TOWN OF
LEWISBORO

WIRELESS TELECOMMUNICATION INFRASTRUCTURE ANALYSIS

APPENDIX C

June 23, 2023

OVERVIEW

Smartphones and smart wireless devices are a fixture of every-day life for millions of people. In 2021, the number of unique mobile internet users globally was 4.32 billion with over 90% using a wireless device to connect.[1] Consumers using these devices expect fast and uninterrupted network connections to the internet, maps, files, videos, news, music, along with the myriad of available applications. For these devices to function optimally a lot of bandwidth is required. To facilitate the device demands, antennas mounted on towers or other elevated infrastructure is necessary.

Functionality is best when the signal transmits directly from the antenna to the consumer's wireless device(s) without obstruction from buildings, trees and/or ridgelines. Macro cell wireless facilities provide the greatest flexibility and coverages for wireless service providers. Without obstructions these facilities can generally cover a two-mile geographic radius in more densely populated areas and about a four-mile radius in suburban and rural areas. Small wireless facilities can be utilized in more populated areas to provide additional services where capacity overloads may be an issue or in areas with viewshed sensitivities. These small wireless facilities typically have approximately a quarter mile service radius.

Coverage gaps result from having facilities with a lot of obstructions, too few antennas within a particular service area or in areas where network capacity overloads occur. Capacity overloads are when the number of wireless subscribers using their devices simultaneously exceeds the performance capability of the wireless facility. Additional antenna infrastructure would be necessary to improve these coverage and/or capacity concerns.

Understanding, evaluating and planning for a well-designed wireless system begins with identifying all existing towers and base stations.

[1] Statista, October 18, 2022

WIRELESS INFRASTRUCTURE INVENTORY

The existing wireless facilities in Lewisboro have been assessed, mapped and analyzed in order to estimate the new wireless facilities anticipated in the Town over the next ten years.

The Lewisboro Study Area is defined as the Lewisboro jurisdictional boundary and a one-mile perimeter surrounding the Town. As of January 1, 2023 there are a total of 18 wireless facilities verified within the Lewisboro Study Area. The wireless facilities consist of 15 towers and three base stations of which seven are in the Town of Lewisboro and 11 are within the one-mile perimeter. Of these towers and base stations one is an inquiry and two are proposed and under review.

Within the Lewisboro jurisdictional boundary there are specifically seven sites consisting of six existing towers and one proposed and under review tower. All six existing towers in Lewisboro are macro wireless facilities. Three are located on private property, two are on public property, and one is in NY DOT right-of-way. One existing tower is semi-concealed and the remaining five are non-concealed. One of the macro cell sites (Site L3) is located on a tower also used for public safety equipment.

Site L5 is a proposed concealed tower or base station that is under review in the vicinity of Spring Street. This site if approved at the Salt Dome Storage Facility would be for a concealed macro cell on public property. An alternative location is also under consideration on private property on the grounds of the South Salem Presbyterian Church located at 111 Spring Street. If this site is approved, the macro wireless facility would be a concealed base station inside a church steeple.

The following *Table L1* summarizes the total number of sites and identifies the inventory by structure type, antenna type, location and design. The inventory of facilities are further depicted on corresponding maps as follows: *Figure L1* Structure Type, *Figure L2* All Antenna Type, *Figure L3* PWSF Antenna Type, *Figure L4* Location and *Figure L5* Design Type.

Greater site detail including facility picture, location map, ownership, providers, type of facility along with any other pertinent individual site information can be found in the Lewisboro Wireless Inventory Catalog in *Appendix C1*.

Lewisboro Study Area		INSIDE JURISDICTION				ONE-MILE PERIMETER			
	TOTAL 18	Existing	Approved Not Built	Proposed Under Review	Inquiry	Existing	Approved Not Built	Proposed Under Review	Inquiry
STRUCTURE TYPE									
Towers	15	6	0	1	0	6	0	1	1
Base Stations	3	0	0	0	0	3	0	0	0
ANTENNA TYPE									
Macro Wireless	10	5	0	1	0	3	0	1	0
Small Wireless	1	0	0	0	0	0	0	0	1
Public Safety/Macro	3	1	0	0	0	2	0	0	0
Public Safety	4	0	0	0	0	4	0	0	0
Other	0	0	0	0	0	0	0	0	0
LOCATION									
Private Property	8	3	0	0	0	4	0	1	0
Public Property	9	2	0	1	0	5	0	0	1
Utility Easement	0	0	0	0	0	0	0	0	0
ROW	1	1	0	0	0	0	0	0	0
DESIGN TYPE									
Concealed	4	0	0	1	0	1	0	1	1
Semi-Concealed	1	0	0	0	0	1	0	0	0
Non-Concealed	13	6	0	0	0	7	0	0	0

