



Chenango County Connectivity Plan 11/14/2016

ECC Technologies



- Telecommunications and Broadband consultants providing Analysis, planning, and development for 20 years
- Corporate HQ in Rochester NY, with offices in Raleigh, Atlanta and LA
- Successfully developed over \$2 Billion in Broadband programs both for profit and community based not for profit initiatives
- Broadband programs range from Open Access middle mile and last mile fiber to Gig to the home
- Strong emphasis on Broadband as an economic development tool

Today's Topics



- The culture of Broadband in the US
- The Broadband Study
- Broadband issues and Determinations
- Recommendations
- Next Steps

Broadband in the US



- The culture of Broadband in the US is changing rapidly
 - The new Digital Divide, those communities who get involved vs. those that don't
 - Gigabit cities being announced on a daily basis
 - Rural towns in NY getting FTTH
 - Billions in Grant funds to those who are prepared
- What's not changing
 - Investment in rural areas without subsidies
 - Some do not have access to any forms of Broadband and are being left behind

Project at a glance

- Conducted Broadband Study in Winter 2015/16
 - Identified and mapped Broadband infrastructure county wide
 - Meetings with Public and Private organizations to document the issues and identify the Broadband needs within the County
 - Meetings with service providers on collaborative partnerships designed to enhance broadband service county wide
 - Recommendations

Broadband Study



The purpose is to support Broadband planning and economic development

- Inventory Broadband infrastructures and services (extent possible)
- Create a GIS Broadband mapping tool
- Identify County Broadband strengths and weaknesses
- Lay the groundwork for Broadband improvement plans

What did the inventory portion of the assessment find?



Service Providers

- Frontier
- TDS Telecom
- FLTG
- ION Networks
- Time Warner Cable
- Adams Cable
- Plexicomm
- Clarity Connect

Fiber Owners

- Frontier
- TDS Telecom
- FLTG
- ION Networks
- Time Warner Cable
- Adams Cable

Structures

- 18 cell towers
- **REMOVED FOR PUBLIC SAFETY CONCERNS**
Public Safety & Water Towers

Meetings conducted



Service Providers

- FLTG
- Plexicomm

Community

- Information Technology
- Economic Development / Planning
- Public Safety

Assessment Determinations

- Through the meetings we determined;
 - The populated & central business areas of the County have at a minimum basic broadband access
 - Provider choice, competition and diversity are limited
 - Large gaps in coverage exist with many areas of the County below the FCC's 25/3 definition of Broadband and severely behind gigabit communities being developed across the US
 - A lack of Broadband in the rural areas
 - A multi step process is needed

- **SLIDE REMOVED DUE TO BUSINESS CONFIDENTIAL MATERIAL**

Identified Issues

Although a significant amount of fiber is installed in the County it is not benefitting the County Broadband profile

- Public safety communications would benefit from additional towers and diversified fiber to connect them
- Lack of broadband or substandard broadband availability outside developed areas
- Low competition levels - Lack of provider choice and cost, even in populated areas
- Lack of widespread 4G Cellular coverage

Identified Issues cont.

Although a significant amount of fiber is installed in the County it is not benefitting the County Broadband profile

- Education- greater dependency on Broadband with needs continuing to grow, lack of adequate Broadband in homes
- Healthcare – Cannot get the needed capacities in the rural areas to expand services
- Economic development Lack of Broadband is impacting the ability to attract and retain jobs
- In general from a Global Competitiveness standpoint the County is falling behind

Recommendations



- Consider the development of a county wide RFP soliciting public private partnerships for the development of Broadband in unserved areas
- Consider a county wide collaborative to strategically build fiber and other assets, this could include education, healthcare, economic development etc.
- Use assets as a stepping stone to facilitate fiber to the home and wireless development in needed areas (seeking grant programs along the way)

Collaborative fiber capacity can be used to support



- County Public Safety
 - Redundancy to Microwave system
 - FirstNet backbone
- Fiber Based Providers
 - Attract new into the County, increase competition, FTTH etc.
- Wireless Companies – WISPs and Cellular
 - Connect to Towers – increase wireless capacity and coverage
- Educational Community – K-12
- Expanding healthcare services

Collaborative example might look like

- **SLIDE REMOVED DUE TO BUSINESS CONFIDENTIAL MATERIAL**

Collaborative estimate

- SLIDE REMOVED DUE TO BUSINESS CONFIDENTIAL MATERIAL

Would seek Grant Programs



Organization	Program Name	Program Summary
USAC	E-rate	Beginning FY 2016, program support will be available for construction of high-speed broadband networks. The costs of dark fiber construction have also been extended to eligibility beyond the property line.
RUS	Telecommunications Infrastructure Loans & Loan Guarantees, community connect etc.	Financing for construction, maintenance &, expansion of service in rural areas
RUS	Farm Bill Broadband Loans & Loan Guarantees	15% of households in area must be unserved and the entire area must be considered rural. Application window for 2016 is closed. 2017 dates not yet announced.
Public Safety	Grants to build fiber connecting towers	Generally given in collaborative environment, Steuben County
ESD PRO	Broadband for All	Governor Cuomo's initiative to have broadband across NYS by 2018. The program has \$500 million with a 50% match. Phase 2 application deadline is November 30, 2016. Would need partners

ities.

