

Greater East Grand Region

Broadband Planning Communities

Amity

Danforth

Haynesville

Orient

Weston

Drew Plantation

Glenwood Plantation

Reed Plantation

Bancroft TWP

Brookton TWP

Forest City TWP

Forest TWP

ConnectMaine Phase 1 Broadband Planning Report November 2020

Submitted by

Greater East Grand Region (GEGR)

Economic Development Initiative

The Regional Broadband Task Force

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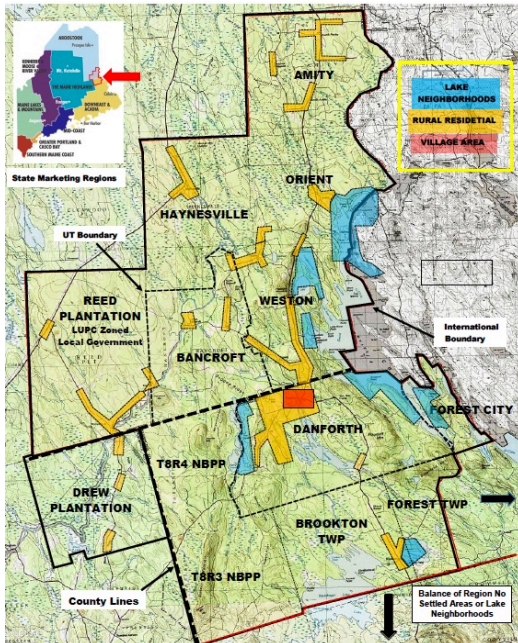
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I. The Greater East Grand Region Defined

Launched in April, 2019, the Greater East Grand Region (GEGR) economic planning initiative was designed from the beginning to be a citizen-led effort involving the towns and residents of a multijurisdictional territory of remote rural Maine. It was launched because of the need to address regional economic decline, an aging population and lack of opportunity for area youth. The historical, business, health and educational connections to the cross-county area of Danforth and Weston and the initiatives associated with school district RSU84/MSAD 14 East Grand School located in Danforth provided much needed momentum.

The region has twelve widely separated communities, five of which are municipalities, three are plantations and



four are villages within the

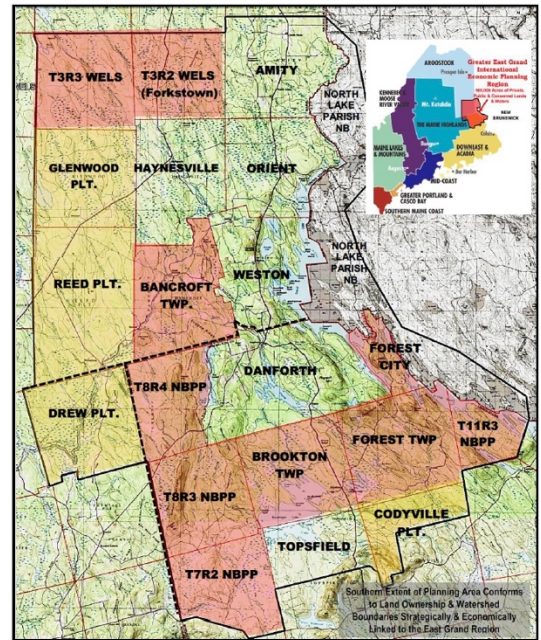
unorganized territory. The region is remote, is situated at the extremities of three counties (Washington, Aroostook Penobscot), shares a forty-mile long international border with Canada, and is divided by two state legislative districts and three state tourism areas.

To say the barriers to past collaborative and coordinated economic and community planning has been a challenge is a serious understatement.

We believe, however, that engaged residents inspired by a collaborative and coordinated economic development plan can turn the regional assets into opportunities.

The specific communities included in this Phase 1 broadband planning report are:

Amity, Danforth, Haynesville, Orient and Weston; the plantations of Drew, Glenwood and Reed including the Village of Wytopitlock; the Unorganized Townships of Bancroft and Brookton Village, Forest City Village, and Forest Twp.

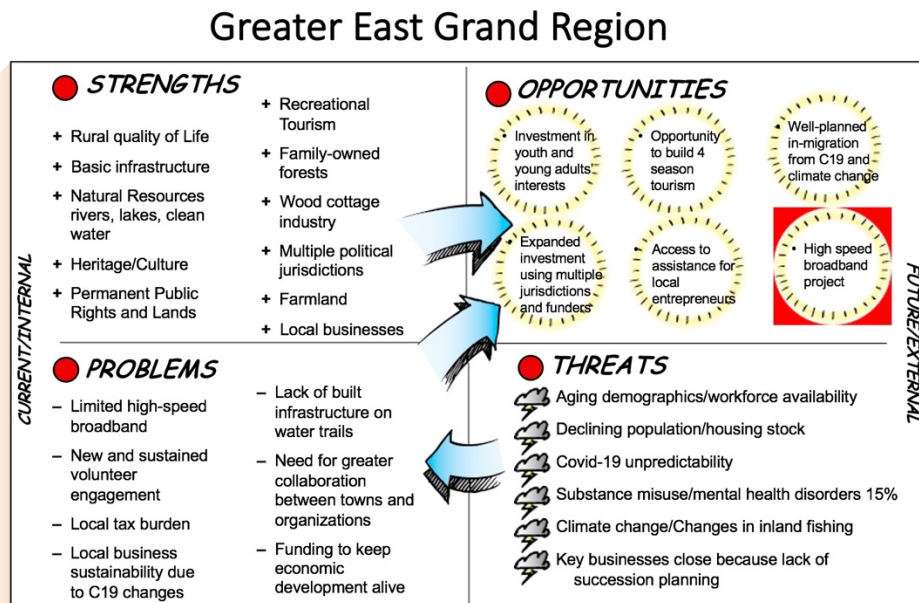


II. Regional Economic & Community Development Goals

The GEGR’s 2030 vision is to be an economically stable, unified constellation of remote, rural, welcoming communities that collaborate to attract and retain people of all ages to live, work, visit and play. Looking forward, the GEGR Economic Development Initiative will provide the capacity to advance the region’s priorities and help unify people, communities and organizations to achieve their shared goals. Success looks like:

- A sustainable, collaborative and trustworthy intermediary organization guides and coordinates economic development by supporting entrepreneurship, business succession and workforce development.
- Investment and peer-to-peer support for existing businesses, entrepreneurs and people have increased new business and employment opportunities.
- Four-season recreational tourism is a positive economic driver and supporter of existing businesses.
- Youth are involved in community, public service, stewardship and volunteer leadership roles.
- Young adults have chosen to remain or return “home” because of the region’s positive support and opportunities.
- New families have moved to the region because of the excellent education, welcoming community and job opportunities.
- Elders are able to successfully “thrive in place.”

The 2030 GEGR Economic Development Planning Project website (www.eastgrandregion.org) provides a comprehensive overview of the region’s assets, challenges, threats and opportunities. The diagram below illustrates the connection and relationship between these different variables, and most importantly, highlights the opportunities that the region must prioritize in order to advance towards its vision. **High-speed internet “connectivity” across the region is a priority infrastructure requirement for residents to build on the strengths, advance the opportunities and mitigate the threats and challenges. It is a prerequisite for successful economic and community development.**



III. Broadband Community Assessment – Phase 1 Report

A. Regional Broadband Project Task Force as of 11/1/2020

Co-Chair: Dwayne Young, Town of Weston, Administrative Assistant to the Board of Selectmen

Co-Chair: Jennifer Fronczak, East Grand School, Teacher

Ardis Brown, Town of Danforth, Town Manager

Denise Smith, East Grand Chamber of Commerce, President; Business Owner; Weston

Elbridge Cleaves, Citizens Organization for Rural Education, President; Weston

Peggy White, East Grand School, Superintendent and Principal; Danforth

Jessica Potter, East Grand Health Center, Administrator, Danforth

Carolyn Fickett, Maine Family Resource Center, Program Manager, Danforth

Kyle Burdick, Baskahegan Company, Woodlands Manager, Brookton

Susan Hatton, Sunrise County Economic Council, Program Manager, Sunrise Loan Fund

