TOWN OF
NEW CASTLE

WIRELESS TELECOMMUNICATION INFRASTRUCTURE ANALYSIS

APPENDIX E

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

The New Castle Study Area is defined as the New Castle jurisdictional boundary and a one-mile perimeter surrounding the Town. As of January 1, 2023 there are a total of 22 facilities verified in the New Castle Study Area. The facilities consist of 15 towers and seven base stations. Of the sites, in the one-mile perimeter, one is approved but not built and one is proposed and under review.

Within the New Castle jurisdictional boundary there are specifically six existing towers and three existing base stations. All nine sites are macro cell facilities with one tower (Site C6) also used for public safety equipment. Six facilities are located on private property, one is on public property and two are within the Consolidated Edison (Con Ed) utility easement. Five of the wireless facilities are non-concealed, three are semi-concealed and one is concealed.

The following *Table C1* 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 C1* Structure Type, *Figure C2* All Antenna Type, *Figure C3* PWSF Antenna Type, *Figure C4* Location and *Figure C5* 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 New Castle Wireless Inventory Catalog in *Appendix E1*.

New Castle Study Area		INSIDE JURISDICTION				ONE-MILE PERIMETER			
	TOTAL 22	Existing	Approved Not Built	Proposed Under Review	Inquiry	Existing	Approved Not Built	Proposed Under Review	Inquiry
STRUCTURE TYPE									
Towers	15	6	0	0	0	8	0	1	0
Base Stations	7	3	0	0	0	3	1	0	0
ANTENNA TYPE									
Macro Wireless	19	8	0	0	0	9	1	1	0
Small Wireless	0	0	0	0	0	0	0	0	0
Public Safety/Macro	2	1	0	0	0	1	0	0	0
Public Safety	1	0	0	0	0	1	0	0	0
Other	0	0	0	0	0	0	0	0	0
LOCATION									
Private Property	12	6	0	0	0	5	0	1	0
Public Property	5	1	0	0	0	3	0	1	0
Utility Easement	4	2	0	0	0	2	0	0	0
ROW	1	0	0	0	0	1	0	0	0
DESIGN TYPE									
Concealed	3	1	0	0	0	0	1	1	0
Semi-Concealed	4	3	0	0	0	1	0	0	0
Non-Concealed	15	5	0	0	0	10	0	0	0

