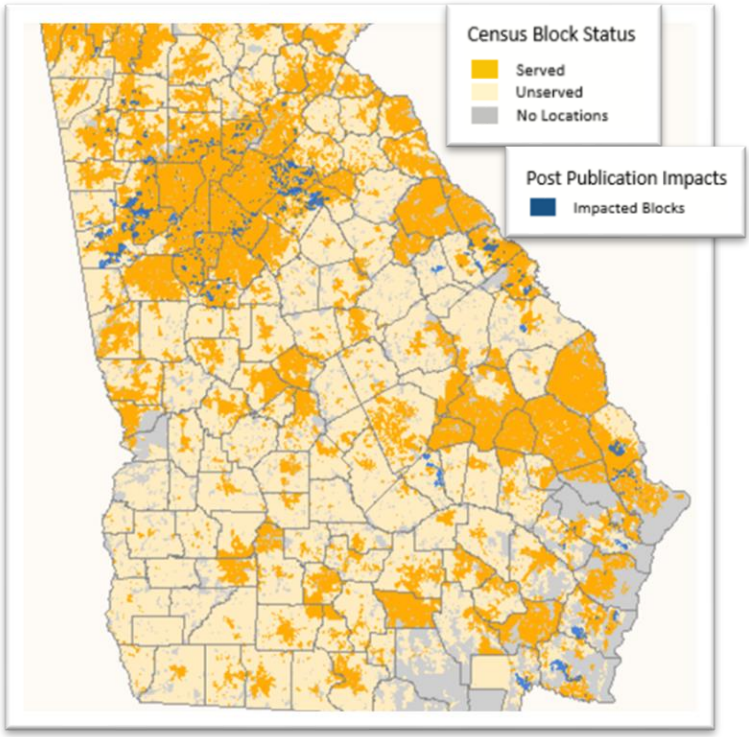
The Georgia Broadband Program's mission is to promote the expansion and buildout of high-speed broadband to all Georgians. With significant funding recently deployed and additional funds becoming available in the future, the roles of state agencies associated with the program are critically important to the successful administration of the funds. To accomplish this work, the program recently established an expanded set of strategic objectives as part of the state's broadband strategy update:

1. Bridge the broadband gap in the most cost-effective, timely way possible. Specifically, the state seeks to optimize the cost and time to implement a statewide broadband strategy to avail high-speed reliable internet service to Georgia's households, businesses, and institutions.
2. Enable sustainable, reliable, and affordable broadband service to end users.
3. Increase the impact of capital investments by expanding internet usage for remote education, telehealth, small business operations, agriculture, and telework.
4. Achieve government objectives for public safety, emergency response, and modern and efficient government administration and customer service with reliable broadband connectivity statewide.
5. Ensure safe and effective end user experiences through digital literacy.
6. Establish workforce development programs to support future broadband expansion efforts, maintenance, and technical support.

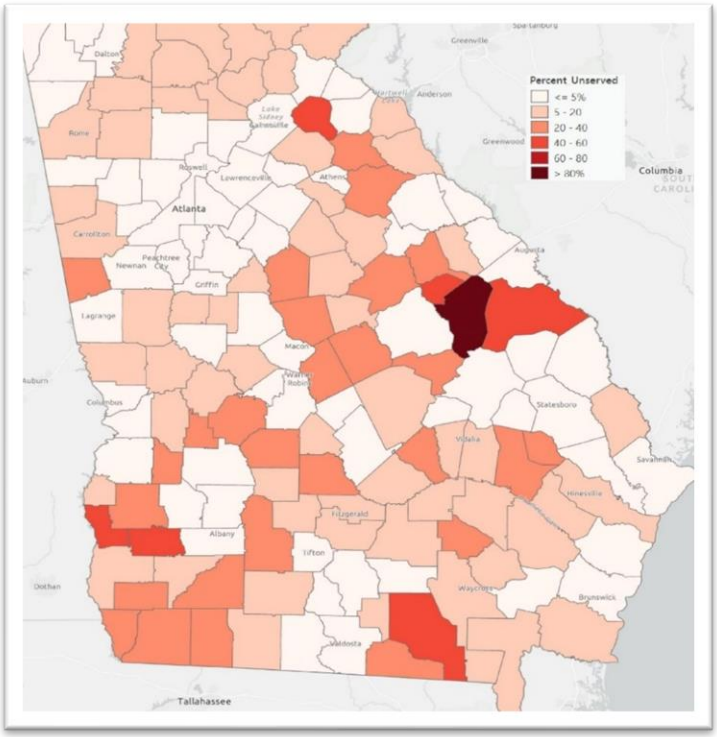
[1] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 1.