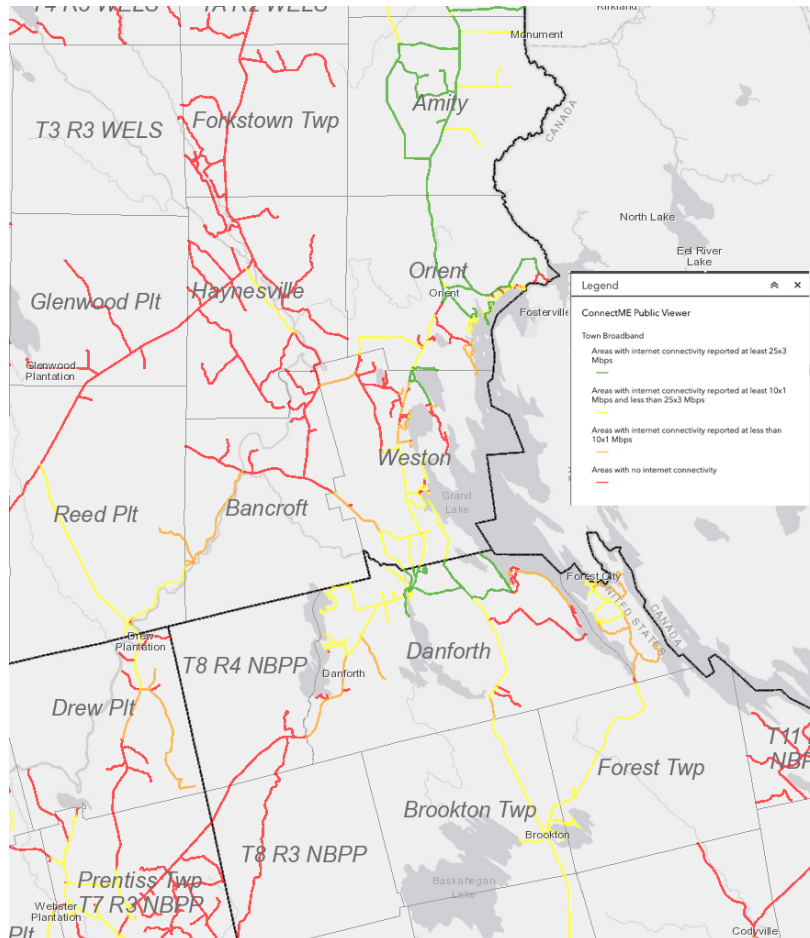
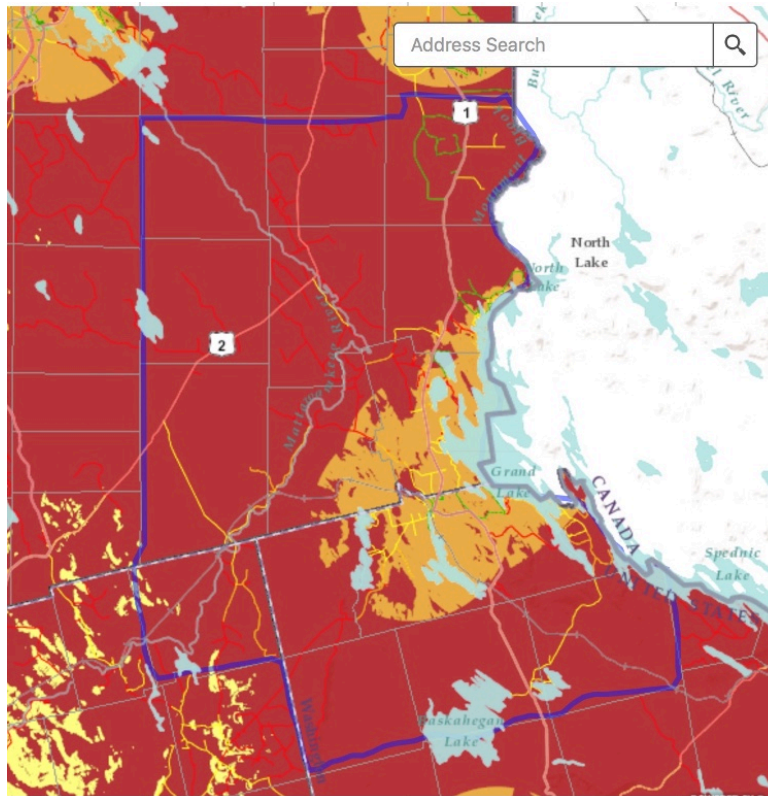
B. Regional Telecommunications Infrastructure Overview

Danforth serves as a the northern most Washington County service center located on the US/Canadian border with Houlton to the north, Lincoln to the west, and Calais to the south. Approximately half of the designated region is in Aroostook County, and half in Washington County. Drew Plantation to the west is in Penobscot County. The Unorganized Territories are an important part of the region’s make-up in both Washington and Aroostook counties.

Driving distances are a minimum of 45 minutes in decent weather, with both Calais and Lincoln being over an hour away. Hence, Danforth and its surrounding communities are highly dependent upon its anchor institutions, retail services and local businesses. Many government and non-profit agencies frequently find it difficult to provide direct services to the area. In many ways, the GEGR is a “northern Maine island” that depends on local community resources and resilience to meet its residents’ needs. Hence, it is priority across the region to maintain community self-sufficiency especially with respect to infrastructure and utility requirements.

Without a doubt, broadband planning for the GEGR is complex and challenging because of the geography and the low population density. Data and maps from ConnectMaine illustrate the most current broadband infrastructure features:

- (1) An estimated 71% of the current households in the GEGR are unserved or underserved by the current mix of providers.
- (2) The 6 providers listed for the region do not serve the whole region – only specific communities: GWI; Pioneer; Consolidated; Spectrum; Axiom; Premium Choice
- (3) Communities on the Route 1 corridor (Danforth north to Amity) have increased service options because of the 3-Ring Binder and Pioneer Broadband’s service.
- (4) Communities to the south and west of Danforth have very limited and few service options.
- (5) There are “dark pockets” to be overcome between the Route 1 corridor and the communities west and south of Danforth.



Looking more specifically by community and provider we begin to see the variation and complexity inherent in the regional planning effort.

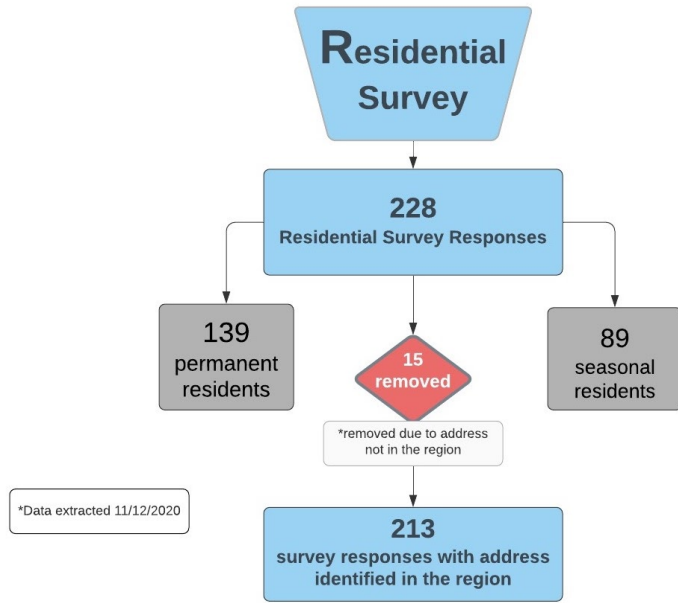
However, one data point stands out: assuming a population of 1800, and 2.0 persons in each household, an estimated 71% of the region’s households are unserved or underserved, based on the current definition. Larger chart in Exhibit A.

		# of Providers	Wired				Fixed Wireless				e Data December Unserved or < 25 mg	Population	Number of Household	%
			Pioneer	Consolidated	GWJ	Spectrum	Pioneer	Consolidated	Axiom	Premium Choice				
Aroostook														
T3R3 WELS	x	0										0		
T3R2 Forkstown	x	0										0		
Amity	x	1	X									24		
Glenwood Plt	x	0										3		
Reed Plt	x	2		X					X			66		
Orient	x	4	X	X			X		X			27		
Haynesville	x	1		X								70		
Bancroft	x	2		X			X					53		
Weston	x	6	X	X	X	X	X		X			125		
Penobscot														
Drew Plt	x	2		X						X		15		
Washington														
Danforth/T8R4	x	6	X	X	X	X	X		X			154		
Washington UT														
T8R4		4	X	X	X		X							
Brookton	x	2	X	X								43		
Forest City	x	3	X	X					X			26		
Forest TWP	x	2	X	X								13		
T11R3	x	0										0		
Codyville Plt	x	3		X			X		X			9		
T7R2/Kossuth TWP		2		X			X					6		
T8R3	x	0										1		
												635	1800	900 71%

C. 2020 Community Needs Assessment Process

The community needs assessment was initiated by the GEGR Broadband Task Force in August 2020 across the region. Survey questions were assembled by reviewing other field surveys on broadband services, reviewed and approved by the task force. Survey Monkey was used as the virtual survey instrument and paper copies were also made available at town offices for people who did not have easy access to a computer. The focus of the survey was to assess current internet accessibility and satisfaction for residents and businesses in the Greater East Grand Region. Separate resident and business surveys were developed and promoted. Special consideration was also given to identify and better understand the needs of seasonal residents with remote working needs. Ample announcements and encouragement during the pandemic were provided through the local newspaper, residential mailings, social media outreach, and exhibits at local events. The survey was available from (date) to (date).