Table L1: Inventory by Structure Type

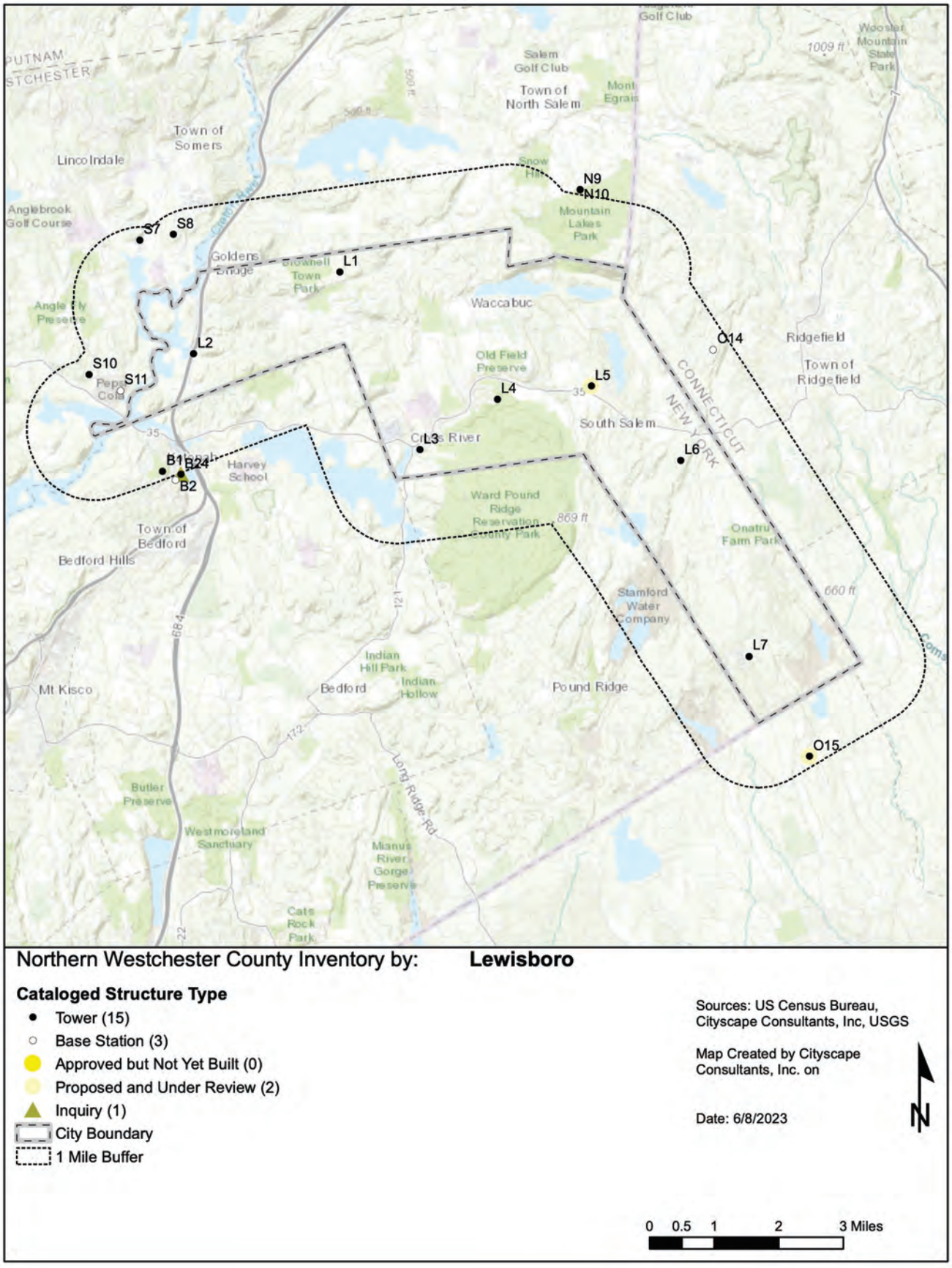


Figure L1: Map of Existing Inventory by Structure Type

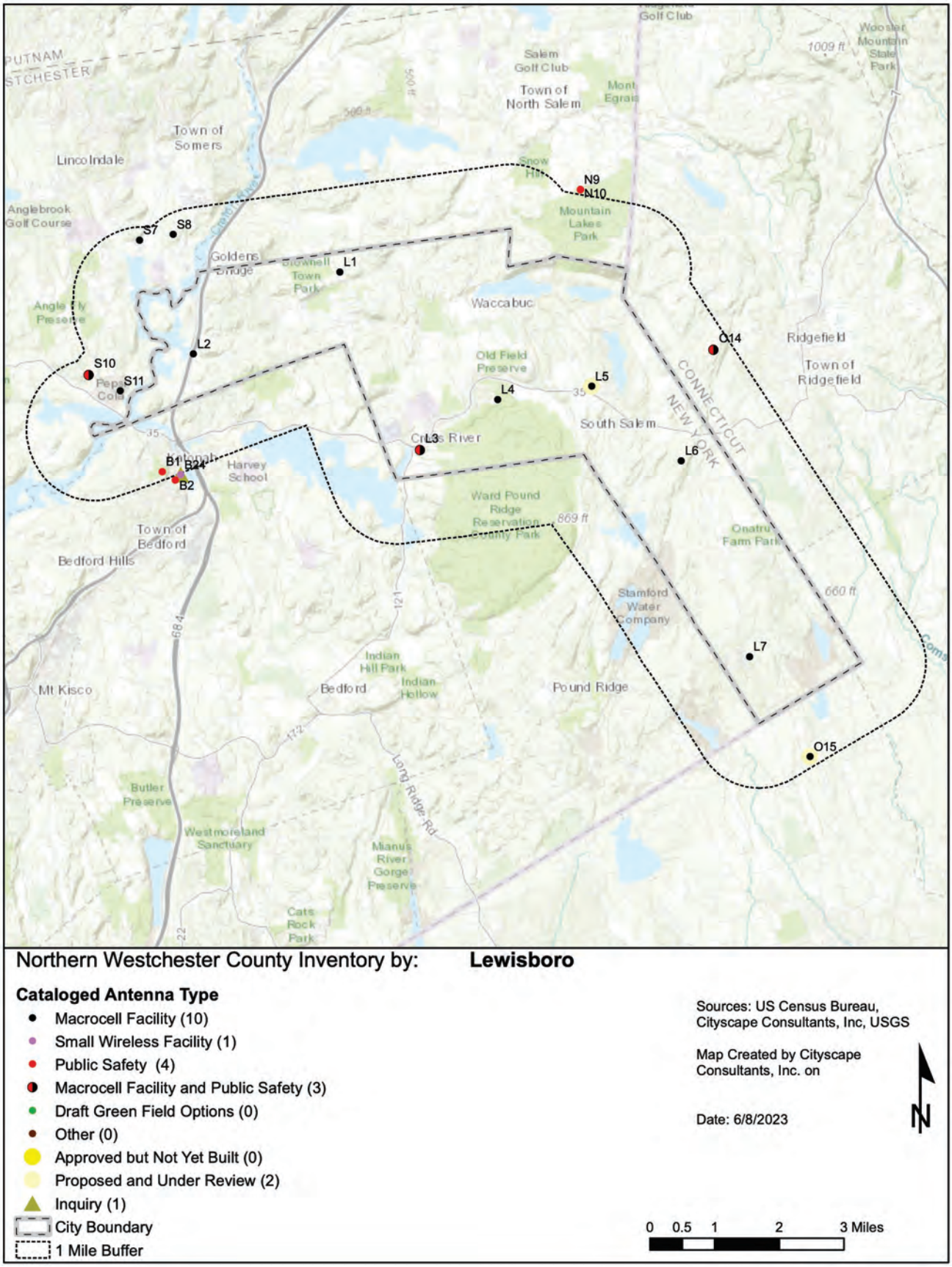


Figure L2: Map of Existing Inventory by All Antenna Type

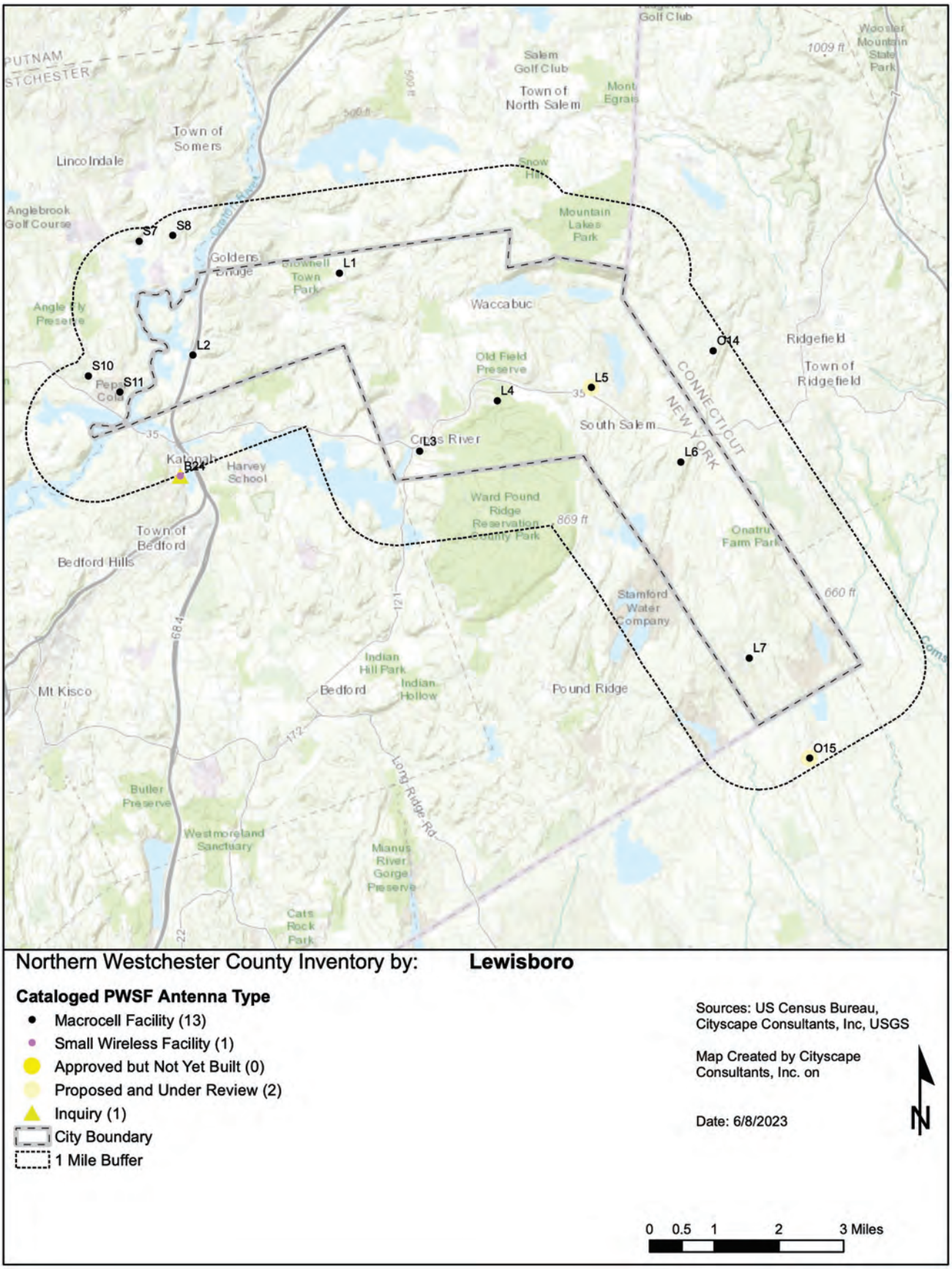


Figure L3: Map of Existing Inventory by PWSF Antenna Type

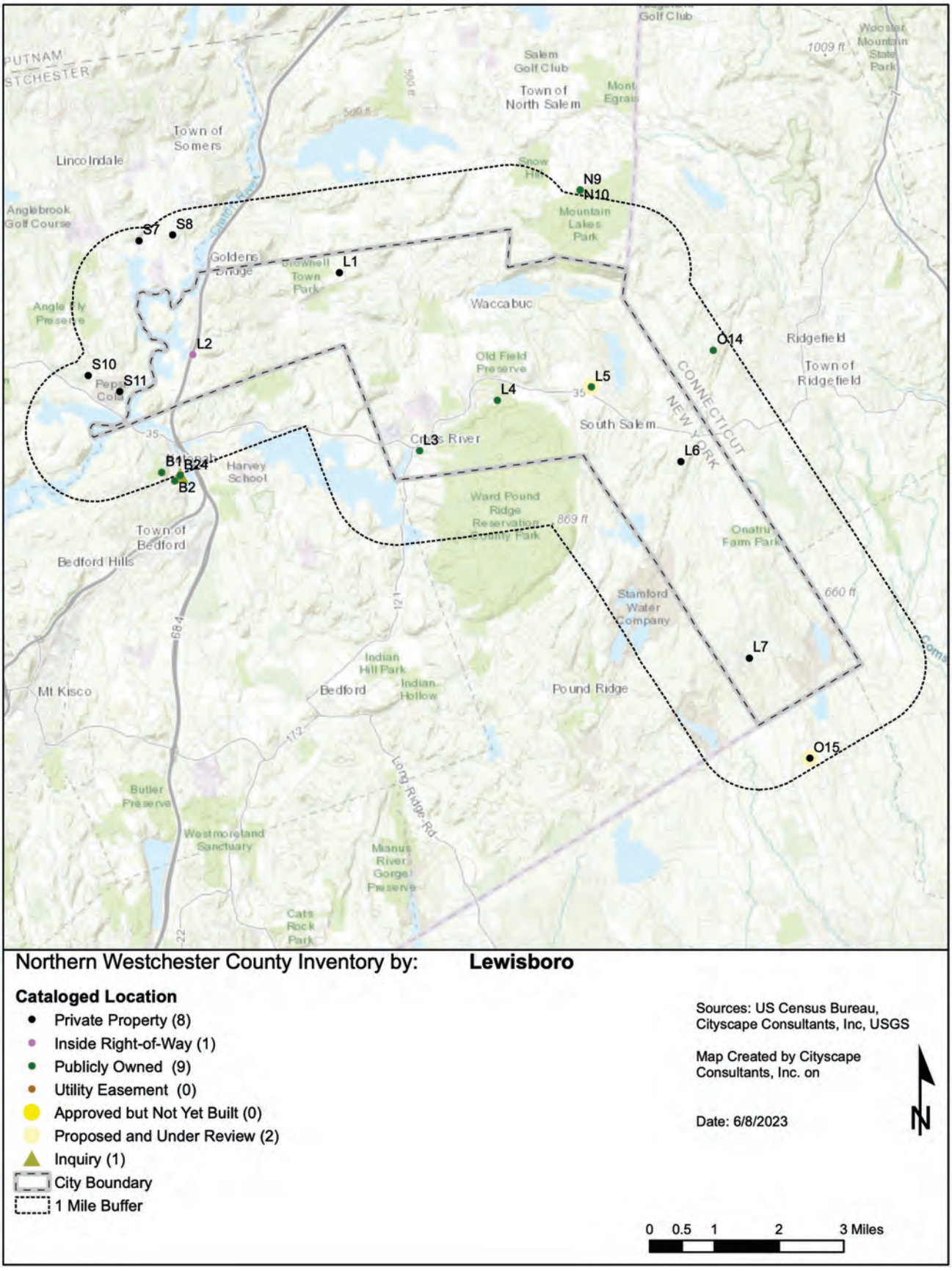


Figure L4: Map of Existing Inventory by Location

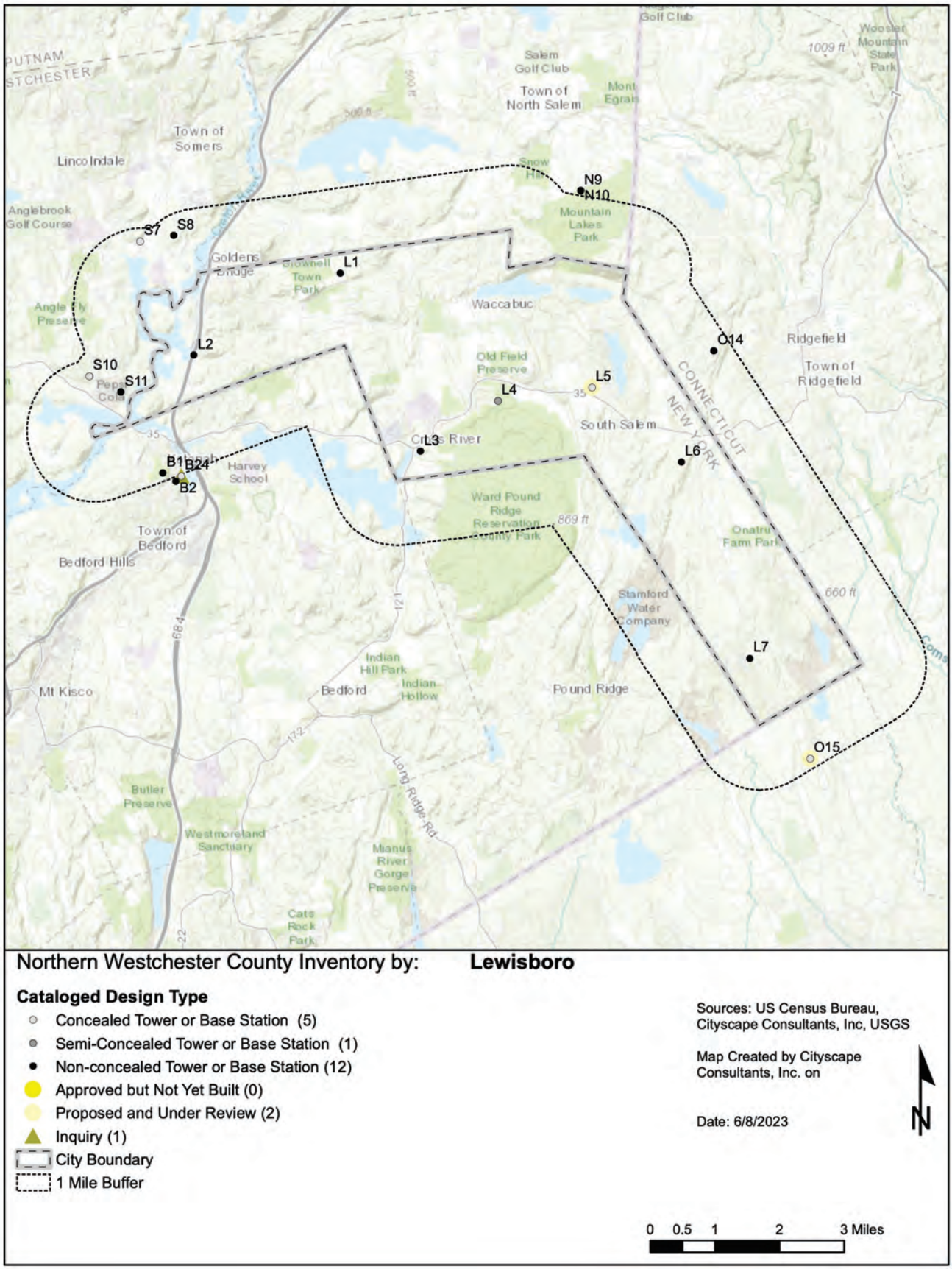


Figure L5: Map of Existing Inventory by Design Type

PROPAGATION MAPPING AND SIGNAL STRENGTH

Propagation mapping is a tool used to simulate antenna signal strength. Signal strength is a term used to describe the level and operability of a wireless device. The stronger the signal between the elevated antenna and the wireless handset device the more likely the device and all the built-in features will work as expected. As a wireless device approaches the outer edge of the antenna's service area, the signal strength becomes more prone to degradation, particularly as usage in the area increases or environmental conditions worsen.

A reduced signal causes unsatisfactory service, results in slow download or upload speeds and can cause dropped calls. Other factors affecting signal strength are any natural or man-made obstructions such as location of buildings, type of building materials, vegetation, humidity or weather that comes between the antenna and devices. The use of devices indoors or outdoors is also a factor when determining signal strength. Consider this much like a light bulb in a lamp; the further away you are from the lamp, the dimmer the light becomes. Any obstructions in between you and the lamp dims or obscures the light, just like signal strength.

The following propagation map provided in *Figure L6* illustrates simulated predicted coverage from the existing and approved but not built personal wireless service facility (PWSF) sites for wireless service providers operating in the Town. The map is generated using mid-band frequency spectrum 1700-2400 MHz, assuming maximum operating power from each of the towers or base stations. This simulated propagation considers a generic antenna model similar to those used by wireless service providers and assumes each provider is located at the highest mounting height on each facility represented.

The gradation of colors from yellow to blue represents the signal strength emanating from each personal wireless service facility. The geographic areas in yellow identify superior outdoor and indoor signal strength, green equates to areas with average in vehicle signal strength and shades of blue symbolize acceptable or poor outdoor signal strength. Areas with no shades show marginal, spotty or no signal. A quick reference of the shades and descriptions are as follows in *Table L2.*

SIGNAL STRENGTH COLOR	dBm	SIGNAL STRENGTH DESCRIPTION
Yellow	> -75	In Building
Green	-95	In Vehicle
Blue	-105	Outdoor
Gray or White		Marginal or No Service

Table L2: Signal Strength Description

This modeling assumption gives an estimation of the wireless coverages in the Town if each service provider was located on each facility. It is noted that not all service providers are on every tower or base station but the goal is to maximize the existing infrastructure already in place to accommodate the other providers.

As shown on *Figure L6* the proposed but not approved site along with all existing towers are located along major roadways within the Town. Site L1 is on the north side of Waccabuc Road, L2 the west side of I-684; Sites L3, L4 and proposed L5 are parallel Cross River Road (NYS Highway 35) and L6 and L7 are along the NYS Highway 123 (Smith Ridge Road) corridor. Land areas outside of these transportation networks have limited or no wireless coverage because the signal hand off distances between the existing antennas on the towers is too far.

Site L1

Site L3

Site L4

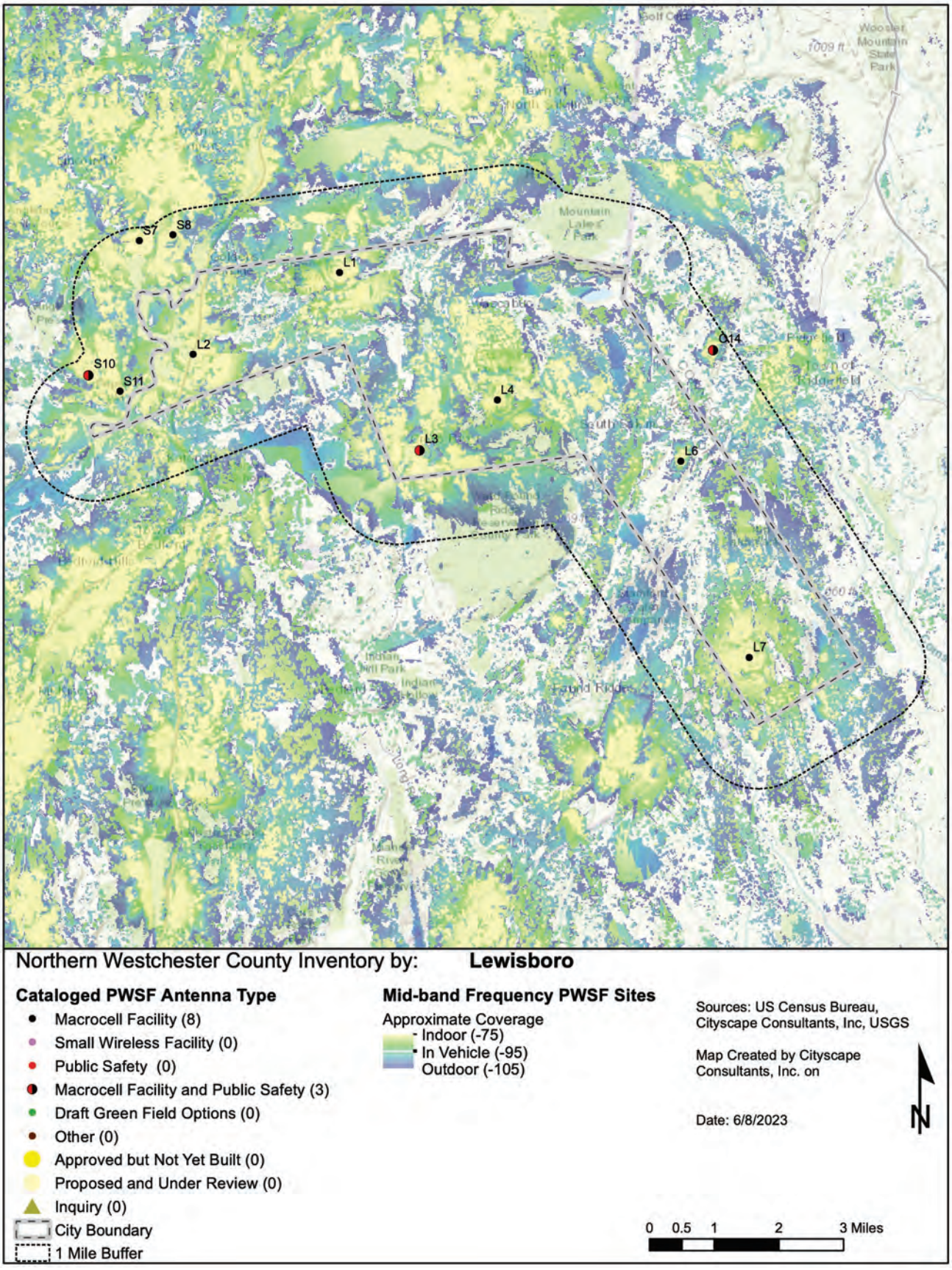


Figure L6: Simulated Coverage Map from PWSF Sites

POPULATION DENSITY AND LAND CLASSIFICATION

Population density is a variable affecting wireless networks. Wireless service providers want to deploy as close to their subscriber base as possible which is why residential areas, employment centers, recreational facilities and along major highways/thoroughfares are ideal locations for infrastructure. Examining population density is a key component in determining where there is likely to be the greater demand of wireless networks.

Figure L7 is a map of population density by US Census Block Group with an existing and approved but not built macro and small wireless facilities overlay. This visual representation clearly indicates the pattern and potential need throughout the Town. The darkest shades of brown represent US Census Block Groups with over 3,000 people per square mile and are the highest population densities in the Town. This indicates the areas with the most potential wireless network consumers.

Figure L8 is the Town's Land Classification map also with the existing and approved but not built wireless facilities as an overlay.

When comparing *Figure L6* (propagation map) to *Figure L7* (population density map) and *Figure L8* (land classification map) the notable wireless facility deployment pattern indicates the facilities parallel the major transportation corridors within the vacant land, commercial land and community services use designations. Sites L1, L6 and L7 are also nearest the most densely populated areas of Town.

