



08



BROADBAND

Introduction

CONTEXT

In 2018, the State of Georgia launched the Georgia Broadband Deployment Initiative to recognize how vital broadband is to communities' economic and social strength. The State defines a high-speed broadband internet connection as a 25 megabits per second download speed and a 3Mbps upload speed. Like other forms of utilities, broadband access and infrastructure can play a significant role in shaping land use patterns, influencing where residential, commercial, and industrial development may occur.

For example, areas with strong broadband internet, especially those supported by fiber optic infrastructure, are more likely to attract businesses that rely on the internet, such as tech startups and e-commerce companies. This can result in a preference for cleaner industries over heavier industrial uses that could increase freight traffic. These also align with Gwinnett County's target industries, identified in Chapter 3, Economic Development.

Broadband also presents opportunities for economic growth via the digital marketplace or by providing work from home solutions for residents in more rural areas. Daily Communities hoping to attract these businesses will want to invest in providing this crucial infrastructure.

Currently, Gwinnett County enjoys a high level of broadband coverage. However, reaching 100 percent broadband coverage can help the county achieve its economic development goals and accommodate growth throughout a variety of community resources. It will be vital to ensure future developments, particularly the Rowen Foundation, are aligned with high coverage areas.

HIGH SPEED BROADBAND INTERNET PROVIDES AT LEAST

25 MBPS download speed &

3 MBPS

upload speed



Existing Conditions

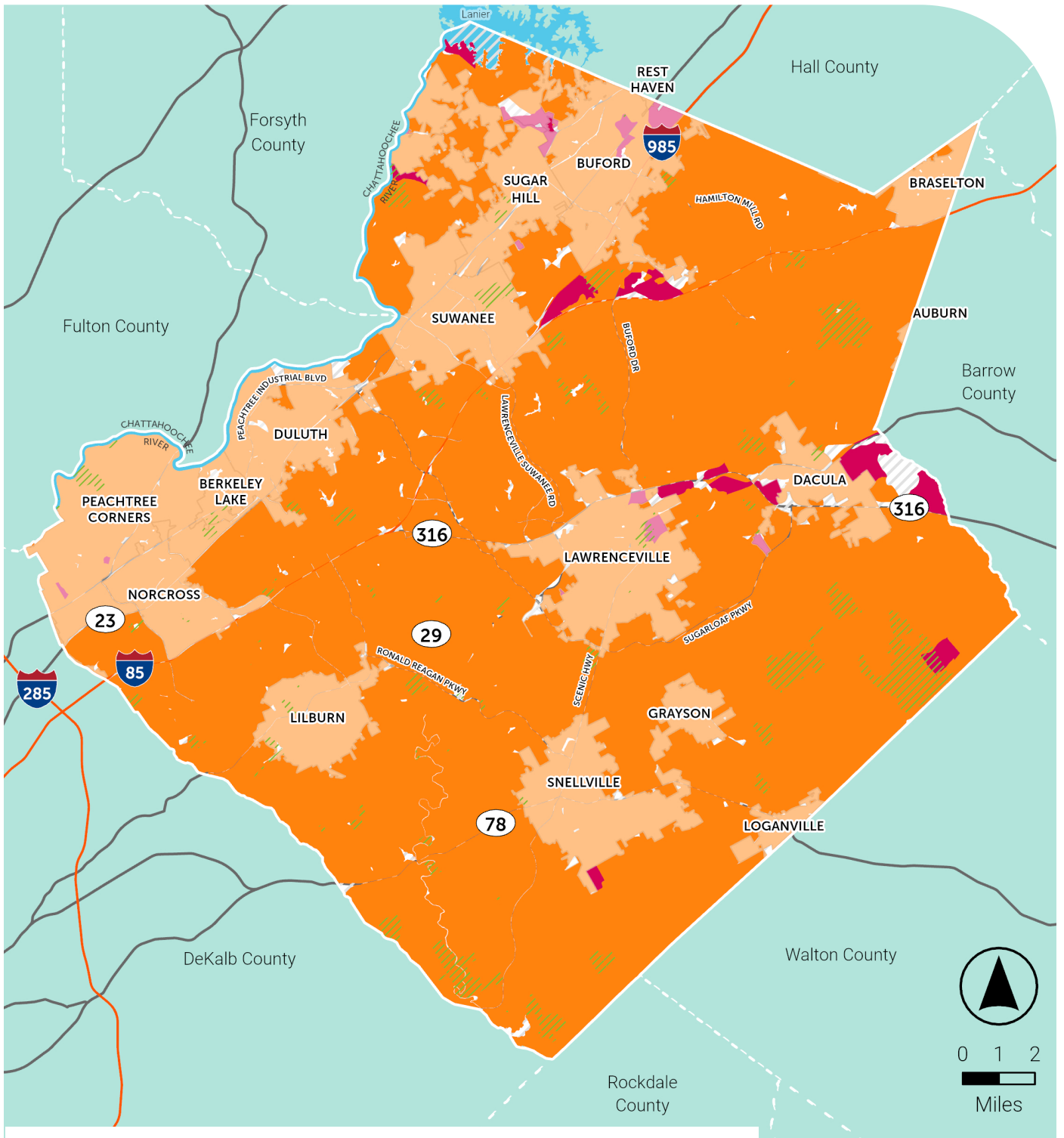
This analysis examines areas both covered and uncovered by broadband, utilizing 2023 data from the Georgia Broadband Deployment Initiative. Additionally, it assesses future projects and their anticipated contribution to the overall broadband coverage within Gwinnett County.