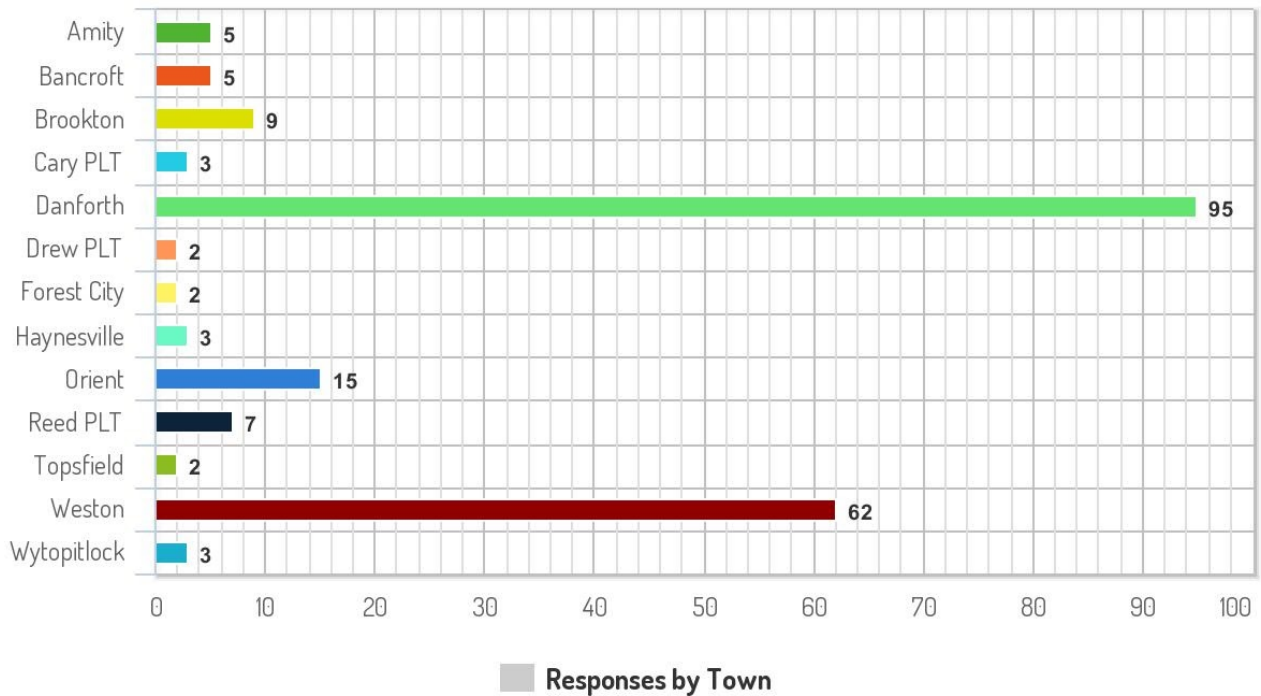
A total of 228 residents responded of which 139 (61%) were permanent residents. This represents 8% of the permanent population based on 1800 residents. 89 additional responses (39%) were seasonal residents. The chart below summarizes the residential survey response categories and the distribution by community/town.



Breakdown of survey responses by town within the GEGR.

GEGR INTERNET ASSESSMENT SURVEY

Survey Monkey 11/12/2020



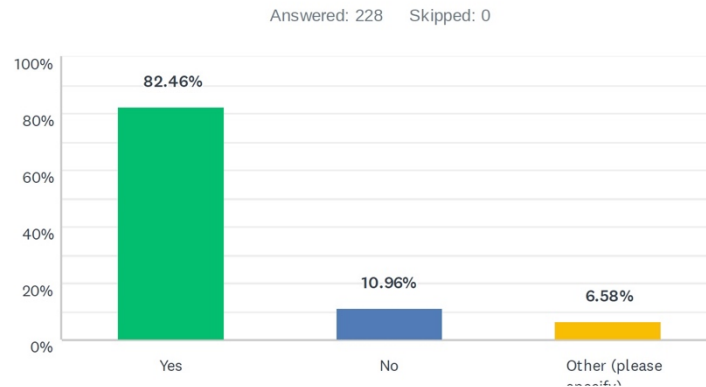
meta-chart.com

D. 2020 Residential Needs Assessment Findings

Do you currently have internet service at this address?

176 responses indicated they had internet service currently at their residence and 24 responses indicated they did not currently have internet service. After further analysis of the “other” responses, 9 additional responses from households with cellular hot spots were added to the 176 bringing the total to 185 responses. The remaining 4 “other” responses were added to the “no” response bringing the total to 28 responses.

Q4 Do you currently have internet service at this address?



What is the name of your current internet service provider?

206 responded to this survey question. Of the 15 responses who selected “Other”, 4 responses indicated they did not have an internet service provider, and the remaining indicated: “Axiom Technology”, “Bell Canada”, “Viasat”, “GWI”, or indicated multiple cell phone hotspot providers. There was 1 response for “Other” which indicated Consolidated bringing a total of 97 responding to using this provider.

Breakdown of current internet service provider

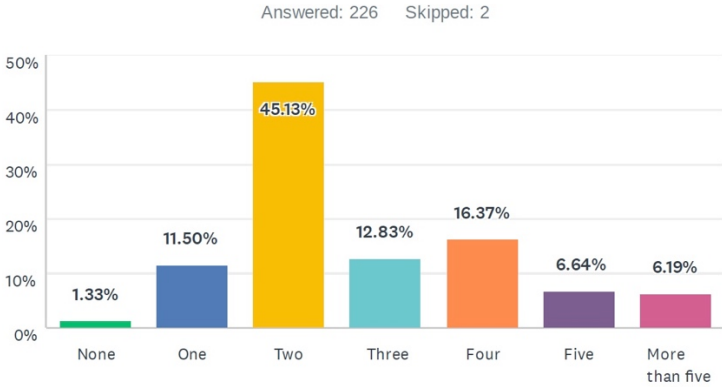
ANSWER CHOICES	RESPONSES
Consolidated Communications	44.80% 99
Spectrum	12.22% 27
US Cellular	9.95% 22
Other (please specify) Responses	8.14% 18
Verizon	6.79% 15
Pioneer	6.79% 15
Hughes Net	6.79% 15
Not sure	1.81% 4
Dish	1.36% 3
T Mobile/Sprint	0.90% 2
At&T/Direct TV	0.45% 1
TOTAL	221

How many total people in your household use the internet every day?

208 respondents to the survey indicated they use the internet every day. The individuals who responded none or skipped the questions were part of the group of respondents who had indicated they did not have internet at their residence in the above question.

Breakdown of total people in a household who use internet every day.

How many total people in your household use the internet every day?

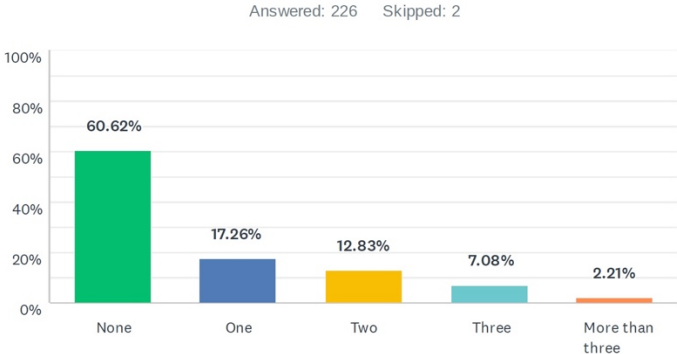


How many students in your home use the internet for school related work?
How many adults in your home use the internet for remote work or other business reasons?

The COVID 19 pandemic produced digital inclusion concerns for many members of the GEGR. 39.34% of respondents indicated one or more students use home internet for school related work. Surveys and discussions with families and staff at the local school district *East Grand School* identified the majority of families unable to access adequate internet in their homes for remote learning.

In addition, 76.31% of respondents indicated one or more adults in the home use the internet for remote work or other business reasons. Focus group questions with business owners and employees working in the GEGR outlined difficulties during the COVID 19 pandemic, such as inability to access enough bandwidth at home to work with online platforms needed to perform job responsibilities and lack of any public COVID-safe location where free WIFI was available (other than sitting in their car in the school parking lot).

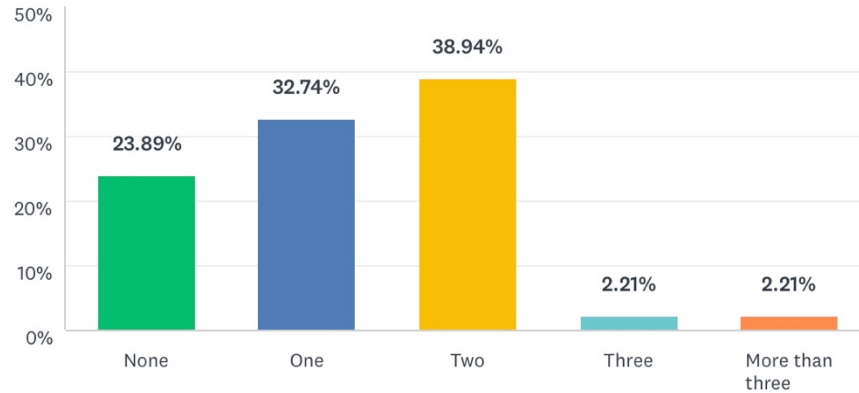
of students in your home use the internet for school-related work



Breakdown of how many respondents have an adult who access the internet at home remote work or business reasons.

