

**A Broadband Perspective**

For:

Kristin Williams

Deputy Chief of Staff

Office of Senator Rachel May

RE: Joint Senate & Assembly Public Hearing

11am

Hearing Room A, Legislative Office Building, 2<sup>nd</sup> Floor

Albany, NY 12247

Offered by:

Jen Gregory

Executive Director

Southern Tier 8 Regional Board

49 Court St Suite 222

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9/17/19

### **Introduction to organization & Southern Tier region:**

Thank you to the NYS Legislative Commission on Rural Resources & NYS Assembly Standing Committee on Local Governments for offering this time today to share local insight.

I am Jen Gregory, Executive Director for the Southern Tier 8 Regional Board, representing the 8 Counties of Broome, Chenango, Cortland, Delaware, Otsego, Schoharie, Tioga & Tompkins- south of the Thruway and north of the Pennsylvania border.

The Southern Tier is home to 579,183 resident, outside the 5 small cities of Binghamton, Ithaca, Oneonta, Norwich & Cortland, our population density is approximately 84 people per square mile.

The Southern Tier is home to the headwaters of the Susquehanna River, 2 NYC water supplies and several colleges & Universities- including Cornell and Binghamton University.

Our broadband infrastructure challenge: we are hilly, sparsely populated and lack large corporate anchors.



The Southern Tier 8 Regional Board is one of the 10 regional planning boards in New York State and serves as the Local Development District for the Appalachian Regional Commission (ARC). The ARC is a regional economic development agency that represents a partnership of federal, state, and local government. We are the local partner and have recognized the need for better broadband over the last 15 years. I have been engaged with this initiative since 2009.

However, since 2009, the region has faced a pronounced decline in several manufacturing industries and the population of these 8 counties has decreased by approximately 9,000 people, taking potential investment elsewhere. *(From 2010 to 2016 the region lost 8,778 people. Rural areas experienced a loss of 7,511 people, while urban cores lost 1,267. Census 2010; ACS 2016 5-year estimates).*

## **Our current challenges in delivering adequate broadband service:**

### **1. Our Terrain & small population**

**While the New New York State Broadband Program has organized a delivery of service for many of NY's residents, this program may serve as a prime example of private sector disinvestment in rural New York State.** As we learned in the first funding round, where the terrain is hilly and population sparse, an Internet Service Provider (ISP) has to build many miles of infrastructure to support & maintain just a few users. This scenario creates a small return for private sector investment in (wired) or fiber infrastructure.

### **2. The Acceptance of slower speeds & unsuitable technologies (defeats the purpose)**

As the second funding round opened and wireless solutions were adopted, **lowered speeds were considered acceptable in rural areas. Slower speeds equate to limited access and this continuation of reduced access, creates a false message of available broadband service in the most rural communities that are still caught in the State's "digital divide".**

I am referring to the current solution of satellite internet service. This service is grossly inadequate and not scalable for future growth. While HughesNet Satellite internet can be purchased for \$80 per month, this service will not provide enough bandwidth for instant gaming (on Xbox or Playstation; i.e. games & applications attractive to our younger generations). This technology will also not support a Virtual Private Network (VPN) i.e. a login from home to business or two offices to support protected computer network use. **This approach does not work for status quo, nor future growth.** Our rural communities may have electricity, but with this internet service, we are not offering a solution to build smart homes nor connected communities.

### **3. High-cost structure**

Currently, for the residents that are fortunate enough to be in Spectrum (or Charter's) footprint, they pay \$200+ a month for the triple-play (phone, internet & TV). This puts our residents at an immediate disadvantage as elsewhere in country where there is more competition and this service is offered at <\$70 per month.

### **4. Perspective of being served**

Our State mapping follows US practice, particularly FCC's practice to map service via census block. This type of mapping many errors as FCC considers a census block "served" if just one house is served in that block. Compounding this issue, in rural areas, census blocks may be further misrepresented as they cover more land area.

**In addition, if an area has a false claim of being "served", this may disqualify the area for federal investment opportunities to build affordable adequate service.**

## 5. Limited local resources

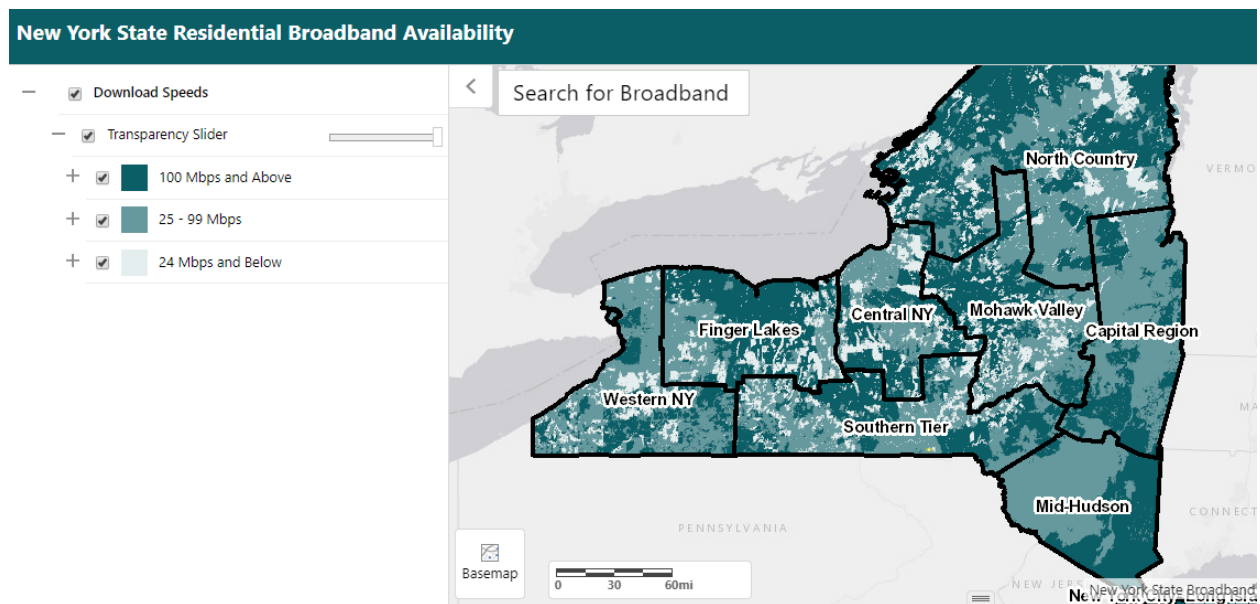
Our additional challenge is **the community capacity to request better service**. Many of our most rural communities have one part-time clerk that manages day-to-day operations, they do not have the capacity to assess the situation and request assistance.

