



Good Morning Senators and thank you for the invitation, my name is Gretchen Hanchett, I am the executive Director of the Greater Allegany Chamber of Commerce and Office of Tourism.

Allegany County is a gorgeous rural county nestled under a canopy of a huge number of beautiful trees!

- We believe our destination is a place where unspoiled wilderness gives the kind of peace and quiet that allows your inner nature to be expressed.
- We are creative, entrepreneurial and loyal who pursue our passions
- Our Local Businesses, exemplify small town values while happily producing and often exporting world class products.
- Our businesses are creative and hardworking while going the extra mile for both their customers and their local employees
- We believe our location is ideal for its access to natural resources, clean water and outdoor recreation while at the same time being close to interstates, rail transportation and easy access airports.
- We believe our location in New York State offers a 180-degree difference from the urban setting. The topography is unique and identifiable, it's a lush collection of greenery and forest and even our interstates our quieter and scenic.
- **We also believe... High-speed Internet service is no longer a luxury. In the 21<sup>st</sup> Century Broadband is a necessity.**

Unfortunately, in rural, Western New York there remain significant areas where it is only a dream or perhaps a promise, but certainly not yet a reality. Internet service across our Nation and State is predominantly

provided by ever fewer large companies, that understandably have a responsibility to their equity holders to maintain an acceptable “return on investment” when making capital expenditures, especially as they grow larger through mergers and acquisitions. The consequences of this situation often mean that sparsely populated areas (like much of Allegany County) are not as high of a priority as more densely populated areas. Companies such as Spectrum, Verizon, AT&T and Frontier Telephone, continue to invest in technology needed to provide service mainly in areas that have higher population density, however, the back roads and agricultural areas where population density is lower have traditionally been and continue to be underserved by these same large enterprises. In 2015, recognizing the importance of broadband infrastructure and building on prior state investments in broadband deployment, Governor Andrew M. Cuomo, with legislative support, established the \$500 million New NY Broadband Program. The Program has provided grant funding to support the deployment of high-speed internet access to unserved areas throughout NY – providing substantial support to companies willing to make an investment in these lower density areas, including much of Allegany County.

First, I would like to thank the Senators here today, who were supportive of that Broadband initiative and applaud a smaller regional operator that has served parts of Allegany County for more than 50 years, Armstrong for participating in and investing their own capital alongside these State funds in order to bring the ubiquitous broadband dream closer to reality. I would also like to note that although Armstrong is in the midst of their expansion to approximately 30,000 presently unserved homes, there is still much more work to be done. Specifically, in areas that were not included census blocks that were awarded to a fiber optic service provider, families, schools and small businesses will remain in need of adequate service.

To try and simplify a very a complex situation, using Armstrong's grant as an example, The NY Broadband Program Office provides support for that company to build out to a very specific number of homes within census blocks scattered across our county that are not currently served by Spectrum, even though there are numerous homes within the cable company's designated service areas that are below the density requirements of their local franchise and thus not served. In addition to the Spectrum areas, the NY Broadband Program also awarded support across Allegany County to a satellite provider that confusingly, already provides service even though, the service they will get support for does not meet the definition of broadband being proffered by regulators today. The end result being, regardless of the important investment New York State has made, many members of our community who live in the most rural areas will still only have access to service which, in practice, neither achieves current definitions of broadband service nor does it meet the basic infrastructure needs of our areas students, businesses and institutions.

Historically Broadband referred to Internet speeds of at least 10 megabits per second (mbps) for download, and 3 mbps for upload. In 2019 that has increased to 25 mbps (download) and 10 mbps (upload). Across America, it has become self-evident that the "gold standard" for broadband service is fiber to the home or FTTH service and virtually every public policy effort to support broadband deployment offers a scoring advantage to providers willing to make such an investment. Alternatively, in areas where incumbent cable companies offer service through hybrid fiber/coaxial networks like spectrum, which do currently meet broadband standards, such support is often withheld as it was in the NY program as it would be largely duplicative or competitive in nature. In remaining unserved areas, where

density issues make fiber or coaxial network deployment infeasible, the latest developments in fixed-wireless technology offer far superior speeds than either incumbent DSL or satellite providers.

#### THE CHALLENGES:

Allegany County topography is a hilly environment with a lush canopy of beautiful trees, it is one of our treasured natural resources, however, it is also a huge challenge when providing internet service to our rural population.

In order to provide “facilities based” service via fiber or coaxial cable, while generally acknowledged to be the most desirable outcome given that these technologies provide the fastest and most reliable service as well as the most permanent in terms of being resistant to obsolescence. This “gold standard” service unfortunately comes at a premium, in that they also require the greatest investment as the most complex and expensive type of broadband infrastructure. These deployments necessarily involve obtaining permits to either enter easements or rights-of-way across lands owned by others, and then the installation of physical wires (lines) that are either carried on poles or buried underground. For this reason, “for-profit” companies have had difficulty extending infrastructure into sparsely populated areas. Depending upon the company, population density requirements of 20 or 30 households per mile, or sometimes even 40 households per mile have been requirements in past service extensions. Armstrong however has routinely lowered that requirement to 10 homes per mile but below that density there wasn’t a reasonable prospect of being able to recover their financial investment. That is until the NY State Broadband program, whose support has allowed that company to invest in

infrastructure down to 5 or 6 homes per mile, which is truly extraordinary. Even with excellent progress made by the NY Broadband office and their awardees like Armstrong notwithstanding, there remain significant aforementioned areas in Allegany County which will only have DSL, Satellite or Cellular service.