How many adults in your home use the internet for remote work or other business reasons?

Answered: 226 Skipped: 2

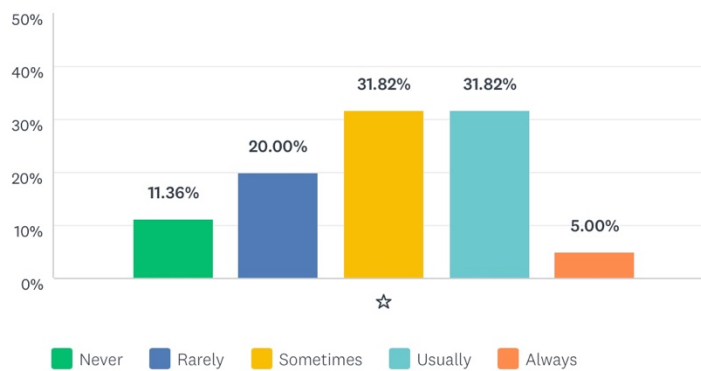


Does your internet service reliably meet the level of speed you need to do web-based activities?

Only 5.37% of respondents indicated that the internet reliably meets their needs for web-based activities while 64.4% indicated the internet reliability ranging from never to sometimes.

Does your internet service reliably meet the level of speed you need to do web-based activities?

Answered: 220 Skipped: 8



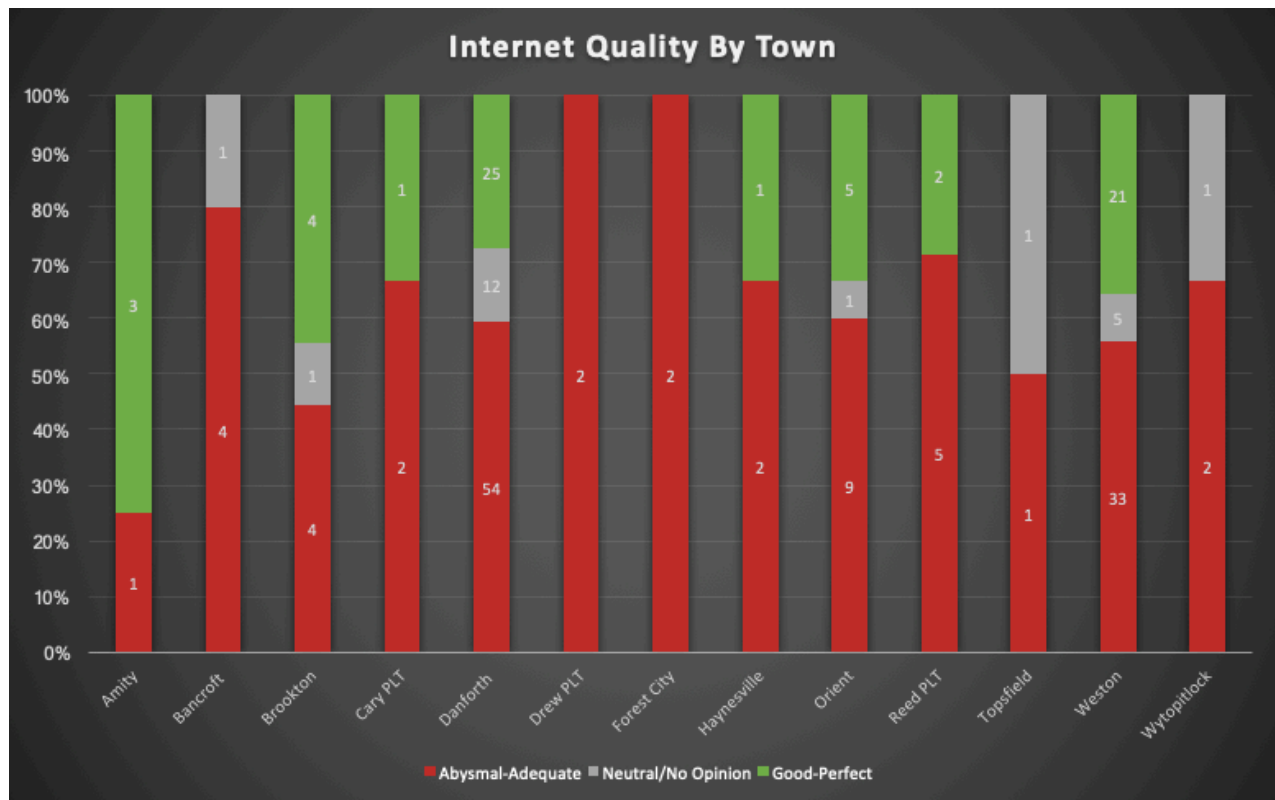
Overall, how would you rate your internet service when you consider Speed and Cost, and other factors important to you?

30.24% of respondents indicated their internet service rating from good to perfect. 59.03% of respondents rated their internet service from adequate to abysmal. In further analysis of this survey

question by town/municipality, it was determined that no one location within the region rated the speed and cost of their internet 100% in the good to perfect range. See image #11 below.

ANSWER CHOICES	RESPONSES
Perfect	0.98% 2
Excellent	5.85% 12
Very good	10.24% 21
Good	13.17% 27
Adequate	16.59% 34
Neutral	7.80% 16
Disappointing	27.32% 56
Bad	1.46% 3
Very bad	8.78% 18
Abysmal	4.88% 10
Dial-up is better	0.00% 0
No opinion	2.93% 6
TOTAL	205

Breakdown of respondents rating internet service by town/municipality



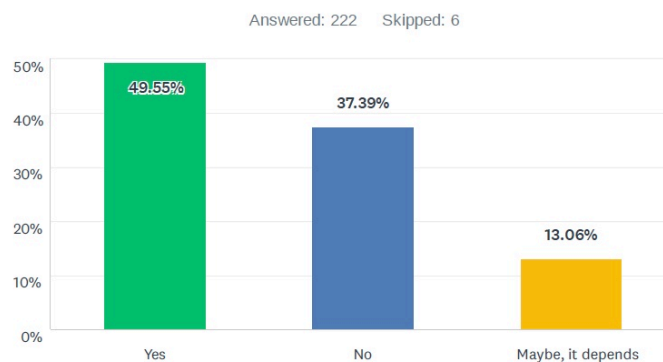
Would you pay more each month for faster speed and reliable service?

More than 50% of respondents indicated they would pay more each month for faster speed and reliable internet service. When breaking this down further, permanent resident responses vs seasonal resident responses, 68.27% of the respondents who indicated they would pay more were permanent residents of the Greater East Grand Region.

Comments in the “Other” category included: “We shouldn't have to pay more just because we are in a rural area. At my home in Carmel I pay the same price as in Danforth and get 80 times the speed.”

“Already pay enough and should have great service for this amount”, and “If it’s significantly faster.”

Q14 Would you pay more each month for faster speed and reliable service?



E. Other Community Assessment Findings

Businesses: Local businesses, municipalities, non-profit, churches and recreation clubs were invited to provide feedback about their internet service needs through a business survey. There are 118 organizations that have been identified in the region. (See Exhibit A).

Highlights include:

- 42% of the identified business within the GEGR responded to the business survey.
- 73.92% of survey respondents identified 1 or more employees are working remotely from home and require internet access.
- 91.30% of survey respondents identified 25-100% of their annual business revenue is dependent on the internet.
- 82.61% of respondents identified high speed internet to be important to business or organizational operation

Business Stories:

- Guests are unable to use the internet reliably during their stay and telework is difficult.
- Service interruption, slow speed, and lack of technical support are critical challenges at this time.

- If the internet is done, then no transactions through IF&W or Payport (credit/debit card) can be done. No research through the registry of deeds and no email with State agencies, customers, tax payers or anyone else.
- I lose internet service often and my credit card machine is dependent on it. My business orders are also online, along with many other applications pertaining to my business.
- It is slower than normal with everyone working from home and other COVID related demands like kids doing distant learning when in school

East Grand School:

The East Grand School district serves 77 households with 150 students PreK through 12th grade from nine towns within the Greater East Grand Region. The towns serviced by the East Grand School district include Bancroft, Brookton, Drew Plantation, Orient, Reed Plantation, Weston, and Wytovitlock. 18 families who reside in Bancroft, Brookton, Drew Plantation, Orient, Reed Plantation, and Wytovitlock have been identified as underserved in regards to existing high speed internet infrastructure.

While 76% of the families served by East Grand School reside in Danforth or Weston, families and school staff identified current challenges in internet quality and reliable for remote learning in these towns. During the COVID19 shutdown in the spring of 2020, many families in the outlying towns had difficulties accessing internet due to lack of infrastructure, while families with high speed internet at home still faced challenges with remote learning methods.