STATE OF BROADBAND SERVICE IN GEORGIA

The 2022 Georgia Broadband Map documents 454,950 unserved addresses – about 90 percent of which are in rural areas. This is an improvement from the 482,274 unserved addresses that were identified in the 2021 annual report released jointly by the Georgia Technology Authority and Georgia Department of Community Affairs. When recent investments such as the Rural Digital Opportunity Fund, U.S. Department of Agriculture ReConnect, and American Rescue Plan Act State Fiscal Recovery Funds are taken into account, the number of unserved and unfunded locations in Georgia substantially diminishes to just over 200,000 locations that remain unserved and without an identified funding agreement to provide service in the future. The map, which is among the most extensive and sophisticated of its kind in the nation, continues to indicate that the state's broadband gap is significantly larger than the Federal Communications Commission's (FCC) data show. Further, although the state's broadband gaps are concentrated heavily in rural areas, a significant number of locations in urban areas also lack coverage.



2022 Broadband Service Availability Map



2022 Broadband Service Availability, including Locations with Funding Agreements

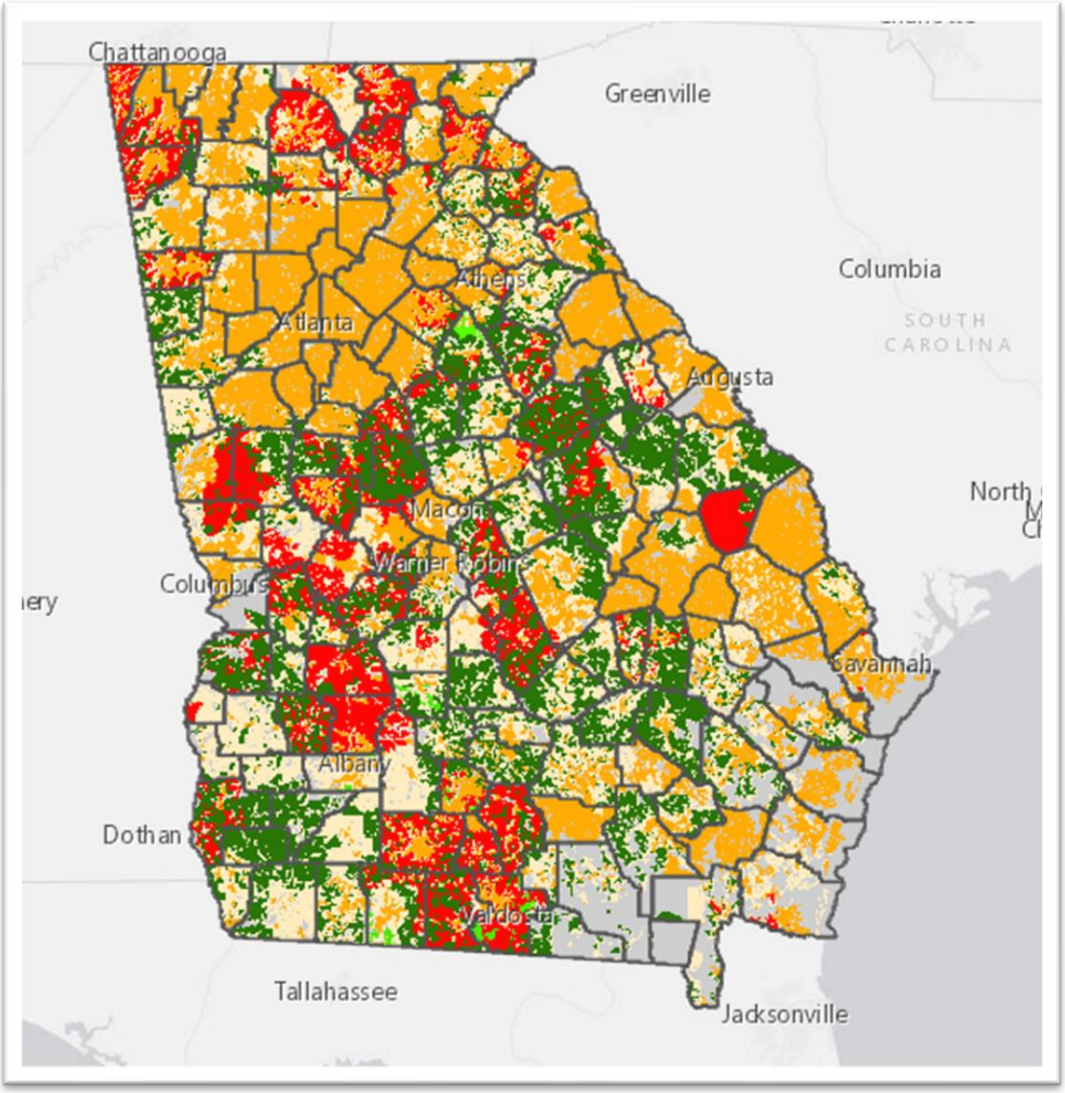
Of the approximately 5.3 million locations in the data (i.e., homes, businesses, and institutions in Georgia), 4.9 million locations, or 91.5 percent, are served at speeds of at least 25 Mbps download and 3 Mbps upload (25/3) via terrestrial technologies. Of the 454,950 unserved locations, about 90 percent are outside of urban areas.

