



Ellenville Broadband Discovery: Findings Summary

Purpose of This Document

This document displays the findings from the landscape overview and stakeholder interviews that Moonfarmer conducted on behalf of the Ulster County Economic Development Alliance. It will help to inform decisions around strategy and messaging for improved internet quality and access in the Village of Ellenville and the surrounding area.

Landscape Overview

In 2006 Spectrum (formerly Time Warner Cable) signed an exclusive contract with the Town of Wawarsing to provide broadband services. Higher-than-dial-up speeds are available from Verizon via DSL and from satellite providers, but neither are available in all areas and can't compete with the performance offered by Spectrum. Spectrum's contract with the town expired in 2016 and is in the process of renegotiation and renewal.

Service	Type	Plan	Speed	Price	Data Limit
HughesNet	Satellite	Business 35	25mbps min	\$70/month	35GB
HughesNet	Satellite	Business 250	25mbps min	\$420/month	250GB
Exede	Satellite	Essential 10	12mbps max	\$50/month	10GB
Exede	Satellite	Liberty 50	12mbps max	\$100/month	50GB
Verizon	DSL	High Speed Internet	1mbps max	\$25/month min	None
Verizon	DSL	High Speed Internet Enhanced	15mbps max	\$35/month min	None
Spectrum	Cable	Internet	100mbps	\$45/month min	None
Spectrum	Cable	Business Advanced	300mbps	\$140/month min	None

Satellite services offer a fraction of the performance of cable for a lot more money, but for some remote areas they're the sole providers of high-speed internet. DSL offers comparable prices but at much slower speeds, and has limited availability.

Findings

Methodology: Over the course of several weeks, Moonfarmer conducted interviews with stakeholders in business, municipal government, and relevant institutions around internet access and quality in the Village of Ellenville and the surrounding area. The following stakeholders were consulted:



Name	Title	Organization
Julie Lonstein	President	UCEDA
Wayne Lonstein	CEO	VFT Solutions
Richard Travers	President	Rondout Valley Business Association
Maggi Grannis	Owner	New York Art Upholstery
Steven Kelley	CEO	Ellenville Hospital
Scott Traeger	Owner	Northeast off-road adventures
Barbara Hoff	Owner	Top Shelf Jewelry
Jeff Kaplan	Mayor	Village of Ellenville
Gerald Berliner	Photographer	Freelance
Marcus	Guiliano	Aroma Thyme Bistro
Abe	Eisner	Schrade property (vacant former industrial site)
Terry Houck	Supervisor	Town of Wawarsing
Daniel Tucker	Village Manager	Village of Ellenville (on behalf of Joe Steockeller)
Matt	Owner	Go Fast Computers

Feedback coalesced into the following categories:

Speed: Most residents and businesses find the available speeds sufficient for their purposes. Speeds above 300mbps aren't typically utilized by residences or most businesses, unless their bandwidth requirements are substantial. Every interviewee reported that speeds were sufficient apart from one, whose business assesses streaming video in real time from all over the world.

Reliability: Reliability was raised as an issue for several stakeholders, but the majority were satisfied with the current service or saw it as reasonable. Service disruptions can be characterized either as slowdowns or total outages, with the former being more common and the latter occurring during emergencies or weather events. Slow downs occur anywhere from once every couple of months to several times a week. While reliability issues most often have minor consequences, there are instances they can be literally dangerous. A lack of redundant infrastructure at the Ellenville Regional Hospital could cause severe issues in the event of an outage. It was reported that speeds decreased with distance from the Village of Ellenville and Rt. 209, with some customers



getting a fraction of the package they were paying for. It was also unclear in certain instances whether reliability issues were caused by local networks or by the internet service provider.

Price: It should be no surprise that stakeholders would be happy to pay less for their internet service. Many, however, saw what they were paying as reasonable. It was reported that introductory rates often increase with time, and sometimes dramatically.