Site L1

Site L6

Site L7

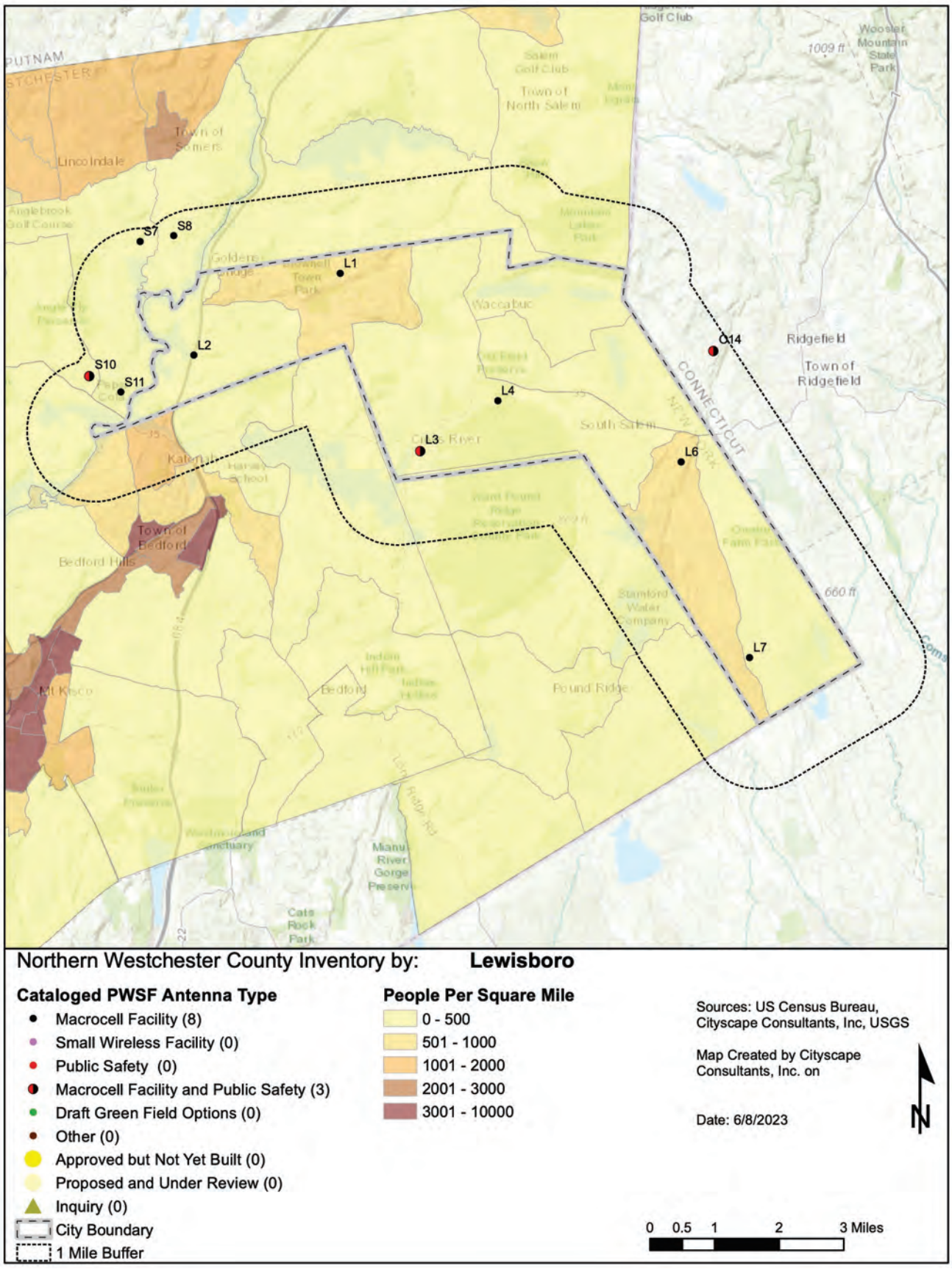


Figure L7: Population Density with PWSF Overlay

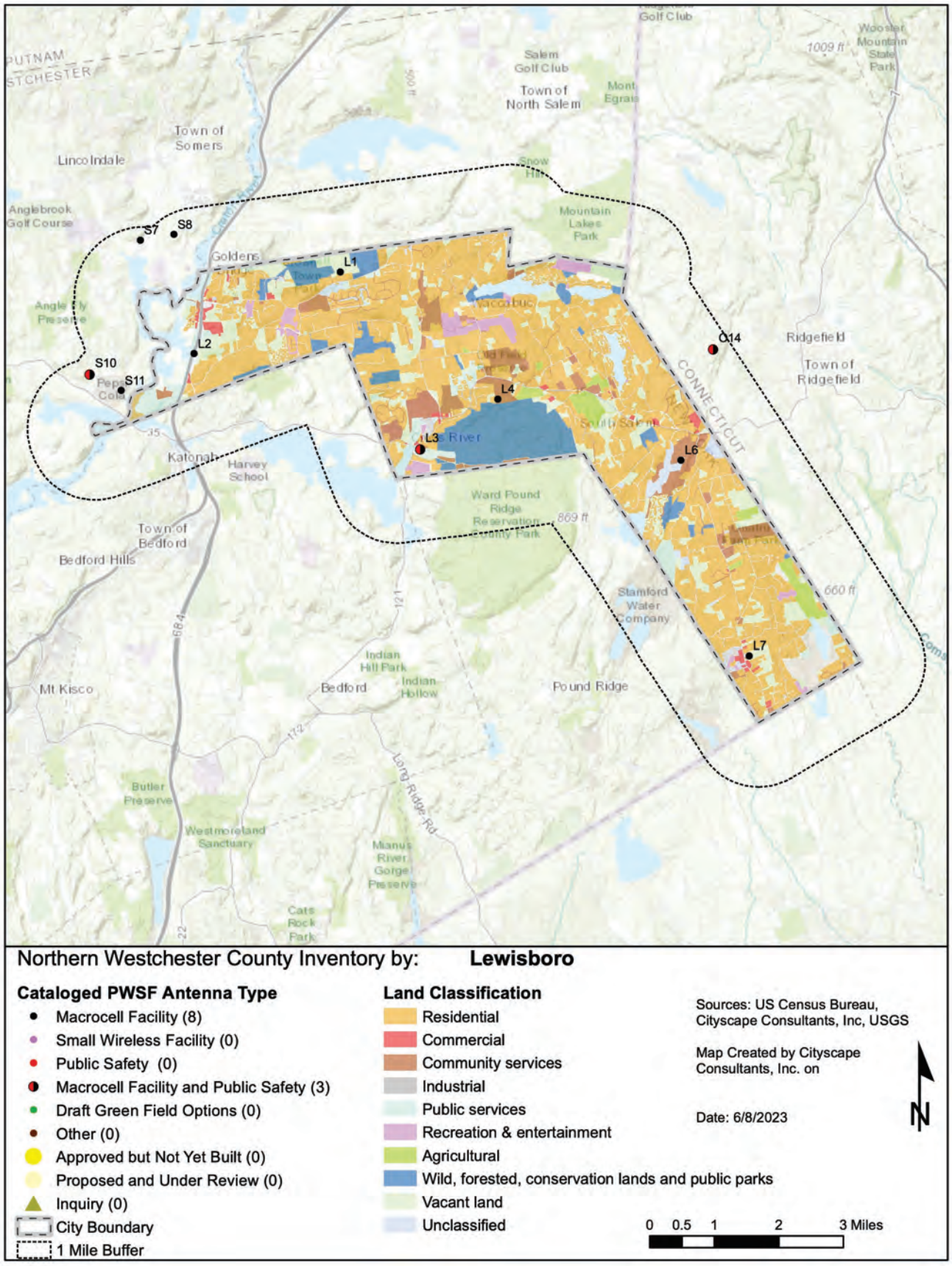


Figure L8: Land Classification Map

WIRELESS NETWORK DENSIFICATION

Modern and advancing technologies continue to transform how the wireless industry builds out their networks. Each wireless service provider is in a different stage of fifth generation (5G) deployment and use different technologies and spectrum to compete in the 5G race. In the evolution of wireless communications, some smartphones still use 4G technologies but they are rapidly transitioning to 5G wireless networks. Both platforms incorporate broadband technology enabling all the Smartphone applications like global positioning services (i.e. Google Maps, Waze Navigation); public safety, medical and banking services; weather, educational, music, games, on-line reading and countless other on demand services. These applications require significant amounts of information to be sent and received within the same radio signal boundary. Network densification is often needed within the coverage area to improve network capacity.

Network capacity is the amount of wireless traffic that a service provider's network can handle at any given time within a specific location. Capacity takes into account the amount of bandwidth being used simultaneously by way of voice calls, and data usage. In order to estimate network capacity, consideration and analysis of the distinct characteristics of the community is studied and portrayed.

Network densification means wireless service providers need to add more capacity to their networks to handle all the usage and network speeds subscribers expect. There are several ways to add capacity to a network. One is providers buying more spectrum, two is making spectrum more efficient and third adding more wireless facilities to areas in need. Commercial wireless providers are pursuing all three methodologies to prepare for and meet network speeds and improvements.

The following *Figure L9* theorizes geographic areas needing network coverage and capacity densification over the next ten years. Red and orange shaded areas are vicinities where the existing number of towers and base stations are proportionally insufficient to the number of existing households. Yellow and green shaded areas do not need immediate densification, provided existing PWSFs inside these colorings can accommodate collocations for other service providers. If collocation options are not available at the existing sites in the yellow and green shaded areas, then a new PWSF will be necessary to accommodate additional antennas. Any area void of yellow, green, orange or red colorings represents places in the Town with immediate need of personal wireless service facilities.

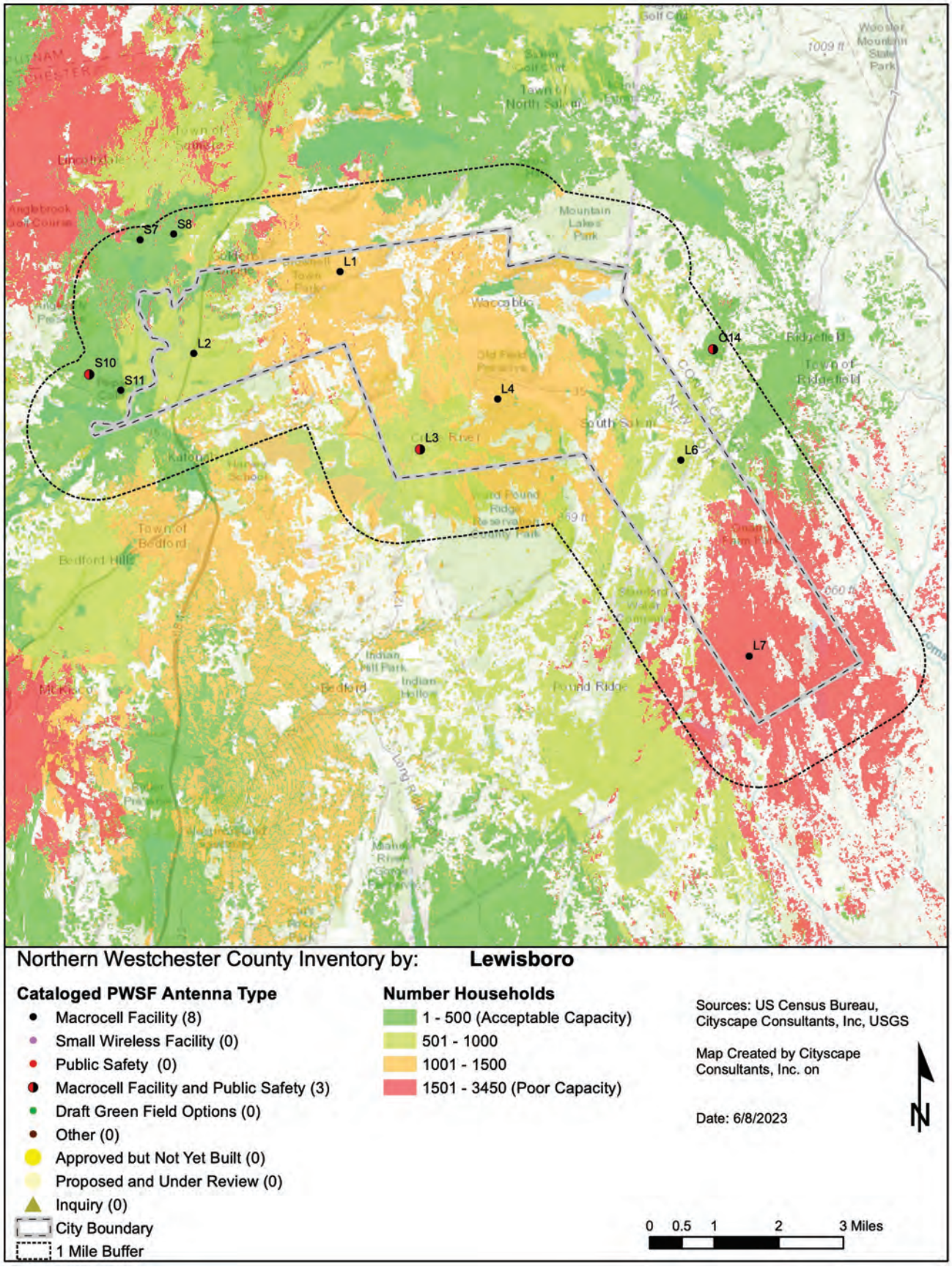


Figure L9: Heat Map Approximating Network Capacity Areas of Concern

POTENTIAL SOLUTIONS

Long Term Evolution (LTE) is a 4G wireless communication standard used by commercial wireless service providers offering high-volume data and faster internet speeds with minimal delay or latency. Transitioning to LTE modeling requires a slight change in the propagation model. Residential indoor service tends to require a minimum of -95 dBm RSRP (LTE Reference Signal Received Power) which contains a 5 dB margin added to ensure reliable indoor services. The typical minimum service level for in vehicle is -90 to -105 dBm, which makes for reliable text, call and data sessions, and the minimum usable outdoor LTE coverage level is -115 dBm.

The following figures are representations of simulated LTE coverage assuming all service providers are on each facility since this is the best possible collocation scenario. Each of these figures uses the following RSRP signal level shown in *Table L3*.

SIGNAL STRENGTH COLOR	dBm	SIGNAL STRENGTH DESCRIPTION
Yellow	> -90	In Building
Green	-90 to -105	In Vehicle
Blue	-105 to -115	Outdoor

Table L3: LTE Signal Strength Description

In order to improve the poor or no wireless coverage areas in the many residential areas of Lewisboro it is anticipated to take a minimum of five macro cell facilities, either towers or base stations at approximately 120’ in height in the vicinities shown on the maps.

As a partial solution for macro facilities that have reached capacity, service providers may start installing small wireless facilities to fill-in these areas to relieve overloaded network systems. Operating with less power and at lower antenna elevations small wireless facilities provide service over a significantly reduced coverage area and are usually interspaced between macro facilities. With the accurate sequencing of the service provider’s available frequencies, each properly located small wireless facility can improve the service provider’s capacity problems and reduce dropped calls and slow data rate transfer speeds. Also suggested are approximately seven small cell wireless facilities on 50’ utility poles.

LEWISBORO OVERVIEW

The following *Figure L10* provides a closer look at the LTE coverage predictions from all the existing personal wireless facilities in the Lewisboro Study Area. The areas outlined in blue illustrate very poor to non-existent wireless coverage and the areas in greatest need of wireless infrastructure.

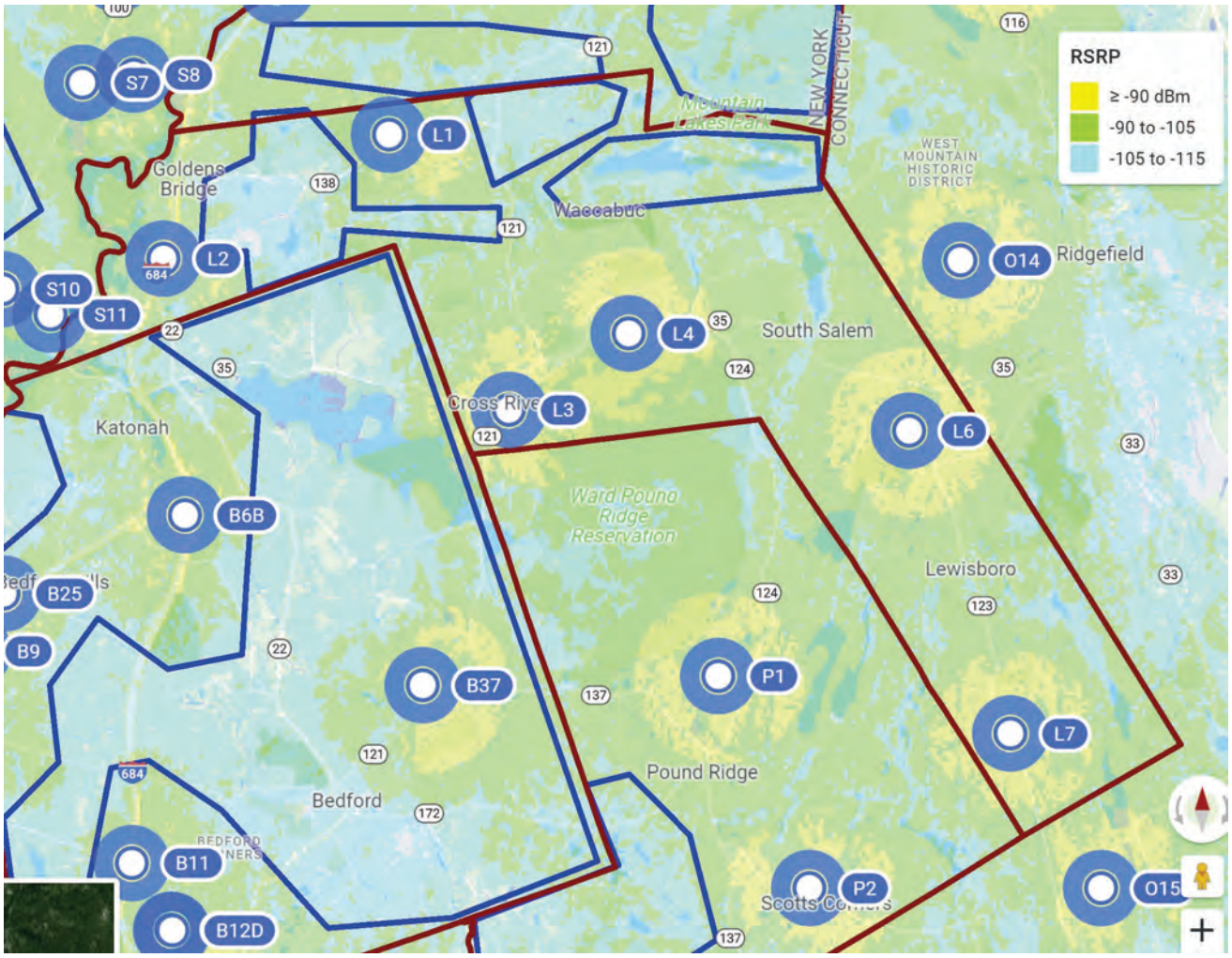


Figure L10: LTE Coverage Predictions Existing or Approved PWSF Sites

The following maps provide an in depth look at specific underserved areas and offer potential solutions to fill-in these gaps. Suggested new macro cell towers or base stations are represented as new tower (NT) followed by a number. Small wireless facilities may provide a feasible solution closer to residential areas or those areas with viewshed concerns. Small wireless facilities on New York State Electric and Gas (NYSEG) poles or new poles in the ROW are identified as new pole (NP) followed by a number.