RECENT BROADBAND INVESTMENTS

American Rescue Plan Act

Governor Kemp announced in June 2021 that the state would use State Fiscal Recovery Funds under the American Rescue Plan Act (ARPA) to address the lack of broadband service in Georgia. To assist in properly deploying these funds within the parameters of a competitive program, the governor appointed an 18-member Broadband Infrastructure Committee composed of legislators and state agency leadership that would score eligible projects and make funding recommendations.

On February 1, 2022, the governor announced almost $408 million in preliminary awards which will provide communities, households, and businesses in 70 Georgia counties access to faster and more reliable broadband. The projects targeted with the awards could serve 183,615 locations, of which 132,050 are currently unserved based on state data. These grant projects represent an investment of more than $738 million when matching funds are contributed. Together, this is the largest public investment in broadband deployment infrastructure in the state's history.



American Rescue Plan Act Preliminary Grant Project Areas (ARPA Projects in Red / RDOF Projects in Green)

NTIA Broadband Infrastructure Program

Along with the funding under the American Rescue Plan Act, Georgia was also fortunate to receive funding in 2022 from NTIA's Broadband Infrastructure Program (BIP). A joint application by Windstream and Lumpkin County was successful in being approved for last-mile infrastructure investment. The project will serve 1,846 locations through a total budget of $5,172,043. $3,236,198 of this will be covered by the BIP grant and the remaining will be contributed as a private match from Windstream.

FUTURE FUNDING OPPORTUNITIES

American Rescue Plan Act Capital Projects Fund

The American Rescue Plan Act (ARPA) includes the $10 billion Capital Projects Fund (CPF) for payments to states, territories, and tribal governments to carry out critical capital projects that directly enable work, education, and health monitoring, including remote options in response to the COVID-19 public health emergency. CPG allows for investment in high-quality broadband as well as other connectivity infrastructure, devices, and equipment. Georgia anticipates an allocation of approximately $260 million in CPF resources that will be used primarily for broadband infrastructure. More information regarding CPF can be found on the U.S. Department of Treasury website.

Infrastructure Investment and Jobs Act Programs

Broadband Equity, Access, and Deployment Program

Through the $42 billion Broadband Equity, Access, and Deployment (BEAD) Program, each state will receive at least $100 million. Georgia should receive additional funding based upon the new FCC national broadband map scheduled for release in late 2022 or early 2023. BEAD funds should be available for distribution by states in late 2023 or early 2024.

Upon approval by the National Telecommunications and Information Administration (NTIA), Georgia will oversee the deployment of BEAD funding to reach three priority areas:

- Unserved locations
  - No access to 25 Mbps download and 3 Mbps upload speeds
- Underserved locations
  - No access to 100 Mbps download and 20 Mbps upload speeds
- Community anchor institutions
  - Without gigabit connections

Digital Equity Act Program

The Digital Equity Act dedicates $2.75 billion to establish three grant programs. These programs promote digital inclusion and equity to ensure that all individuals and communities have the skills, technology, and capacity needed to reap the full benefits of a digital economy.

- The **State Digital Equity Planning Grant Program** is a $60 million formula grant program for states and territories to develop digital equity plans.
- The **State Digital Equity Capacity Grant Program** consists of a $1.44 billion formula grant program for states and territories. Funds are distributed via annual grant programs over five years to implement digital equity projects and support the implementation of digital equity plans.
- The **Digital Equity Competitive Grant Program** is a $1.25 billion discretionary grant program which will distribute funds via annual grant programs over five years to implement digital equity projects. Eligible applicants include specific types of political subdivisions, agencies, or instrumentalities of states; tribal governments; nonprofit entities; community anchor institutions; local educational agencies; and entities that carry out workforce development programs.

Enabling Middle Mile Broadband Infrastructure Program

The Enabling Middle Mile Broadband Infrastructure Program creates and funds a $1 billion initiative for the construction, improvement, or acquisition of middle mile infrastructure. The purpose of the grant program is to expand and extend middle mile infrastructure to reduce the cost of connecting unserved and underserved areas to the internet. Eligible applicants include states' political subdivisions; tribal governments; technology companies; electric utilities; utility cooperatives; public utility districts; telecommunications companies and cooperatives; nonprofit foundations, corporations, institutions, and associations; regional planning councils; native entities; or economic development authorities. This funding program will be run entirely by the federal government and will close to applicants by the end of September 2022 with awards being announced in 2023.

REVISED STRATEGY

O.C.G.A. § 50-40-2 enables the joint broadband initiative between Georgia's Technology Authority (GTA) and Department of Community Affairs (DCA). Under this code section, GTA is tasked with establishing and implementing the state's broadband deployment strategy. During fiscal year 2022, GTA led a strategic plan update with the assistance of a telecommunications and broadband consulting and engineering firm. This six-month-long engagement 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. Included below are select key takeaways and an overview of the strategy's proposed recommendations. The full 150-page plan is publicly available and can be requested by contacting GTA.