Table C1: Inventory by Structure Type

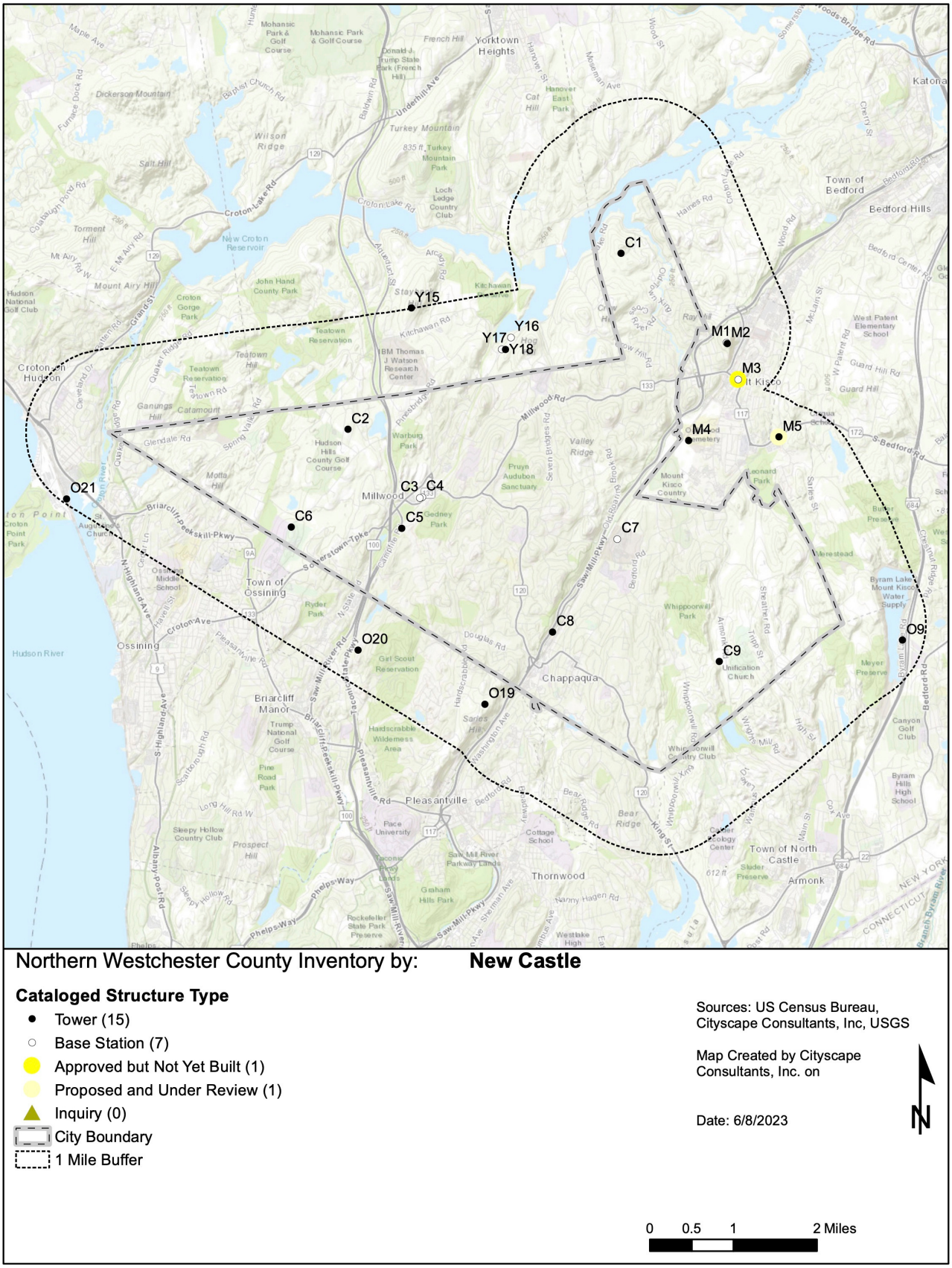


Figure C1: Map of Existing Inventory by Structure Type

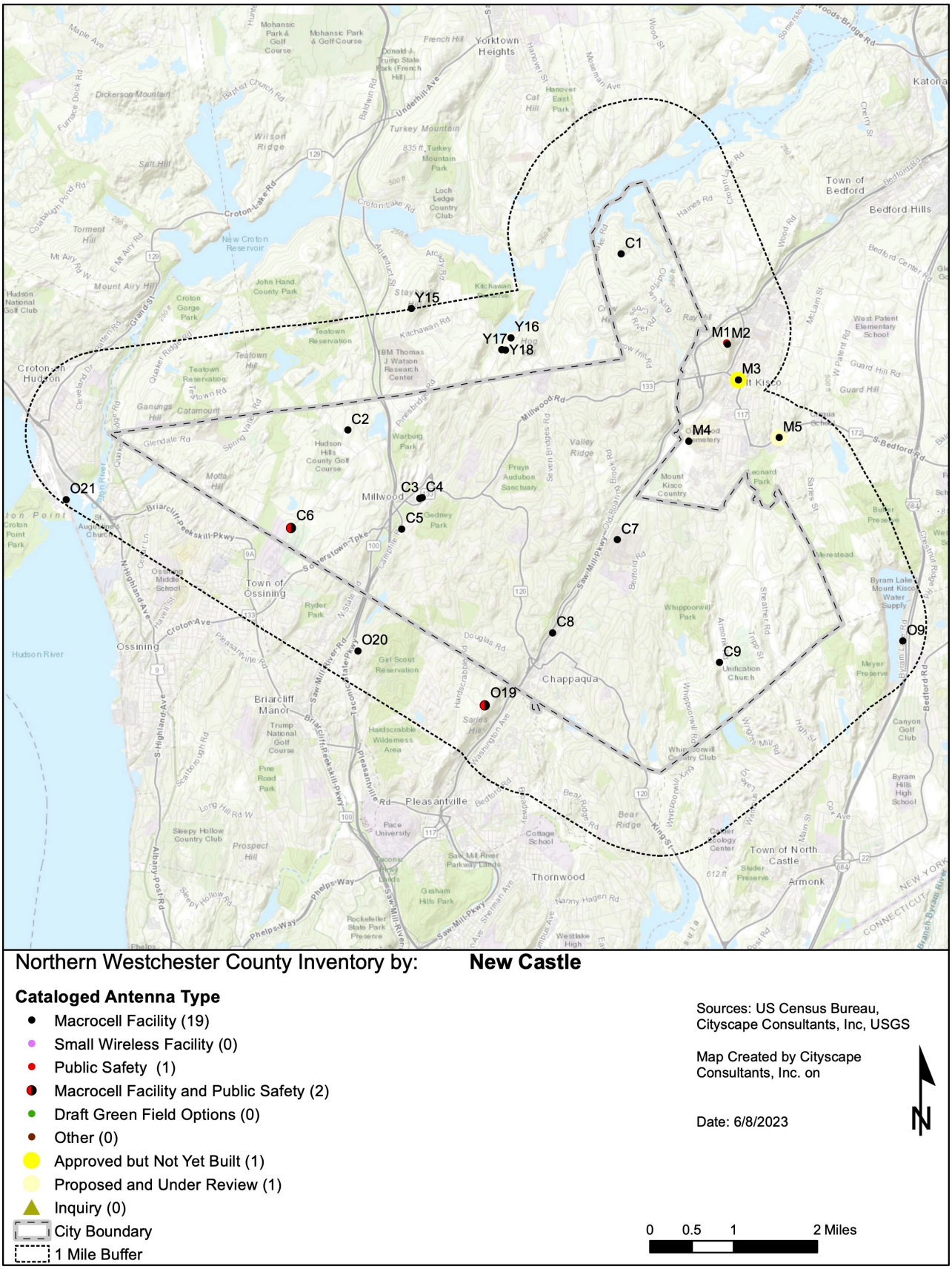


Figure C2: Map of Existing Inventory by All Antenna Type

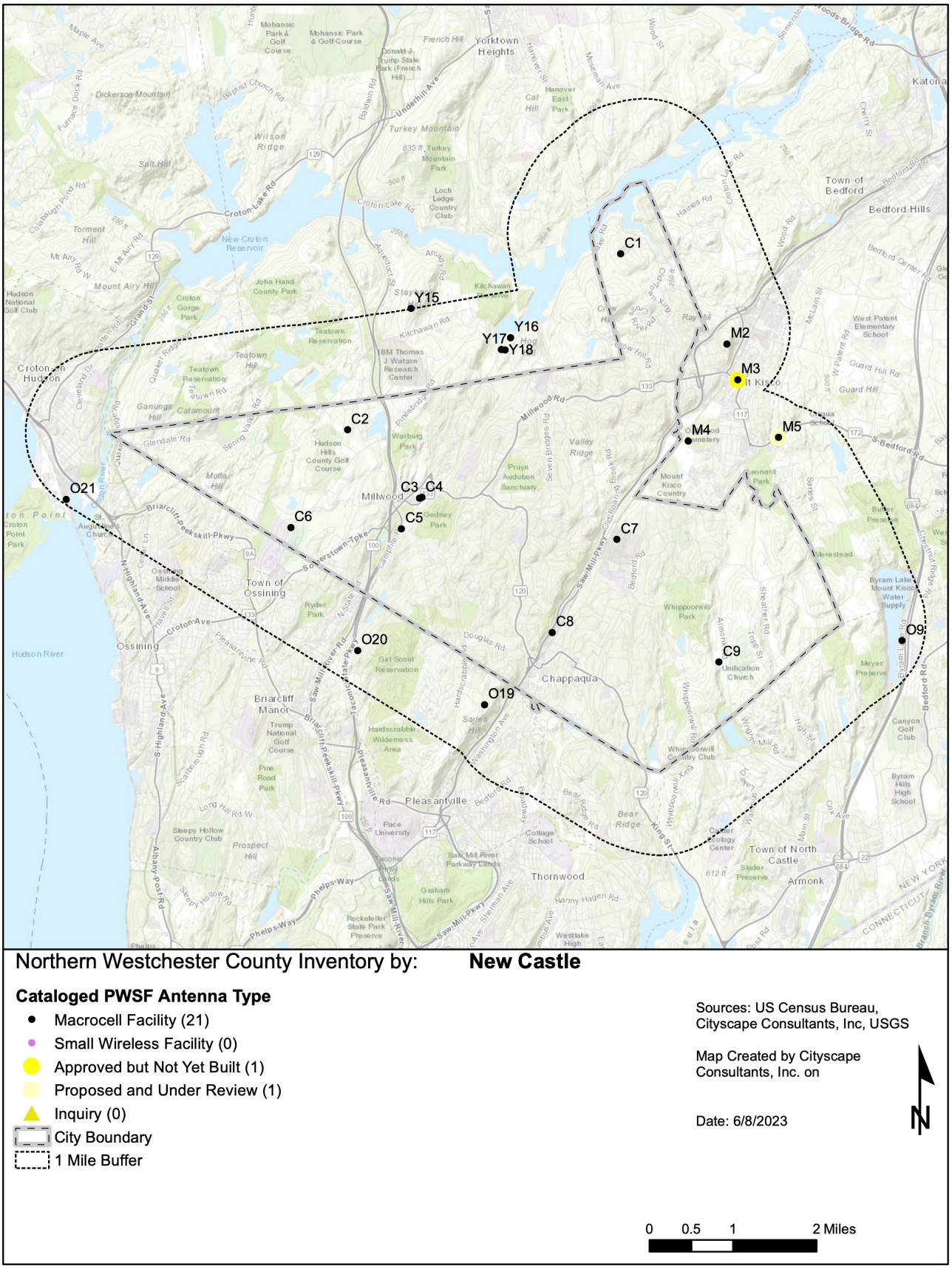


Figure C3: Map of Existing Inventory by PWSF Antenna Type

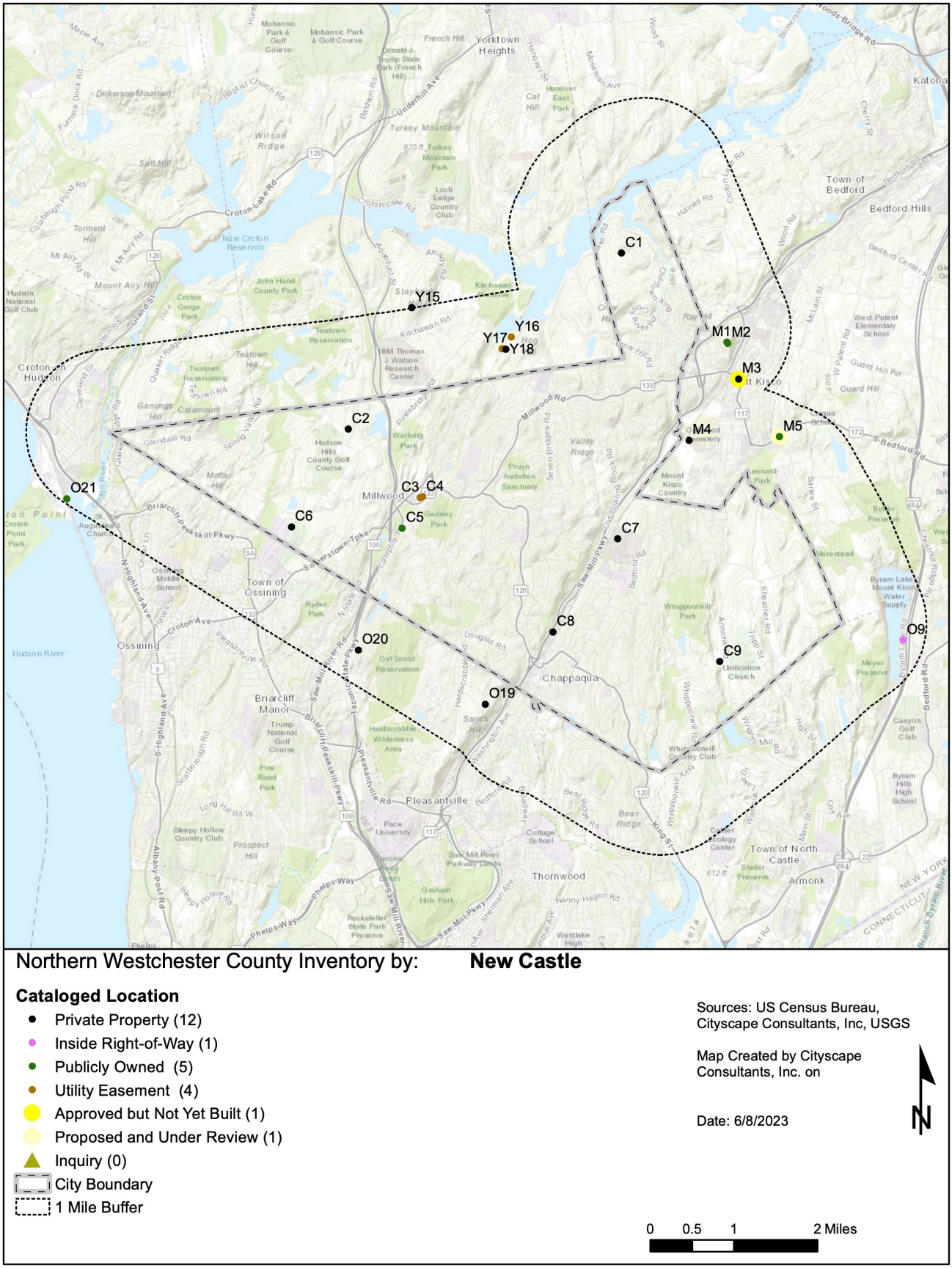


Figure C4: Map of Existing Inventory by Location

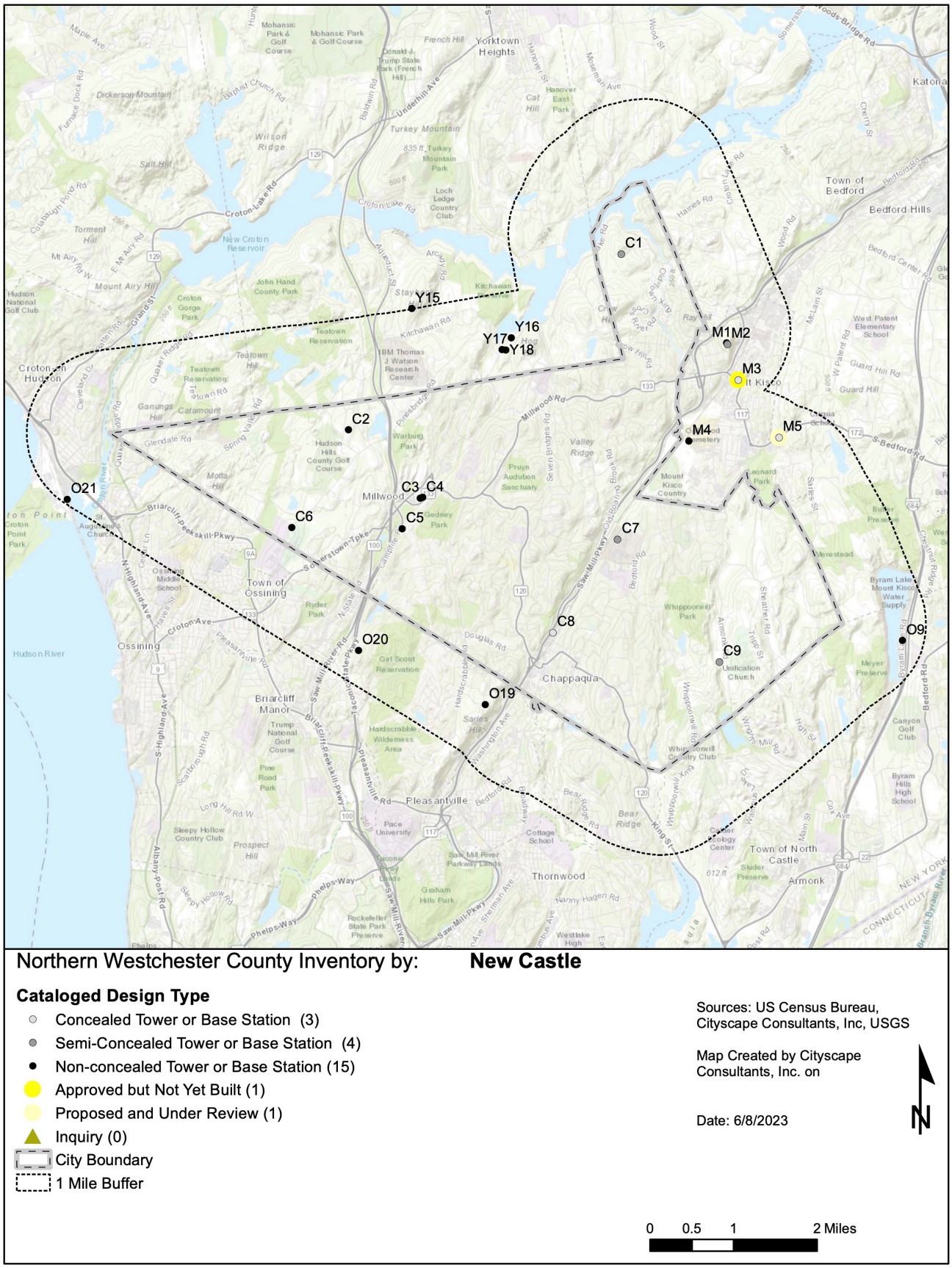


Figure C5: Map of Existing Inventory by Design Type

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 C6* 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, 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 C2.*

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 C2: 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.

The wireless facilities in New Castle are spread throughout the Town and are generally parallel to main transportation corridors. Sites C3, C4 and C5 serve both the community of Millwood and vehicular traffic along that portion of the Taconic State Parkway. Site C2 helps cover the northern part of the Taconic State Parkway into Yorktown. Parallel the Saw Mill Parkway are Sites C8 and C7 with Site C7 handing off to Site M4 in Mount Kisco. Land areas between Sites C4, C5, C7 and C8 have many gaps in services due to the great distances between these sites. The same situation persists eastward towards Site C9 and westward of Sites C2 and C6.

Site C2

Site C4

Site C9

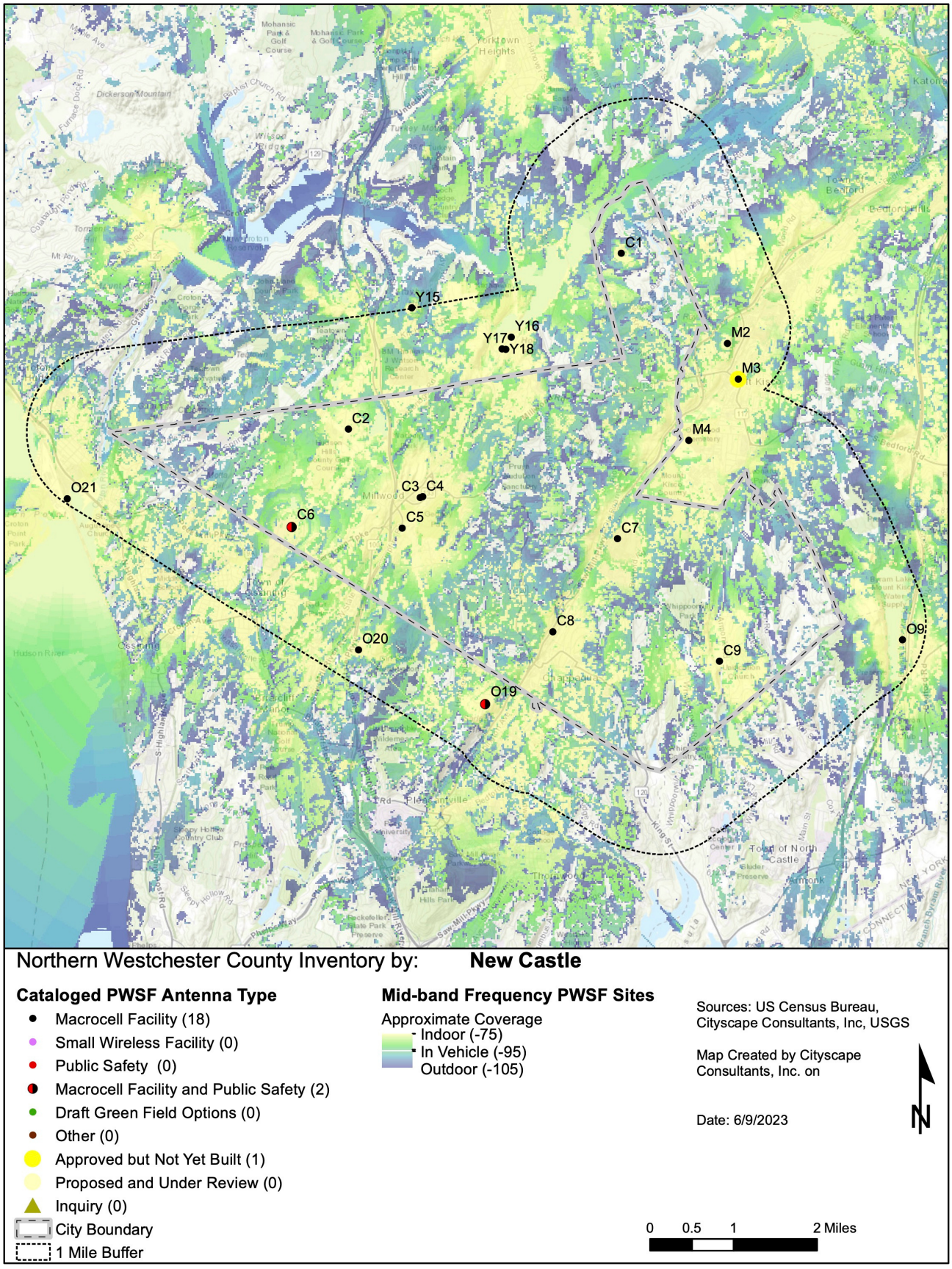


Figure C6: Simulated Coverage Map from PWSF Sites

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 C7 is a map of population density by US Census Block Group with an existing and approved but not built macro wireless 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.

The census block groups around Site C1 and C8 have the most densification in the Town with 1,000-3,000 people per square mile in the vicinity of those sites.

Figure C8 is the Town's Land Classification map also with the existing and approved but not built wireless facilities as an overlay.