Access: Many people in the area surrounding Ellenville continue to lack access to broadband internet. Terry Houck, town supervisor of Wawarsing, named the following areas wherein certain residents can't get broadband: Ulster Heights, Oak Ridge, Cragmoor, Kerhonkson, and Naponoch. While most have access in the village and close to Rt. 209, there are residences that Spectrum does not provide service to. These residences have to rely on satellite internet, which is substandard and expensive. There exists a fund, managed by the Town of Wawarsing, that is earmarked for infrastructure projects to increase access to broadband.

Public Wifi: The possible provision of public wifi in Ellenville's downtown business district was mixed. Most supported the idea of free internet access for the district's small businesses, but that's likely not how the scenario would play out. Those in favor pointed out possible benefits for tourists, who could easily post pictures and video to social media and promote their visit to the town and its businesses. Some in Ellenville rely on tourist connectivity for marketing, engaging with them directly in real time if they post about their trip. Few stakeholders recognized the benefits that public wifi might provide for marketing the village, but there were a handful of vocal proponents. There was not consensus on whether or not public wifi could attract local businesses to the area.

User Stories

Stakeholders overall were satisfied with the speed of their service, but would welcome improvements to reliability and reductions in price. They support the idea of public wifi, especially if it provides free internet to local small businesses, but additional benefits are not always clear to them.

While they aren't designed to represent the typical or average stakeholder, the following user stories help to illustrate some of the major concerns of the community around internet access and quality.

Resident: Residential users are distinguished by whether or not they have access to cable broadband. Access is common in the village and close to Rt. 209, but there are many areas where access is limited or unavailable. In some instances a DSL connection



is available, but speeds in some instances are 1% to 10% that of cable broadband. Satellite connections are often even slower, are more expensive, and have monthly data limits. Their performance can also be inconsistent depending on things like the time of day or the presence of trees.

Business Owner: The vast majority of business owners in Ellenville are well served by the available bandwidth that Spectrum provides. Even heavier users that may upload video or manage their websites likely don't need more than the 100mbps basic plan, with room to upgrade up to 300mbps. Reliability can sometimes be an issue, especially with older infrastructure, but many interruptions are as likely caused by internal networks and wifi than by the internet service provider. Business owners would prefer to put the money they spend on internet service back into their business, but most see the rates as reasonable.

High-Bandwidth User: Two of the interviewed stakeholders were high-bandwidth users, and only one of them was dissatisfied with the maximum available bandwidth. These users are characterized by national or global business dealings and communication that demand the transmission of large file sizes and a lot of data. Because these businesses rely so heavily on connectivity, redundancy is an important issue for them. Outages or interruptions are heavily disruptive for these users and redundant infrastructure would give them peace of mind.

Economic Developer: Economic developers recognize the critical importance that broadband serves for businesses in the community. Many are optimistic about the potential development that higher-speed options could enable, but are cognizant that available speeds largely meet current demand. One of the largest issues they're aware of is that many remote residential areas around Wawarsing don't have access to broadband at all. There's more than one story of people looking to move from the city and invest in the community, but had passed over a home they were considering because it didn't have access to broadband. Their optimism about public wifi is tempered; many recognize the benefits free wifi could provide to local businesses, but the impact to tourism or business attraction is sometimes vague or disagreed upon.

Public Servant/Representative: Public servants by and large are served well by the available bandwidth for their own purposes, but report frequent complaints from residents about the quality of their connections. They're also genuinely concerned that some in and around Ellenville still don't have access to cable broadband and need to rely on satellite connections, which have much slower speeds, are often more expensive, and have limits on available data month by month. They're aware of the tenuous negotiating position they're in with Spectrum and are exploring ways to work with them to have access to better information and work with each other to explore collective action.



Talking Points for Ellenville Broadband Stakeholders

Tell us your name and tell us a bit about your position, occupation, business, or organization.

Tell us about how you use the internet at your place of work, or, if applicable, at your home.

Tell me the story of internet access in Ellenville. Our understanding is that it needs to be improved but we really don't want to make any assumptions about why it needs to be improved. Please tell us in your words why it needs to be improved.

- Is the service slow?
- Is the existing service too expensive?
- Is the existing service unreliable?
- Does it go down leaving you without internet access for periods of time?

Are the problems more prominent in the village of Ellenville, the rural parts of Ulster County, or both?