Key Takeaways

Investing in Broadband Will Create Jobs and Other Economic Benefits[2]

Georgia's broadband deployment sector generates $13 billion in direct economic output and encompasses 85,796 jobs. The indirect impact through supplier purchases is $6.1 billion and 42,970 jobs, and the induced effects, due to employee consumption activities, result in $21.2 billion in output and 155,504 jobs.

The tables below outline the total estimated economic benefits from a $1.5 billion, $3 billion, or $4 billion investment in broadband in Georgia. The analysis finds that these investments would lead to an estimated doubling of economic impact through sales. In addition, an amount equivalent to roughly half of the investments would become earnings for Georgia's workforce. This includes the creation of tens of thousands of new jobs along the broadband deployment supply chain and throughout the state's economy.

EFFECT	SALES	JOBS	EARNINGS
Initial	$1,500,000,000	3,635	$317,557,355
Direct	$423,163,282	2,355	$135,803,064
Indirect	$181,926,168	1,214	$66,094,361
Induced	$731,533,637	5,450	$282,282,471
Total	**$2.8 billion**	**12,653**	**$800 million**

Table 1: Estimated Economic Effects of Investing $1.5 Billion in Broadband Construction

EFFECT	SALES	JOBS	EARNINGS
Initial	$3,000,000,000	7,269	$635,114,709
Direct	$846,326,564	4,710	$271,606,128
Indirect	$363,852,337	2,429	$132,188,721
Induced	$1,463,067,275	10,899	$564,564,942
Total	**$5.7 billion**	**25,307**	**$1.6 billion**

Table 2: Estimated Economic Effects of Investing $3 Billion in Broadband Construction

[2] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 4-5.

EFFECT	SALES	JOBS	EARNINGS
Initial	$4,000,000,000	9,692	$846,819,612
Direct	$1,128,435,419	6,280	$362,141,504
Indirect	$485,136,450	3,238	$176,251,628
Induced	$1,950,756,367	14,532	$752,753,256
Total	**$7.6 billion**	**33,743**	**$2.1 billion**

Table 3: Estimated Economic Effects of Investing $4 Billion in Broadband Construction

Broadband Investment Will Lead to Construction Workforce Needs[3]

Significant investment in the broadband deployment sector will place intense demands on the state's applicable 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.

This analysis projects additional workforce needs under the broadband construction investment scenarios listed above, i.e., $1.5 billion, $3 billion, and $4 billion. This analysis only addresses the direct workforce requirement. These are the broadband deployment jobs created by the direct investment – that is, not the jobs created by the indirect or induced effects in the economy.

The following table estimates the numbers of workers needed in the top 15 categories in each investment scenario and the proportional increase in workforce needed for each occupation.

[3] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 5-6.

		$1.5B Investment		$3B Investment		$4B Investment	
Occupation	Currently Employed in Georgia	New Workers Needed	% Increase	New Workers Needed	% Increase	New Workers Needed	% Increase
Construction Laborers	61,435	331	0.5%	663	1.1%	883	1.4%
Personal Service Managers	95,192	162	0.2%	324	0.3%	432	0.5%
Electrical Powerline Installers and Repairers	4,414	157	**3.6%**	314	**7.1%**	419	**9.5%**
First-line Supervisors of Construction Trades	25,287	150	0.6%	300	1.2%	400	1.6%
Operating Engineers and Other Construction Operators	14,752	147	1%	294	2%	392	2.7%
First-line Supervisors of Mechanics and Installers	18,091	120	0.7%	239	1.3%	319	1.8%
Electrical, Electronic, and Electromechanical Assemblers	4,254	117	**2.7%**	234	**5.5%**	312	**7.3%**
Telecommunications Equipment Installers and Repairers	11,022	114	1%	228	2.1%	305	2.8%
Electricians	23,259	108	0.5%	216	0.9%	288	1.2%
Construction Managers	23,759	97	0.4%	194	0.8%	259	1.1%
Telecommunications Line Installers and Repairers	3,585	84	**2.3%**	167	**4.7%**	223	**6.2%**
Customer Service Representatives	116,220	78	0.1%	156	0.1%	208	0.2%
Sales Representatives of Services	42,969	71	0.2%	142	0.3%	190	0.4%
Project Management and Business Operations Specialists	65,282	68	0.1%	136	0.2%	181	0.3%
Miscellaneous Assemblers and Fabricators	55,807	68	0.1%	135	0.2%	181	0.3%

Table 4: Estimated Workforce Requirements for Top 15 Broadband Deployment Occupations
Source: Emsi Datarun 2021.3

Increased Broadband Adoption Will Create Billions in Additional Long-term Economic Benefits in the State[4]

Investments in broadband infrastructure and other efforts to increase broadband adoption will create long-term economic benefit. 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

[4] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 6-7.

jobs resulting in $1.1 billion to $1.4 billion in additional earnings. Healthcare savings 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.