When comparing *Figure C6* (propagation map) to *Figure C7* (population density map) and (land classification map) the notable wireless facility deployment pattern indicates the facilities parallel the major transportation corridors within the commercial land use zone nearest the most densely populated areas of Town. Only sites C6 and C9 are in low density areas and away from major roadway corridors

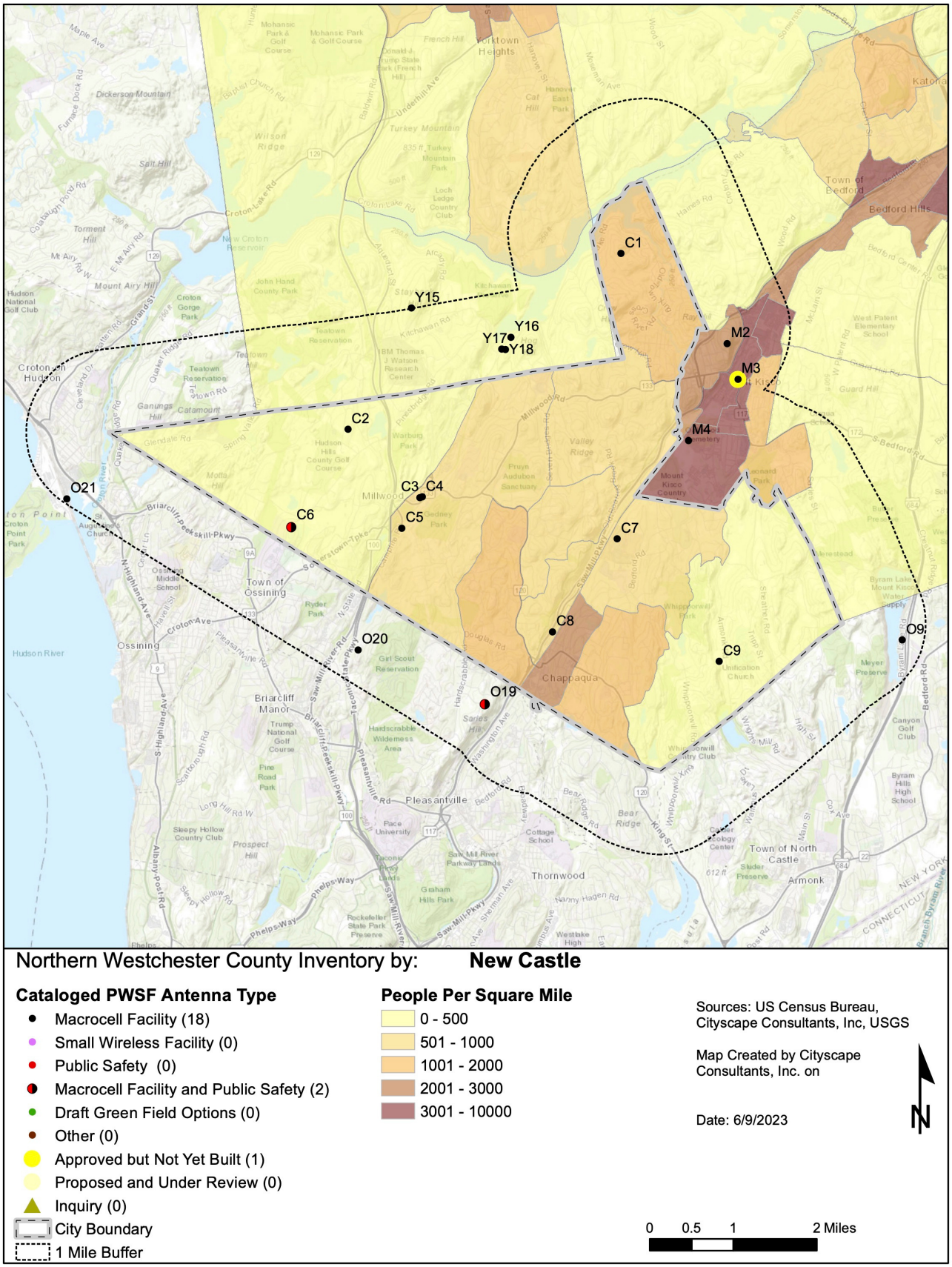


Figure C7: Population Density with PWSF Overlay

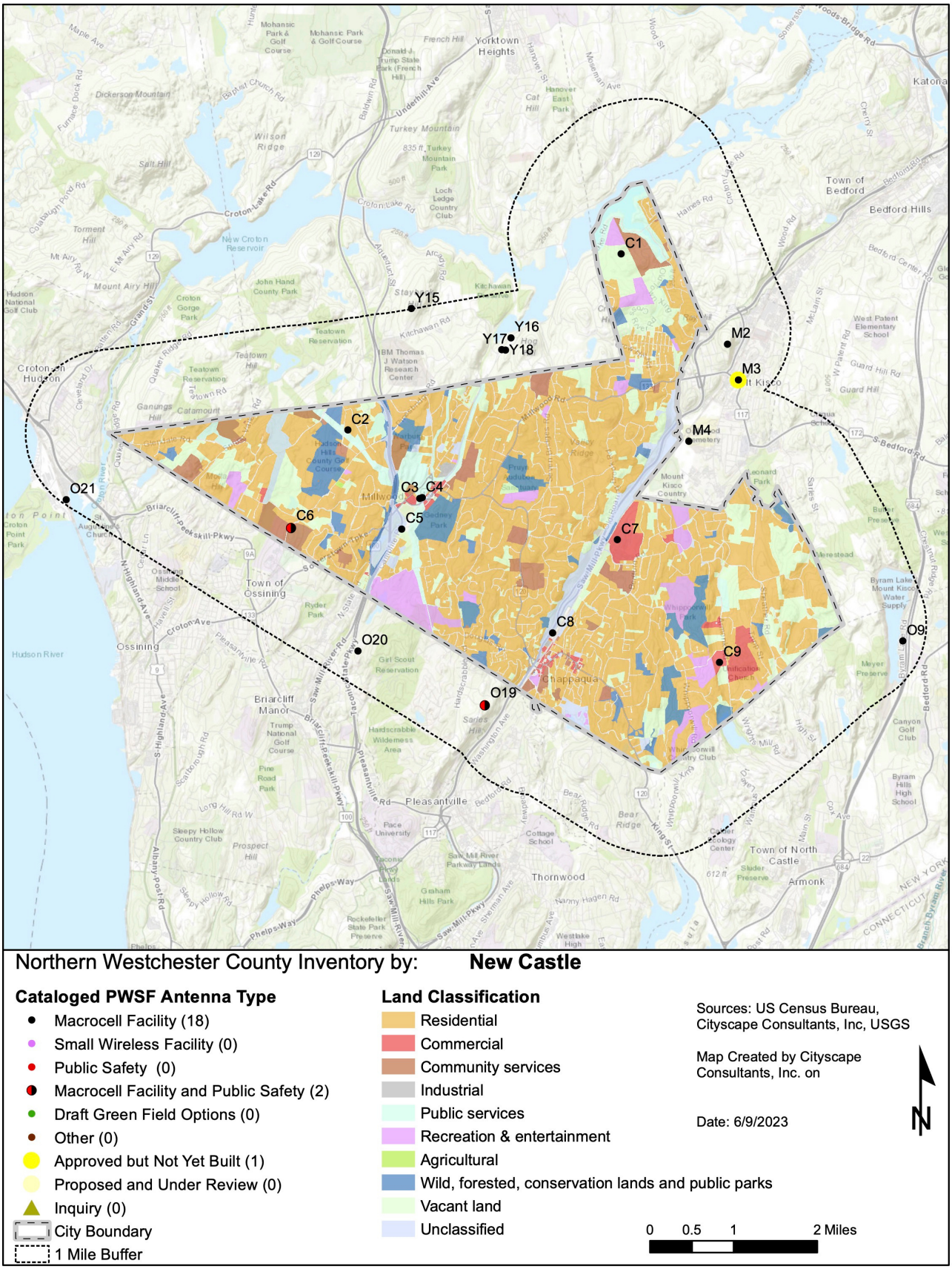


Figure C8: Land Classification Map

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 C9* theorizes geographic areas needing network coverage and capacity densification. 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.

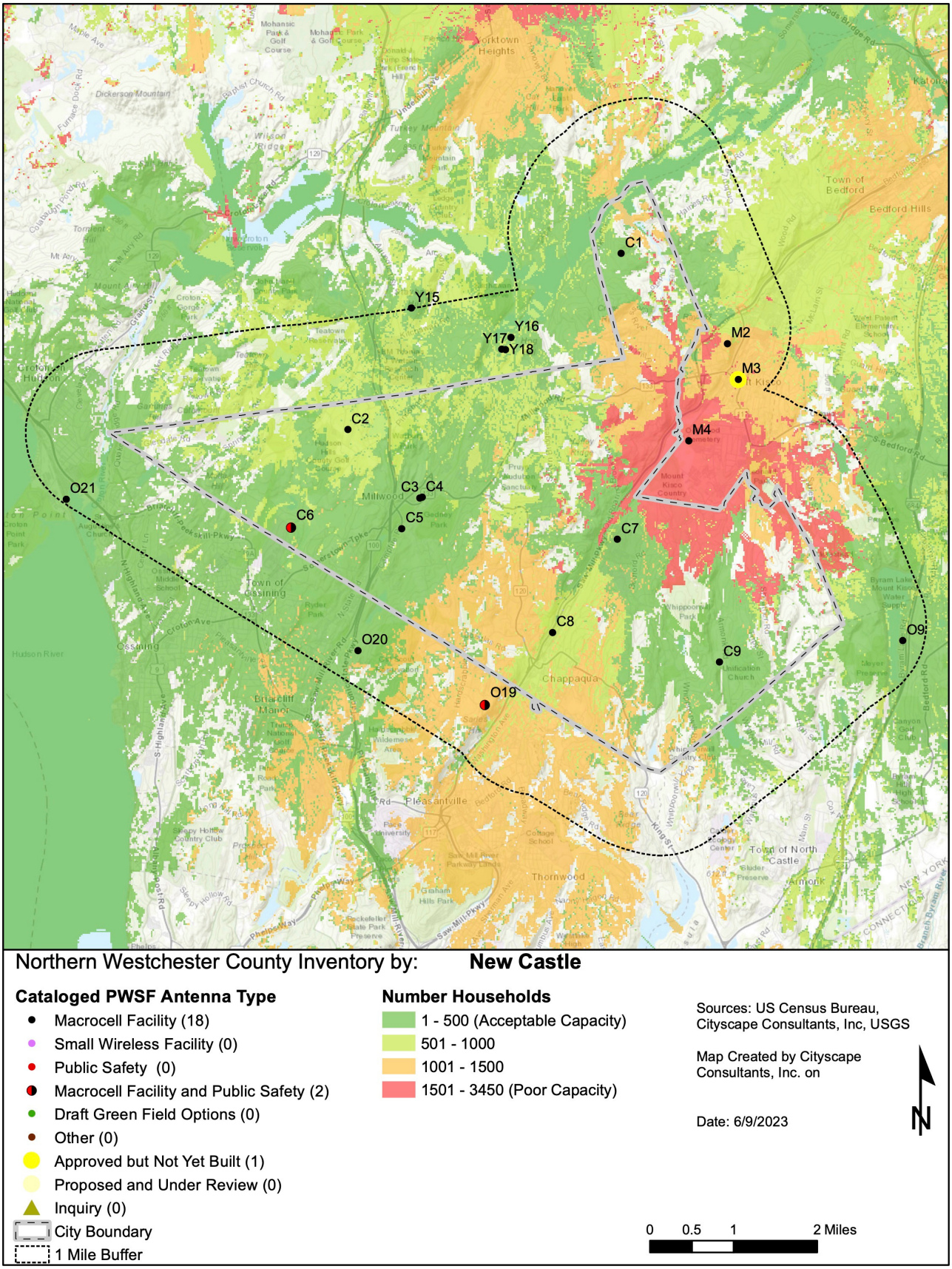


Figure C9: Heat Map Approximating Network Capacity Areas of Concern

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 figure uses the following RSRP signal level shown in *Table C3.*

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

Table C3: LTE Signal Strength Description

Site C1

Site C6

Site C8

NEW CASTLE OVERVIEW

The following *Figure C10* provides a closer look at the LTE coverage predictions from all the existing personal wireless facilities in the New Castle Study Area. The areas outlined in blue illustrate very poor to non-existent wireless coverage and the areas in greatest need of wireless infrastructure.

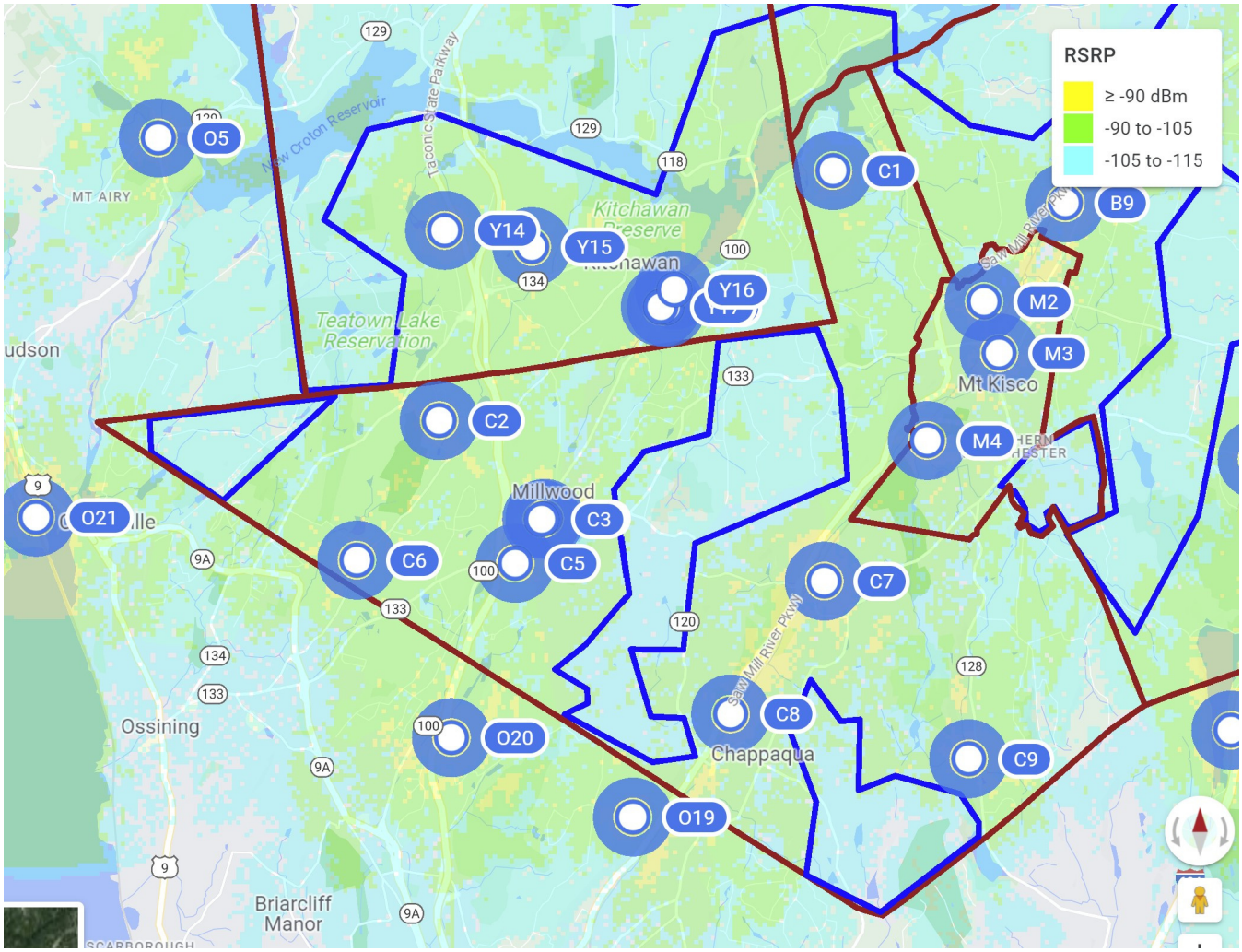


Figure C10: LTE Coverage Predictions Existing or Approved PWSF Sites

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 of those areas with viewshed concerns. Small wireless facilities on Con Ed poles or new poles in the ROW are identified as NP followed by a number.