NYS Broadband Program

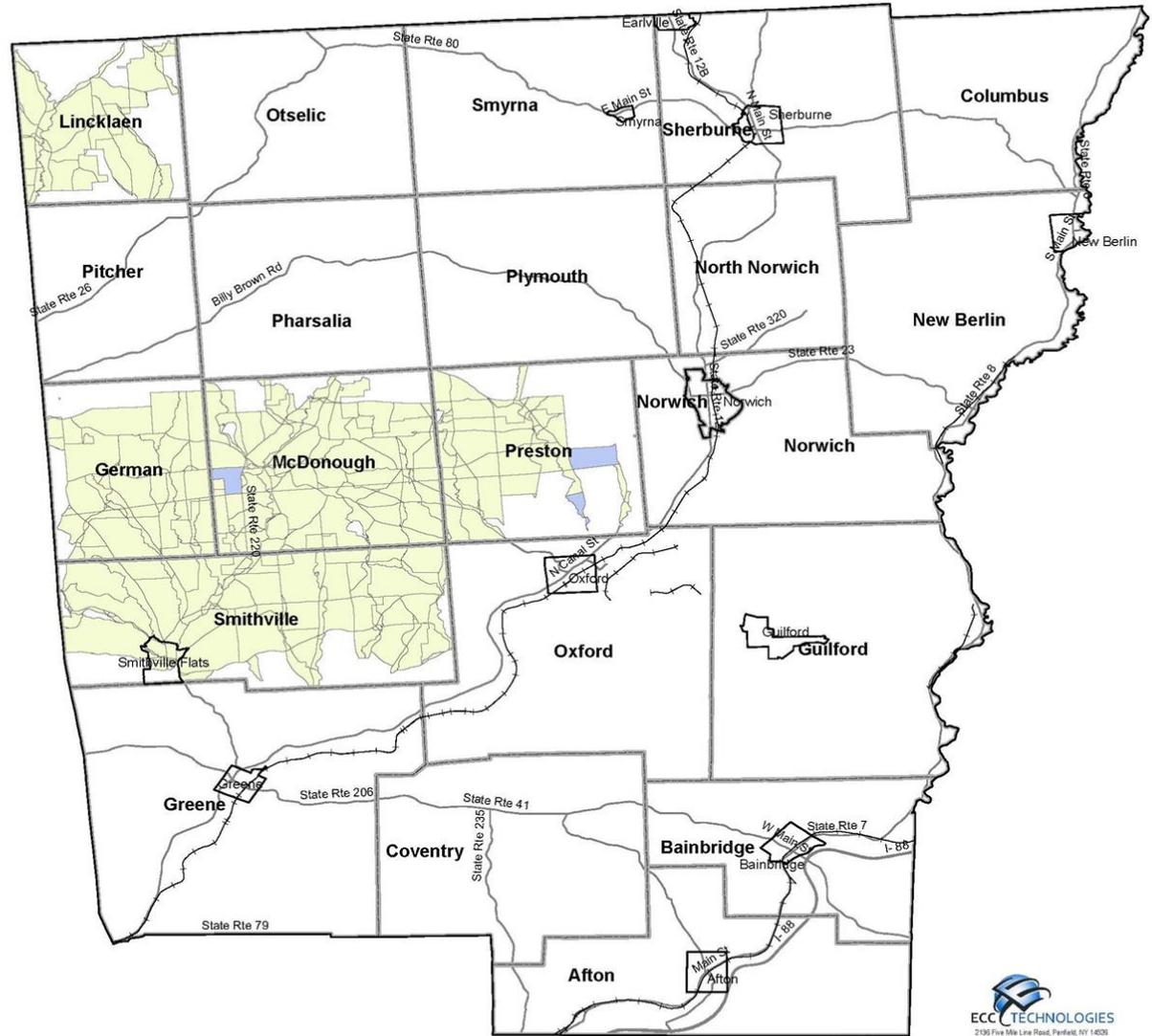
- Round 1 – 1806 unserved & 54 underserved
- Round 2 – 3955 unserved, 18 underserved & 68 CAF unserved
- Round 2 deadline is November 30th