Educational instruction via zoom posed difficulties not only for students but for educators who reside in the GEGR due to insufficient high speed internet accessibility in their homes. Many educators were forced to stop engaging students through a synchronous approach as educators and students alike were constantly dropped from zoom sessions, posing disruption to educational material and causing frustration by educators, students, and families. Educators using an asynchronous approach also found challenges as many of the online platforms used (SeeSaw, Reflex, IXL, and Google Classroom) demanded download and upload streams which are not available to many educators or families within the region, in order to access or submit assignments. Families with several students accessing remote learning, and/or adults in the household who were also working remotely faced additional challenges when more than multiple family member needed to access high speed internet at the same time.

East Grand Health Care Center: This health center sees between 600 and 700 unique patients each year from the following zip codes. Two thirds of the patients are under 65 years. Reports from the health center administrator suggest that tele-health services during the pandemic have been significantly compromised because of poor internet access and computer equipment that did not allow for visual appointments. Both are required for reimbursable telehealth appointments. This is a service that requires additional information to pinpoint what access, equipment and literacy will be necessary to increase the health center's ability to access these services.

Patients by Age	
<18	106
19-39	117
40-64	230
65+	203

PATIENTS BY ZIPCODE	
Date Range: Apr 1, 2018 - Mar 31, 2019	
Facilities: East Grand Health Center	
ZipCode (a)	
04413 - Brookton, Forest City, Forest	65
04424 - Danforth, Weston	382
04471 - Amity, Orient	52
04497 - Haynesville, Reed, Glenwood, Drew	55
04730 - Houlton	37
Other Zip Codes	65
Total	656

F. Stories and Comments from the Community

- We have struggled over the past 14 years that we have owned our home in Weston to find good internet service. First, we tried dial up - way too slow. For several years we used Pioneer broadband but it got slower and less dependable until we often couldn't get on. For the past few years we have used Consolidated Communications but often have had to reboot several times a day to get on. We have upgraded our modem two times and currently it is working fine but the repair man who upgraded us said it's just a matter of time before we will have trouble again because the phone lines need to be extended or upgraded. So, it's been a struggle.
- Consolidated Communication is available for phone and internet, but the ISP hub is so far away, the internet is slow and not worth buying.
- We plan to be in our home at least 6 months of the year. We would likely stay longer except online services are unreliable and/or slow. With a child online for school full time plus the need to conduct work-related meetings, we would greatly benefit from higher-speed and reliable internet service
- We love this area. We need more speeds as far as internet, and we would possibly consider moving here. I have been forced to work from home all summer due to the pandemic, and this has been a very frustrating experience because of poor internet speeds.
- It is impossible to be an impactful member of society without a strong reliable internet. The new "have versus have not's" is no longer divided by income but by the accessibility to the internet.
- Teaching from home this year has been difficult. I have not been able to attend some Zoom sessions due to poor connection. I also had to increase my US Cellular package in order to avoid throttling of my internet.
- When Covid hit the internet was our life line to work, necessities, communication and even food. It was the most difficult to work from home because many of my students did not have internet access, not necessarily due to finances but mostly due to availability. The same is true for cellular phone service. It is unacceptable in this age of technology.
- Work duties that I need to perform take me about an hour using my satellite internet- when doing same duties in the office it takes maybe 10-15min
- When the state shut down, I had 3 students return from school to my home and I needed to work from home. We can only get limited service to our home and it is very unreliable. We bought another line to come into the home just so we could access some of our internet needs. The lack of internet created such an anxious situation in our home we were arguing over usage and schedules. It made a hard situation so much harder. My children missed

tests and classes. One of my children was about to start an AP exam and the internet quit. It almost caused him to fail the whole program. It was devastating to my ability to work. It puts all of the families living in rural situations at a huge disadvantage. One of my children needed to move to his brothers just to finish his schooling separating our family at a time of crisis. My children deserve better.

- I am 68 yrs old and I need better cell coverage and internet so I can stay connected to doctors, family members, banks and emergencies.
- I am Health care provider at the local clinic and need to log onto system at work. Takes hours to get work done.

G. Municipal Ordinances Findings

The Danforth and Weston town managers on the task force are not aware of any ordinances or policies that would interfere with expanding high-speed broadband services in their communities. To the best of their knowledge this is also true for the other 10 smaller communities in the region.

H. Digital Inclusion Findings

Digital access: Across the region, there are extremely limited ways that residents can gain access to higher speed Wi-Fi signals if they do not have adequate service at their homes. There are unadvertised Wi-Fi links for “guests” in the parking lots of Machias Savings Bank (Danforth); the Weston Town Office; East Grand School and other unadvertised locations. There are two outdated computers for public use at the Danforth Library, however this is a very small building that is open, or safe, during a pandemic.

Digital literacy programs are only available on-line. The closest adult education center is in Houlton or Calais. The 8th grade class does have a required digital literacy/citizenship class.

Digital equipment is available for students from East Grand School and pandemic related funds have increased their availability. Every student has a laptop computer or iPad. Ed Techs and Teachers also have their own computers. Because of the pandemic and remote learning, hot spots were provided through US Cellular and Verizon to increase internet access at student’s homes although the performance and reliability has been very mixed.

Phase II planning will bring together the community development priorities for each of the twelve communities in the region with the region’s broadband planning. Additional study is needed to:

- Locate a set of easily accessible locations for permanent residents, seasonal residents, and recreational tourists to access reliable high-speed internet;
- Better understand the specific equipment needs of the health center’s patients so that tele-health services can be expanded;
- Inventory the digital education needs of high school students and young adults to support their aspirations and learning; and
- Establish a resource hub for the region that can be used as a convening space to support innovation and entrepreneurial activities across all ages.

I. 2020 Community Profiles

Individual community profiles provide more specific information from ConnectMaine's website and mapping database. More specific conversations are planned to better understand each provider's capacity and infrastructure needs for each community. As these profiles are completed, the regional survey information and provider information will be presented and discussed with each town's community leaders as part of goal setting and feasibility planning in Phase II. **All community profiles can be found in Exhibit C.**

IV. Next Steps: Phase 2 Feasibility Planning

The planning and assessment effort to date provides the region with baseline data, important insights, and a framework from which to advance into Phase 2 Feasibility Planning. The GEGR Broadband Task Force reached out to several broadband consultant groups and plans to retain **Mission Broadband** to facilitate this next phase of planning. Sarah Strickland and Aly Cropley will continue as project liaisons to ensure continuity between and across communities, the task force, and the consultant.

The scope of work will include four phases:

1. Additional Community Surveys, Vendor Interviews and Data Synthesis
2. High-Level Engineering and Mapping for 12 communities
3. A Request for Proposal (RFP) Process from the Providers in the region
4. A Cost Analysis for the region and by community

The intent is to complete a broadband vision for the region and provide realistic feasibility plans for each community's broadband needs.

The specifics for this next phase of planning are provided in the ConnectMaine Phase II Feasibility Planning grant application.

Exhibit B

GREATER EAST GRAND REGION BUSINESSES and ORGANIZATIONS 10-1-2020

Anchor Organizations	Businesses/Services
East Grand School East Grand Health Center Danforth Habilitation Center Machias Savings Bank US Post Office	Allan Hanscom Construction Amor Yoga Paz B & R Bartlett Enterprises Baskahegan Company Canoe the Wild Maine Wilderness Carl's Self Storage Cary's Cars & Equipment Cary Brown Excavation Cecelia Rhoda Probate Paralegal Chan's Place Chris White Construction Colin Bartlett & Sons Community News Cowan's Recovery & Towing D.J. Campbell & Son, Inc D.J. Huff Auto Repairs Danforth Golf Range Danforth Guide Service Dave Smalley, Elves and Angels Dave's Maine Wreaths and Trees Davis Forest Products Farr & Associates Security Foss & Son Inc Furnace Doctor Gillis Fuel LLC Hanington Bros Gabrielle Lapointe Yoga Gilpatrick's Marina Grand Lake Hunt Park Ground Up Construction Independent Truck Drivers Jenkins Heights Apartments Little Cove Day Care Mark's Odd Jobs Magoon's Propane Michael Fawcett, SmartShoot Moose Maine-iah Nic's Auto Repair Our Maine Street LLC PFC Logging, Inc Richard Rhoda Attorney at Law Rising Sun Outfitters Rossignol Architecture Ground Up Construction Scuba Rog Seagrass Sean Beaudoin Plumbers Scott Hanington, Hanington Lumber Snowbird Travel The Snow Farm Whiting Small Engine Repair Trent Noyes & Son
Municipalities/UT	
Amity Bancroft Brookton TWP Codyville Plantation – North Danforth Drew Forest TWP Forest City Glenwood Plantation Haynesville Orient Reed Plantation Topsfield – North Weston Wytopitlock T3R3 Wels; T3R2 Forkstown; T11R3; T8R4; T8R3; T7R2	
Retail	
Dave's Hardware Spring Valley Gift & Yarn Knight's Thriftway Down on the Farm Maine Wreaths Orient Gardens Gillis Gardens The Millyard Mem's Place Sunny Crest Maple Grove Farm Brookton General Store	
Lodging/Camps/Outfitters	
Paradise Cabins First Settlers Lodge Rideout's Birchwood Cottages Greenland Cove Campground Greenland Cove Cabins Cowger's Cabins Maine River Lodge Wheaton Lodge Village Camps Living Waters Christian Camp East Branch Lodge Birch Hill Camps Wilderness Escape Outfitters	