To improve the poor or no wireless coverage areas in the underserved areas of New Castle it is anticipated to take a minimum of five macro cell facilities, either towers or base stations at approximately 100' in height. Also suggested are approximately 26 small cell wireless facilities on 50’ poles.

The maps have overlapping sites; for example potential site C-NT2 appears on two of the following maps, in these instances, a proposed site will only be listed in the narrative for the first map in the sequence and not in subsequent map description narratives.

Site C3

Site C5

Site C7

NORTHEAST NEW CASTLE

The northern portion of the Town is represented in *Figure C11* showing predicted coverages utilizing existing macro cell Sites C1, C3 and C4 (Site C3 and C4 are side by side so label is covering Site C4) and two suggested 100' macro cell sites C-NT2 and C-NT5. Site C-NT5 is shown in the vicinity of intersection Highway 133/Millwood Road and Seven Bridges Road with Site C-NT2 to the south of C-NT5 in the vicinity of Highway 120/Quaker Road and Seven Bridges Road. Both sites are suggested as fill in for network service gaps.

Additionally, nine small wireless facilities are suggested on existing Con Ed utility poles or new 50' poles in the same vicinity. These are represented as C-NP5, C-NP6, C-NP7, C-NP13, C-NP14, C-NP23, C-NP24, C-NP25 and C-NP26.

These recommended small wireless facilities would fill in gaps between the macro cell sites in areas where siting a macro cell is difficult due to topography and sensitive viewsheds. Existing Site M4 in the Village/Town of Mount Kisco provides coverage along the Saw Mill Parkway to the eastern area of New Castle.

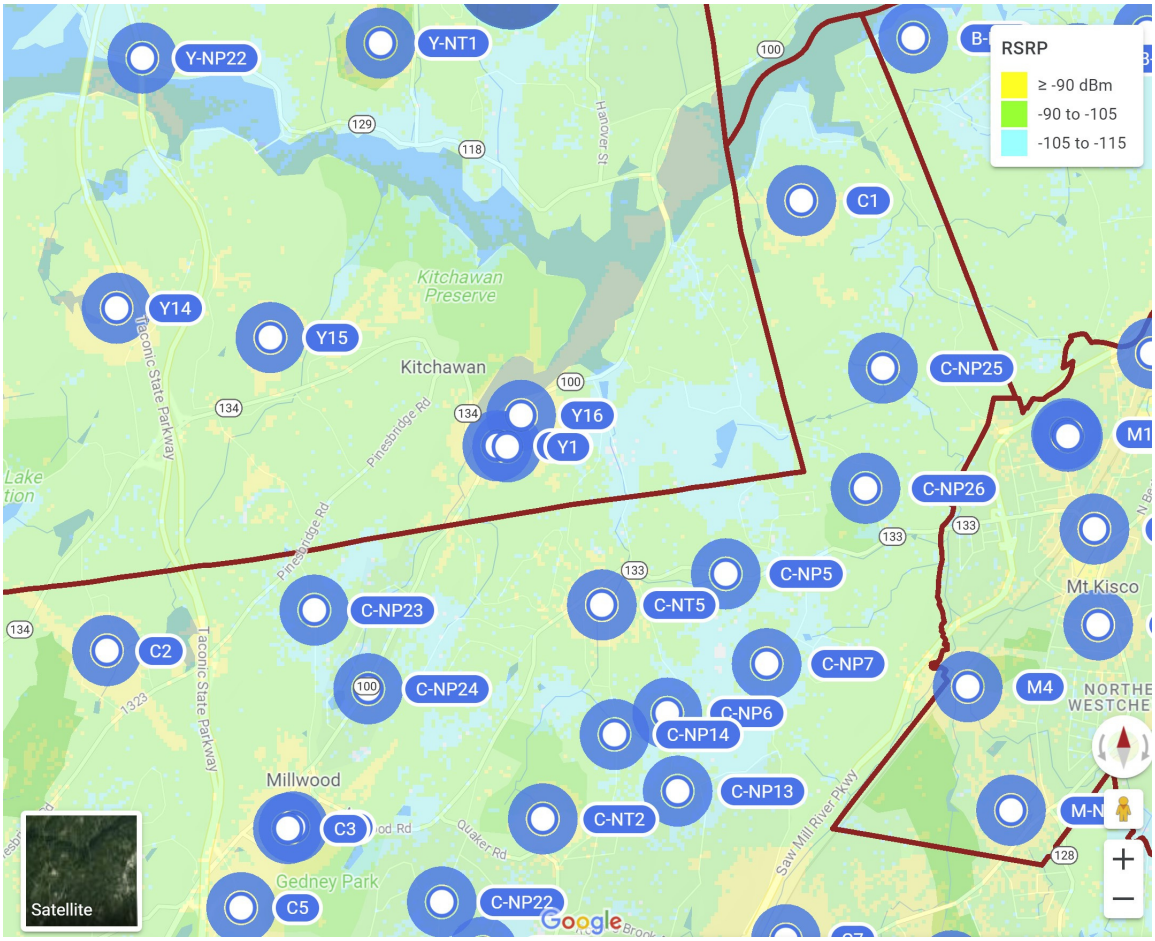


Figure C11: Predicted LTE Coverage NE New Castle

NORTHWEST NEW CASTLE

The following *Figure C12* shows simulated coverages from existing Sites C2, C5 and C6. Two new 100' macro cells, C-NT3 and C-NT4 are shown as needed to fill in gaps in the western portion of New Castle. Also shown are the suggested five small wireless facilities on existing Con Ed utility poles or on new 50' poles in the same vicinity C-NP3, C-NP4, C-NP8, C-NP9, C-NP22. Macro cell Site C-NT3 and the five small wireless facilities are proposed in a linear pattern to facilitate closing the gap between the Taconic State Parkway and the Saw Mill River Parkway east of existing Sites C-3, C-4, C-5 and west of existing sites C-7 and C-8.

Potential C-NT4 would fill in the existing gap along Glendale Road west of existing Sites C2 and C6. This area is very rural and it would take a number of small wireless facilities north of the suggested C-NT4 site, but the lack of subscribers in this area may keep the wireless industry from deploying more infrastructure in the vicinity for the foreseeable future. For this reason no small wireless facilities are shown at this time.

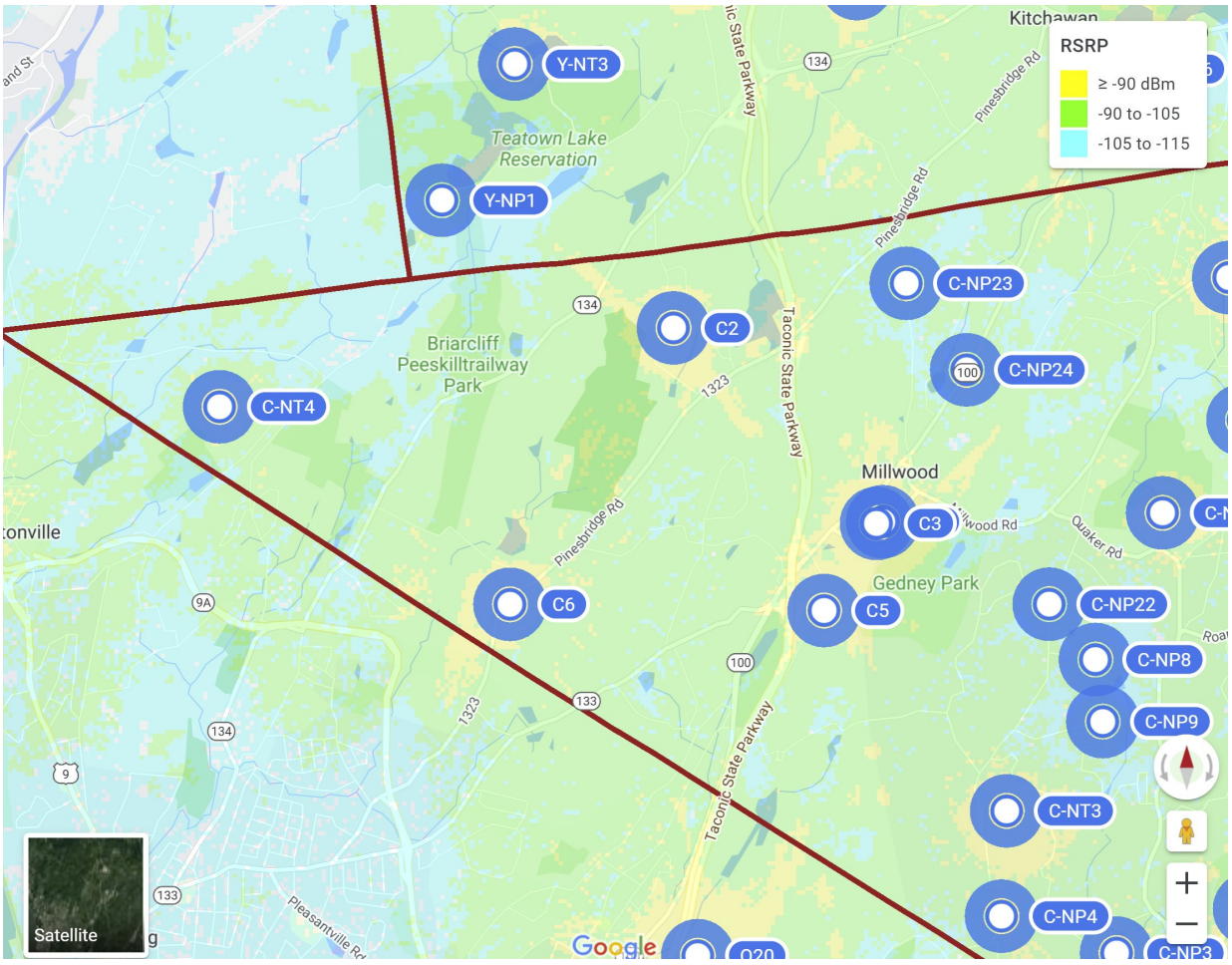


Figure C12: Predicted LTE Coverage NW New Castle

SOUTHEAST NEW CASTLE

The map in *Figure C13* focuses on the land area east of the Saw Mill River Parkway. Existing Sites C7, C8 and C9 are the only macro cell wireless facilities serving this large area of the Town and they are spread too far apart to provide coverage to most of this area outside of the Saw Mill Parkway corridor. The recommended sites east of the Saw Mill River Parkway are needed in areas around Site C-NT1. Additionally, twelve small wireless facilities (C-NP1, C-NP2, C-NP10, C-NP11, C-NP12, C-NP15, C-NP16, C-NP17, C-NP18, C-NP19, C-NP20, C-NP21) are proposed on 50' Con Ed poles or new poles in the same vicinity.