Some of the maps have overlapping sites; for example, potential site L-NT1 appears on two of the following maps, in these instances, a proposed site will only be listed in the narrative for the first map and not in subsequent map description narratives.

NORTH LEWISBORO

The northern portion of the Town is represented in *Figure L11* and shows predicted coverages utilizing existing Sites L1, L2, L3 and L4, as well as adding four potential 120' macro cell sites in the vicinity of L-NT1, L-NT2, L-NT3 and L-NT5.

A new macro cell site in the vicinity of L-NT1 would fill in coverge in the Waccabuc community; L-NT2 would fill in the gap shown between existing Sites L1 and L2 along the Highway 138/Waccabuc Road corridor; and a suggested macro cell L-NT3 would fill in gaps along Todd Road. Recommended L-NT5 would help maintain connectivity along I-684 and add coverage between this proposed macro cell sites and suggested small wireless facility L-NP6.

Additionally, five small wireless facilities are suggested on existing NYSEG utility poles or new poles in the same vicinity. Suggested L-NP3, L-NP4, L-NP5, L-NP6 are parallel Todd Road providing connectivity between potential Site L-NT1 and existing Site L2. The possible Site L-NP7 would help fill in the gap northeast of existing Site L2 east of I-684. Recommended small wireless facilities in North Salem (N-NP3 and N-NP6) would benefit both Towns along the shared jurisdictional boundary north of existing Site L1.

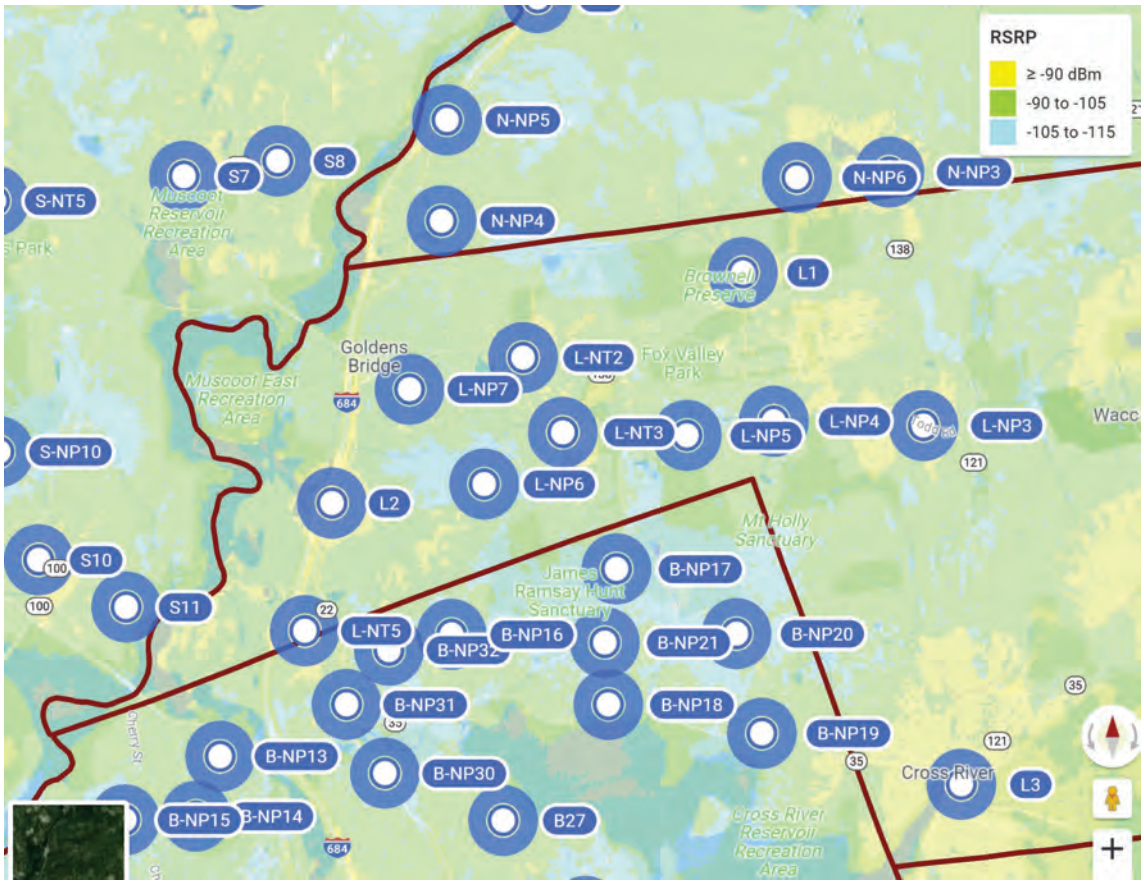


Figure L11: Predicted LTE Coverage North Lewisboro

CENTRAL LEWISBORO

The following *Figure L12* shows simulated coverages from existing existing Site L6, proposed and under review Site L5 at 81 Spring Street and two possible small wireless facilities L-NP1 and L-NP2 in the central portion of Lewisboro.

Potential small wireless facilities L-NP1 and L-NP2 will add coverage and capacity in the gap areas of Lake Rippowam and Lake Oscaleta and connectivity to one suggested new macro cell site identified as L-NT1. Together these recommended facilities would fill in the gaps in that area and along Waccabuc Road between Lewisboro and Connecticut.

The proposed and under review 120' tower, Site L5 also known as Salt Dome on Spring Street will improve wireless network access along the section of Cross River Road/Route 35 and will fill in the coverage gap between existing Sites L4 and L6, which are spaced too far apart for adequate signal handoff.

Figure L12: Predicted LTE Coverage Central Lewisboro

Part of the coverage analysis for the Town of Lewisboro is to review a possible alternative location for proposed Site L5. The alternative location is on the grounds of the South Salem Presbyterian Church located at 111 Spring Street in Lewisboro. *Figure L13* shows the predicted coverage for the proposed alternate location for a 120' macro cell facility at 111 Spring Street. The simulated coverage from 111 Spring Street is similar to the coverage from the proposed Salt Dome site at 81 Spring Street, but it does improve coverage in the Town particularly the west side of Lake Truesdale. Conversely the predicted coverage of six or seven houses along Main Street and Lower Salem Road north of Bouton Road is reduced as compared with the proposed Salt Dome tower site.

Figure L13: Predicted LTE Coverage Southwest Lewisboro

SOUTH LEWISBORO

There is a wireless gap in services between Sites L6 and L7 because the existing towers are spaced too far apart resulting in poor and no coverage areas in the middle of the two locations. One new 120' macro cell Site L-NT4 is suggested in this vicinity as shown in Figure L14. Adding this site will fill the existing network gap along Smith Ridge Road/Highway 123 and improve capacity in the southeast portion of the Town with greater residential densities.

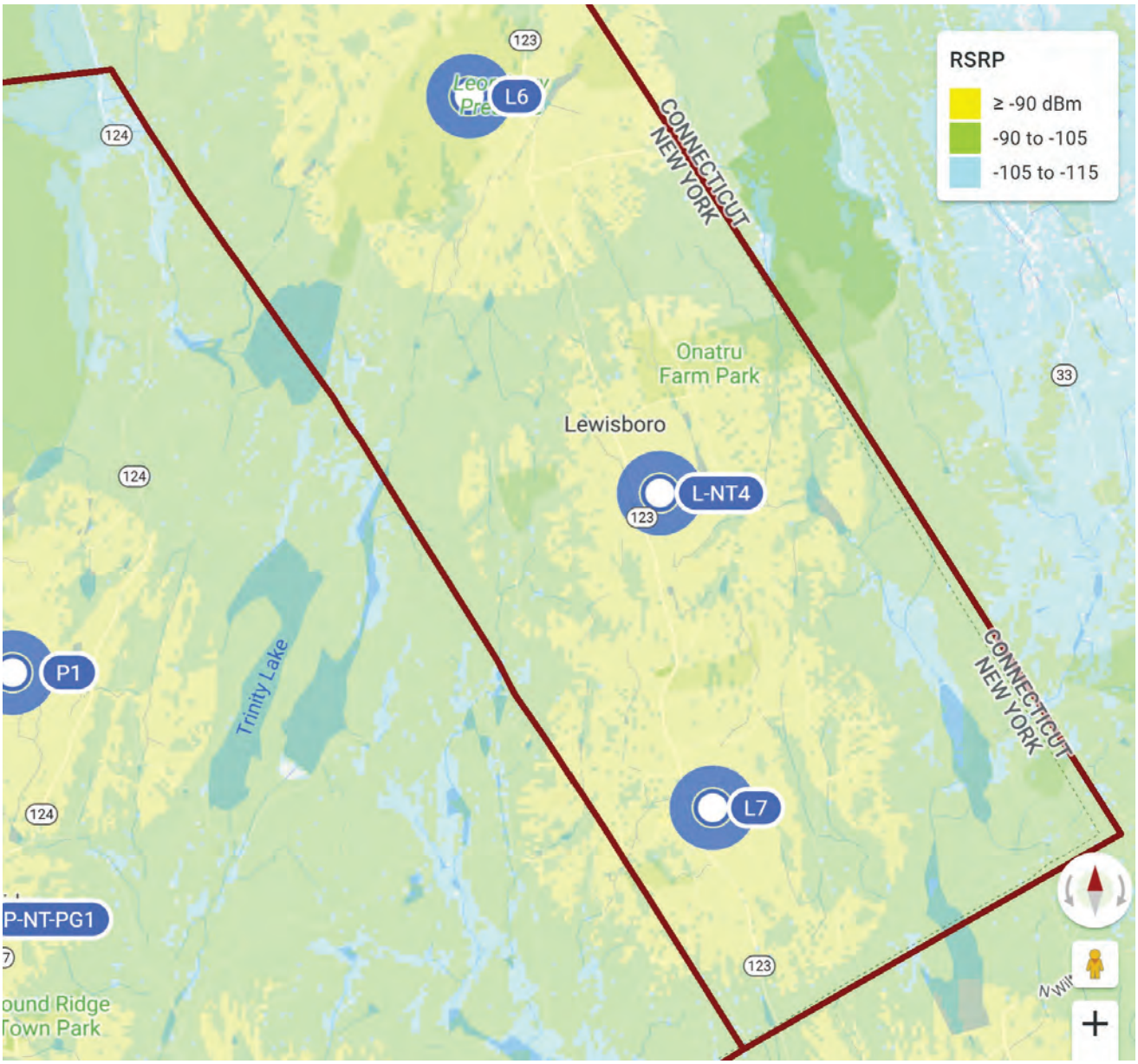


Figure L14: Predicted LTE Coverage South Lewisboro

The following *Table L4* provides a summary of all the suggested macro cell fill in sites for the Town.

MACRO CELL SUGGESTED SITES	
SITE NAME	**FACILITY HEIGHT (FEET)**
L-NT1	120'
L-NT2	120'
L-NT3	120'
L-NT4	120'
L-NT5	120'
L5 Alternative	120'

Table L4: Suggested Macro Fill-In Sites

The following *Table L5* provides a summary of all the suggested small wireless mounted on existing NYSEG utility pole sites or on new poles in the same vicinity.

SMALL CELL SUGGESTED SITES			
SITE NAME	**LATITUDE**	**LONGITUDE**	**HEIGHT**
L-NP1	41.29825	-73.5580	50'
L-NP2	41.29983	-73.5669	50'
L-NP3	41.28970	-73.6164	50'
L-NP4	41.29004	-73.6323	50'
L-NP5	41.28893	-73.6416	50'
L-NP6	41.28510	-73.6323	50'
L-NP7	41.29255	-73.6711	50'

Table L5: Suggested Small Wireless Fill-In Sites

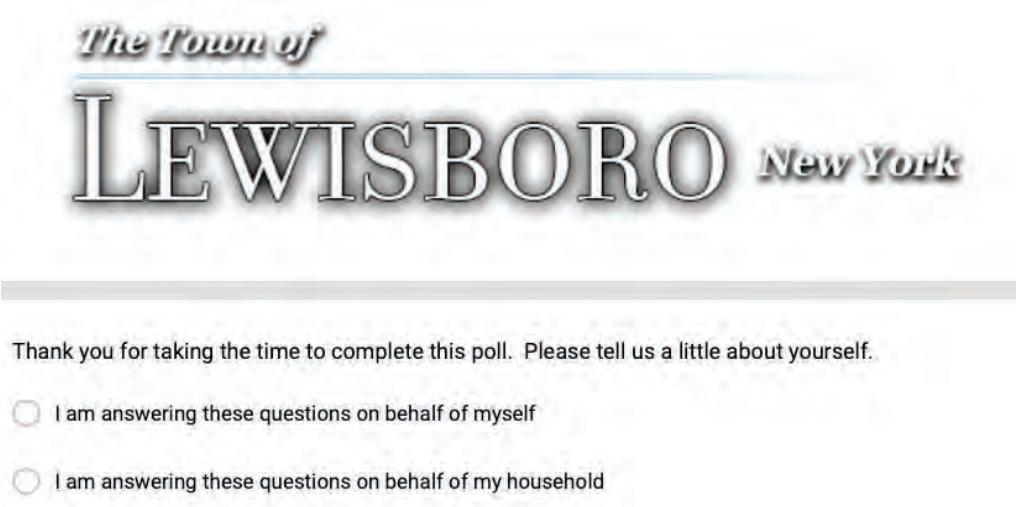
COMMUNITY SURVEY AND ZONING

In order to facilitate effective regulations that takes community input into consideration, the Town promoted a Wireless Telecommunications Infrastructure Survey (Survey) to engage the townspeople. The main objective was to solicit information regarding thoughts, concerns and preferences as it relates to wireless infrastructure facilities.

The Survey solicited opinions and experiences regarding the importance of the current state of wireless connectivity and aesthetics of the infrastructure in the Town. The Lewisboro survey opened on July 28, 2021 and closed on September 7, 2021 and during that time 477 people participated in the poll. The responses are very similar to those collected for the larger study area.

Those who participated in the survey indicated that wireless connectively and quality of service is very important to them at home, work and while travelling around town is generally poor or inconsistent. There is support for use of public property for future sites and prefer concealed base stations, towers, and small wireless facilities over non-concealed and semi-concealed infrastructure.

The most notable observations from the survey and compared to the entire NWC study area are shown in *Table L5* with the entire collection of responses and comments provided in *Appendix C2*.



RESPONSES	Lewisboro	NWC
PARTICIPANTS	477	4002
Average Number of Devices	6	6
Use of Devices		
○ Personal Recreation/Leisure	94.30%	85.84%
○ Employment Related	71.50%	63.33%
Wireless Coverage at Residence		
○ Excellent or Acceptable	42.30%	43.03%
○ Poor or Inconsistent	57.00%	55.91%
Wireless Coverage at Work		
○ Excellent or Acceptable	34.40%	35.37%
○ Poor or Inconsistent	34.60%	32.60%
Wireless Coverage Traveling Around Town		
○ Excellent or Acceptable	25.90%	37.18%
○ Poor or Inconsistent	73.10%	61.88%
Would Rely More on Device if Network was Better		
○ Entirely Agree	66.20%	61.90%
Quality of Wireless Service Is Important to Me		
○ Entirely Agree	88.10%	87.64%
What is Most Important to You		
○ Excellent Connectivity	66.20%	56.24%
○ Good Connectivity and Minimal Visual Impact	88.10%	38.71%
Prefer Taller Tower Supporting Multiple Collocations	52.30%	44.64%
Non-Concealed Tower Preference - Monopole	63.40%	62.09%
Concealed Tower Preference - Flag Pole	68.60%	70.11%
Rooftop Preference - Concealed	79.00%	78.65%
Small Wireless Facility Preference - Concealed	88.70%	89.99%
Locational Preference in Town - Anywhere	64.20%	60.88%
Support Use of Public Property for Revenue and Aesthetics - Yes	56.30%	52.18%

Table L5: Summary of Notable Survey Responses

Overall, additional macro and small wireless facilities are needed throughout the Town to provide initial coverages in areas where no service is currently available and in other areas where the ratio of subscribers exceeds the number of wireless facilities. Based on survey responses, the community supports and desires additional wireless infrastructure to improve the wireless network.

The Town's Code § 220-41.1 Communication facilities, communication towers, antenna towers or monopoles was updated recently to include treatment of "eligible facility request" and comprehensively address wireless deployment. Additionally, certain sections were modified to harmonize with Code of Federal Regulations; specifically shot clock, application requirements, interference and alterations, amendments and waiver of application requirements.