BROADBAND COVERAGE

Gwinnett County is privileged to have widespread broadband coverage, with less than one percent of its area unserved. As of 2022, there are only 103 unserved locations within the county. Figure 8-1 illustrates geographically where these served and unserved areas are located. The areas within Gwinnett that are neither served nor unserved are classified as No Location, meaning there is no commercially available source for the data.

It should be noted that unserved location data is pulled at a specific point in time and can include neighborhoods or buildings under construction that are not yet served by broadband, but will be served once occupied. Locations with no current use for broadband connectivity such as a freight distribution lot, portions of Gwinnett's airport, and other public property were also found to be listed as unserved locations.

Areas of the county not served by broadband include some rural communities to the east between State Route 316 and Winder Highway around the city of Dacula. Communities to the north around Lake Lanier also lack coverage. The County must closely monitor broadband deployment along the eastern portion of Highway 316. As the Rowen Foundation develops into a significant academic, research and development focused area, private developers will need to install broadband infrastructure to support the foundation's work. This can also bring broadband to neighboring communities and continue to strengthen Gwinnett's strong coverage.



**FIGURE 8-1:
BROADBAND COVERAGE**

Needs & Opportunities

The following section reviews the needs and opportunities for building and maintaining high quality broadband infrastructure throughout Gwinnett County.