Education and Tourism is increasingly demanding access to greater bandwidth. What was acceptable 5 years ago in terms of speed, is just no longer sufficient. We have talked to users of satellite internet and using the providers own testing site, which they require for "accuracy" speeds usually max out at 15 mbps not the 25 they advertise and on a cloudy, drizzly day , if service is available at all, it often is limited to 6 or 8 mbps. That is the downstream rate, upstream, which is needed for Skype, VPN, and other business tools capped at 3 Mbps and on cloudy and drizzly days usually is closer to 800k. I mention drizzly days because on rainy days the service does not work at all. Heavy snow – no service. Heavy rain where the beam returns to earth maybe thousands of miles away no service. The limitations are many.

#### THE OPPORTUNITY:

A sizeable minority of the rural population of Allegany County, New York, and similarly situated counties in New York and other states, currently have no access to high-speed (Broadband) Internet. Where available, residents use DSL service provided by their incumbent Phone provider and that technology can no longer achieve speeds that meet current federal definitions as "broadband" service. Where DSL is unavailable, we are relegated to using satellite service (which is often unreliable and always slower than fiber), or do without high-speed Internet service altogether.

That is unacceptable in a society where educational opportunities for our children are now being provided over the Internet, where medical and health services are increasingly being provided over the Internet, and where public safety and other government services are increasingly being provided over the Internet. We believe the time has come when our society and government have an obligation to ensure availability of affordable high-speed Internet service to all citizens and residents.

**Better Mapping:** There has been appreciable movement at Federal State and local levels in developing mechanisms to propagate broadband deployment but a continuing hobgoblin of every effort so far has been mapping. Given the limited funds available, it is imperative that locations without any broadband should be addressed before areas where the service exists, even if they are marginally slower than perhaps areas that have full duplex Gigabit services available. We believe that better mapping is imperative so true broadband “have nots” can be addressed on a priority basis.

**Barriers To Entry:** Irrespective of technology type or solution, there is always an overarching obstacle associated with broadband deployment whereby companies face expensive bottlenecks while making these large and complicated investments.

In the case of the fiber deployments, as previously stated, the permitting process called “make ready” on power company owned poles and access to rights of way in order to build thousands of miles of infrastructure. Better accountability to the people of NY, perhaps through the actions of an agency like the Public Service Commission, could be better used to keep costs

associated with attaching to infrastructure in line, especially since it is already maintained by rate paying citizens of our great state.

There are locations across Allegany County and New York which may simply always be too rural for a facilities-based model to be feasible and in those cases, there are solutions for example a pioneering joint program with Wireless Internet Service Providers (WISPs) who can obtain a strong Internet signal by leveraging existing tower infrastructure. In Allegany the program used the E-911 towers that the County has erected to serve the public safety needs of the County. This permits the County to use the same infrastructure for two critical needs of county residents and businesses. The use of the E-911 towers, and private WISP-owned relay towers has extended high-speed Internet services into areas of the County that were previously unable to receive such service.

Similar initiatives should be explored and developed to expand this program. There are numerous cellular telephone service towers located across much of our county. Many are located in areas where there is no Internet service, or only poor Internet service. If those cellular towers were made available to be shared, this could dramatically increase the area of the County that could receive high-speed Internet. Unfortunately, the owners and operators of those cellular towers have generally been unreceptive to proposals for joint operations. If State or local governments could require those cellular tower owners to make space on their towers available for fixed wireless radio providers, that could make a significant impact upon the availability of Internet service in our County.

There are currently multiple programs available at the federal, state and local level. Unfortunately, there doesn't seem to be a great deal of

coordination or cooperation between these differing levels of government. Another concern is that most of the funding is controlled by the federal and state governments, rather than at the local level. In most situations the local officials and agencies are the most familiar and aware of local circumstances and needs. They should also encourage local innovation and experimentation to address unique local needs.

#### CONCLUSION:

Our rural area has many advantages and can present unique opportunities. Our rural citizens are entitled to enjoy these benefits while still receiving basic services, such as high-speed Internet.

This can best be accomplished by encouraging deployment of these myriad services, be it fiber optic, coaxial cable and fixed-wireless services. Our government needs to address these needs as soon as possible and develop a plan to extend these necessary services using the technology most appropriate and efficient for each location.

To build a growing Allegany County economy of tomorrow that creates and sustains the jobs of the future, we must provide high-speed internet access, so that every rural home, school or small business gets, and remains, connected

I appreciate the invitation and opportunity to share the needs of broadband services that will meet our unique landscapes of Allegany County.