APPENDIX C1

WIRELESS INFRASTRUCTURE INVENTORY

Site L1	117 Waccabuc Road	Lewisboro
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Monopole	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Non-Concealed	
FACILITY OWNER/ID:	Homeland Towers, NY486	
FACILITY SITE NAME:	Goldens Bridge - Waccabuc-L	
SERVICE PROVIDERS:	AT&T, Verizon, T-Mobile	
FCC ASR:		
HEIGHT:	150’	
LOCATION:	Private Property	
LATITUDE/LONGITUDE:	41.301699 N, -73.635623 W	
PARCEL ID:	3100400010140000000	
ZONING:	R-2A	
NOTES:		

Site L2	204 Route 22	Lewisboro
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Monopole	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Non-Concealed	
FACILITY OWNER/ID:	Crown Castle International, 805003	
FACILITY SITE NAME:	Lewisboro - Goldens Bridge	
SERVICE PROVIDERS:	AT&T, MTA, Sprint, T-Mobile, Verizon	
FCC ASR:		
HEIGHT:	150’	
LOCATION:	Inside Right-of-Way	
LATITUDE/LONGITUDE:	41.283584 N, -73.679342 W	
PARCEL ID:		
ZONING:	R-4A	
NOTES:	NYS DOT	

Site L3	779 Route 35	Lewisboro

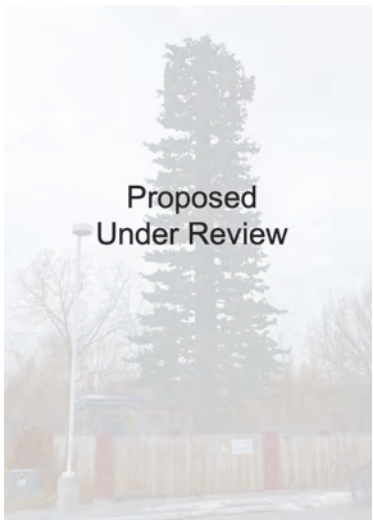
STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro and Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Homeland Towers
FACILITY SITE NAME:	Katonah - Lewisboro Volunteer Ambulance Corp
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon
FCC ASR:	1310704
HEIGHT:	170’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.261525 N, -73.612357 W
PARCEL ID:	05300600010470000000
ZONING:	R-1/2A
NOTES:	

Site L4	1081 Hwy 35	Lewisboro

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Semi-Concealed
FACILITY OWNER/ID:	American Tower Corp, 413114
FACILITY SITE NAME:	Cross River NY -Lewisboro Town Park
SERVICE PROVIDERS:	AT&T, Verizon
FCC ASR:	1285599
HEIGHT:	161’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.272692 N, -73.589110 W
PARCEL ID:	4200400030140000000
ZONING:	Town Park Land
NOTES:	

Site L5	81 Spring Street	Lewisboro

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Concealed
FACILITY OWNER/ID:	Homeland Towers
FACILITY SITE NAME:	
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.275431 N, -73.561115 W
PARCEL ID:	4301500010070000000
ZONING:	R-2A
NOTES:	Proposed and under review

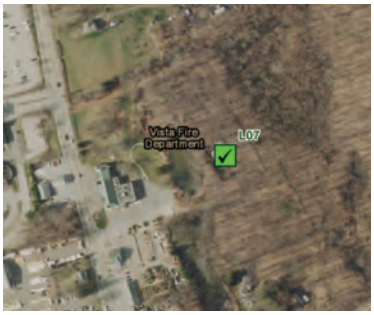


Site L6	Smith Ridge Road	Lewisboro

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	American Tower Corp, 88166
FACILITY SITE NAME:	South Salem - Leon Levy Preserve
SERVICE PROVIDERS:	AT&T, Verizon
FCC ASR:	
HEIGHT:	127’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.258479 N, -73.534699 W
PARCEL ID:	5500100030160000000
ZONING:	R-4A
NOTES:	

Site L7	377 Smith Ridge Road	Lewisboro

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Vista Fire Department
FACILITY SITE NAME:	East Woods
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon, Sprint
FCC ASR:	1276640
HEIGHT:	150’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.214346 N, -73.515038 W
PARCEL ID:	7701100020090000000
ZONING:	R-1A
NOTES:	



Site B1		Bedford

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Katonah Fire District
FACILITY SITE NAME:	Wildwood Tower Site - Katonah Memorial Park
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	50’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.257227 N, -73.68902 W
PARCEL ID:	04901500010010000000
ZONING:	
NOTES:	Lattice tower painted green and equipment is part of the existing emergency radio service network.

Site B2	65 Bedford Road	Bedford

STRUCTURE TYPE:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Katonah Fire District
FACILITY SITE NAME:	
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	30’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.2553 N, -73.68509 W
PARCEL ID:	04901900020470000000
ZONING:	
NOTES:	Rooftop antenna used for public safety.

Site B24	Katonah Avenue	Bedford

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Utility Pole
ANTENNA TYPE:	Small Wireless Facility
DESIGN TYPE:	Concealed
FACILITY OWNER/ID:	
FACILITY SITE NAME:	Katonah Small Cell
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	45’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.256505 N, -73.683559 W
PARCEL ID:	04901900020470000000
ZONING:	CB
NOTES:	Inquiry

Site N9	Access of Keeler Lane	North Salem

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Guyed
ANTENNA TYPE:	Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Westchester County
FACILITY SITE NAME:	Westchester County - Mt. Lakes Park
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	198’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.319604 N, -73.563866 W
PARCEL ID:	
ZONING:	R-4 Rural Density Residential
NOTES:	

Site N10	Access off Keeler Lane	North Salem

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Westchester County
FACILITY SITE NAME:	Westchester County - Mt. Lakes Park
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	140’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.319544 N, -73.563837 W
PARCEL ID:	49.2-1370-20
ZONING:	R-4 Rural Density Residential
NOTES:	49.2-1370-20

Site S7	245 Route 100	Somers
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Unipole	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Concealed	
FACILITY OWNER/ID:	Crown Castle International, 857113	
FACILITY SITE NAME:	Somers-Plumbrook Shade - SAMAJ Investors	
SERVICE PROVIDERS:	AT&T	
FCC ASR:		
HEIGHT:	100’	
LOCATION:	Private Property	
LATITUDE/LONGITUDE:	41.309262 N, -73.695142 W	
PARCEL ID:	28.10-1-6.1	
ZONING:	OLI Office Light Industry District; Groundwater Protection Overlay District	
NOTES:		

Site S8	84 Route 100	Somers
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Monopole	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Non-Concealed	
FACILITY OWNER/ID:	Crown Castle International, 806949	
FACILITY SITE NAME:	NY Somers 958150 - IBM	
SERVICE PROVIDERS:	Sprint, T-Mobile, Verizon	
FCC ASR:		
HEIGHT:	104’	
LOCATION:	Private Property	
LATITUDE/LONGITUDE:	41.310459 N, -73.685153 W	
PARCEL ID:	17.19-1-1	
ZONING:	OB-100 Office Business 100	
NOTES:		

Site S10	121 Route 100	Somers

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro and Public Safety
DESIGN TYPE:	Semi-concealed
FACILITY OWNER/ID:	InSite Towers, LLC or Homeland Towers, NY576
FACILITY SITE NAME:	Somers - Amato
SERVICE PROVIDERS:	AT&T, Sprint, Verizon
FCC ASR:	1278926
HEIGHT:	140’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.279152 N, -73.710616 W
PARCEL ID:	38.17-1-5
ZONING:	R80
NOTES:	A faux tree type tower outside the Town's jurisdictional boundaries. Somers FD on tower

Site S11	1 Pepsi Way	Somers

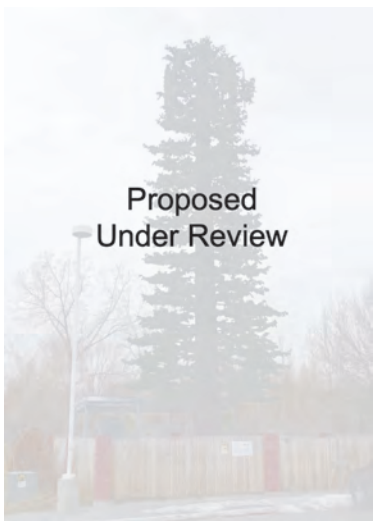
STRUCTURE TYPE:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Pepsi Headquarters, 339472
FACILITY SITE NAME:	Pepsi
SERVICE PROVIDERS:	T-Mobile, Verizon
FCC ASR:	
HEIGHT:	65’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.275448 N, -73.701302 W
PARCEL ID:	38.18-1-1
ZONING:	CRO Corporate Research/Office District
NOTES:	Commercial wireless rooftop mounted antennas on a building outside the Town's jurisdictional boundary.

Site O14 — Other

STRUCTURE TYPE:	Base Station
FACILITY TYPE:	Water Tank
ANTENNA TYPE:	Macro and Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	
FACILITY SITE NAME:	
SERVICE PROVIDERS:	T-Mobile
FCC ASR:	
HEIGHT:	85’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.283350 N, -73.524743 W
PARCEL ID:	
ZONING:	
NOTES:	Estimated height

Site O15 — 377 N Wilton Road — Other

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Concealed
FACILITY OWNER/ID:	
FACILITY SITE NAME:	
SERVICE PROVIDERS:	AT&T
FCC ASR:	
HEIGHT:	90’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.219386 N, -73.487977 W
PARCEL ID:	
ZONING:	
NOTES:	Proposed and under review



APPENDIX C2

WIRELESS INFRASTRUCTURE SURVEY RESULTS

Wireless Infrastructure Poll

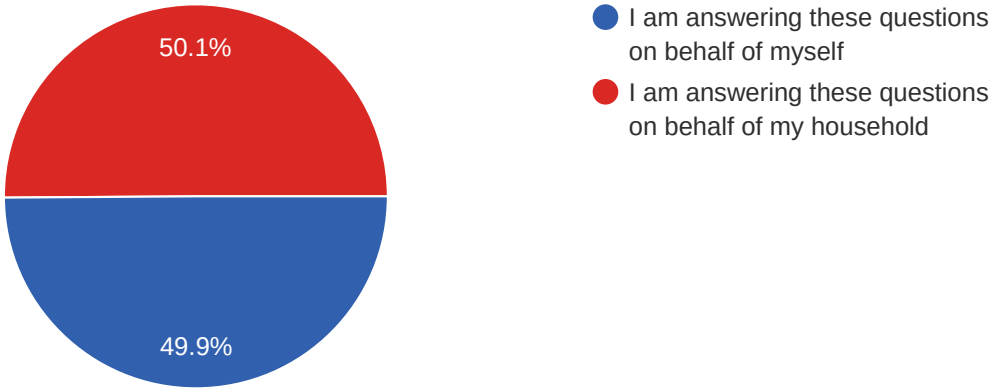
478 responses

Publish analytics

Thank you for taking the time to complete this poll. Please tell us a little about yourself.

Copy

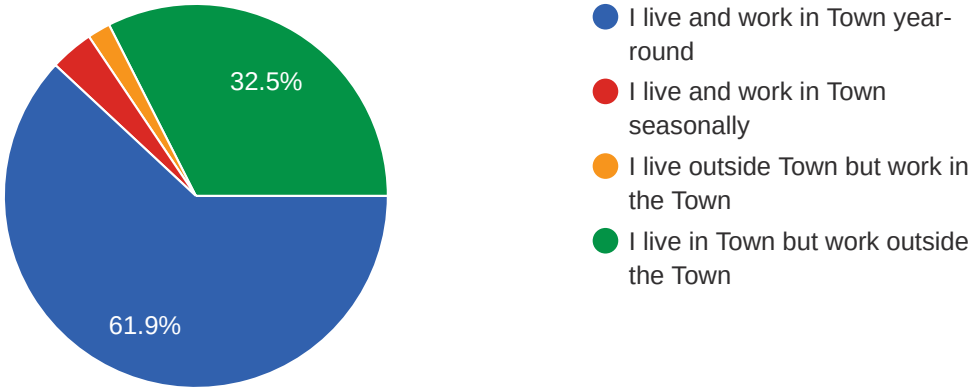
473 responses



Choose which best describes you:

Copy

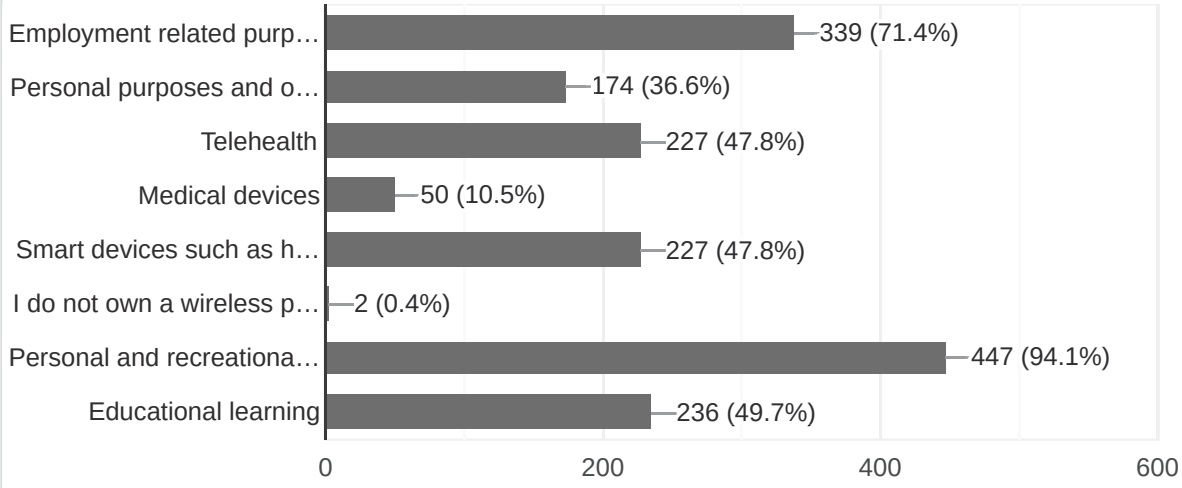
465 responses



I use personal wireless services for (check all that apply):

Copy

475 responses



Please identify the area where you live by one of the following: Address, Zip Code, Hamlet, Use Area, Lake District, General Area

468 responses

10590

10526

10518

10597

10536

Vista

South Salem

Goldens Bridge

10576

Waccabuc

Truesdale Lake

Twin Lakes Village

Lewisboro

Lake Truesdale

Lewisboro Hamlet

Cross River

Waccabuc 10597

Lake Waccabuc

Lake Kitchawan

South Salem

10590 Vista

South Salem, NY 10590

Lake Kitchawan

Arbor Hills, Goldens Bridge

Goldens bridge

Lake Oscaleta

VISTA

Keeler Court

Goldens Bridge 10526 (Todd Rd North)

Todd Hill Circle, Goldens Bridge

Pettit Road, South Salem 10590

South Salem. 10590

Lake Trusdale

Twin lakes 10590

Twin Lakes Road, South Salem

10589

Lake Truesdale, South Slaen

Rock Shelter Rd - Waccabuc

Deepwell Farms Road

10590- the north side of Lake Waccabuc

Cross river , 10518

Katonah

South Salem NY 10590

Mark Mead Rd. Cross River

10590, South Salem, same, Oscaleta

Indian Hill

My. Holly area

Chapel rd. Waccabuc 10597

 South Salem

Old goldens bridge

Gideon Reynolds Road, Cross River

Goldens Bridge Road

Cross river

Vista

South salem

Indian Hill Development

Old Goldens Bridge

 Lambert Ridge 10518

Golden’s bridge colony

Deer Run Road 10590

 Elmwood Road, Lewisboro Hamlet, 10590

Wild Oaks Golden’s Bridge

 The Logging Rd, Waccabuc

Goldens Bridge Colony, 10526

Meadows

Vicinity of Lewsiboro Library

10590 - South Salem

Lambert Ridge, Cross River

105362713

Keeler Court, South Salem

[redacted] N Salem Rd, Cross River, NY 10518

South Salem, lake kitchawan

vista

Hilltop Road, Waccabuc

Wild Oaks

Vista Hamlet

south salem

Vista. 10590

[redacted] Maplewood Dr, 10590

lewisboro hamlet 10590

[redacted] Stonemeadow Dr South Salem 10590

[redacted] Lake Kitchawan Dr., South Salem 10590

[redacted] Salem Lane, South Salem

Goldens Bridge (Colony)

South Salem - Vista side

Kitchawan rd. 10590

Mt Holly Rd E, Town of Lewisboro

10576-south salem

10590

Increase Miller

South Salem Hamlet

LES NEIGHBORHOOD / 10590

Oscaleta

Cross River

Oakridge

main street south salem, ny 10590

Lake District

Lake Truesdale, Lewisboro Hamlet

Todd Rd North, Goldens Bridge

South Salem, 10590

73 more responses are hidden

If you work in Town at a fixed location other than your place of residence then please identify where you work by one of the following: Address, Zip Code, Hamlet, Use Area, Lake District, General Area

101 responses

10590

N/A

10526

n/a

Cross River

NA

10518

South Salem

na

10549

N/a

Katonah

General area

10597

Same

Cross River, NY

Cross river 10518

Cross river 1051

Truesdale Lake (TLPOA section)

Vista

Town wide

10576

[redacted]Main Street, South Salem,10590

Currently work from home

[redacted]The Logging Rd, Waccabuc

meadows

I work from home

10012

Entire town

Pound Ridge

No

south salem

Main Street, South Salem

[redacted] Lake Kitchawan Dr., South Salem 10590

Goldens Bridge

10036

10573

Croton/Briarcliff

none

06854

Not applicable

Same as residence address

I work from my home

general area

South Salem

Todd Rd area

10528

10577

Lewisboro hamlet

12524

Not working at this time.