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.

Infrastructure Funding Program Recommendations[5]

1. Address middle mile gaps through targeted grants

Discussions with Georgia internet service providers (ISPs) suggest that middle mile (i.e., backhaul and internet exchange points) gaps still exist in significant parts of the state. Smaller ISPs and electric membership cooperatives (EMCs) have identified that bridging middle mile gaps would enable more cost-effective construction and operations in the last mile, creating more opportunity for innovation.

The state should consider creating a pilot middle mile grant program to test the market for middle mile funding, including robust requirements for demonstrating need. By starting with a targeted pilot program that includes a clear and detailed requirement that last mile applicants must demonstrate the need for public middle mile support, the state can begin to understand the connection between last mile and middle mile facility deployment. The state can then gather additional data on the impacts of public middle mile funding on competition and affordability of middle mile services, especially in unserved and underserved areas.

2. Develop a line extension grant program

Discussions with ISPs suggest a large quantity of unserved pockets of addresses within otherwise served areas. These are different from the usual large contiguous unserved areas. Addressing these unserved pockets would be most efficiently done through line extensions by ISPs that serve surrounding areas. This is a best practice executed in several states and strongly supported by Georgia ISPs.

The state should consider creating a pilot line extension grant program to test ISP appetite for this approach to funding unserved pockets within otherwise served areas. The line extension grant program should fund both extension on the road and deployment on long driveways as both represent investments that were not viable for private investment alone.

3. Review strategy as needed to align priorities with funding sources

The federal broadband funding environment is changing rapidly and will require frequent strategic analyses of how to optimize state programs to maximize the opportunity to leverage federal funds for Georgia. For example, the American Rescue Plan Act (ARPA) and the Infrastructure Investment and Jobs Act (IIJA) use standards for broadband that are different from those in current Georgia and FCC policy. IIJA funding requirements are yet to be determined by the National Telecommunications and Information Administration (NTIA). The FCC has launched, based on IIJA direction, a proceeding to review and potentially reform Universal Service funding, e.g., Rural Digital Opportunity Fund, E-rate, Healthcare Connect Fund, and Lifeline. And new FCC and agency appointments are likely to shift federal funding strategy. Quarterly or biannual review would ensure the state's efforts are calibrated to maximize the potential for federal support to Georgia ISPs.

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[5] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 9-10.

4. Seek opportunities to align needs and capabilities across agencies

State assets and capabilities can be leveraged for efficiencies and opportunity. Build- and dig-once policies such as those currently under development at the Georgia Department of Transportation (GDOT) enable efficient deployment with win-win state-private outcomes. For example, GDOT has extensive communication needs for monitoring evacuation- and emergency-driven needs and plans to install modern telecommunications physical plant to meet short- and long-term requirements. At a low additional cost, excess infrastructure can be made available for commercial use to support middle mile operations and increase the viability of last mile deployment. The state broadband team's middle mile efforts should be aligned with and support important new efforts by GDOT to spur new middle mile deployment through dig-once policies and its own construction efforts.

Data and Mapping Recommendations[6]

1. Maintain and expand Georgia's leading national role in mapping

The Georgia Broadband Map is nationally renowned and serves as a critical tool for policymaking, grantmaking, and representing Georgia's interests in Washington, D.C. The map will enable Georgia to vet and challenge incorrect federal data.

The state broadband team should consider ways to optimize the map to participate in the FCC challenge process to ensure proportional and fair federal funding for Georgia. This might include:

- Expanding data collection to include higher speeds, including by linking collection protocols to emerging and evolving broadband definitions rather than being tied solely to the FCC current (outdated) definition
- Developing a Georgia challenge process that allows localities to submit data to clarify the map

In the same vein, the state should consider ways to provide support and training for localities to challenge the federal map if necessary. And ISPs should be incentivized to continue participating in mapping. This could include requiring data sharing as a precondition for applying for grants or as a scoring criterion in grant evaluation; ISPs could also be required to share data as an ongoing condition of receipt of a grant.

2. Develop expanded data collection strategy

New data collection will enable tracking of progress over time and evaluation of the efficacies of other programs. Data collection can include multiple categories of information:

- Adoption
    - Collect Affordable Connectivity Program (ACP) usage by provider, jurisdictional boundary, and school district on a quarterly basis
    - Undertake a statistically valid survey statewide of barriers to adoption that enable development of digital opportunity plans and strategy

- Service and speed availability
    - Publicize the Georgia online speed test

[6] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 10-12.