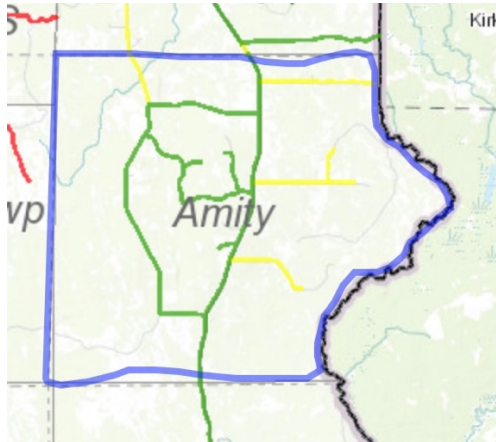
GREATER EAST GRAND REGION BUSINESSES and ORGANIZATIONS 10-1-2020

Clubs	In-Region Non-Profits
East Grand Snowmobile Club Eastern Maine Snow Sports Grand Lakers ATV Club Haynesville Woods ATV Club Tomah ATV Club Quod County Snowmobile Club (Springfield) Linneus Sno Sports Aroostook Riders ATV Club	Chiputneticook Lakes International Conservancy (CLIC) Citizens Organization for Rural Education (CORE) The Maine Family Resource Center Woodie Wheaton Land Trust
Churches	Non-Profits Serving Region
Amity Baptist Church Brookton Baptist Church Brookton Pentecostal Church Danforth Apostolic Church Danforth Baptist Church Danforth Methodist Church Danforth Pentecostal Church Haynesville Baptist Church Saint Ann's Catholic Church Weston Community Church (Summer Only) Wytopitlock Baptist Church	Sunrise County Economic Council Northern Maine Development Council Conservation Fund Aroostook County Action Program (ACAP) Downeast Community Partners (DCP) Healthy Acadia St Croix Regional Family Health Center Katahdin Valley Health Center Health Access Network Aroostook Mental Health Services, Inc The Northern Lighthouse, Inc Calais Regional Hospital Houlton Regional Hospital

Exhibit C

Amity – 04471

Aroostook



Amity Demographics

- 238 population in 2010
- Median age 46 years
- 135 households
- 18% underserved internet access

Broadband Goals (draft):

- (1) Expand fiber broadband to all underserved households on Monument Rd.
- (2) Expand services on Tracy Rd, Wildwood Lane and Estabrook Rd.

Green Areas with internet connectivity reported at least 25x3 Mbps

Yellow Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps

Unserved Households

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Amity	Estabrook Rd	298	430	2
Amity	Monument Rd	19	476	12
Amity	Tracy Rd	7	164	7
Amity	Tracy Rd	342	360	2
Amity	Wildwood Ln	29	29	1
				24

Providers Pioneer Wired

Digital Inclusion There are no public spaces and options available to access computers.

Municipal Rules There are no current ordinances, policies or rules that limit broadband expansion.



Orient Demographics:

Broadband Goals:

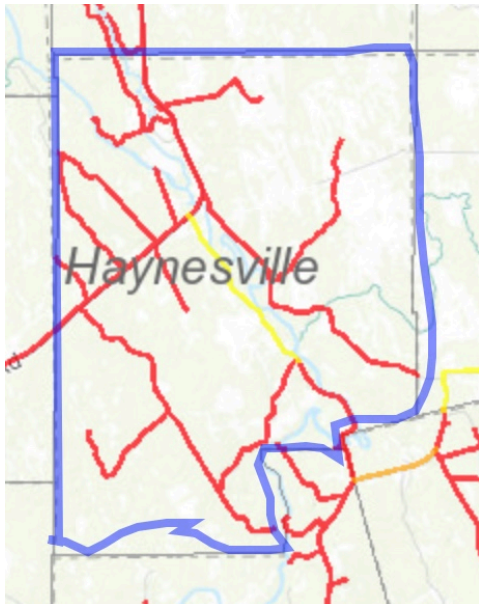
- Green** Areas with internet connectivity reported at least 25x3 Mbps
- Yellow** Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps
- Orange** Areas with internet connectivity reported at less than 10x1 Mbps
- Red** Areas with no internet connectivity

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Orient	Alder Ln	5	5	1
Orient	Boundary Rd	521	521	1
Orient	Boundary Rd	626	626	1
Orient	Cedar Point Rd	164	206	5
Orient	Circle Ln	11	13	2
Orient	Highland Dr	57	57	1
Orient	Hillside Ln	9	9	1
Orient	Hummingbird Ln	88	88	1
Orient	Island Cove Rd	29	29	1
Orient	Moosewood Ln	7	7	1
Orient	Number Nine Rd	72	608	8
Orient	Old Bark Landing Rd	430	430	1
Orient	Old Bark Landing Rd	454	482	2
Orient	Red Bank Ln	21	21	1

27

Providers

- Pioneer Wired/Wireless
- Consolidated Wired
- Axiom Wireless



Haynesville Demographics

Broadband Goals

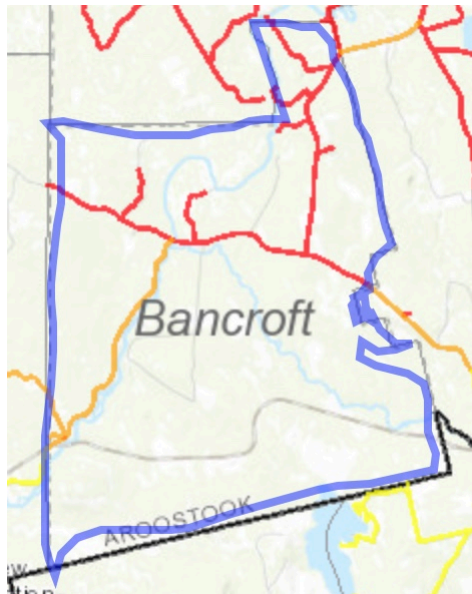
Red Areas with no internet connectivity

Yellow Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Haynesville	Dales Pit Rd	188	188	1
Haynesville	Danforth Rd	6	600	13
Haynesville	Denmark Rd	171	305	2
Haynesville	Fitzpatrick Rd	4	4	1
Haynesville	Military Rd	2616	2616	1
Haynesville	Military Rd	2957	2978	7
Haynesville	Military Rd	3001	3032	4
Haynesville	Military Rd	3057	3057	1
Haynesville	Military Rd	3141	3382	19
Haynesville	Military Rd	3391	3426	4
Haynesville	Military Rd	3465	3540	4
Haynesville	Mooseberry Rd	17	17	1
Haynesville	Skagrock Rd	18	360	11
Haynesville	Tweedie Rd	1	1	1
				70

Providers

Consolidated Wired



Bancroft Demographics

Broadband Goals:

- Orange** Areas with internet connectivity reported at less than 10x1 Mbps
- Red** Areas with no internet connectivity

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Bancroft	Bancroft Rd	1349	1378	4
Bancroft	Bancroft Rd	1665	1665	1
Bancroft	Bancroft Rd	1827	1827	1
Bancroft	Bancroft Rd	1903	2555	12
Bancroft	Bancroft Rd	2745	2810	7
Bancroft	Baskehegan Rd	391	391	1
Bancroft	Ferry Rd	1132	1143	2
Bancroft	Haynes Rd	6	253	2
Bancroft	Hinch Rd	16	127	3
Bancroft	Kelly Rd	31	362	7
Bancroft	Kelly Rd	412	414	2
Bancroft	Kelly Rd	478	506	2
Bancroft	Kelly Rd	739	739	1
Bancroft	Kennedy Ln	53	53	1
Bancroft	Mill Rd	71	71	1
Bancroft	Schoolhouse Rd	17	42	6