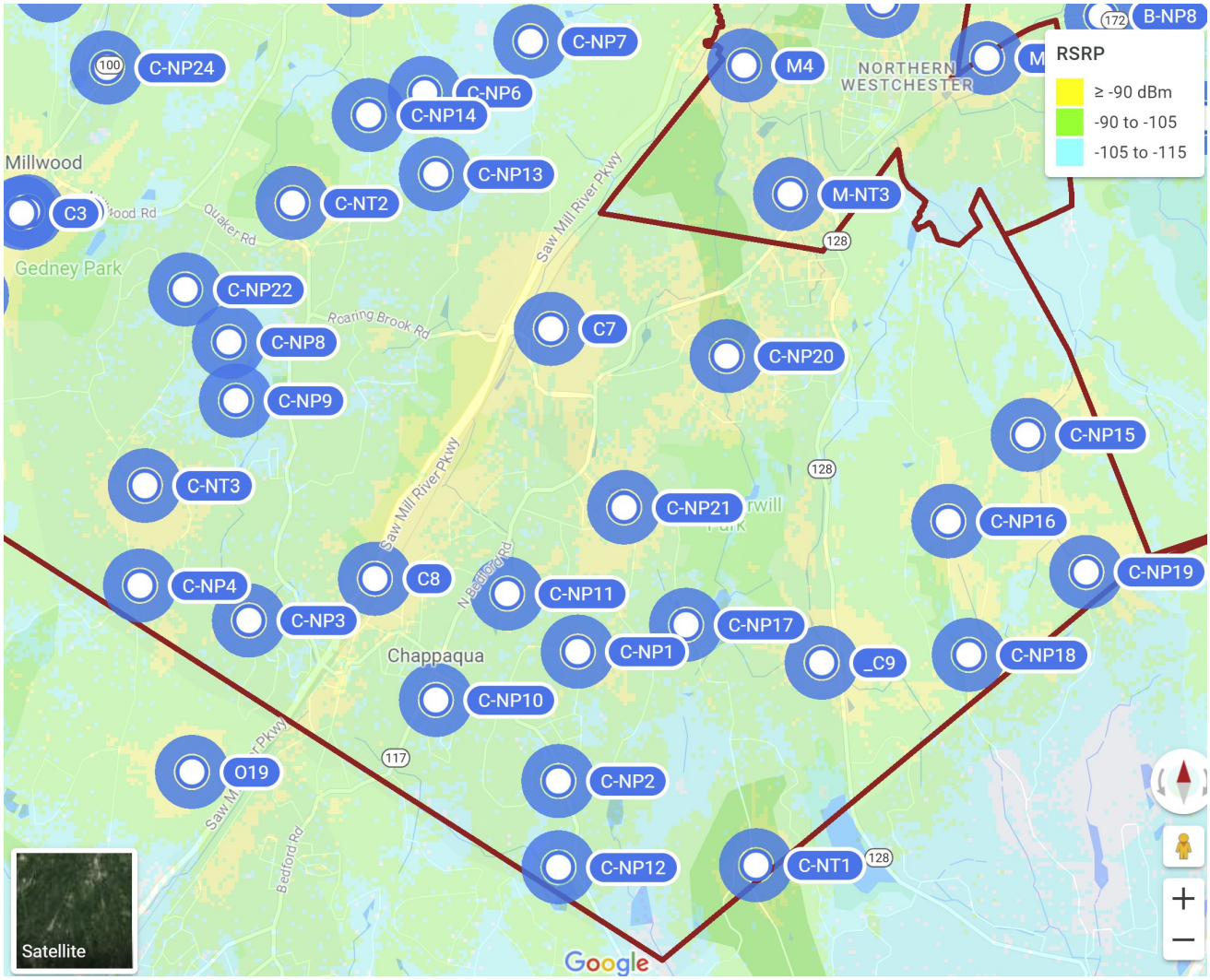


Figure C13: Predicted LTE Coverage Southeast New Castle

The following *Table C4* provides a summary of all the suggested macro fill in sites for the Town and *Table C5* is a summary of suggested small wireless facilities on existing Con Ed utility poles or on new poles in the same vicinity.

MACRO CELL SUGGESTED SITES	
SITE NAME	**FACILITY HEIGHT (FEET)**
C-NT1	100'
C-NT2	100'
C-NT3	100'
C-NT4	100'
C-NT5	100'

Table C4: Suggested Macro Fill-In Sites

SMALL CELL SUGGESTED SITES			
SITE NAME	**LATITUDE**	**LONGITUDE**	**HEIGHT**
C-NP1	41.15991	-73.7527	50'
C-NP2	41.15157	-73.7544	50'
C-NP3	41.16192	-73.7809	50'
C-NP4	41.16417	-73.7902	50'
C-NP5	41.20523	-73.7605	50'
C-NP6	41.19589	-73.7658	50'
C-NP7	41.19921	-73.7568	50'
C-NP8	41.17984	-73.7826	50'
C-NP9	41.17605	-73.7820	50'
C-NP10	41.15679	-73.7649	50'
C-NP11	41.16365	-73.7588	50'
C-NP12	41.14601	-73.7544	50'
C-NP13	41.19065	-73.7649	50'
C-NP14	41.19446	-73.7706	50'
C-NP15	41.17385	-73.7142	50'
C-NP16	41.16831	-73.7210	50'
C-NP17	41.16164	-73.7435	50'
C-NP18	41.15971	-73.7192	50'
C-NP19	41.16504	-73.7092	50'
C-NP20	41.17893	-73.7400	50'
C-NP21	41.16920	-73.7488	50'
C-NP22	41.18322	-73.7863	50'
C-NP23	41.20280	-73.7979	50'
C-NP24	41.19752	-73.7930	50'
C-NP25	41.21904	-73.7462	50'
C-NP26	41.21097	-73.7478	50'

Table C5: Suggested Small Wireless Fill-In Sites

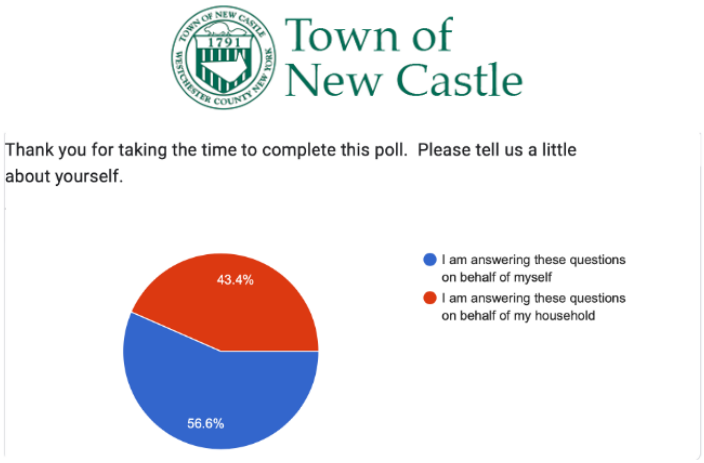
COMMUNITY SURVEY AND ZONING

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 New Castle survey opened on June 23, 2022 and closed on July 26, 2022 and during that time 475 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 and coverage at home, work and while traveling around the Town is generally excellent or acceptable. The majority support the 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 C5* with the entire collection of responses and comments provided in *Appendix E2*.



RESPONSES	New Castle	NWC
PARTICIPANTS	475	4002
Average Number of Devices	7	6
Use of Devices		
○ Personal Recreation/Leisure	24.70%	85.84%
○ Employment Related	75.30%	63.33%
Wireless Coverage at Residence		
○ Excellent or Acceptable	28.70%	43.03%
○ Poor or Inconsistent	71.10%	55.91%
Wireless Coverage at Work		
○ Excellent or Acceptable	30.40%	35.37%
○ Poor or Inconsistent	42.30%	32.60%
Wireless Coverage Traveling Around Town		
○ Excellent or Acceptable	23.20%	37.18%
○ Poor or Inconsistent	76.80%	61.88%
Would Rely More on Device if Network was Better		
○ Entirely Agree	73.00%	61.90%
Quality of Wireless Service Is Important to Me		
○ Entirely Agree	94.50%	87.64%
What is Most Important to You		
○ Excellent Connectivity	53.00%	56.24%
○ Good Connectivity and Minimal Visual Impact	44.90%	38.71%
Prefer Taller Tower Supporting Multiple Collocations	38.50%	44.64%
Non-Concealed Tower Preference - Monopole	64.30%	62.09%
Concealed Tower Preference - Flag Pole	66.10%	70.11%
Rooftop Preference - Concealed	60.20%	78.65%
Small Wireless Facility Preference - Concealed	91.20%	89.99%
Locational Preference in Town - Anywhere	60.90%	60.88%
Support Use of Public Property for Revenue and Aesthetics - Yes	46.60%	52.18%

Table C5: 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.

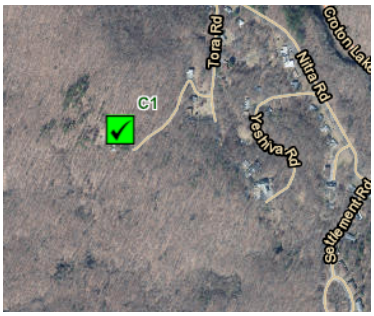
The Town's Code for regulating wireless telecommunications infrastructure was amended in 2019, no changes are recommended and it can be found in the following sections:

- § 64-430. Permitted special uses
  - Subsection O. (14) Non-small wireless facilities
- § 60-410. O Small wireless facilities
  - Subsection (2) Eligible facilities request

APPENDIX E1

WIRELESS INFRASTRUCTURE INVENTORY

Site C1	Croton Lake Road	New Castle
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Monopole	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Semi-Concealed	
FACILITY OWNER/ID:	SBA	
FACILITY SITE NAME:	Somers 2	
SERVICE PROVIDERS:	AT&T, Sprint, T-Mobile, Verizon	
FCC ASR:	1271315	
HEIGHT:	154’	
LOCATION:	Private Property	
LATITUDE/LONGITUDE:	41.230258 N, -73.753698 W	
PARCEL ID:	07100500010010000000	
ZONING:		
NOTES:		



Site C2	50 Hoags Cross Road	New Castle
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Monopole	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Non-Concealed	
FACILITY OWNER/ID:	Homeland Towers - NY531	
FACILITY SITE NAME:	Millwood II	
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon	
FCC ASR:		
HEIGHT:	120’	
LOCATION:	Private Property	
LATITUDE/LONGITUDE:	41.200067 N, -73.816798 W	
PARCEL ID:		
ZONING:		
NOTES:	Not able to get to site; provider information from Town.	

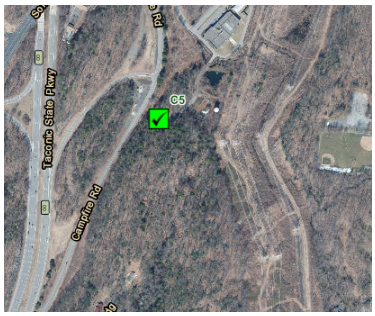
Site C3 — New Castle

STRUCTURE TYPE:	Base Station
FACILITY TYPE:	High Tension Tower
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Consolidated Edison Company
FACILITY SITE NAME:	Facility Owner Site Name
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	110’
LOCATION:	Utility Easement
LATITUDE/LONGITUDE:	41.188145 N, -73.800344 W
PARCEL ID:	
ZONING:	
NOTES:	Unable to access site

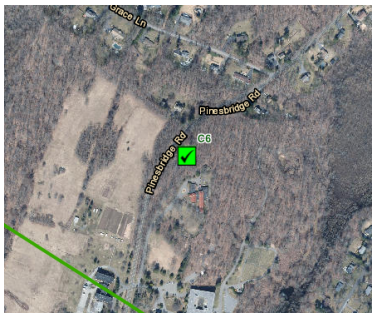
Site C4 — New Castle

STRUCTURE TYPE:	Base Station
FACILITY TYPE:	High Tension Tower
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Consolidated Edison
FACILITY SITE NAME:	
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	110’
LOCATION:	Utility Easement
LATITUDE/LONGITUDE:	41.188253 N, -73.799837 W
PARCEL ID:	
ZONING:	
NOTES:	Unable to access site

Site C5	Barnes Lane	New Castle
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Monopole	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Non-Concealed	
FACILITY OWNER/ID:	American Tower Corporation, 207892	
FACILITY SITE NAME:	Milwood	
SERVICE PROVIDERS:	AT&T, T-Mobile	
FCC ASR:		
HEIGHT:	149’	
LOCATION:	Public Property	
LATITUDE/LONGITUDE:	41.182831 N, -73.804598 W	
PARCEL ID:		
ZONING:		
NOTES:		



Site C6	Pines Bridge Road	New Castle
STRUCTURE TYPE:	Tower	
FACILITY TYPE:	Lattice	
ANTENNA TYPE:	Macro and Public Safety	
DESIGN TYPE:	Non-Concealed	
FACILITY OWNER/ID:	American Tower Corporation, 88147	
FACILITY SITE NAME:	Ossining NY	
SERVICE PROVIDERS:	AT&T, Sprint, T-Mobile, Verizon, Westchester County	
FCC ASR:		
HEIGHT:	127’	
LOCATION:	Private Property	
LATITUDE/LONGITUDE:	41.183208 N, -73.830022 W	
PARCEL ID:		
ZONING:		
NOTES:		



Site C7	480 N Bedford Rd	New Castle

STRUCTURE TYPE:	Base Station
FACILITY TYPE:	Roof
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Semi-Concealed
FACILITY OWNER/ID:	Summit Greenfield
FACILITY SITE NAME:	Chappaqua Commons
SERVICE PROVIDERS:	T-Mobile
FCC ASR:	
HEIGHT:	45’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.180680 N, -73.755035 W
PARCEL ID:	
ZONING:	
NOTES:	Estimated Height

Site C8	220 Hunts Lane	New Castle

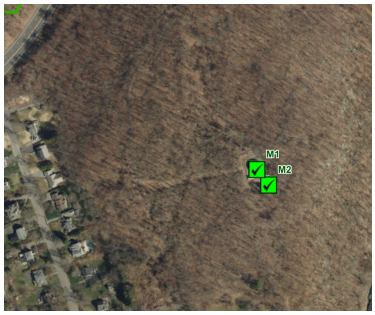
STRUCTURE TYPE:	Tower
FACILITY TYPE:	Unipole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Concealed
FACILITY OWNER/ID:	Crown Castle International, 826834
FACILITY SITE NAME:	Proposed RL@220 Hunts Ln
SERVICE PROVIDERS:	T-Mobile
FCC ASR:	
HEIGHT:	99’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.164609 N, -73.770093 W
PARCEL ID:	
ZONING:	
NOTES:	Concealment needs repairs

Site C9	620 Armonk Road	New Castle

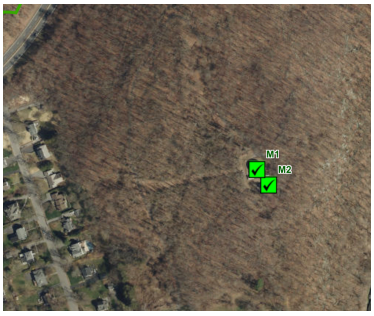
STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Semi-Concealed
FACILITY OWNER/ID:	American Tower Corporation, 207752
FACILITY SITE NAME:	Amonk
SERVICE PROVIDERS:	AT&T, T-Mobile
FCC ASR:	
HEIGHT:	143’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.159198 N, -73.731839 W
PARCEL ID:	
ZONING:	
NOTES:	No Verizon meter; meter is for Homeland Towers; Tower owned by ATC

Site M1	Emory Street	Mt. Kisco

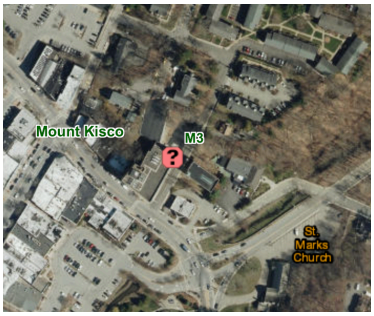
STRUCTURE TYPE:	Base Station
FACILITY TYPE:	Water Tank
ANTENNA TYPE:	Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Westchester County Mountain Ave
FACILITY SITE NAME:	Mount Kisco - Mountain Ave
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	50’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.214624 N, -73.729548 W
PARCEL ID:	06905600040070000000
ZONING:	CD - Conservation Development District
NOTES:	Antenna mounted on the water thank are part of the existing emergency radio service network.