  - Develop a mechanism for consumer reporting of lack of service
  - Develop collaboration with GDOT for ongoing collection of mobile service data
- Workforce needs
  - Conduct outreach to ISPs to understand true scale of workforce gaps and calibrate strategy to actual requirements
  - Conduct outreach to training centers to determine the scale of training and the percentage of students who are Georgians

3. Develop a mobile testing mechanism and collect mobile drive test data

FCC maps suggest that the entire state is served with mobile coverage, but this is not reflected in the experience of all Georgians. Drive tests enable collection of mobile service data that can dramatically improve on poor FCC data. Georgia should consider developing a mobile coverage map akin to the existing Georgia Broadband Map. This would constitute a valuable tool for identifying middle mile gaps as well as cellular and emergency communications challenges.

The actual mobile drive tests could be undertaken by a contractor or by providing apps and equipment to entities that continually drive throughout the state (such as GDOT road crews and state police). This effort could also incorporate findings from the Georgia Department of Education's (GaDOE) analysis of connectivity needs.

Mobile drive testing can also efficiently be expanded to include testing of fixed wireless networks. Any data regarding the coverage areas and capacity of fixed wireless networks would add considerable value to the Georgia Broadband Map – and would also provide additional tools for Georgia to challenge inaccurate FCC data and ensure Georgia receives its fair share of IIJA BEAD funding.

State and Local Collaboration Recommendations[7]

1. Support local planning through technical assistance

Localities play multiple key roles in broadband deployment: asset owner, volume consumer, ISP partner, permitting authority, and representative of the public. A key goal is to enable local communities to be partners to the state and private ISPs.

The state's technical assistance program should be continued and expanded – building on the work of the University of Georgia Carl Vinson Institute of Government, the Georgia Municipal Association (GMA), and others – to enable local public sector leaders to navigate the current environment successfully and deftly. Efforts could include:

- An ongoing webinar series regarding grant opportunities and partnership approaches
- Assistance with preparation of local and regional plans with similar components (and alignment with) the state strategy
- Creation of a repository of useful information, requests for proposal (RFP), contracts, etc.
- Development of strategic resources to entities undergoing or considering undergoing planning processes

[7] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 12-13.

Notably, there exists the potential for federal grants through the U.S. Department of Commerce Economic Development Administration (EDA) to fund some of this work. EDA is strongly supporting state efforts to provide technical assistance to local communities with broadband planning efforts.

2. Support local communities to challenge the FCC map

The FCC mapping process will include opportunity for challenges from communities. The Georgia Broadband Map, along with local and any additional test data that the state of Georgia can collect, will be singular tools in enabling communities to vet and challenge the FCC map if necessary. To do this, communities will benefit from coaching and support from the state that enables efficient analysis and responsiveness to the FCC. The goal is to enable local communities to protect their interests.

3. Allow localities to contribute a portion of match funds

Localities across the state seek ways to support and encourage private partners to invest in local broadband deployment. Allowing local contributions to a private ISPs match obligations for the state's grant program would address this concern and have additional benefits. For example, this approach would increase the reach of ISP deployments by increasing the total capital available to ISPs. It would also encourage ISPs to engage with local communities and seek to address their needs through such partnerships. Localities should not be able to contribute more than a modest percentage of ISP match obligations to ensure sufficient investment by ISPs.

Affordability and Adoption Recommendations[8]

1. Develop digital opportunity/equity plan

Consideration of broadband factors other than infrastructure can benefit the state by benefitting residents and ISPs. National and Georgia data demonstrate that connectivity via infrastructure is insufficient alone; broadband adoption also requires digital skills, device access, and other support. These are frequent challenges for seniors and lower-income households, in particular.

These gaps are the target of the digital equity funding in the IIJA, which will provide both planning and execution funds for each state. These efforts will involve a different set of partners from infrastructure projects, including:

- Community-based organizations
- Local governments
- Libraries and schools
- Nonprofit entities

While the implementation of the IIJA funding programs is still under development by NTIA, Congress mandated a robust digital opportunity funding stream for planning grants for states and for specific programmatic work on needs assessments, identifying barriers to adoption, addressing digital literacy and device access, and supporting workforce development programs. This funding will depend in part on the funding allocation set out in the statute – and on each state's Digital Equity Plan.

[8] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 13-14.

ISPs will be interested in engaging with the state on this issue, because increasing adoption is a key goal of those businesses and increased broadband adoption serves to make their investments more viable.

2. Maximize benefits of federal subsidy programs for households and companies

Nationwide and in Georgia, participation in ISPs' and federal low-income programs is generally low, largely due to lack of information and trust, although best practices exist for engaging the low-income community to expand participation in private and federal programs.

Increased use of federal subsidy programs like ACP would have multiple public and private sector benefits. Increased use of federal subsidies would increase the feasibility of deployment in lower-income areas by creating a multi-year revenue stream from customers that otherwise would not subscribe to services.

Georgia should consider developing a multi-prong public outreach campaign to connect residents to ISPs to enroll in subsidy programs. This approach might include educational materials (for the public, educational stakeholders, and nonprofit entities); technical assistance for eligible residents; and partnerships with trusted, local institutions and nonprofit and educational organizations.