### Request for Assistance:

**If New York's goal is still to create affordable, equal access across the state, the Southern Tier still needs your help. Many residents are still left with expensive inadequate service and there is some uncertainty to just how many are left unserved.**

The Southern Tier municipal leaders and residents could really use an independent assessment of their affordable options that includes a realistic map that defines the access to all.

While the State Map is helpful for determining service in a census block and showcases the discrepancy in available internet speeds, it does not provide a base for totaling households left behind.



<https://map.nysbroadband.ny.gov/html5viewer/?viewer=broadband>

As the New NYS Broadband Program offered the best possible incentive for the private sector ISPs to invest in infrastructure across the state, there are still areas that will not be covered, where private sector investment does not make fiscal sense.

Now that most areas are covered with reasonable private sector investment, **it may be time for the public sector to establish a stronger presence in the disinvested areas**. Perhaps these areas should be supported by NYS differently, **perhaps the State should take ownership** and launch a state-wide municipal broadband infrastructure program.

We have an excellent model for municipal owned infrastructure that covers a portion of the Southern Tier, that being the Southern Tier Network (STN). STN is a non-profit operation that maintains open-access dark fiber. This fiber is the build for the schools & Universities and 911 centers between communities. It is wired service that is designed to connect one community to another in the most affordable fashion so that the last-mile internet service provider can keep costs low and focus on providing service to the end-users. This best practice has provided an opportunity for schools to reduce their technology costs as in Elmira, where Verizon charged \$64K per year for the City School District's service (and in 2013, was projected to increase to \$229K per year). With STN, the school district has more internet bandwidth and pays \$12K less than 2013 prices. Another example of this municipal asset: The Southern Tier Network also provided an opportunity for a smaller ISP to utilize their fiber for long runs at a lower cost so they could plan for the future and offer Fiber To The Home (FTTH) 1 GIG service for <\$70 per month in the Village of Waverly.

While this is an excellent model, following the New NY Broadband Program, private sector ISPs invested in places that they could make a business case for building out. **We now have areas where many of the private sector anchors have service and there are less businesses or customers to support buildouts in sparsely populated areas.**

#### **Utilizing New York State's Assets:**

##### **Better Mapping:**

Under the New NYS Broadband Program, ESD developed a broadband map that identifies census blocks served with a specific speed, and that speed may be insufficient (Again, current satellite service is not adequate for business, gaming or new technologies).

When applying for the New NYS broadband program, ISPs had to identify & map the route for proposed broadband infrastructure (so pole attachment agreements could be requested). **ESD would now have maps from the service providers that show exactly where they planned to serve.** New York State has one of the nation's best Statewide GIS or mapping Clearinghouses- where **road infrastructure databases are maintained, and County parcel files can be accessed.** With the talented state agencies sharing data on broadband infrastructure, roads and parcels, **New York State has the capability to map speed & service to the household.** New York State should be able to **serve as a model** and best define what parcels are served and with what speed, as well as what parcels are not. **This would provide a better resource to define where improvements still need to be made and how many residents are still left behind in the digital divide.**

##### **Serving those unserved:**

Municipal broadband can be effective, but the most rural communities do not have the capacity to map, build out and maintain the broadband infrastructure. While Empire State Development (ESD) has made great strides to encourage private sector investment, this may be the time for

the public sector to support those that are left behind and build and maintain additional municipal broadband infrastructure for the future.

New York has a strong infrastructure team and a professional team dedicated to shared services. Last week, the Governor announced a new task force to develop potential solutions and policies to address the lack of cell service in rural and remote parts of upstate New York. Perhaps the new **Upstate Cellular Coverage Task Force could consider organizing an expansion of services that aligns with the NYS Department of Transportation and partners with NYS Department of State to manage assistance efforts.**

As many of the wired/fiber installations are along roadways, emerging & future technologies will utilize broadband infrastructure (like environmental monitoring & self-driving cars) perhaps NYS's Department of Transportation would benefit in owning additional broadband infrastructure.

NYS Department of State may be able to identify areas for shared services that cross municipal boundaries and plan for logical state-owned buildouts to deliver service to the most challenged areas while addressing additional community needs.

Thank you for allowing me the opportunity to share my perspective and request for assistance for our rural communities.

Sincerely,

Jen Gregory