Site M2	1 Mountain Ave
STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Semi-Concealed
FACILITY OWNER/ID:	Crown Castle International - 843210
FACILITY SITE NAME:	Mount Kisco
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon, MTA
FCC ASR:	
HEIGHT:	109’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.214455 N, -73.729373 W
PARCEL ID:	06905600040070000000
ZONING:	CD - Conservation Development District
NOTES:	Painted brown in an attempt to conceal somewhat.



Site M3	45 East Main Street	Mt. Kisco
STRUCTURE TYPE:	Base Station	
FACILITY TYPE:	Roof	
ANTENNA TYPE:	Macro Cell	
DESIGN TYPE:	Concealed	
FACILITY OWNER/ID:	Verizon - VZCO-SC	
FACILITY SITE NAME:	Mt. Kisco	
SERVICE PROVIDERS:	Verizon	
FCC ASR:		
HEIGHT:	98’	
LOCATION:	Private Property	
LATITUDE/LONGITUDE:	41.208229 N, -73.726962 W	
PARCEL ID:	06908100020030000000	
ZONING:	CB-1 - Central Business District-1	
NOTES:	Approved But Not Built	

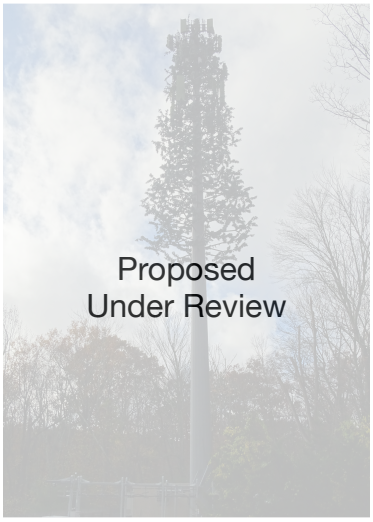


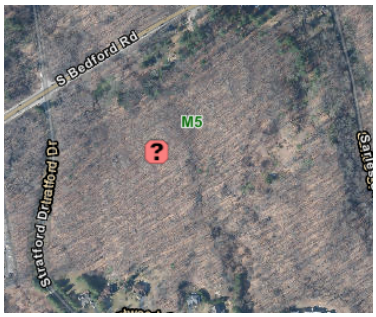
Site M4	304 Lexington Avenue	Mt. Kisco

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Crown Castle International - 806584
FACILITY SITE NAME:	South Mount Kisco - Oakwood Cemetery
SERVICE PROVIDERS:	AT&T, T-Mobile, Sprint, Verizon
FCC ASR:	
HEIGHT:	125’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.197654 N, -73.738491 W
PARCEL ID:	08003900010010000000
ZONING:	PD - Preservation District; also in PWSF - Personal Wireless Service Facility Overlay District
NOTES:	

Site M5		Mt. Kisco

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopine
ANTENNA TYPE:	Macro
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Village Town of Mount Kisco, NY156
FACILITY SITE NAME:	
SERVICE PROVIDERS:	
FCC ASR:	
HEIGHT:	120’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.190768 N, -75.1169900 W
PARCEL ID:	
ZONING:	
NOTES:	Proposed Under Review





Site Y15	Route 134	Yorktown

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Crown Castle International - 806594
FACILITY SITE NAME:	NY Yorktown Heights Route 134
SERVICE PROVIDERS:	AT&T, Sprint, Verizon,
FCC ASR:	
HEIGHT:	125’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.221085 N, -73.801936 W
PARCEL ID:	69.08-1-25
ZONING:	R1-200 Single-Family Residential
NOTES:	

Site Y16	Yorktown

STRUCTURE TYPE:	Base Station
FACILITY TYPE:	High Tension Tower
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	Sprint - NY33XC399
FACILITY SITE NAME:	
SERVICE PROVIDERS:	Sprint
FCC ASR:	
HEIGHT:	110’
LOCATION:	Utility Easement
LATITUDE/LONGITUDE:	41.215865 N, -73.778958 W
PARCEL ID:	70.11-1-17
ZONING:	R1-200 Single-Family Residential
NOTES:	Estimated height

Site Y17 — Yorktown

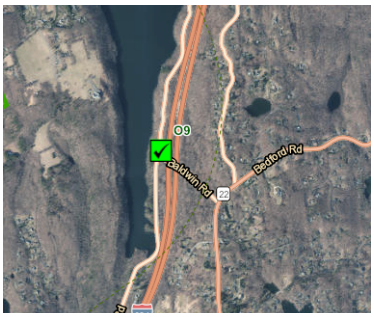
STRUCTURE TYPE:	Base Station
FACILITY TYPE:	High Tension Tower
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	
FACILITY SITE NAME:	
SERVICE PROVIDERS:	T-Mobile
FCC ASR:	
HEIGHT:	110’
LOCATION:	Utility Easement
LATITUDE/LONGITUDE:	41.213825 N, -73.781286 W
PARCEL ID:	70.11-1-17
ZONING:	R1-200 Single-Family Residential
NOTES:	

Site Y18 — Yorktown

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	American Tower Corporation - 207934
FACILITY SITE NAME:	Crompound II
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon
FCC ASR:	
HEIGHT:	146’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.213758 N, -73.780396 W
PARCEL ID:	70.15-1-1
ZONING:	RSP-1 Senior Residential
NOTES:	T-Mobile meter not in but labeled for it

Site O9 — Other

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	863935
FACILITY SITE NAME:	
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon
FCC ASR:	
HEIGHT:	147’
LOCATION:	Inside Right-of-Way
LATITUDE/LONGITUDE:	41.162652 N, -73.689721 W
PARCEL ID:	
ZONING:	
NOTES:	Need to verify providers



Site O19 — 7 Morning View Court — Other

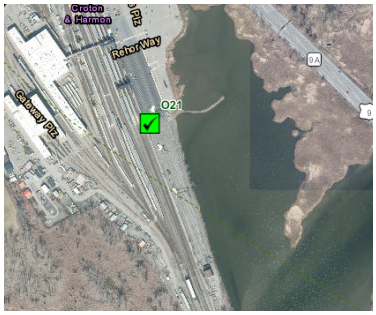
STRUCTURE TYPE:	Tower
FACILITY TYPE:	Lattice
ANTENNA TYPE:	Macro and Public Safety
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	American Tower Corporation, 88153
FACILITY SITE NAME:	Plesantville
SERVICE PROVIDERS:	Metro PCS, Verizon
FCC ASR:	1294032
HEIGHT:	126’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.152153 N, -73.785761 W
PARCEL ID:	
ZONING:	
NOTES:	Metro PCS is now T-Mobile

Site O20	121 Claybird Lane	Other

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	American Tower Corporation, 272961
FACILITY SITE NAME:	Mt Pleasant NY
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon
FCC ASR:	1257061
HEIGHT:	140’
LOCATION:	Private Property
LATITUDE/LONGITUDE:	41.161758 N, -73.814842 W
PARCEL ID:	
ZONING:	
NOTES:	

Site O21	Other

STRUCTURE TYPE:	Tower
FACILITY TYPE:	Monopole
ANTENNA TYPE:	Macro Cell
DESIGN TYPE:	Non-Concealed
FACILITY OWNER/ID:	M&B Towers, LLC
FACILITY SITE NAME:	Croton-Harmon Station
SERVICE PROVIDERS:	AT&T, T-Mobile, Verizon
FCC ASR:	1269126
HEIGHT:	144’
LOCATION:	Public Property
LATITUDE/LONGITUDE:	41.188396 N, -73.881571 W
PARCEL ID:	
ZONING:	
NOTES:	One additional unknown provider



APPENDIX E2

WIRELESS INFRASTRUCTURE SURVEY RESULTS

Wireless Infrastructure Poll

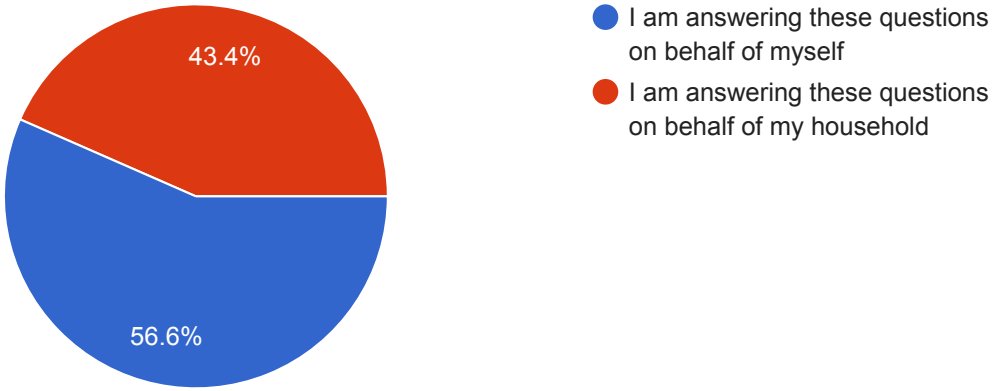
475 responses

Publish analytics

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

Copy

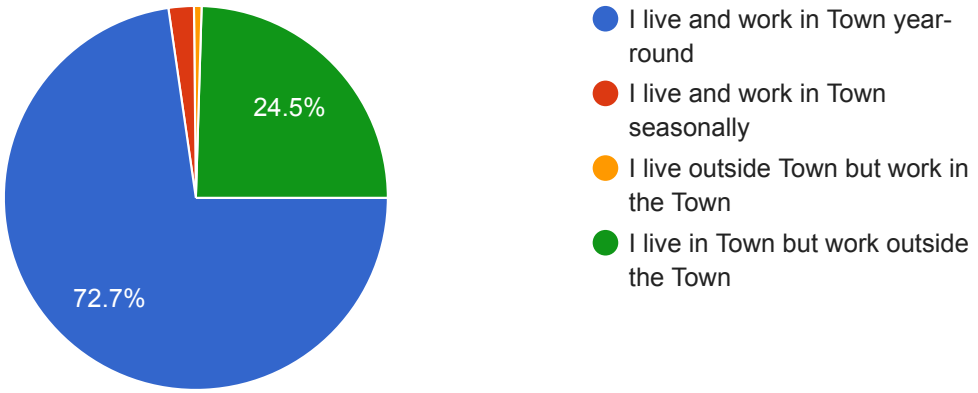
472 responses



Choose which best describes you:

Copy

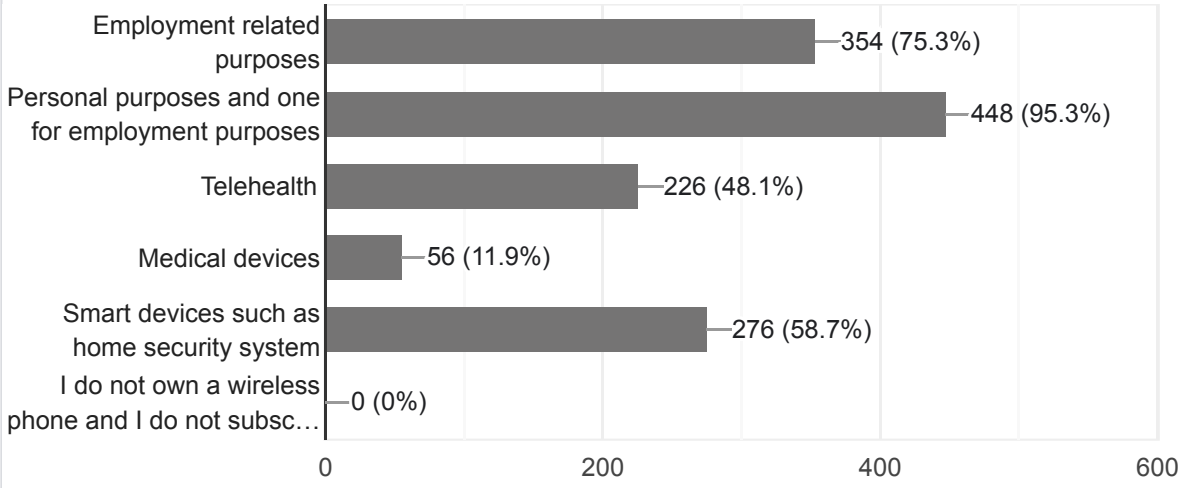
469 responses



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

Copy

470 responses



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

466 responses

10514

10549

Chappaqua

10546

Millwood

10562

Chappaqua

Kisco Park

10570

Hamlet

10504

Smith Street, Chappaqua

Dodge Farm

Indian Hill

[redacted] winthrop Rd Chappaqua Ny 10514

Pine Cliff Road

Marcourt Drive

West Place, Chappaqua, NY 10514

[redacted] park drive chappaqua ny 10514

[redacted]Shadow Brook Pky, Chappaqua

10514/Chappaqua

[redacted] High Way, Chappaqua, NY, 10514

[redacted] Stonewood Lane

Elm Street ,10514

Mid place

105141110

Riverwoods

10549

10514, Chappaqua

Breckenridge Rd, Chappaqua

Breckenridge Road

Inningwood area Millwood

Cross ridge rd

[redacted] Quaker Rd, Chappaqua

[redacted] North Greeley Avenue

Pond Hill Rd, Chappaqua

West End off Rt. 133

[redacted]

King Street near Grafflin Elementary school

[redacted]cindy way chappaqua

Old Lyme Rd 10514

Whippoorwill Road

Aldridge Road Chappaqua

[redacted] Paulding Dr Chappaqua NY

Lawrence Farms Crossway Chappaqua 10514

Millwood area

[redacted]Woodland Place 10514

[redacted] Quaker Rd. 10514

[redacted] douglas rd

Devoe Rd, Chappaqua, NY

[redacted]valley lane chappaqua

Spring road 10514

[redacted] Haights Cross Rd, Chappaqua, NY 10514

[redacted] N. Greeley Ave

Hamlet

meadow ln 10514

[redacted] S Bedford Chappaqua

[redacted]awrence farms crossway, chappaqua, 10514

Old Farm Lake - Pond View Lane, Chappaqua

10514 - Lawrence Farms East

Random Farms

10549 - the "Kisco Hills"

King street, Chappaqua

Hardscrabble Lake

Alta Lane

[redacted]alpine ln, chappaqua

[redacted]Neustadt Lane 10514

Fernbrook Drive 10514

Garden ridge road, 10614

Riverwoods

sleepy hollow road chappaqua

[redacted] Quaker road chappaqua 10514

[redacted] Old Chimney Road, Mount Kisco 10549 (Riverwoods).