Where do you think our focus should be in improving internet access in Ellenville?

Who should we be talking to about these issues? Who is most vocal? Who needs to be heard and what is the perspective or view point that they represent?

Would it be alright if I added your email address to a group that would receive correspondence about this project as it moves forward?



Summary of Ellenville Broadband Stakeholder Interviews

Julie Lonstein, President

Ulster County Economic Development Alliance

Julie has a point of view as a businessperson inside a law firm that has a particularly poignant and strong need for internet connectivity due to their focus on internet piracy law. More importantly she is the President of the Ulster County Economic Development Alliance. Julie wants options for better internet speeds for her business and for all stakeholders in Ellenville. The lack of options is her primary concern. The reliability or top speed of service is not particularly important to **Julie except with respect to what those characteristics indicate to other stakeholders with respect to how suitable Ellenville is for business in general.** Julie has a lot of enthusiasm for improving the economic development story of Ellenville as a destination for business and tourism. She would like to see a marketing campaign develop around this project to provision public wifi to tourists, encouraging them to share their experiences in Ellenville with the world on social media. Julie feels that the story of Ellenville is too disconnected currently and sees this as an opportunity to help Ellenville and all stakeholders to become more connected, more visible, and more engaged in their community.

Abe Eisner, Property Manager

Former Schrade Property

The Schrade property formerly housed the Imperial Schrade Knife Company, which manufactured knives on a national scale for decades. The company closed its doors over 10 years ago. A business partner of Abe's purchased the property and in turn demolished the buildings because of concerns about asbestos. Eisner is not from this area and so was not able to speak directly about access and quality of internet in Ellenville and the surrounding area. He said that he has been in contact with Suzanne Holt's office, and is currently working with BFJ Planning to conduct a study on the site to identify industries and potential tenants that would have the highest impact on employment in Ellenville and the surrounding area. **Eisner said that broadband would likely be critical for any future tenants, and hopes that BFJ Planning incorporates access and quality in the report on the site.**

Daniel Tucker, Treasurer

Village of Ellenville

Daniel spoke on behalf of Joe Stoeckeler, the Ellenville Village Manager. Tucker is the village treasurer and works with software vendors to manage accounting, tax collection, and relationships with banks. As such, he's become the de facto IT person in the village's offices. As far as their needs are concerned, Tucker believes their current service is sufficient; most of their internet usage occurs via email, although they do have two servers. Tucker explains that they're planning to move most of their operations to cloud-based platforms, which may increase their need for bandwidth in the future. Although he has heard complaints from community members,



he can't quantify or formally characterize whether internet is meeting community needs. He'd focus on improving speed first, and thinks that public wifi could help enable tourism, which could give a modest boost to local businesses. **He says the benefits of public wifi would have more an impact on younger people, who rely more heavily on connectivity.** Tucker believes that of the issues dissuading business relocation to Ellenville, there are several higher on the list than internet quality, such as taxes.

Maggi Grannis, Store Manager

New York Art Upholstery

Maggi manages the Ellenville location of New York Art Upholstery, which has another location in New York City. She says internet access is critical for their business for bids, contract management, proposals, communication, and marketing. She says the file sizes don't tend to be very large so they may not need substantial amounts of bandwidth. However, she's very dissatisfied with her current service, experiencing frequent outages that can last from five to thirty minutes, which are very disruptive to her business. The building is old and thusly has issues with signal transmission. She also said she wasn't certain whether issues were on her local network or associated with the ISP, but she did note that wifi signals were strong during outages. The building also has issues with their VOIP phone lines. Grannis and her husband live in Walker Valley, where she experiences similar issues with her business package that did not occur when they had a residential package. Spectrum has sent technicians three times with no appreciable improvement. Grannis believes that introducing competition would encourage Spectrum to provide better, more reliable service at competitive prices. The biggest issue for her now is reliability and consistency. Grannis thinks public wifi would save businesses money if they had access to it, but the impact on tourism wouldn't be huge. She expressed concerns about security on the network. She also noted that cell service is typically pretty good downtown.