Staffing an outreach contact center to receive calls from and make calls to eligible residents to guide them through the process is a proven best practice in this regard. As with all adoption programs, ISPs will serve as important partners in this effort. The guaranteed federal revenue stream associated with customers who use ACP can serve to lower the risk on ISP investments in lower-income areas.

Workforce Readiness Recommendations[9]

The current broadband moment offers opportunity in the areas of new jobs and work opportunities. Like most states, Georgia will need to take steps to ensure it has a sufficient trained workforce to meet upcoming needs given the anticipated scale of investment and construction in broadband for the next decade.

1. Engage the public sector

Georgia state broadband members should consider ways to engage the public sector to maximize Georgia's workforce readiness for broadband construction and maintenance jobs. For example, the Technical College System of Georgia could seek to prioritize broadband jobs from customer service to splicing. There are already training opportunities at the Wiregrass Georgia Technical College campus, but it is limited by availability of instructors and the ability to recruit; scaling the training from Wiregrass Tech to other institutions could be an effective approach. Robust marketing initiatives should also be used to attract sufficient enrollment; students are seeking financial earning power along with lifestyle and values benefits.

2. Engage the private sector

The state broadband team should consider ways to engage the private sector to maximize Georgia's workforce readiness for broadband construction and maintenance jobs. For example, a partnership with Southeast Lineman Training Center could create a pipeline of employees to work in Georgia after graduation. The center trains 150 communications line workers per year, the majority of whom are from

[9] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 14-15.

out of state and find jobs out of state. The state could discuss collaborative ways that private employers could increase publicity and awareness of opportunities in Georgia – or incentives they could offer to keep those trained workers in the state. The state would have a stronger and bigger pipeline between training and jobs.

Broadband Office Recommendations[10]

The state's broadband office will require key roles either in house or via contracted assistance. GTA should conduct an internal review to determine an approach that will support ongoing management and interagency coordination. Further, Georgia should ensure it has the critical roles and skills to support its core competencies.

[10] CTC Technology & Energy, *Georgia Broadband Strategy* (2022), 15.

BROADBAND READY PROGRAM

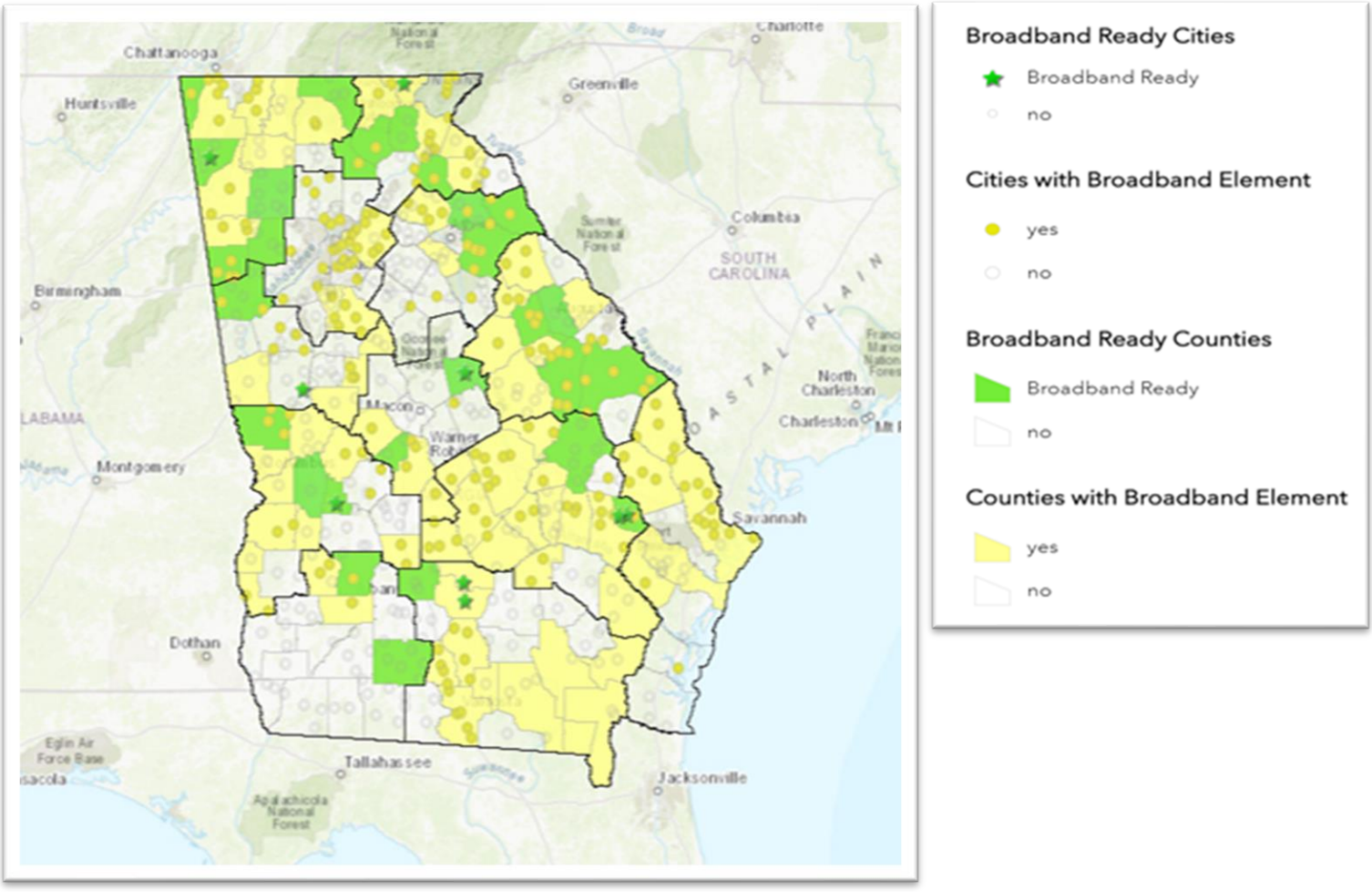
Broadband Ready status is a designation awarded by the Department of Community Affairs (DCA) that recognizes a community that has taken action to reduce obstacles for broadband expansion by:

1. Adopting an ordinance that streamlines permitting for broadband projects
2. Including a "broadband element" in their local comprehensive plan that clearly states their goals and strategies for broadband expansion

In 2018, to underscore the importance of local planning for broadband expansion, Georgia began requiring that a broadband element be included in all communities' Comprehensive Plans. Now, four years after that requirement's issuance, nearly every community in Georgia has updated their plans to include local coverage data, as well as specific goals and strategies for broadband in their jurisdiction. 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.

Currently, 52 communities have achieved Broadband Ready status across the state. Of those, 36 were designated in the past year, with 12 of those since January 1, 2022.

The graphics below identify the communities that have received the Broadband Ready designation and those that that made movement on adding broadband elements to their comprehensive plans.



POLE ATTACHMENT FEE CHANGES

Although it is not under the purview of the Georgia broadband team, the issue of pole attachments has long been a critical part of broadband expansion efforts. There are two primary methods by which to deploy wireline (fiberoptic and coax cable) infrastructure: aerial and underground trenching. The aerial method is primarily done by using pole attachments on utility poles. Pole owners charge broadband providers who do not own their own poles to use space on the poles. These charges have historically been unregulated except in the case of Georgia Power, whose pole rates are regulated by the FCC. To help broadband providers better plan for infrastructure buildouts, 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 electric membership cooperatives (EMC) and telecommunications service providers.

Voting on December 15, 2020, PSC implemented the following fee structure that went into effect on July 1, 2021. EMC are now required to charge a simple $1-per-year fee for entities to attach utility service to poles in areas unserved by broadband. 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. Served and unserved areas are determined by the Georgia Broadband Map published by DCA.

GDOT RIGHT-OF-WAY FEE CHANGES

As outlined in Georgia's Achieving Connectivity Everywhere (ACE) Act in 2018, the Georgia Department of Transportation (GDOT) began 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 GDOT develops an investment plan for broadband deployment for transportation purposes, GDOT will coordinate with the Georgia Technology Authority 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.

Additionally, GDOT recently improved the fee structure for wireline and wireless carriers to utilize the state's roadway rights-of-way (ROW) for locating physical plant. The ROW 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. Additionally, 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 permitting expenses.

PREVIOUS

Long Distance and Trunk Communications Cables; Permit Fee Schedule

Rate Class	Location	Annual Fee
L	Along local roads in rural areas	$1,000/mile
	Along State Highways in rural areas:	
R1	Where traffic is less than 2,000 vehicles per day	$1,000/mile
R2	Where traffic is 2,000 vehicles per day or more	$2,000/mile
U	Along roads and streets inside urban areas	$5,000/mile

1. 25% reduction for aerial or joint trench installation.
2. EMC's and organizations contracted to EMC's will be exempt from fees.
3. Allows for negotiated agreements.

UPDATED

Issuance of Permits, Permit Fees, and Alternative Procedure for Assessing Fees for Communication Utilities

	Communication Cable Permits		Wireless Facility Permits
Application Fee (One-time)	> 1 mile: $1,400	< 1 mile: $742	$742
Annual Fee (Recurring)	> 1 mile: $300	< 1 mile: $300	$270

1. Retains 25% reduction for aerial or joint trench installation.
2. EMC's and organizations contracted to EMC's will be exempt from fees.
3. Allows for negotiated agreements; existing agreements may remain in effect.
4. Defines Communications Utilities vs. Non-Communications Utilities (electric, gas, water, etc.).
5. Defines Wireless Facilities and Communications Service.
6. Defines low-cost parameters for small-cell facilities for modern wireless telecommunications (i.e. 5G).

Table 5: GDOT's ROW Fee Schedule for Broadband Providers before the revision effective January 1, 2022. Source: GDOT.

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