53

Providers

- Consolidated Wired
- Pioneer Wireless



Glenwood Plt Demographics

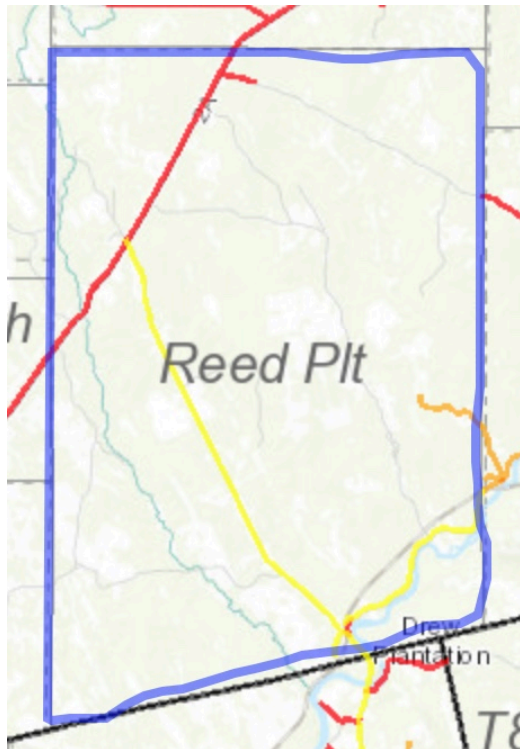
Broadband Goals

Red Areas with no internet connectivity

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Glenwood Plt	Military Rd	2219	2219	1
Glenwood Plt	Military Rd	2247	2247	1
Glenwood Plt	Moulton Dr	73	73	1
				3

Providers

None



Reed Plt Demographics

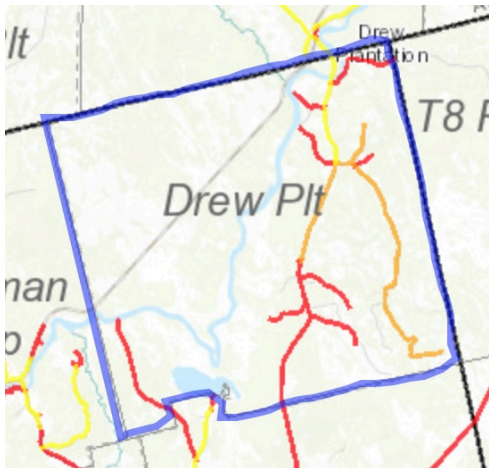
Broadband Goals

- Yellow** Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps
- Orange** Areas with internet connectivity reported at less than 10x1 Mbps
- Red** Areas with no internet connectivity

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Reed Plt	Bancroft Rd	2872	3451	6
Reed Plt	Main St	95	765	42
Reed Plt	Main St	770	777	3
Reed Plt	Main St	800	836	4
Reed Plt	Military Rd	1554	1619	4
Reed Plt	Mill Rd	112	112	1
Reed Plt	Old Rd	8	12	2
Reed Plt	Santa Claus Ln	2	3	2
Reed Plt	Springer Rd	4	8	2
				66

Providers

- Consolidated Wired
- Premium Choice Wireless



Drew Plt Demographics

Broadband Goals

- Yellow** Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps
- Orange** Areas with internet connectivity reported at less than 10x1 Mbps
- Red** Areas with no internet connectivity

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Drew Plt	Andrews Rd	10	10	1
Drew Plt	Andrews Rd	38	146	2
Drew Plt	Center St	61	79	3
Drew Plt	Center St	105	123	2
Drew Plt	Center St	258	326	3
Drew Plt	Center St	668	691	3
Drew Plt	Tower Rd	60	60	1
				15

Providers

- Consolidated Wired
- Premium Choice Wireless



Weston Demographics

Broadband Goals

- Green** Areas with internet connectivity reported at least 25x3 Mbps
- Yellow** Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps
- Orange** Areas with internet connectivity reported at less than 10x1 Mbps
- Red** Areas with no internet connectivity

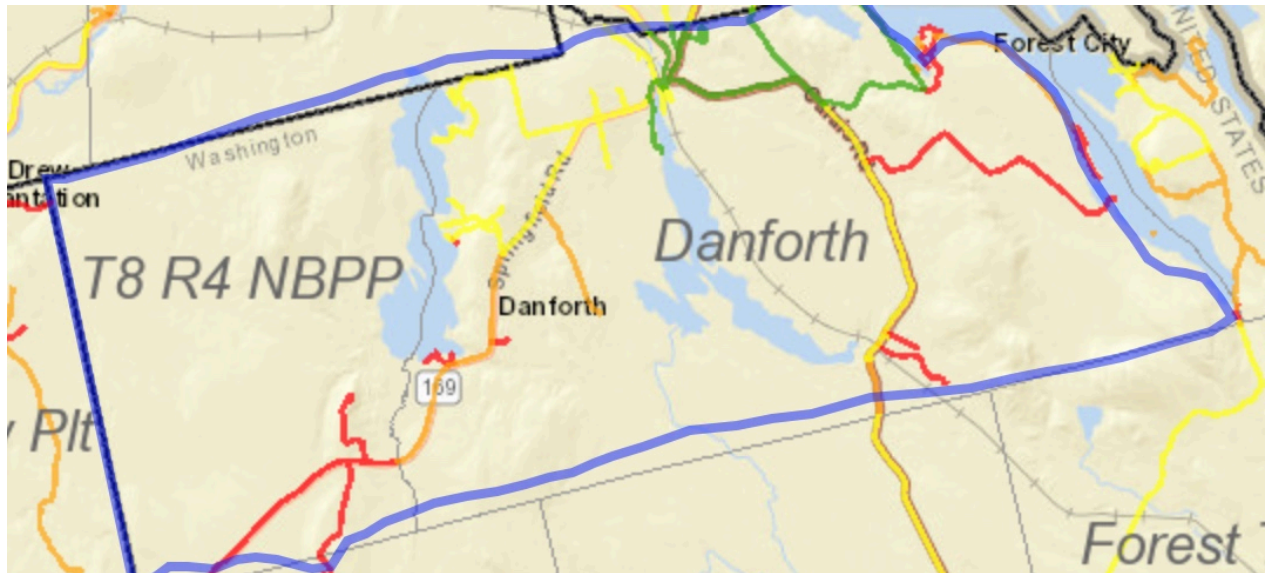
Providers

- Pioneer Wired/Wireless
- Consolidated Wired
- GWI Wired
- Spectrum Wired
- Axiom Wireless

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Weston	Bancroft Rd	645	645	1
Weston	Bancroft Rd	678	971	10
Weston	Bancroft Rd	1000	1093	3
Weston	Bass Ln	6	28	2
Weston	Butterfield Landing Rd	112	130	4
Weston	Butterfield Landing Rd	136	176	3
Weston	Cedar Point Rd	260	260	1
Weston	Cedar Point Rd	276	284	2
Weston	Chadwick Point Rd	803	829	4
Weston	Church Ln	5	16	3
Weston	Cropley Rd	99	307	8
Weston	Dark Cove Rd	47	54	2
Weston	Dark Cove Rd	179	273	6
Weston	Faulkner Lake Rd	134	134	1

Weston	Gellerson Dr	13	13	1
Weston	Harris Hill Rd	303	317	2
Weston	Harris Hill Rd	407	467	2
Weston	Lakeside Dr	36	76	2
Weston	Living Waters Rd	39	39	1
Weston	Madigan Point Rd	31	39	2
Weston	Madigan Point Rd	54	76	2
Weston	Moody Ln	90	90	1
Weston	Partridge Ln	10	54	2
Weston	Randall Dr	77	81	2
Weston	Route 1	6	225	5
Weston	Route 1	375	462	5
Weston	Route 1	588	593	2
Weston	Route 1	680	921	9
Weston	Route 1	959	959	1
Weston	Route 1	1021	1081	6
Weston	Route 1	1241	1241	1
Weston	Route 1	1270	1300	2
Weston	Schoodic Dr	12	12	1
Weston	Selden Rd	9	262	7
Weston	Springer Rd	80	284	15
Weston	Waterfront Dr	6	6	1
Weston	Wishbone Ln	24	29	3

125



- Green** Areas with internet connectivity reported at least 25x3 Mbps
- Yellow** Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps
- Orange** Areas with internet connectivity reported at less than 10x1 Mbps
- Red** No service

Weston Demographics

Broadband Goals

Providers

Pioneer	Wired/Wireless
Consolidated	Wired
GWI	Wired
Spectrum	Wired
Axiom	Wireless

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Danforth	Amero Ln	100	100	1
Danforth	Baker Ridge Rd	8	348	7
Danforth	Bartlett Ln	3	24	2
Danforth	Brooks Ln	28	68	3
Danforth	Brown Rd	61	61	1