[redacted] Haights Cross Road

Chappaqua - Devoe rd

10514- Millwood side

[redacted] Ridgewood Terrace, Chappaqua, 10514

[redacted] Marcourt Drive, Chappaqua, NY 10514

Douglas Rd

Oak Hill Road

Valley View Rd

Fox Den Rd, Mount Kisco

Seven Bridges Road

deerfield ln north

[redacted] Hardscrabble road chappaqua

[redacted] Glen Terrace

Jeffrey Lane

Seven Bridges Rd

Cross Ridge Road

Chappaqua 10514

10514, Old farm road north

Oak Hill Road, 10514

Haights Cross Rd

Cross Ridge rd, chappaqua

Far Eastern part of town - 10549

Turner Drive- 10514

Oak Hill Road, Chappaqua, NY 10514

Rose Lane, 10514

Millwood 10546

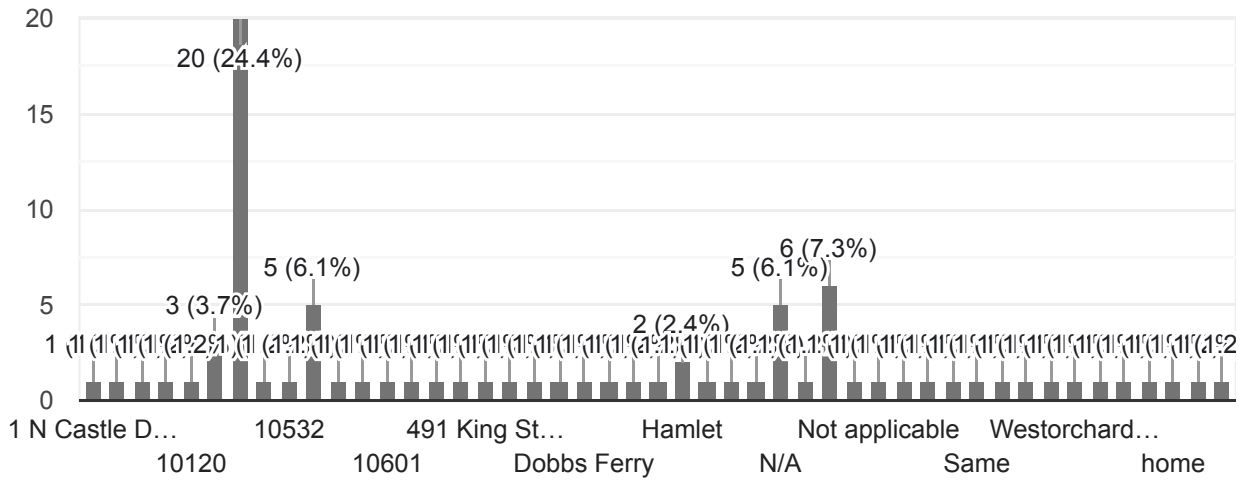
Mohegan dr 10514

103 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

Copy

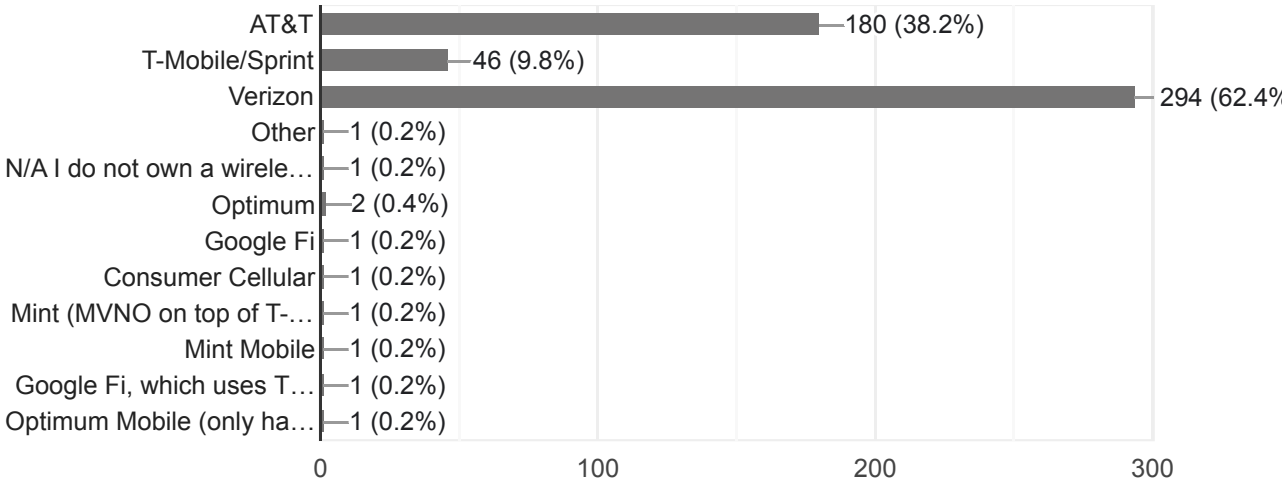
82 responses



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

Copy

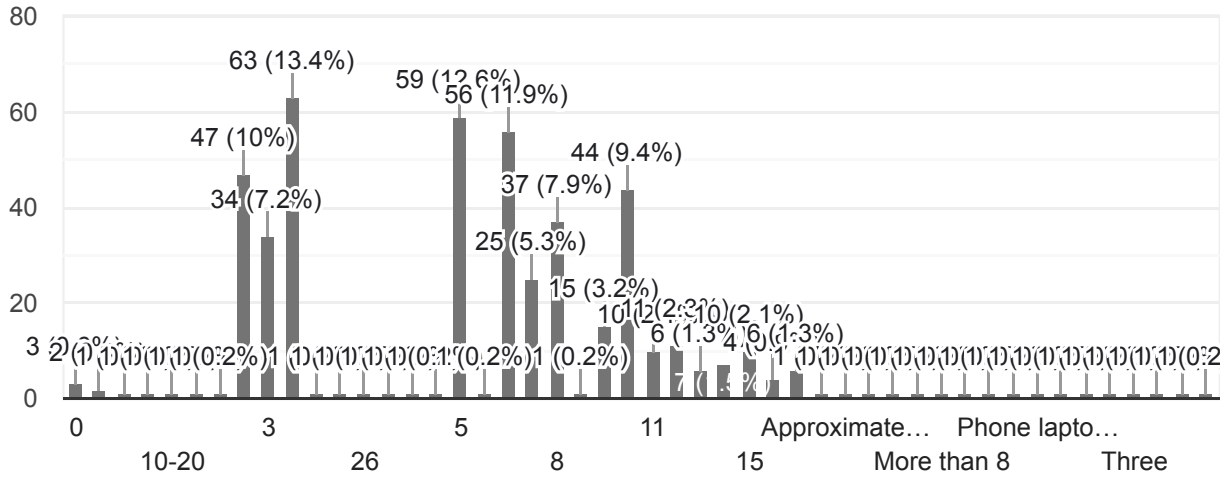
471 responses



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

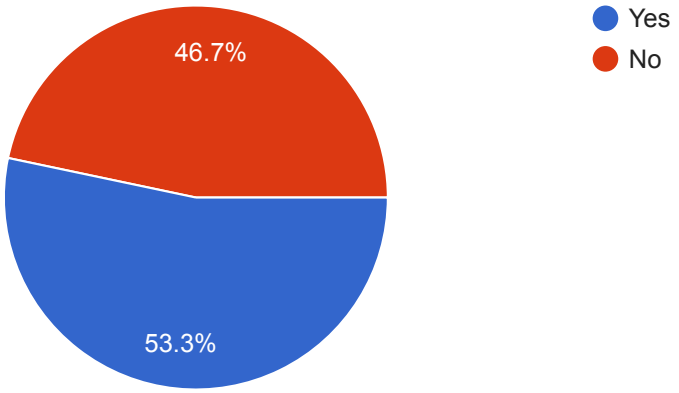
469 responses



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

Copy

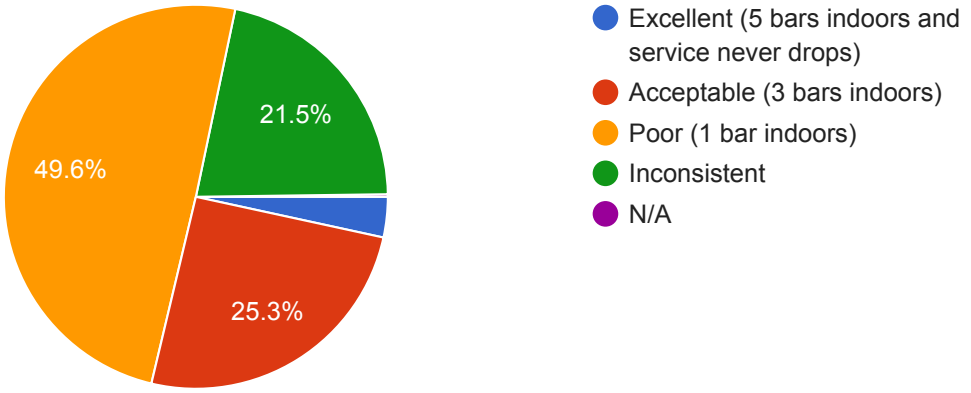
469 responses



Wireless network coverage where I reside is:

Copy

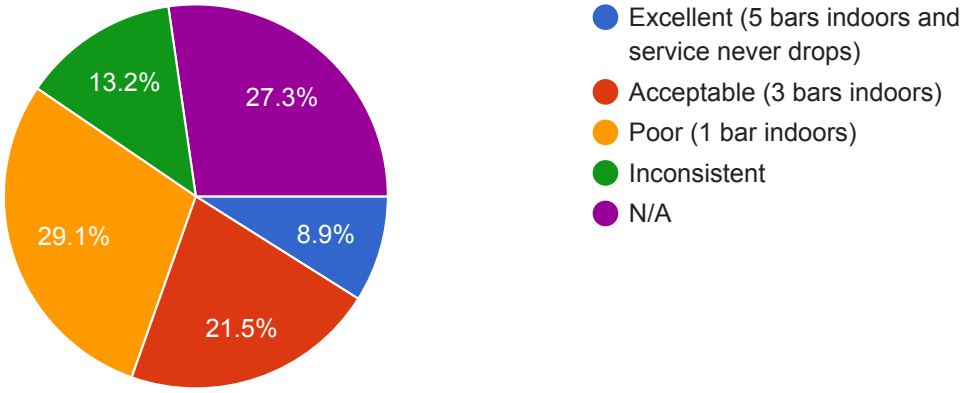
470 responses



Wireless Network coverage where I work is:

Copy

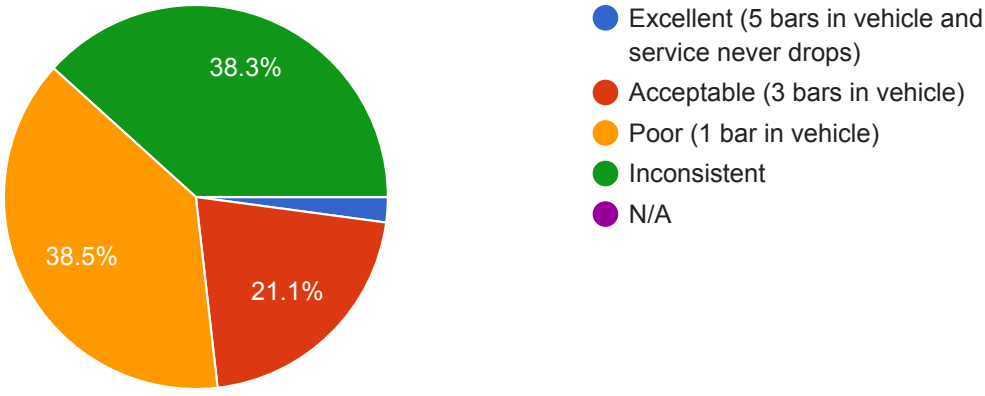
447 responses



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

Copy

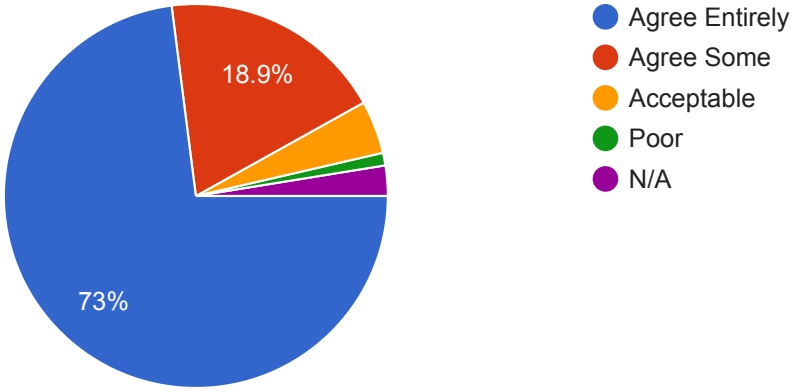
470 responses



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

Copy

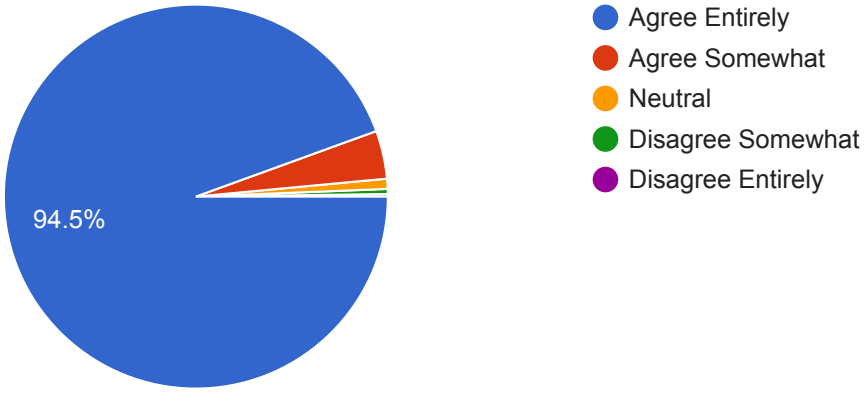
470 responses



The quality of wireless service is important to me.