Marcus Guiliano, Owner

Aroma Thyme Bistro

Marcus owns Aroma Thyme Bistro, a local restaurant and anchor of the downtown business district in Ellenville, but also cultivates a substantial online presence. As such, his demands for bandwidth are higher than those of other restaurants or small businesses in the area. His YouTube account gets 500,000 monthly views, and he's frequently uploading video. He pays for an upgraded service, and overall he's happy with quality and reliability of the service he gets, though he wishes it were less expensive. He does experience slowdowns and outages, but only every couple of months. He was not incredibly enthusiastic about the benefits of public wifi outside of saving businesses money if they had access. However, **connectivity in Ellenville and the surrounding area is very important to him. He provides wifi to his customers so that they can post and tag their experiences in his restaurant, helping to promote his business. The same effect is felt in the broader area, with posted pictures of Lippman Park or Sam's Point helping to promote the town. In both locations, he mentioned that**



connectivity is limited. Guiliano actually engages directly with people who come to the area and post about it on social networks, helping to promote his business when people are considering visiting a restaurant after hiking or mountain biking.

Matt, Owner

Go Fast Computers

Matt was referred to the study by Marcus Guiliano, owner of Aroma Thyme Bistro. Matt is the owner of Go Fast Computers, a network IT company that services residences and businesses in Ellenville and the surrounding area. As such, he's deeply familiar with connectivity speeds, access, and quality throughout the area. He says that the most critical problem is access: there are remote residences in the area that still don't have broadband and need to rely on HughesNet, a satellite service provider which he characterizes as "terrible." He says that available speeds from Spectrum are sufficient for the vast majority of business and residences in Ellenville and Wawarsing. Very few would need speeds higher than 300mbps. Reliability, however, he cites as an issue. The farther away from Rt. 209 one gets, the more these problems present themselves. Many residences he's visited get speeds at a fraction of what they're paying for. More often than not issues with speed are because of a faulty wire, wifi issues, or a bad modem, and the cable company will repair them if they are reported. He says public wifi would be beneficial to the town, but only to save money for residents and businesses. He did not mention tourism. **He said the impact would be felt more greatly by younger people, who rely more heavily on internet connectivity.**

Richard Travers, President

Rondout Valley Business Association

The Rondout Valley Business Association is a collection of businesses along the Rt. 209 corridor between Marbletown and Ellenville. Along with owning several other business, Richard Travers is the president of the association. He says that for his purposes, he finds internet speed and price sufficient. He was also not dissatisfied with reliability, despite having slow downs several times per week. Travers recorded internet speeds in advance of the interview. He could typically rely on 40mpbs download and 23mbps upload, but during high-traffic times it can go down to 9 mbps download and 17.8mbps upload. Overall, he says, the issues are not speed or reliability, but access. **Many residences don't have access to broadband in the area, and the issue is compounded the farther one gets from Rt. 209.** He hasn't heard many complaints about available bandwidth. He is very skeptical about the benefits of public wifi, and believes there are issues more deserving of time and resources in the area.

Scott Traeger, Owner

Northeast Off-road Adventures

Traeger opened Northeast Off-road Adventures outside of Ellenville about seven years ago. They train individuals and groups on how to navigate vehicles over rugged terrain. Many of these groups include corporate retreats from Manhattan and business executives. Traeger's



background is in engineering and computer science on Wall Street. When he first opened NORA, broadband wasn't available on the 70-acre site. After an assessment, Spectrum found that it could be provided and ran lines out. Usage requirements can be sizeable at times; remote video security is run over their wifi, and they frequently upload pictures and movies to social media and their website. Traeger currently has the 100mbps download package, and is very happy with speed and reliability. He doesn't encounter slowdowns or service interruptions outside of the occasional storm, but he and his staff are not on the site every day. **He is considering upgrading his package to accommodate additional usage requirements after a facilities improvement. Traeger believes that public wifi could supplement ever-increasing demands for connectivity. He thinks that high-bandwidth service solutions like fiber could attract tech companies to the area from the city.**