Scott's Corner

residence

School in Hempstead

retired

n/a retired

Main Street

Salem Hill Rd, South Salem

Truesdale Lake Area

10536

Twin Lakes

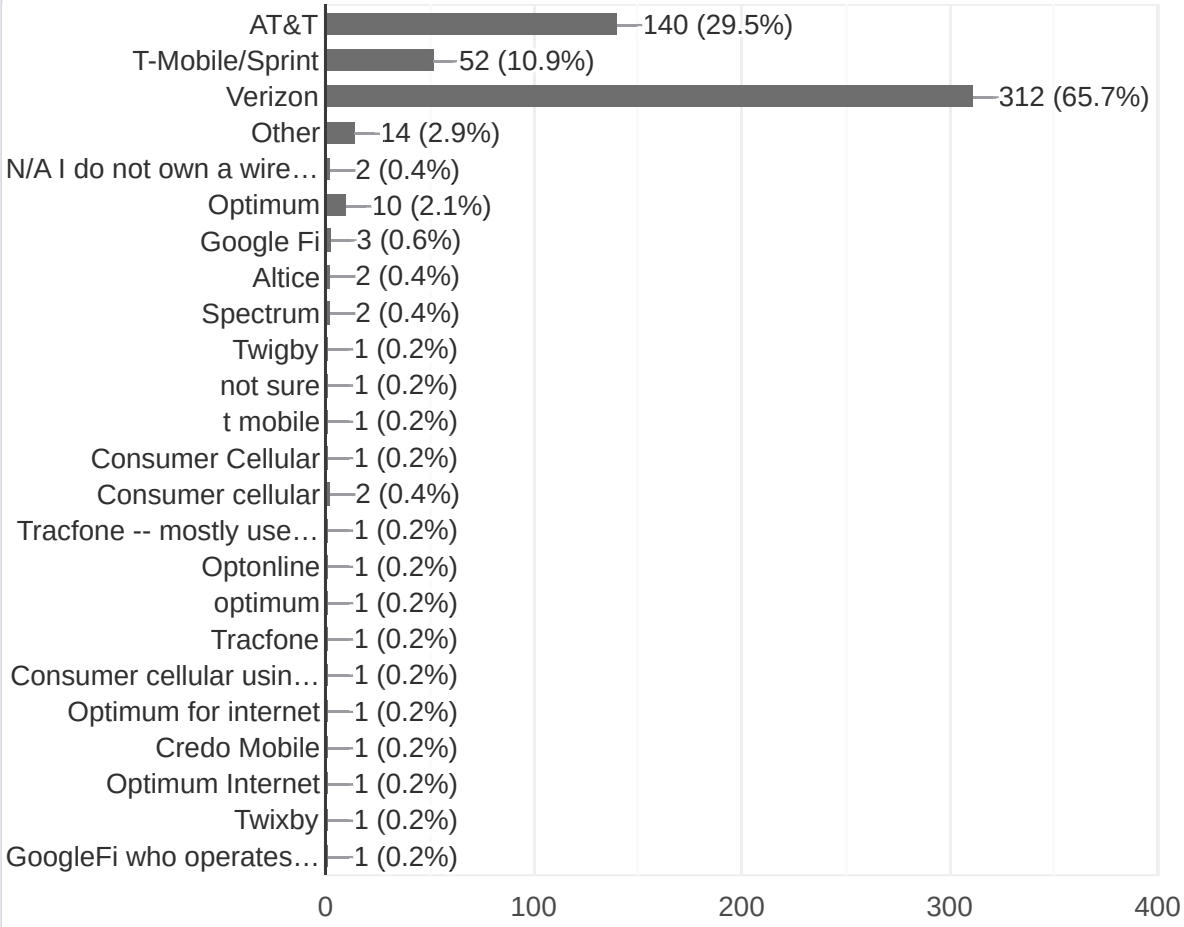
The town house

Katonah Hamlet

My Wireless Service Provider is (if you have multiple wireless providers then please mark all that apply):

Copy

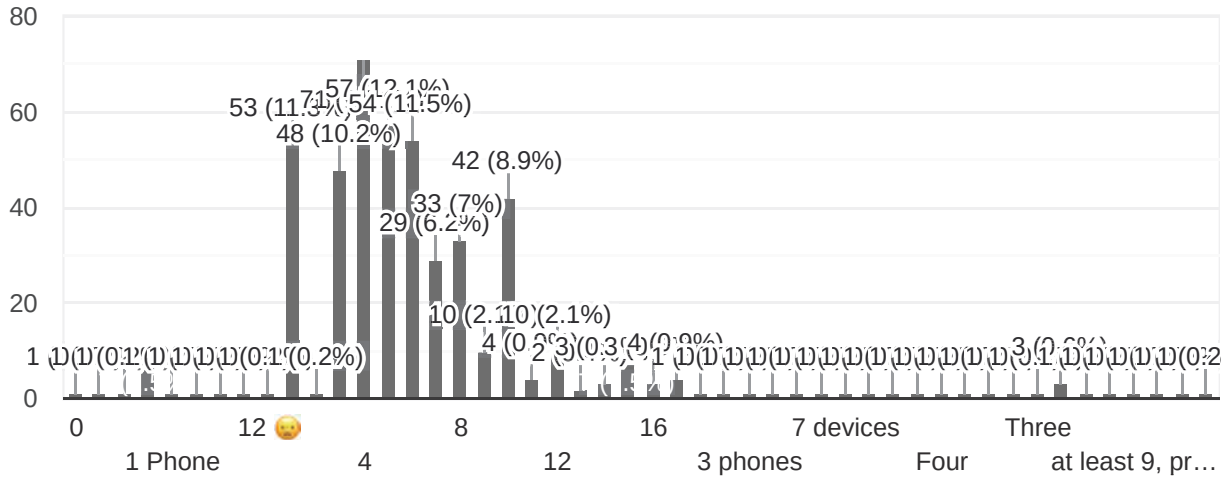
475 responses



How many wireless devices are used in your household? (Devices would include but not be limited to; wireless phones, laptops, tablets, watches, computers NOT using your home internet provider. Do not include items like garage door openers or smart home items.)

Copy

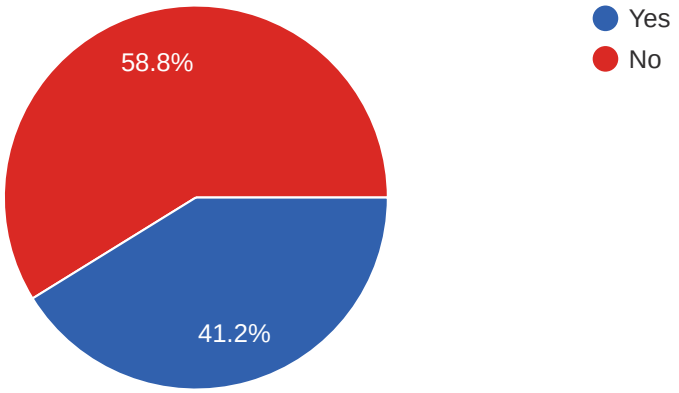
470 responses



Do you have a network extender (booster) to enhance your wireless service from your provider?

Copy

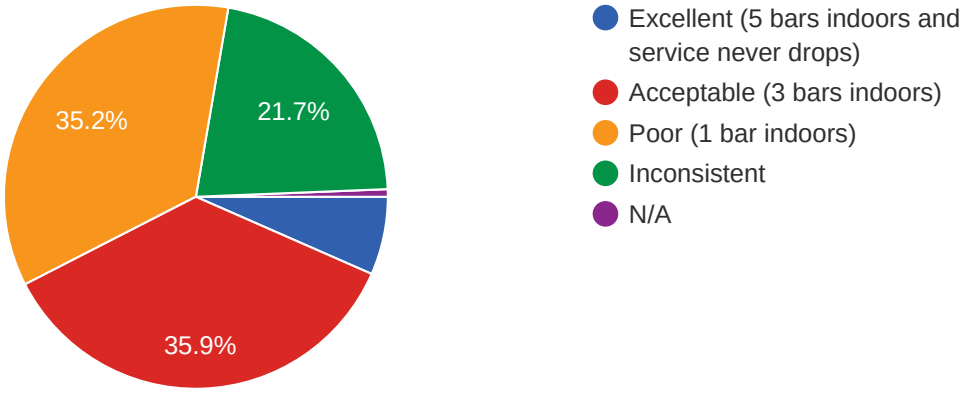
471 responses



Wireless network coverage where I reside is:

Copy

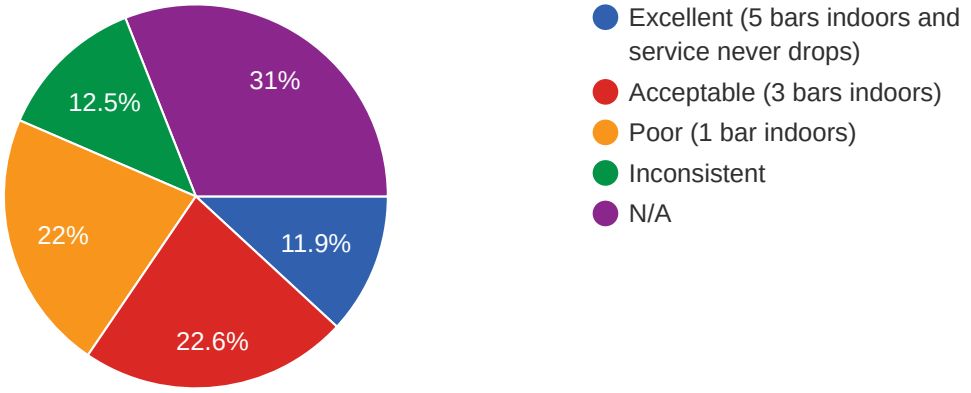
471 responses



Wireless Network coverage where I work is:

Copy

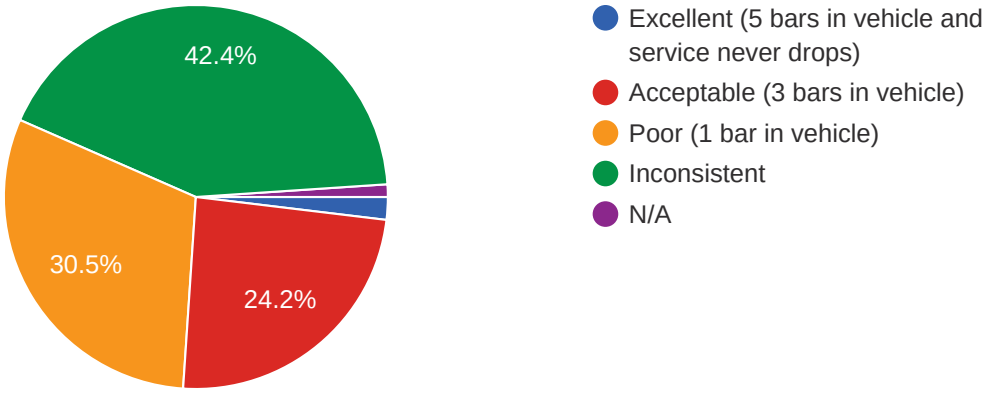
455 responses



When I travel in and around the Town my network coverage is:

Copy

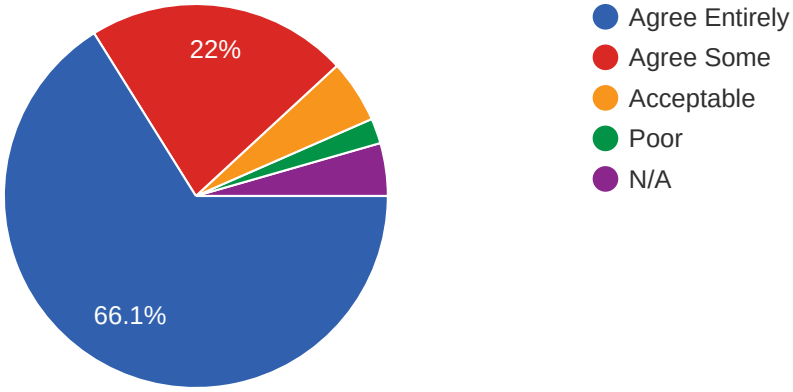
472 responses



I would rely more on my mobile device(s) if the network service was better.

Copy

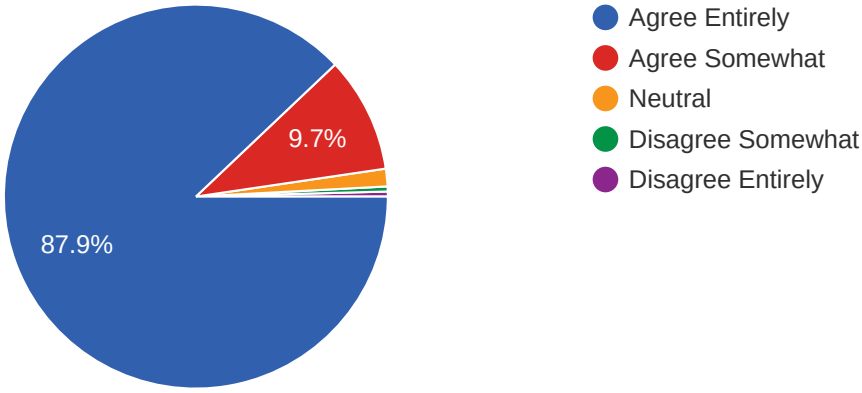
472 responses



The quality of wireless service is important to me.

Copy

472 responses



Are there specific areas of Town where your service is poor? If yes, please explain below.

352 responses

Cross River

Cross river

Cross River

Route 35

No

Twin Lakes area

Twin Lakes Village

All around Waccabuc

Rt 138 between Increase Miller and 684

rt 35

Goldens Bridge

Twin Lakes, Portions of South Salem, Route 35 on border to Bedford and to Ridgefield

Goldens Bridge (non existent)

I said service at home (Twin Lakes Village) was poor defined as 1 bar, but it really is non-existent. I often have no bars or connectivity at all even standing on the deck with the phone held above my head. I mostly rely on calls over internet - which frequently goes down mid-call. Poor connectivity in three lakes area. No connectivity on Rt 138. intermittent connectivity on Rt. 35.

At my house in Goldens Bridge (Todd Hill Circle)

10590, 10518 Route 35 heading to CT and Katonah NY

All hamlets have dead spots

TRUESDALE LAKE

Lower Salem Rd, intersection of rt35 and 121 as well as on rt 138

Waccabuc

At my house. Between Cross River and Katonah

Middle school and high school

Lake Waccabuc area

Waccabuc, Cross River, North Salem, Katonah, Vista

Route 138. Route 35. Route 22.

all of waccabuc/south salem

Route 35 going out toward 684

All of south Salem

123 and 35, as in driving from meadow pond to town park

Cross River, South Salem, Waccabuc, Vista, Lewisboro Hamlet

At home and Route 123 between Route 35 and Shady Lane

South salem lake waccabuc

Spotty on route 35 from 684 to route 121 north

Along 35

inconsistent at home poor on the roads better in towns like Ridgefield and Katonah

Throughout the town intermittently

Rt 138 near Golden's Bridge fire dept

Cross River shopping center

Near Vista

On Rt 35 calls always drop

Waccabuc and Oscaleta Lake area, Post office road, Main street.

Oakridge

South Salem, NY 10590

Lewisboro and Pound Ridge areas

Most of Route 138 has no service, as well as Route 121

Shopping areas

Route 35 near the Bedford border.

123, 35

Cross Rive shopping center; Rte 123

Along the Rte 35 corridor

John jay high school - Rt 123 and 35

Route 35 between Bedford and Cross River

I notice poor service on 138 and side streets rom Fairmont road to 121

On post office road

Yes - Rt. 35 between 684 and 124 is horrible. Not able to use GPS or make/keep a phone call

Silkman lane

Inconsistent coverage along 35 and 121 north

Route 35 between Four Winds and Katonah; Route 121 North towards 138

South Salem, the Lakes, small area of Goldens Bridge by Fire house, intersection of 121 and 138 and north.

