Transforming the Delivery of Health Care to Georgians for Generations to Come

Georgia Mental Health Policy Partnership

Georgia can transform the delivery of medical care for mental health and substance misuse disorders for generations to come. Such transformation is required because:

- Georgia ranks 51st in terms of access to mental health care among the 50 states and the District of Columbia.
- There are **87** Mental Health Care Health Professional Shortage Areas in Georgia encompassing **more than 4.9 million** Georgians.

Telehealth – the use of telecommunications technologies to deliver healthcare, public health services, and health education from a distance – is reshaping the delivery of medical care. Instead of physically bringing behavioral health professionals to rural areas, Georgia can do so virtually. **Attachment A** set out 10 ways Georgians benefit from statewide broadband Internet access.

Telehealth expands access to mental health professionals both by enabling virtual access when physical access to mental healthcare is not available and by enabling mental health professionals from outside the state to provide care to Georgians in need. The latter is accomplished by interstate compacts that enable licensed professionals from outside Georgia to provide care (and vice versa).

As stated in the May 10, 2021, U.S. Treasury Interim Final Rule on Coronavirus State and Local Fiscal Recovery Funds, "The COVID-19 public health emergency has underscored the **importance of universally available**, high-speed, reliable, and affordable broadband coverage as millions of Americans rely on the internet to participate in, among critical activities, remote school, healthcare, and work."

The rule goes on to specify that eligible investments must be designed to provide services that meet "adequate" speeds—**at least 100 megabits per second** wherever practicable—for unserved and underserved households and businesses.























The Challenge

Hundreds of thousands of Georgians do not have access to high-speed Internet and statewide broadband Internet access is crucial to Georgia's ability to address the state's lack of access to medical care for mental health and substance misuse.

The lack of broadband Internet connectivity in many of Georgia's rural communities segregates those communities from access to opportunity and upward mobility. Statewide broadband access will enhance the Georgia's ability to achieve health equity - the absence of systemic disparities in health between urban and rural areas.

Due to actions taken by the Executive and Legislative branches of Georgia's state government over the past few years, **Georgia is in the unique position of having a clear understanding of places, persons, businesses, and organizations unserved or underserved by broadband Internet**. In creating its broadband availability maps, the Georgia Rural Broadband Deployment Initiative utilizes a location-level methodology that precisely maps the availability of broadband services to every location – e.g., home, business – in the state. Unlike current FCC methodology, Georgia's enhanced map categorizes census blocks as served or unserved based upon **every location** in the census block.

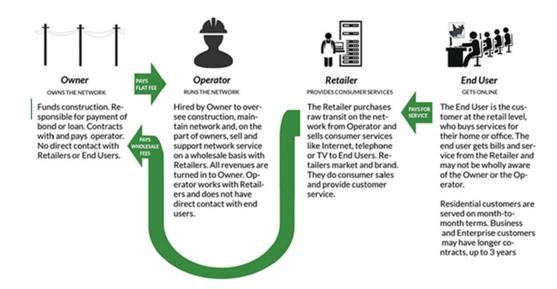
The Network

The proposal is to create an **open access, fiber-to-the-home network** where the same physical network infrastructure is utilized by multiple providers delivering services to subscribers in unserved and underserved areas.

The open access business model provides for competition between providers and the freedom of choice for the subscriber. The model has proved to be a **feasible way to connect rural areas** where service providers have a hard time generating enough revenue to justify investing in their own network infrastructure.

Set out below is an example of an open access network arrangement:

- > The network owner (potentially a public-private partnership) funds the construction
- > The operator (a third party) oversees the construction, operation, and maintenance of the network.
- The retailers provide broadband services to end users, including families and businesses (e.g., high-speed Internet service, online education, workforce training, streaming services)



Wireless operators like AT&T, T-Mobile, and Verizon, will be able to purchase fiber connections to their rural tower sites, at a cost far lower than building their own individual fiber transport capacity.

Why Fiber
-to -theHome

When fiber-optic cables are used to deliver service directly to a subscriber's residence, it's known as "fiber-to-the-home" (FTTH). The most common FTTH architecture is the Passive Optical Network (PON), a design in which signal is driven down a single fiber and "split" using a series of passive lenses to serve individual subscribers.

Fiber-optic cable has around **10,000 times more usable bandwidth** than a typical coaxial cable. Furthermore, fiber-optic cables are much less susceptible to interference and noise than coax or wireless channels. Beams of light do not interfere with other electromagnetic waves in the same way that radio-frequency signals do, so fiber is not vulnerable to crosstalk or radio-frequency leakage like coax.

A typical FTTH deployment today has **symmetrical upload and download speeds** around 1 Gb/s, though currently adopted PON standards support symmetrical speeds up to 10Gb/s. As technology continues to develop, better transmitters will become cheaper and more efficient, and providers will be able to upgrade existing fiber deployments without any changes to the fiber itself. Once fiber is laid, its capacity can be upgraded by orders of magnitude just by changing the transmitters at each end. Fiber-optic cables are typically designed for a lifetime of at least 25 years, though they can, and frequently do, last much longer.

If Georgia installs fiber-to-the-home connections today, it will be able to upgrade the transmitters at each end without touching the underlying cables, **yielding massive performance increases at low cost for decades to come**. Fiber will enable the next generation of applications that depend on high-throughput, low-latency, high-reliability connections. There is an identifiable "speed chasm" between fiber and everything else that is only going to grow more pronounced in time.

ATTACHMENT A

10 Ways Georgians Benefit from Statewide Broadband Internet Access Georgia Mental Health Policy Partnership	
1	Addresses the lack of MH/SUD workforce in unserved/underserved geographies Georgia ranks 51st out of the 50 states and D.C. in terms of access to mental health care There are 87 Mental Health Care Health Professional Shortage Areas encompassing more than 4.9 million Georgians (state population: 10.6 million)
2	Enables access to specialized care providers by persons in unserved/underserved geographies
3	Enhances healthcare workforce efficiency Telehealth has fewer cancellations/no-shows
4	Facilitates early identification and prevention, especially for children, adolescents, and young adults 1 in 4 of Georgia's 6th graders experienced drastic changes in behavior and/or personality in the past 30 days and 1 in 9 of Georgia's 11th graders seriously considered suicide at least once in the past 12 months
5	 Enables the provision of integrated healthcare A model that brings together all parts of the healthcare delivery system (behavioral, mental, physical) that traditionally work in silos. Individuals with a serious mental illness die on average 25 years earlier than the general population and it is routinely due to the failure to address their physical health ailments.
6	Works to achieve health equity Health equity is the absence of systematic disparities in health between and within social groups that have different levels of underlying social advantages or disadvantages
7	Addresses social determinants of health upstream factors that play a critical role in the health and welfare of communities. such as lack of education, unemployment, unequal access to health care, and racism > 98% of the population of Georgia's Hancock County are unserved by broadband Internet access. The county's population is 70% Black, 31% live in poverty, and 8.6% have a bachelor's degree or higher.
8	Allows for the embrace of population health, which includes prevention, promotion, and recovery
9	Supports the delivery of evidence-based standards of care
10	Provides for effective monitoring and follow-up care for chronic health conditions