Steven Kelley, CEO

Ashima Butler, COO

Ellenville Regional Hospital

Ellenville Regional Hospital is the only hospital serving the Ellenville area. It's a 25-bed critical access hospital about one mile from the downtown business district. The hospital uses a cloud-based IT system, and at times has substantial usage requirements, especially from the radiology department which sends large files off site for analysis. Because of issues around security and liability, all medical-related traffic must be conducted on their network, so connectivity issues can't be addressed by switching to cell phones. Despite large usage requirements, Kelley and Butler report that speeds are typically sufficient. They anticipate needing more bandwidth in the future as requirements grow. Reliability is pretty consistent, but **they report major concerns about a lack of redundancy.** Service interruptions occur during the occasional storm, and slow downs occur somewhat regularly. While outages or interruptions are not severe, they represent a critical risk because medical staff relies on the internet for patient's medical records and information. **Service interruptions are literally a life or death issue, and there's not currently any infrastructure to ensure connectivity should their current connection fail. Kelley believes high-speed broadband will be an increasingly important factor for business attraction to the area.** He says that public wifi could be beneficial to the community, and could help improve depressed property values in the village. He suggested that Spectrum could be encouraged to provide it as part of their contract.

Terry Houck, Supervisor

Town of Wawarsing

After serving as a councilman for 14 years, Houck was elected Supervisor of the Town of Wawarsing last November. Usage requirements in their office are modest, and include email, some cloud services, and web development. Houck says their needs are being met. **Community members, he reports, often complain that the service is insufficient.** They say that prices are high and quality has decreased since Spectrum took over. The contract with Spectrum is managed at the town level, and Houck was insightful on its status. The original



contract lasted for 10 years between 2006 and 2016, and has not be renewed since it expired two years ago. Spectrum has provided some template contracts, but negotiations have not gone anywhere. As part of the original contract, they were required to provide broadband access to 140,000 homes, and there are questions around whether they met their obligations. Houck reports there are many areas around Ellenville that still don't have access to broadband internet. He named Ulster Heights, Oak Ridge, Cragmoor, Kerhonkson, and Naponoch in particular. He's requested a map from Spectrum, but they have not been forthcoming, saying that the information is proprietary. **Houck points out that 5% of local cable bills are collected and placed in a fund managed by the town to pay for infrastructure for the provision of broadband. The fund currently has over \$200,000. Houck met recently with representatives from other municipalities to discuss the possibility of collective bargaining with service providers to negotiate more favorable conditions.**

Wayne Lonstein, Founder

Signal Auditing, VFT Solutions

Wayne Lonstein is a lawyer in Ellenville that runs two businesses focused primarily on curbing content piracy on a global scale. Both have substantial bandwidth requirements. Signal Auditing operates a network of employees in the field who report on content piracy in public spaces using a proprietary platform that catalogs GPS data and uploaded photos and videos. VFT Solutions monitors piracy online and developed a way to trawl live streaming video from all over the world. Lonstein says he pays over \$1,500/month for connectivity from both Spectrum and Verizon, and has the highest available bandwidth packages from both. He says reliability is reasonable and has improved over time, but speed and price are abysmal. At the time of the interview, he recorded speeds at 269mbps download and 23.31mbps upload, the latter of which he was very dissatisfied with. **He believes that access to more bandwidth could possibly attract new types of businesses to Ellenville**, but admits that his is one of the only organizations in the area that has such substantial requirements for bandwidth. He was skeptical about the provision of public wifi, and unclear about potential benefits. He's concerned about operational questions around administration, liability, and security.

Jeff Kaplan, Mayor

Village of Ellenville

Jeff Kaplan has been the mayor of Ellenville since 2001. His office relies on broadband primarily for sending email, and he reports that service is sufficient for those purposes. **He says that community members would benefit from increased speed and lower prices.** From what he understands, disruptions occur rarely and reliability is overall pretty good. He was unclear about the benefits that public wifi could provide; many cafes and restaurants provide wifi to their customers in the business district so additional connectivity may not be a major benefit. He wasn't sure whether limited bandwidth was preventing the consideration to relocate to Ellenville by outside businesses. He suggested consulting with a commercial broker to understand the needs of those businesses.



Note: Due to a software malfunction, the interview recording with Jeff Kaplan was lost and rendered irretrievable.