NEED

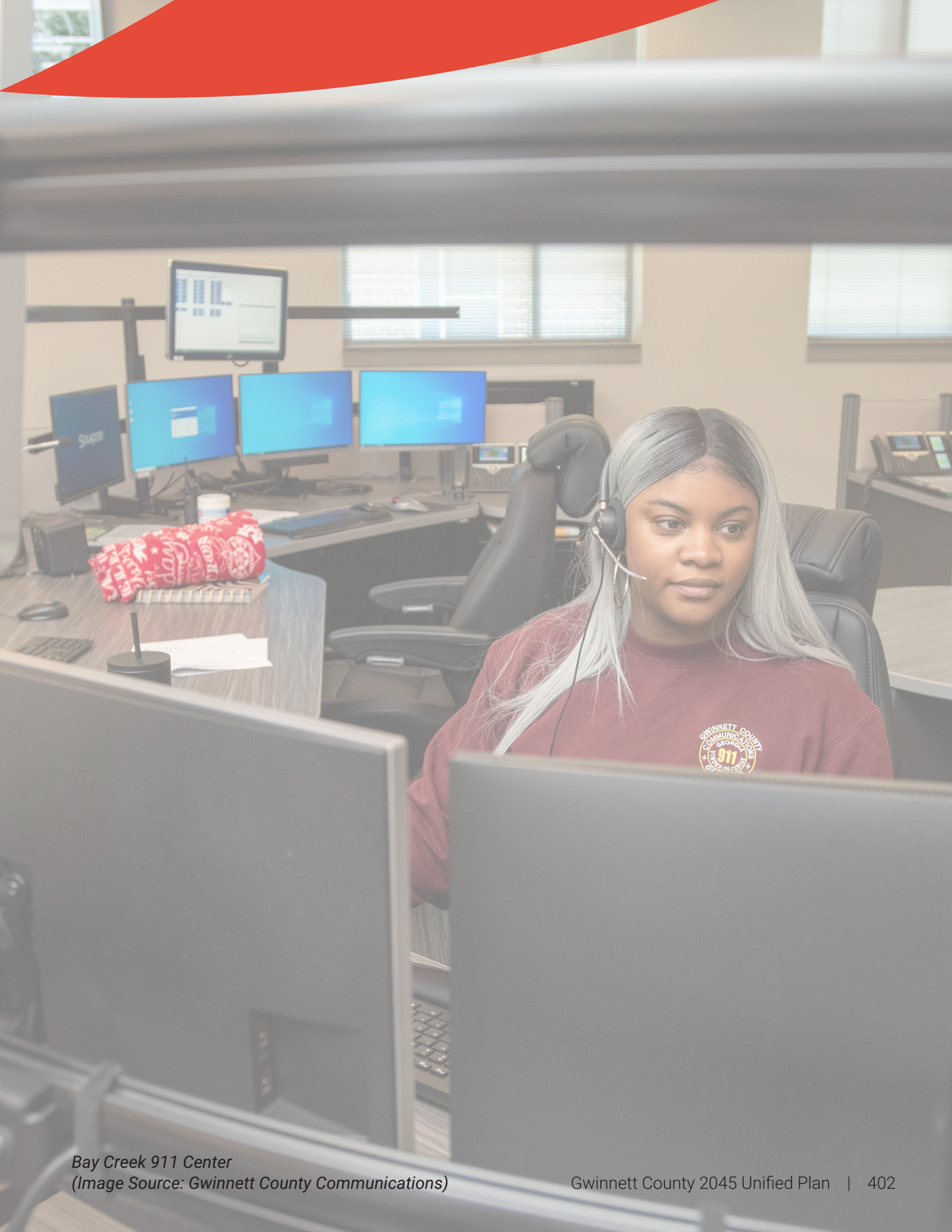
1 MONITOR BROADBAND COVERAGE

While Gwinnett enjoys extensive broadband coverage, pockets of the County remain unserved. Broadband expansion is needed around Highway 316, as the future home of the Rowen Development site. Since this development will focus on research and development, broadband will be crucial to support its vision, and development could bring this to nearby communities.

OPPORTUNITY

1 EXPANDING BROADBAND THROUGH REDEVELOPMENT

Like other essential utilities such as water, wastewater, and transportation, broadband should be prioritized during development and redevelopment projects. Not only does broadband service offer substantial social benefits, but it also enables residents and businesses to enjoy greater economic opportunities and increases economic competitiveness. In areas where broadband coverage already exists, upgrading the infrastructure from cable to fiber optic wiring can further distinguish Gwinnett as a prime location for both residents and businesses.



Bay Creek 911 Center
(Image Source: Gwinnett County Communications)

Goals & Best Practices

As the pace of technological advancement continues to accelerate, Gwinnett County must persist in expanding and enhancing its broadband services, ensuring that all residents have access to the connectivity and information these services offer. This section highlights proposed goals the County can pursue over the next 20 years.



REACH FULL BROADBAND COVERAGE FOR GWINNETT COUNTY

Providing full broadband coverage across Gwinnett County can facilitate economic development goals and foster ideal land use practices. For Gwinnett specifically, expanding broadband coverage in Eastern Gwinnett will be crucial to the success of the future Rowen Foundation research and development site. To unlock state funding to support this goal, the County could pass a Broadband Ready model ordinance. There is also a national push to support broadband expansion through federal spending packages the County may want to pursue. This work could also be achieved collaboratively between cities, the County, and various departments. Planning and Development can coordinate with private providers when right of way maintenance occurs to diminish costs to upgrade broadband service when DWR and GCDOT perform right of way maintenance.

Two best practices should be pursued to accomplish this goal:

1

PASS BROADBAND READY MODEL ORDINANCE

While the county does not presently meet the criteria to be labeled a Broadband Ready Community by the state, it has initiated the first steps toward this designation by incorporating broadband into its 2045 Unified Plan. The next step toward joining 34 other counties in the state that enjoy this designation is passing the model ordinance, as outlined in O.C.G.A. §50-40-40. The designation's purpose is to show that the County has taken the step to reduce obstacles to broadband infrastructure investment.

2

INSTALL AND UPGRADE BROADBAND INFRASTRUCTURE THROUGH DEVELOPMENT, REDEVELOPMENT, AND OTHER INFRASTRUCTURE PROJECTS

Though most of Gwinnett County enjoys broadband coverage, reaching the remaining areas currently without service can be achieved by installing broadband infrastructure in future developments. Opportunities to upgrade existing infrastructure to include fiber optic connections should be taken advantage of during redevelopment projects or updates to existing utilities such as roadways or waterlines. This will take coordination between departments as well.

CASE STUDY:

STRATEGIC BROADBAND INVESTMENT - CHATTANOOGA, TENNESSEE

Just across the Georgia border, the city of Chattanooga's collaborative public and private leadership has executed several initiatives to increase the quality of life for its residents over the last twenty years. These initiatives, across economic development, parks and recreation, planning and conservation, were buoyed by an early 2000s investment in a complete redesign of the power grid and internet services. The project was referred to as Gig City, and went live in 2010 with contributions from local and regional entities. Today, Chattanooga is known for having the fastest municipal internet grid in the entire Western hemisphere. It runs about 200 times faster than the national average. The economic development that followed has dramatically increased the quality of life for residents and allowed the city to provide better community resources as well.



Image Source: Chattanooga Government Technology

BROADBAND IMPLEMENTATION

There are several reasons to prioritize full broadband coverage, including economic competitiveness, viability of future developments, and equitable digital access for residents. Recommendations for actions related to broadband can be found in the Community Work Program on page 459.