Danforth	Byers Ln	8	12	2
Danforth	Calais Rd	1253	1445	8
Danforth	Calais Rd	1486	1486	1
Danforth	Calais Rd	1520	1535	2
Danforth	Calais Rd	1607	1607	1
Danforth	Central St	46	60	2
Danforth	Central St	77	110	6
Danforth	Cowgers Ln	14	14	1
Danforth	Crooked Brook Farm Rd	8	8	1
Danforth	Depot St	71	122	4
Danforth	Fifield Ln	11	43	4
Danforth	Greenland Cove Rd	581	581	1
Danforth	Hanington Dr	19	19	1
Danforth	Hot Brook Lake Rd	61	81	3
Danforth	Huff Rd	15	25	4
Danforth	Irish Settlement Rd	46	299	8
Danforth	Kinney Ln	30	70	3
Danforth	Kneser Ln	23	23	1
Danforth	Lakeview Rd	5	71	3
Danforth	Lydic Ln	12	12	1
Danforth	Maple St	12	199	16
Danforth	Maple St	231	231	1
Danforth	Moon Is	3	3	1
Danforth	Reservation Rd	25	141	7
Danforth	Roy Lee Rd	27	50	2
Danforth	Sandy Beach Rd	20	516	13
Danforth	Sandy Beach Rd	538	643	4
Danforth	Schillinger Rd	9	44	2
Danforth	Snow Farm Rd	46	81	4
Danforth	Springfield Rd	190	246	5
Danforth	Springfield Rd	340	381	4
Danforth	Springfield Rd	521	521	1
Danforth	Springfield Rd	791	791	1
Danforth	Springfield Rd	896	990	4
Danforth	Springfield Rd	1087	1257	5
Danforth	Springfield Rd	1394	1419	2
Danforth	Springfield Rd	1532	1532	1
Danforth	Stoddard Ln	6	6	1
Danforth	Toupin Mountain Rd	4	4	1
Danforth	Weatherbee St	5	82	8

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Brookton Demographics

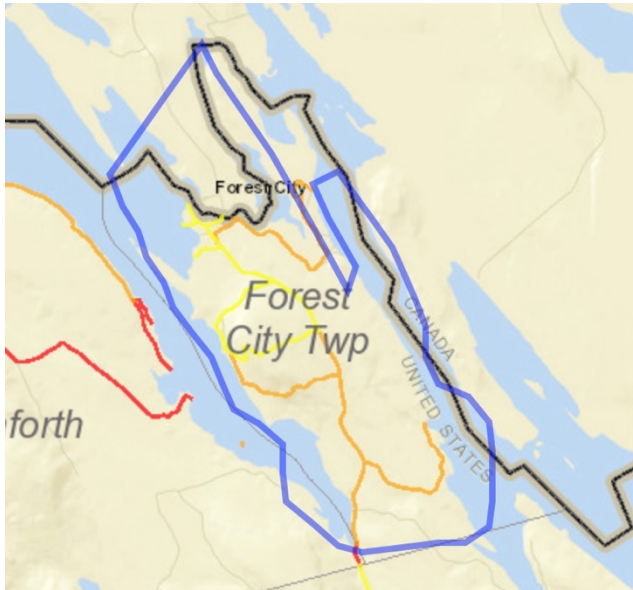
Broadband Goals

Yellow: Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps

	Street Name	From Address*	To Address*	Number of unserved addresses
Less than 25x3	Brookton Twp Channel Rd	81	81	1
	Brookton Twp Forest City Rd	45	45	1
	Brookton Twp Forest City Rd	95	96	2
	Brookton Twp Forest City Rd	144	292	13
	Brookton Twp Picnic Point Rd	88	167	7
	Brookton Twp Route 1	74	223	2
	Brookton Twp Route 1	458	1059	17
				43

Providers

Pioneer	Wired
Consolidated	Wired



Forest City Demographics

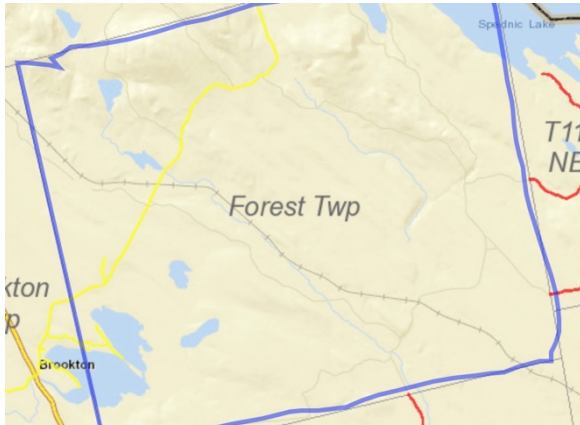
Broadband Goals

- Orange** Areas with internet connectivity reported at less than 10x1 Mbps
- Yellow** Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Forest City Twp	Castle Rd	245	245	1
Forest City Twp	Forest City Rd	1674	1740	2
Forest City Twp	Forest City Rd	1966	1966	1
Forest City Twp	Forest City Rd	2092	2092	1
Forest City Twp	Forest City Rd	2288	2357	3
Forest City Twp	Forest City Rd	2423	2423	1
Forest City Twp	Forest City Rd	2434	2466	6
Forest City Twp	Forest City Rd	2510	2510	1
Forest City Twp	Gray Ghost Rd	4	262	4
Forest City Twp	Lydic Ln	286	306	2
Forest City Twp	Spednic Rd	2	562	2
Forest City Twp	Walls Hill Rd	185	223	2
				26

Providers

Pioneer	Wired
Consolidated	Wired
Axiom	Wireless



Forest Demographics

Broadband Goals

Yellow Areas with internet connectivity reported at least 10x1 Mbps and less than 25x3 Mbps

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Forest Twp	Channel Rd	189	189	1
Forest Twp	Channel Rd	224	263	3
Forest Twp	Drakes Lake Rd	1	69	4
Forest Twp	Forest City Rd	300	374	4
Forest Twp	Forest City Rd	757	757	1
				13

Providers

Pioneer	Wired
Consolidated	Wired



Codyville Plt Demographics

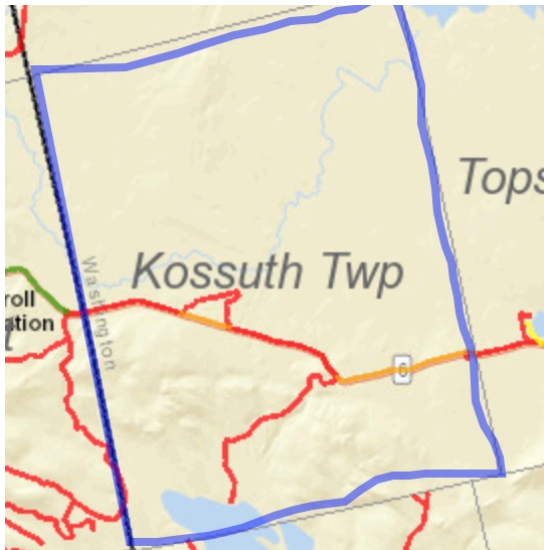
Broadband Goals

Orange Areas with internet connectivity reported at less than 10x1 Mbps
Red Areas with no internet connectivity

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Codyville Plt	Vanceboro Rd	12	74	4
Codyville Plt	Vanceboro Rd	171	258	5
				9

Providers

Consolidated	Wired
Pioneer	Wireless
Axiom	Wireless



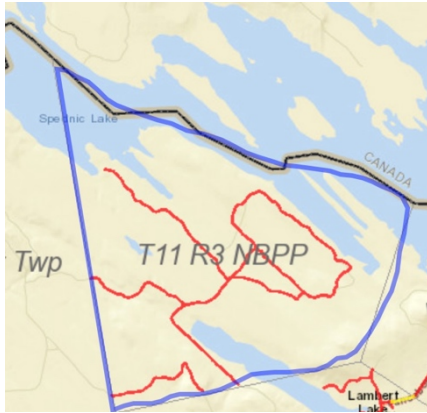
Kossuth Plt Demographics

Broadband Goals

- Red** No service
- Orange** Areas with internet connectivity reported at less than 10x1 Mbps

Less than 25x3	Street Name	From Address*	To Address*	Number of unserved addresses
Kossuth Twp	Log Cabin Ln	14	23	2
Kossuth Twp	US Highway 6	1	1	1
Kossuth Twp	US Highway 6	109	121	2
Kossuth Twp	US Highway 6	1034	1034	1
				6

- Providers**
- Consolidated Wired
 - Pioneer Wireless



T11R3

Less than 25x3
None identified in database

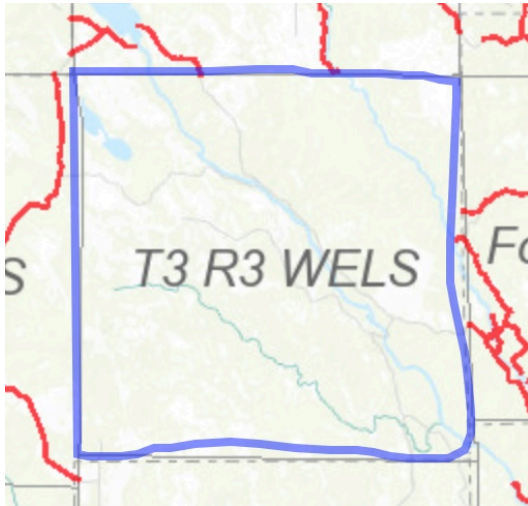
Providers – None
Red – No service



T8R3

Providers – None
Red – No service

	Street Name	From Address*	To Address*	Number of unserved addresses
Less than 25x3	Power Aly	1650	1650	1
T8 R3 NBPP				



T3R3 Wels
No Data
No Providers
No Service



T3R2 Forkstown
No Data
No Providers
No Service