CHENANGO COUNTY, NY

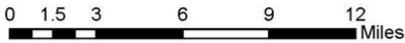
UNSERVED + UNDERSERVED REGIONS

Date: 4/28/2016



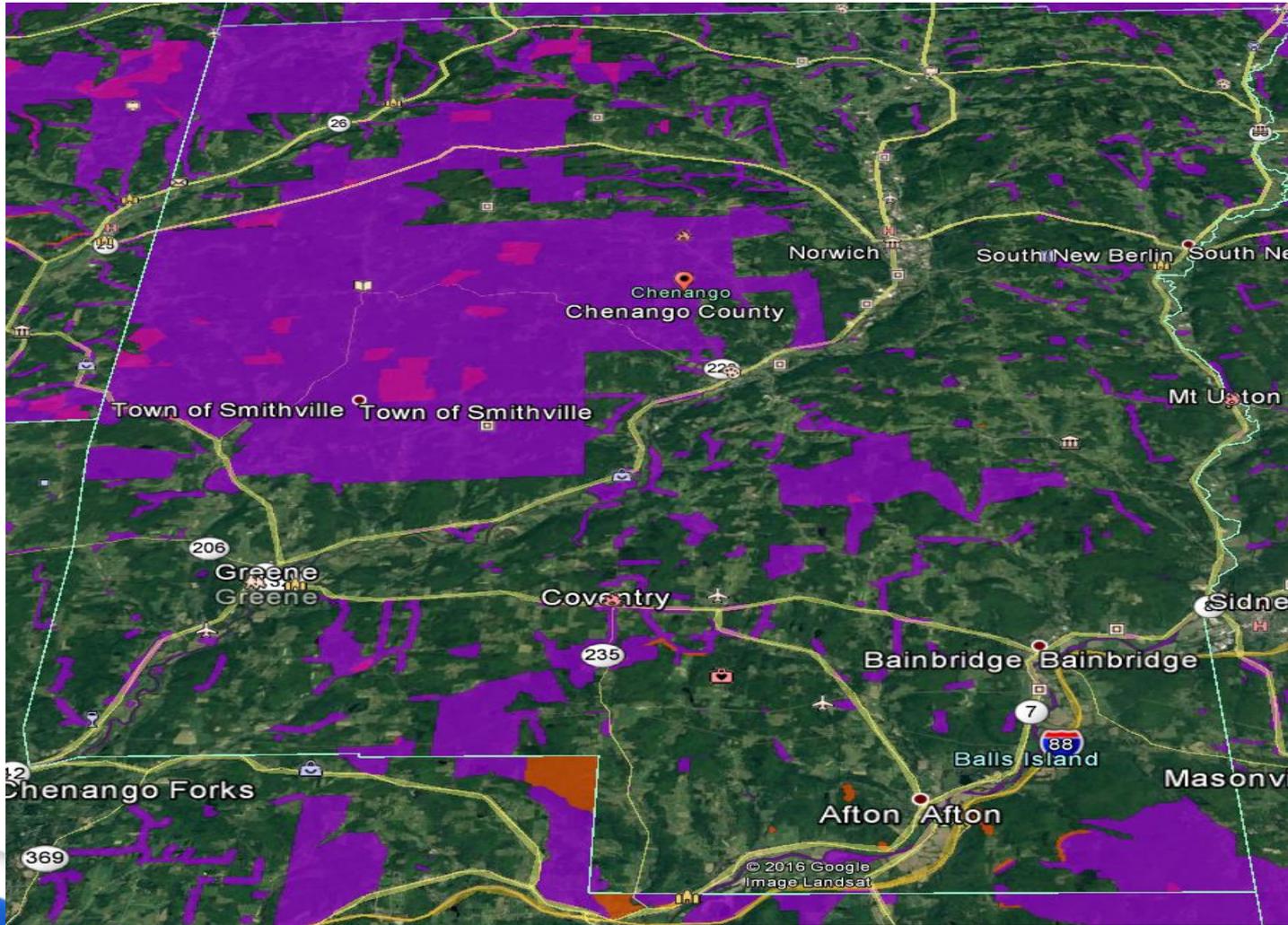
Legend

-  UNServed Regions
-  UNDERserved Regions



THIS MAP IS CONSIDERED CONFIDENTIAL INFORMATION AND SHOULD NOT BE COPIED OR DISTRIBUTED

NYS Broadband Map – Phase II



Building smarter schools, richer corporations, and integrated communities.

Action Steps



- Get County wide buy in and support on an action plan
- Designate a champion to oversee the initiative and a County sponsored Broadband Committee
- Identify collaborative partners and any existing or proposed assets
- Develop a list of coordinated assets, develop and release RFP
- Identify and apply for applicable grant programs

Questions?