Route 138 is terrible near and by the firehouse; Route 35 in South Salem; Twin Lakes; intersection of Rt. 138 and 121 going Northbound

Fairmont to rt 121

All along Route 35 from Route 123 to Route 22 + John Jay Middle/High School Campus

Along routes 35 and 121

RT 123

Segments on route 35, intersection of 35 and 123.

Most of Golden’s bridge and route 121 area

my home

Route 35, Route 138, Twin Lakes

Yes. Not sure where, usually in less dense areas between hamlet centers.

On Rte 35 going towards pump house near Katonah side

South salem, parts of 138,

north side of south Salem. during last year's power outages, I had to drive to 35 and Bouton to have good enough service to call/book a hotel.

home

Rte. 35 between Boutonville Rd. & Rte. 123; Twin Lakes area; Near intersection of Rtes. 121 &138

Cross River , RT 35 south Salem, RT 121 Vista. Rt 138 Golden’s Bridge

Chapel, 138, Top of 123

In my home at 22 Pond Street; at the Timber Lake beach

Twin Lakes Village in South Salem where we live and work

Route 35 between 4 Winds and the Dam

My home at [redacted]Smith Ridge Road in South Salem. Service is almost non existent and my wife's medical alert device has to be connected via land line as a result.

Lambert Ridge, Route 35 (Ridgefield to Katonah), Route 121 North to I-84

Route 35 and 121 doesn't have consistent service. These would be good candidates for 5g microcells.

At my house - just north of JJHS.

Lewisboro hamlet

downtown South Salem/ Twin lakes

Route 35, Cross River intersection / shopping center

There is absolutely no service in and around my home.

our house, on rt 35, onatru

South Salem

138, 35

Rt 123 near vista and south Salem is very spotty, as well as some areas near cross river

Rt.35

Our neighnorhood--Hilltop Rd off 121. Most of route 138 towards G Bridge. Cross River. Many other areas.

Basically everywhere

138 between Goldens Bridge and Cross River

35 and mt holly rd near dam. 138 near pond st.

Rte 138 (Waccabuc Rd) between Indian Hill and Lake St. Also anywhere on North Salem Rd north of Waccabuc

It is sporadic and unreliable. For example, my cell works fine on my street, but I can't walk to the next street over without a call dropping.

Rt 123

Cross River, junction of Routes 35 and 121, John Jay area

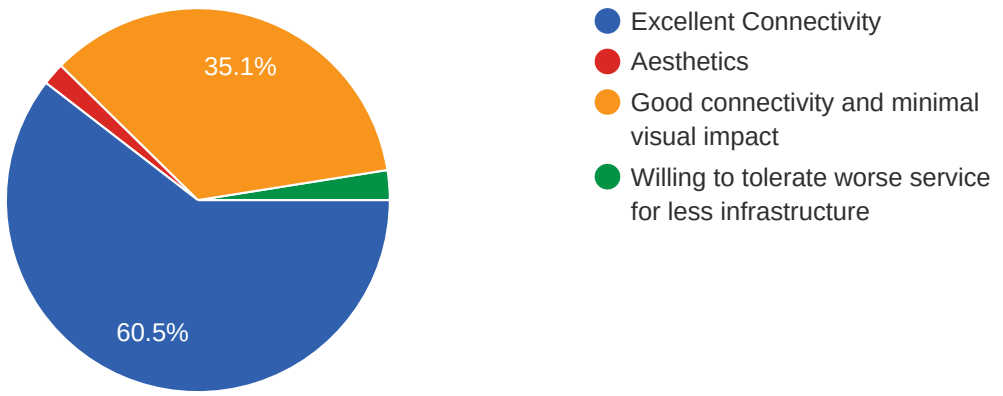
231 more responses are hidden

Aesthetics and Location

What is most important to you?

Copy

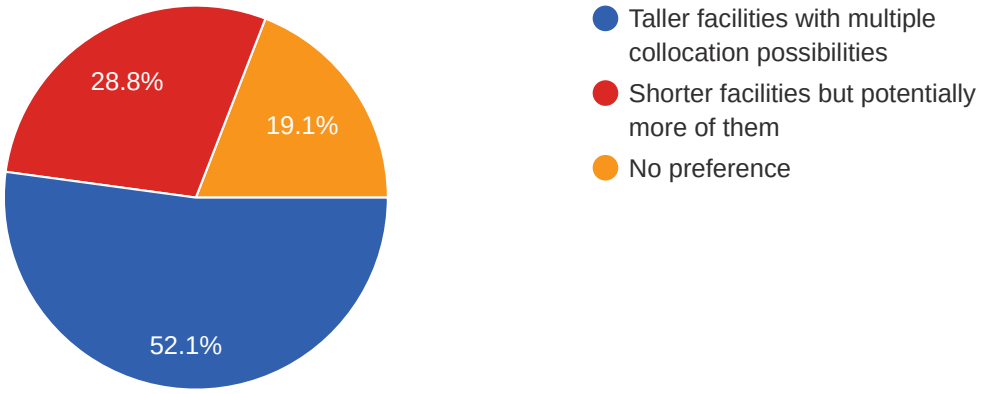
478 responses



Taller traditional macro towers remain the backbone of the wireless network. Taller towers allow for more collocations but are more visible in the landscape. Building shorter tower are less visible in the landscape but limit collocations so more towers are required. Please choose which you prefer.

Copy

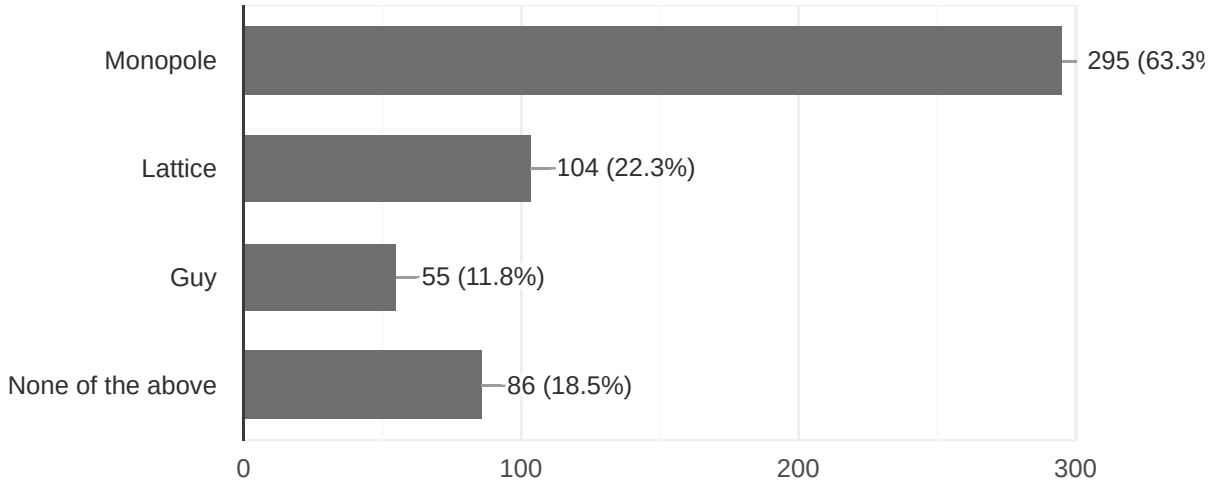
466 responses



Which non-concealed macro tower facility do you prefer? Check all that apply.

Copy

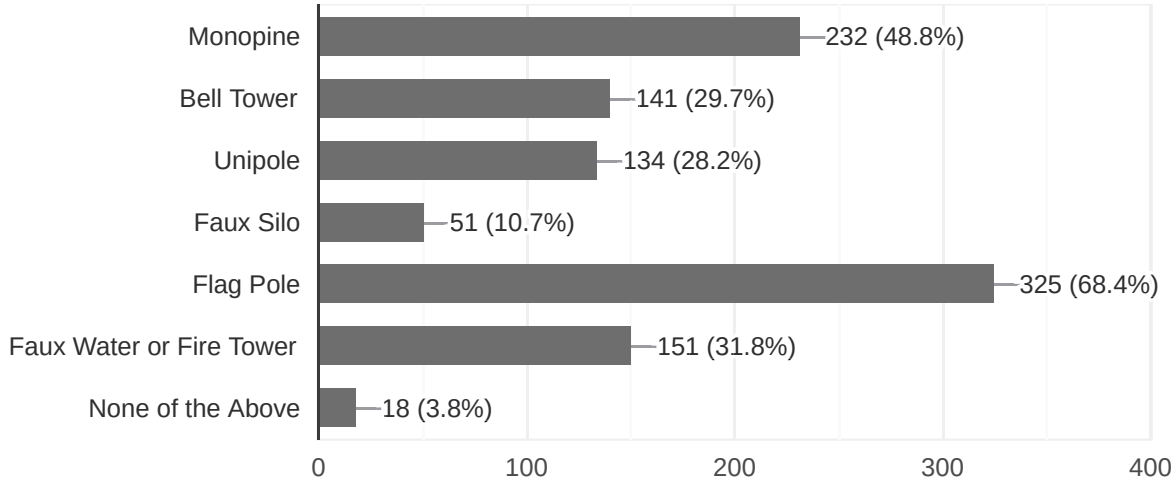
466 responses



Which concealed macro tower do you prefer? Check all that apply.

Copy

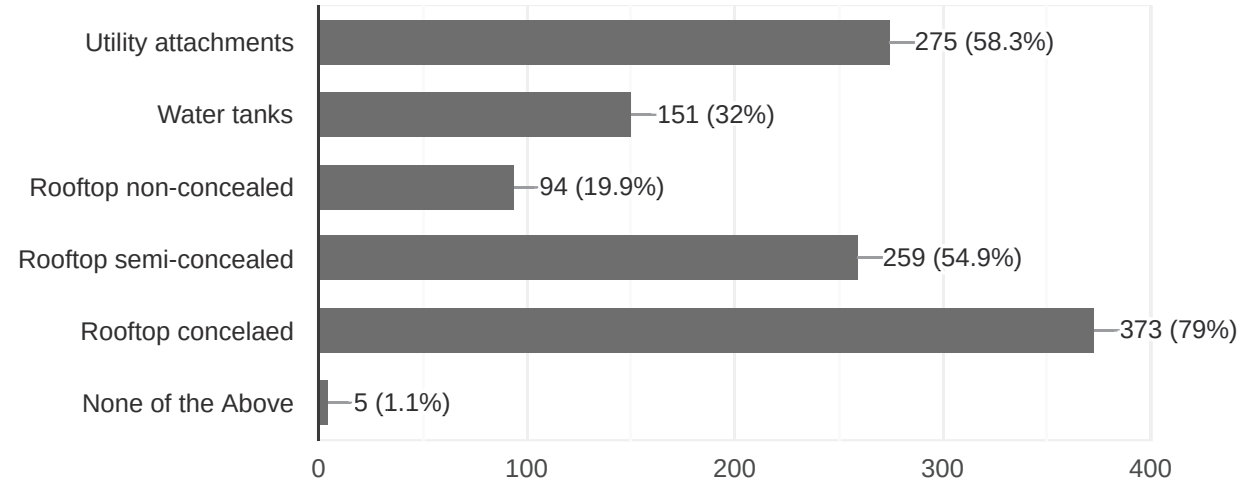
475 responses



A "base station" is any existing structure other than a tower that can accommodate wireless antennas. Examples include rooftops, water tanks, stadium lights, electrical utility poles. Which macro base station do you prefer? Check all that apply.

Copy

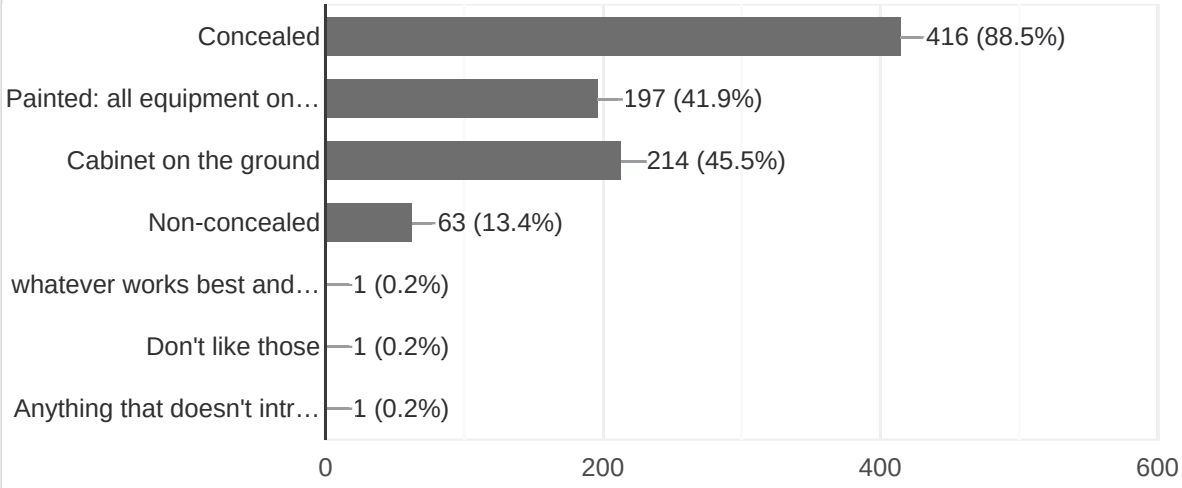
472 responses



Which small wireless facilities do you prefer? Check all that apply.

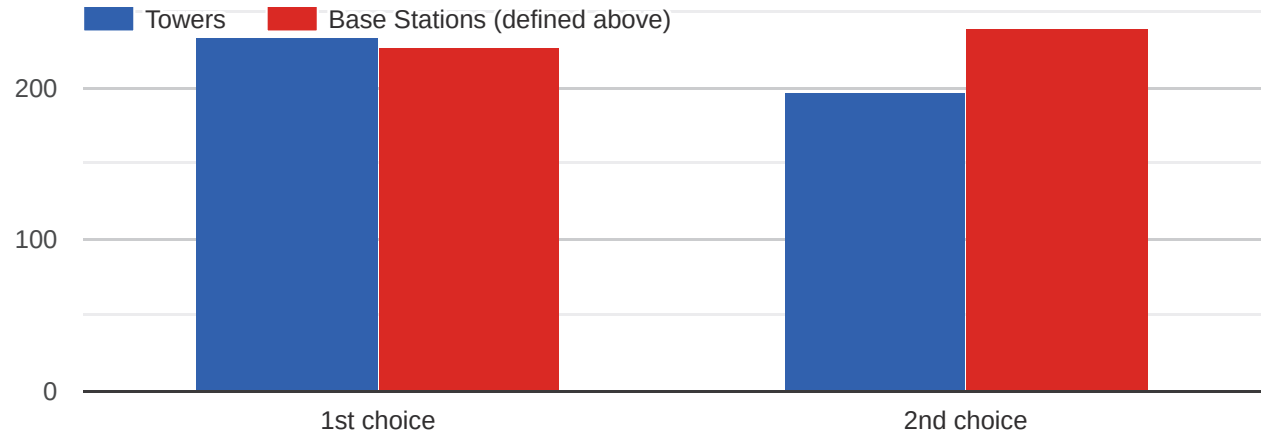
Copy

470 responses



Which do you prefer?

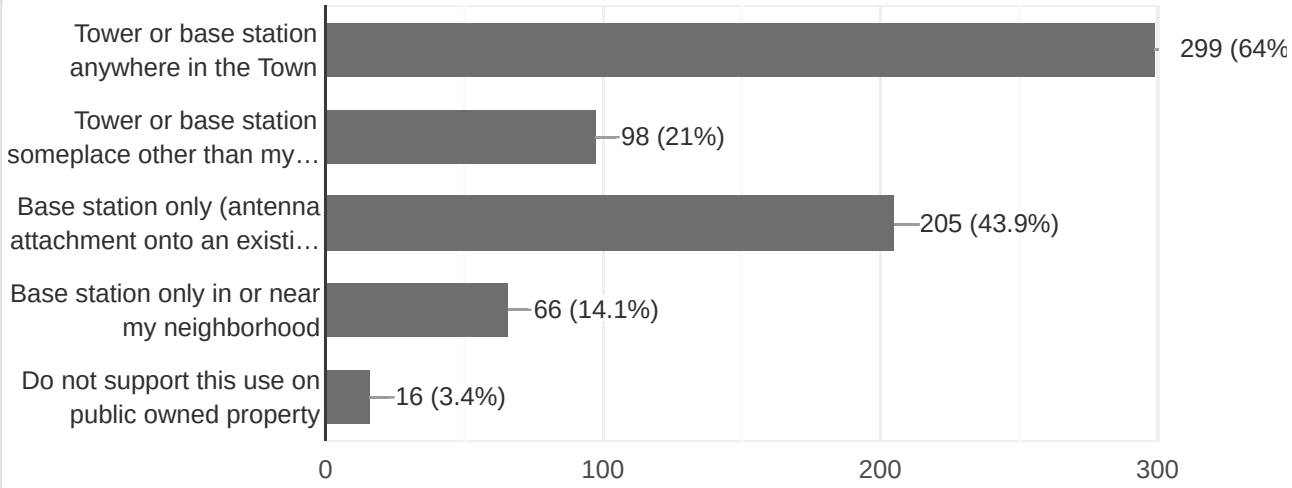
Copy



Town owned, school board or quasi public property (fire, ambulance core etc.) could be used to fill in wireless network coverage and capacity gaps in certain areas. Please check all that you would support.

Copy

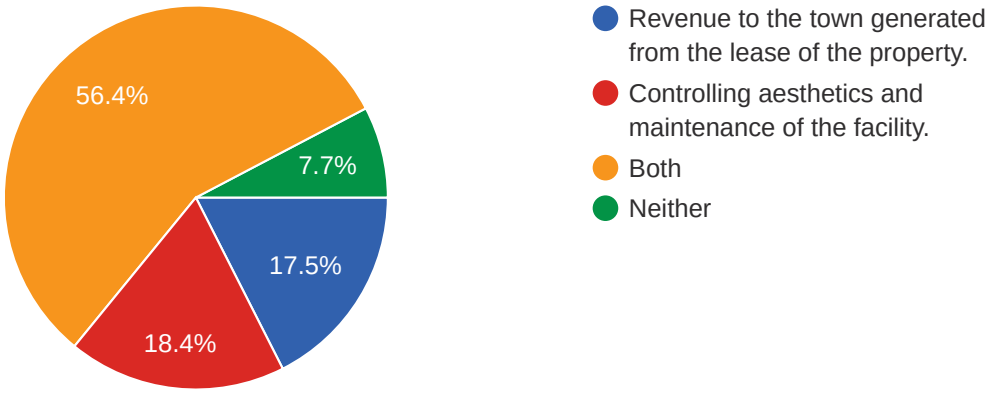
467 responses



If you support using Town owned, school board or quasi public property (fire, ambulance core etc.) property please choose which is more important to you.

Copy

468 responses



Name or email address *email will not be used for anything other than this poll

478 responses

[redacted]

29 more responses are hidden

Comments or suggestions

126 responses

Thank you for your work on this important project!

None

Readdress Goldens Bridge area. This study does not acknowledge that there is basically no service in most of the area between Increase Miller and 684. I need to have a network extender in my house and have no cell phone service past my driveway. Network extenders are dependent on internet service and are unacceptable in an area like GB that has regular power outages.

I support use of salt dome site for a tower. I support use of poles with tree branches even if

they look fake.

If cellphone coverage were improved to 5G, it would provide an alternative to cable TV service in Lewisboro.

Thank you for this survey. Images are nice but local images would be more relatable/practical

We're so glad you're working on this issue. I can't drive from one part of town to another without losing a call at least 2-4 times. I use cellular service, Google Maps, etc. for work all the time. I'm also concerned if we had an emergency, if we don't have reception we couldn't get help. This is a VERY important issue for us. Thank you for considering it.

We desperately need better cell coverage in the Town of Lewisboro. There are too many power outages that disrupt wireless service and we need strong cellular signals so that people can keep working and communicating when that happens. This is vital in this day and age.

the bigger issue is the lack of compelling home internet. we should consider town owned or sponsored wireless basestations to make a ring mesh network. we could probably use the fiber backbone of the KLSD school district as a backbone.

When we lose power(which is often) we can’t even report an outage. The town has ample space to get this done.

I work for a Westchester County Law Enforcement agency and volunteer in one of our local Fire Depts.

Fast, reliable, and widespread cellular communication is crucial for the safety of everyone who lives in our town; from the homeowner to the shopkeeper to the police/fire/EMS worker.

I understand the question of aesthetics, but at no point can "it's ugly" really outweigh the benefits of reliable cell service. My household had to switch to Verizon because it was the only carrier that worked in our area, I'd love to see more carriers be supported by our towers.

It's too late for us but maybe not for others who can't afford the switch to a more expensive carrier.

More towers, base stations, and access to coverage should help everyone sleep a little easier at night knowing that no matter what happens they can reach their friends and loved ones.

This is the 2nd highest taxed county in the state, maybe the country. We should have excellent mobile coverage. It is outrageous that calls drop every time we drive east-west in this area.

Route 35 should have uninterrupted cell coverage for convenience and safety reasons. Lewisboro is not the boondocks. Put up some towers to allow complete cellular communication in the entire area.

We desperately need better service. The fact that we can't get Fiber internet, nor have a choice of providers, means the only other real option would be wireless service - It's 2021 and people are working/learning/living at home far more. This is a need, not a want.

Not having adequate connectivity in the area is incredibly dangerous in case of emergencies. If ambulance, fire, police need to be called and there's no cell phone coverage, people's lives are placed at risk. It is unconscionable that, in 2021, in an affluent community, intermittent or no cell wireless coverage exists.

Poor connectivity is very frustrating especially drop outs when you're in the middle of reading something

Good luck handling the NIMBY syndrome ! Someone, preferable those in commercially zoned areas or near major highways, needs to sacrifice aesthetics for the benefit of everyone else.

My family is desperate for a solution to our wireless connectivity difficulties. It is impossible to make a phone call from our home using wireless service. This, combined with frequent Optimum outages, is the biggest negative aspect about living in Lewisboro. In this new era of working and learning from home, lack of access to wireless coverage should not be permitted by any town. The potential negative visual impact of towers or base stations does not outweigh the negative impact that comes from not being able to use wireless service to complete work and learning responsibilities from home. I very sincerely hope that CityScape and the Town of Lewisboro can provide a solution this issue as quickly as possible.

Due to the unstable service provided by Optimum, wireless connectivity is an essential option that needs significant deployment in our community.

Our town needs better service for health/safety, work and school purposes. Aesthetics take a back seat in my opinion.

It is unacceptable to not have contiguous, consistent wireless service throughout the entire Town of Lewisboro and it needs to be fixed by whatever means possible.

Better wireless service is very necessary and has to be improved as soon as possible.

We need strong, reliable and consistent internet connections NOW!

Thank you for looking into this!

With our reliance on wireless devices nowadays, it is imperative we ensure everyone in town has good, basic service for emergencies or for remote learning.

Whatever is determined NO INCREASE IN TAXES. PERIOD.

Surveys force generalizations because they must but the specifics of each situation may well change one's mind. In practice each decision requires an analysis based on relative aesthetic destruction versus the number and importance of the buildings which would benefit.

I have Metro PCS (uses T mobile network). Service was excellent until recently. Now it stinks! Ranges from mediocre to non existent.

The connectivity and infrastructure in our neighborhood is absolutely terrible and we would very much like it to be improved as it is critical for personal and professional lives of many in our neighborhood including myself and my family

I have tried repeatedly to get Verizon to put a booster near me to support my wife's medical alert devices but they have been totally unresponsive.

Existing electric poles aren't pretty, but everyone likes having power. The same logic should apply to wireless communications too, since today it is as important as electric service.

100% supportive of additional wireless capacity however it's created. I have no problem with a tower near my home. I have land on cove road that I can lease for a cell tower should facilities be needed in that area.

We have had a microcell for years to make up for lack of cell service. AT&T is doing away with that technology in Feb. 2022. We will the have to rely on WIFI calling - which has a much shorter range. So, actually getting cellular coverage at our home would be a welcome change - subject to reasonable aesthetics and zoning constraints in this beautiful area. We can do both!

improving cell service so all residents have reliable reception is priority for our family.

N/a

We still have no wireless internet in our house. We rely on wifi to make cell phone calls and all internet related services. If power goes out we have absolutely no connection with the outside world.

What is this obsession with total coverage?. If you're driving on the road you'll get to a spot that will have cell service within five minutes.

Thank you for your efforts to improve communications in Lewisboro. Now, if only you could do something about Cablevision :-(

ALL RESIDENTS SHOULD BE GIVEN ALL SAFETY REGULATIONS PERFORMED ON THIS TECH. IT IS KNOWN THAT VARIOUS CANCERS VIA HIGH RADIATION LEVELS ARE A RESULT OF 5G TECHNOLOGY. PLEASE DO THE RESEARCH ON 5G AND OTHER OPTIONS BEFORE ROLLING THESE TOWERS OUT. OUR LIVES DEPEND ON IT.

While wireless is important, we must do something about the Optimum monopoly. Their service are rates are horrendous!

We should research and then use the LATEST TECHNOLOGY for providing better internet connectivity across our town. Perhaps there are other options than those listed here.

We need good 5G towers asap. Thanks!!

part of my property is in Lewisboro

The use of a tower or base station, equipment location and concealed vs non-concealed must be evaluated based on the specific location.

Pursue a small tower at Mt. Lakes Park which would provide coverage for a large area.

I don't approve of people using cell phones while driving, don't make it easier for drivers to use cell phones while driving.

?Tower/base stations options really should be site dependent. Electrical Engineer (communications, retired) interested in getting involved.

1. To maximize value to current residents and resale value of homes in the town, I recommend that the town board prioritizes universal coverage throughout the town, that is, a minimum of 2-3 bars (AND reliable, fast data service), with a choice of several major carriers, throughout town - while reducing visual impact.

2. Given the total budgets of the school district and the town (we pay both taxes), the town should not make decisions on the basis of a few $K or $10K of cost recovery for the use of

town property.

We also need additional internet providers in town. Optimum has a monopoly in our hamlet.

Please let the wireless companies improve service

I would prefer any wireless facilities to blend in. I really really really dislike seeing the towers.

If they are concealed poles put them up all over town!! Get better coverage for those that need it!!

The town has to figure out how to make it easier from a permitting point of view for service providers to build infrastructure in our town. We need to have sensible rules and timely responses to their needs

Improved cell service would greatly improve the quality of life in Lewisboro.

We need better service, without dead areas, in our towns.

Service can be aesthetic and functional if done intelligently

none

Cell service in Goldens Bridge is pathetic and needs to be addressed ASAP. I need to have a network extender in my house and have no cell phone service once I leave my driveway until I reach 684. Cell phone service is particularly important in this area as we have so many power outages and frequently are dependent on just cell phone service to communicate.

With more of us WFH than ever, we need better access

We need to get better internet. With more people working from home, it is impossible to work with terrible cell service. Also, it is becoming a safety issue with having kids that are at different schools and more mobile. Sometimes public safety must outweigh people’s want for aesthetics.

The service is terrible as I drive around town. I often worry what would happen if I got in an accident in a dead zone. Or if my child was in a dead zone, and could not contact me. I’m all for towers or whatever is needed to make service better and therefore keep residents safe.

We are connected to internet only via Verizon Jet Pack. Must use library for faster internet.

PUT THE POWER ETC LINES, UNDERGROUND! BRING THE TOWN INTO THE 21ST CENTURY!!!

It would be helpful to know how much better service would be. Speeds?

Please make sure plan fits our need for coverage and capacity, not carrier need for filling out highway maps were tower companies need to sell their own technology

improvements to wireless service are crucial to insure the safety of the individuals living in the Lewisboro community

The South Salem Fire House is a far better option than the 'salt dome' as it is higher ground and has less visual impact. The two are close enough together that it should not make much coverage difference. The notion of getting some nominal rental revenue from a tower by the salt dome is not worth the loss of the bucolic view, especially as the service is already plenty adequate..

please clean up the eyesore that is the highway garage

This debate has been going on for a long time. As a town we continue to discuss it but our cell coverage is beyond poor. We need to come up with a plan that will allow us to catch up to other towns.

It is a safety issue to not have cell service

Question v. answer not always a good match

Concerned that 1st responders do not have good service.

IS IT POSSIBLE TO COVER OR CHANGE EXISTING STRUCTURES WITH SOME OF THE OPTIONS ABOVE? THERE IS A CELL TOWER VERY VISIBLE WHEN YOU DRIVE DOWN OUR STREET (COMANCHE CT) AND IT IS AN EYE SORE.

Glad to be having this discussion--we need an upgrade in this area.

I ABSOLUTELY do NOT want to have ANY type of cellular structure visible from ANY persons home or vantage point from around or in lake Truesdale. No exceptions!

It’s about time!

More info on the base station coverage. Would you need them every block, mile etc.

Just get the wireless service already! 20 years of debate and nothing is better.

You also should deal with the broadband issue

Thanks AAB! Can you reel Ryan Reynolds into your committee and get Mint for everyone in town?!???

Internet service is extremely unreliable. Service goes out constantly for no reason. Problematic if working from home.

If you must put up a tall structure make it as invisible to the sky as possible (unipole). Don't sacrifice the aesthetics of the historic hamlet of South Salem with an ugly monopole. It will dominate the viewscape.

I am concerned also with minimizing radiation exposure to residents and schools. High power towers should be far from residents and schools. Base stations might be lower power but closer to people and thereby increase the radiation exposure to people. You did not mention this aspect of the cell tower plan, but I urge you to consider it as well. Radiation exposure is much more important to me than aesthetics and also more important than coverage. High radiation in areas that are not frequently habited by people, such as road ways or shopping centers (except for the workers), is better than high radiation in residential areas and schools.

It's about time someone looks into fixing our poor cell service. It's an embarrassment.

Clearly, no home owner wants the tower in their backyard or ruining their views. NIMBY. But, in favor of better service & safety, you gotta do what you gotta do.

No more towers. We do not need any more.

Fire houses or ambulance buildings would be acceptable for use. Keep it out of neighborhoods, schools and cemeteries!

Please consider power backup for connectivity during weather emergencies

Most important is getting cell phone service at JJMS and JJHS. If there was a serious emergency, like a shooter in the building, students can't even call 911 or call their parents or tell our part time police department where they are located in the building. These kids can't even call to say good bye to their parents. This is an unbelievably horrific risk and it seems our

Town is just hoping that "things like that don't happen here." Everyone knows that getting help by cellphone is impossible, and maybe this makes our schools more at risk and a better target. Voiced my concerns many times to the Katonah Lewisboro School district and got nowhere with their 3rd party "security" monitoring company. Very relieved that my kids got through the school system here, but very concerned about those that are there everyday. Our Town is way back in the dark ages with cell phone service. We need our phones for work and personal, there should be no place in Town where there is no service. We're living in a false sense of security in our little Hamlet, with a police department that you can't call (leave a message) and rely mostly on State police that on a good day will take 1/2 hour to get to your emergency. I'm surprised we don't have to climb a pole to make a phone call like in Green Acres. We pay a LOT of taxes here and basically get zero services. The Town has been promising better cell phone service for about 20 years. I seriously doubt that any improvements will ever be made.

Please improve wireless services !!

I would really be so pleased and grateful if the tall cell tower, currently existing at Vista, located next to our fire station, were to be well disguised! Preferably, as a majestic pine tree or an oak. I can clearly see the cell tower, in the not too far distance, in a directly straight view, from my terrace and some of my windows, at my Oakridge Condo home. It is an ugly eyesore, tacky, and will bring down property value! I am always upset when I see the tower from my condo home. I always feel embarrassed when I show visitors the view from my terrace, in which the ugly cell tower prominently figures!!! If the cell tower would be disguised well and prettily, then the view would become transformed into a genuinely fine and even attractive one! In addition, the excellent cell service/internet would be a true asset to property value, work, and lifestyle enjoyment. Aesthetics really do matter!!! Please, disguise the Vista cell tower and any other towers/bases currently existing or to be constructed in Lewisboro! Please have all towers upgraded to 5G. Excellent, trusty services, are imperative.
However, please use disguises for aesthetics! Thank you.

This survey applies to wireless telephony, what about wireless internet?

Answered tower preference solely on aesthetics without knowing technological benefits or drawbacks of each style beyond what is provided for towers vs. base stations. There were no financial related questions in this survey which is concerning. If the benefit of wireless service to residents is going to result in raised rates or invisible or unknown use of funds collected by the town I would prefer to reassess my response.

Aside from wireless, PLEASE also looking into bringing in more internet provider. Optimum is probably the worst internet company in the history of bad internet companies and it has a monopoly! Unacceptable! Please help!

Having only one interns provider is also part of the issue for my house- as Optimum is terrible service and even worse customer service. Since the booster for the cell and my “land line” phone both have to run through my internet, when that goes out or when electricity goes out (both happen frequently) we are left with absolutely no for of communication for work, family, news, or weather alerts. Having a reliable cell signal would be a very big improvement for our whole neighborhood.

SERVICE HAS IMPROVED OVER THE YEARS BUT THANKFUL FOR CELL PHONE SERVICE THROUGH INTERNET

Our town has maintained it's unique character for a long time. I appreciate that you are carefully looking at this important need and the aesthetics of these tech additions to town. The best we can conceal them, the better is our families thoughts. We are thankful for living in a beautiful place and love our town. Also, the way things change who knows what will be the precedent in 5 years... best to proceed with consideration and caution. Many thanks

We do not have service deficits at home or when traveling through town. If there are areas of town with service deficits, the plan should focus on those areas only.

No comment

Thanks for asking. I hope we can get both coverage and capacity.

24 more responses are hidden