Copy

469 responses



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

370 responses

Douglas Road

Everywhere

Everywhere

Downtown

Home

home

Douglas Rd

Quaker rd

Indian Hill/Fox Den and Kisco Park

My home

Douglas Road, Quaker Road, Hardscrabble Road, Bedford Road

Our st Winthrop Rd has 0 cell service. It is unacceptable. Please fix it. Westchester as a whole is like living in a 3rd world country when it comes to cell service

Near town center in Chappaqua

near our current home and also our former home in New Castle

Hamilton Road. Almost nonexistent Verizon cell coverage, especially bad when leaves are on the trees.

Marcourt Drive, Seven Bridges Road

At my house; Route 120 heading toward Armonk.

Park drive, Douglas road area

When I’m downtown, I consistently have “bars” but actually have no service. Very strange. If I’m in Ibiza and want to text someone, I have to walk out of the restaurant and over to the corner opposite Starbucks to connect to their WiFi so I can send my text.

our town's cell service is generally trash and completely unacceptable

Northwest part of town near Milwood

[redacted]around Bear Ridge Road, Douglas Road, Hardscrabble Road, [redacted]

Near our house on Quaker Road (close to the duck pond) there is pretty much no cellular service. A few blocks in either direction and it returns, but it is very frustrating right where we live.

by the fire station next to Quaker Hill Tavern and on Douglas by the pond off the saw mill

Walgreens and Memorial Drive area

Home residence

133/120

Home, near Chappaqua Crossing and the Kittle House.

133 between 7 Bridges and the Saw Mill

Hamilton Road

West End

King St

At my home on Breckenridge, and downtown Chappaqua

My home. Without the extender, there are only 2 rooms that get any service at all, and that's 1 bar sitting next to a window. Most of the house has zero service.

Rt 133, Rt 100 (north)

Roaring brook road, cross ridge rd

Douglas rd, Bedford rd between town and Chappaqua crossing

At Roaring Brook school, at the beginning and end of Oak Hill Road

Rt 133

Downtown Chappaqua: Greeley Ave, King Street

It is largely a provider issue, Verizon has much better coverage in my area than AT&T. Neither work near Duck pond.

120 by Grafflin-consistent dead patch. Algonquin drive, devoe area. Very inconsistent

Heading towards Armonk

Douglas RD btw Kipp and Oak Hill, Oak Hill Rd on Douglas side, Pond Hill RD & Kipp

Route 120 heading into Chappaqua from the north

Rt. 120 between intersection with Rt. 133 and Douglas Road; Rt. 120 south of Grafflin school.

Train station; corner of Bedford and King

1) Rt 120 towards Armonk; 2) Intersection of King Street and Bedford Road; 3) Near Temple Beth El

roaring brook road, cross ridge road, route 133 from mt kisco line to millwood, 7 bridges road, 120 from 133 to town of chappaqua

Service is poor near Grafflin. Used to be excellent and deteriorated last year - perhaps due to 5G towers

Throughout Whippoorwill Road and particularly in the Armonk portion

Route 120

Roaring Brook, 120 near Hardscrabble, 133 near the firehouse, 120 tween chapp and Armonk, 133 tween 7 bridges and old roaring brook

At the bottom of hills and valleys and on something the roads like hardscrabble.

Downtown chappaqua

Seven Bridges - no 5G still

West end, Douglas Rd, King St (Route 120) near Bear Ridge Rd

My home address, Traveling on 120 (around Birchwood) to 133 by Gedney, Birchwood

When driving through back roads from Roaring Brook Elementary School to get to the Saw Mill Parkway by Chappaqua Crossings.

My neighborhood

Mainly Douglas Road, Gedney Park, Wynnewood Road, Hunts Lane

Douglas Road including extension

Yes. There are several, including my home on Laurel Lane.

Quaker road, 7 bridges road, 133 just east of 7b road

My home on Fox Den Rd in Mount Kisco

Occasionally drop calls on 117 between 120and Roaring brook road

Anywhere in chappaqua

Quaker road

Coverage in town used to be excellent but since last august or September it has been terrible

Quaker Road on the town end; areas of town. The that block the tower on the Flag Hill side.

 douglas rd, our home

On Route 120 between Chappaqua and Armonk

Roaring brook, lawrence farms crossway

117 near Walgreens all the way north to Annandale

Almost everywhere

All over!

Terrible and often no service around Old Lyme Rd. Same around King St. driving towards Armonk.

Roaring Brook Road

Valley lane, Hardscrabble road, on all school and town fields and parks.

Spring road, Douglas road, chappaqua road

Whippoorwill Road area; King Street from Bear Ridge Road to the intersection with Bedford Road; inconsistent throughout the Chappaqua Hamlet.

Haights Cross Rd mainly and on Rd 120 from town towards Armonk.

Almost every place in town; Douglas Road, Hardscrabble Road, King St. 120 - it's getting worse and worse

Downtown, near all schools, on Greeley, on King, on Quaker headed to Millwood-

whippoorwill crossing; whippoorwill road

The Main Street on king/s greely

Rte 120 along the reservoir from the Armonk border near Whippoorwill Crossing and Bear Ridge Road all the way to Rte 117- hasn't been service there for years.

Hidden Hollow Lane & elsewhere in Millwood

Route 117 between Route 120 and Chappaqua Crossing. Route 120 towards Armonk. Route 133 near 120.

train station, residence

driving up 120 by roaring brook school and then when i make the right onto seven bridges and then when i make the right onto lawrence farms crossway. service is really bad and calls

always drop. also driving to armonk from chappaqua on 128 is really bad. ultimately though the service at my house is poor and when i lose internet it becomes impossible to work from home.

Paulding drive, quaker road, Gedney park

Hillholme, where I live, has terrible service.

whippoorwill road near route 117

The area from Smith Street to the Chappaqua Library, including Town Hall.

Rambling Brook Rd - Old Farm Lake, Rt 120 East of Haights Cross Rd

Anytime driving on King Street between Grafflin and Armonk service always drops in certain areas.

Service is inconsistent all over town. Some days it works and some days is doesn't even in the same location.

various locations

Downtown, near my home

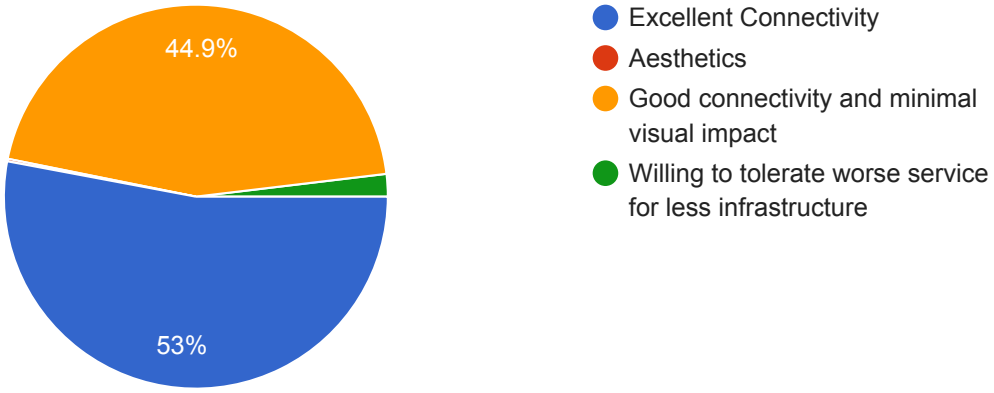
259 more responses are hidden

Aesthetics and Location

What is most important to you?

Copy

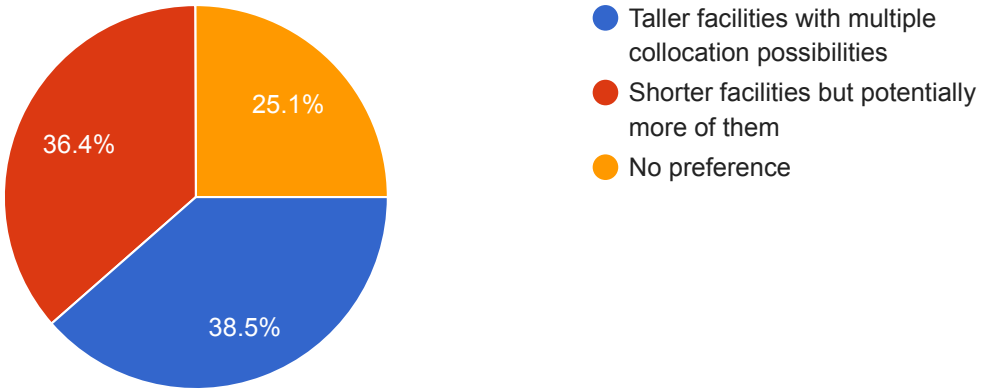
474 responses



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

467 responses



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

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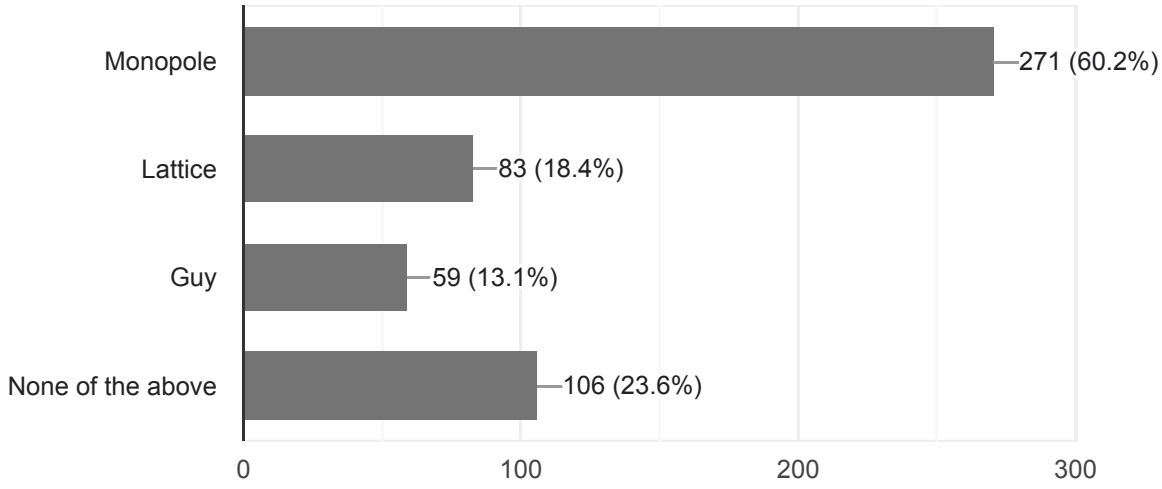
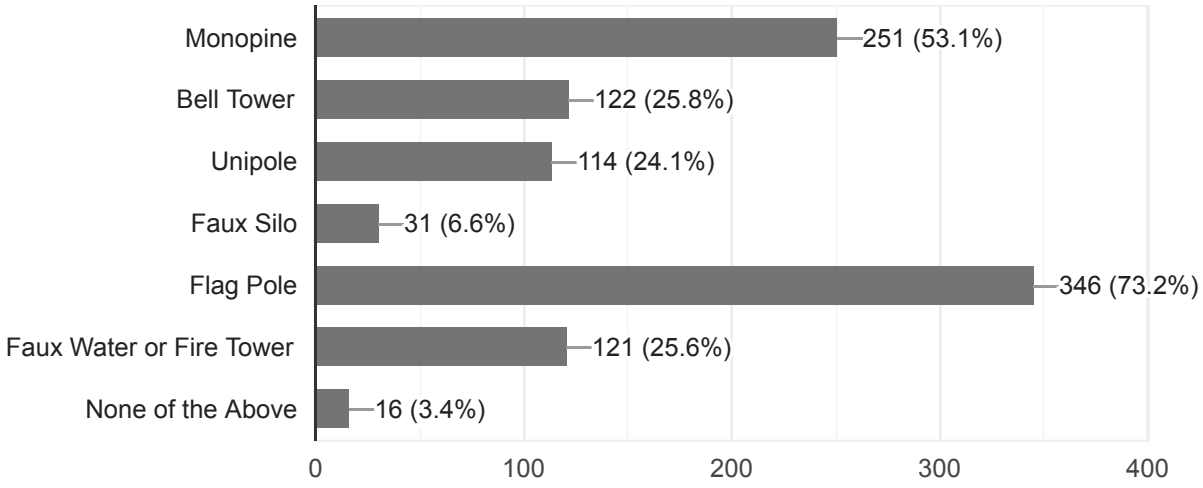
450 responses



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

Copy

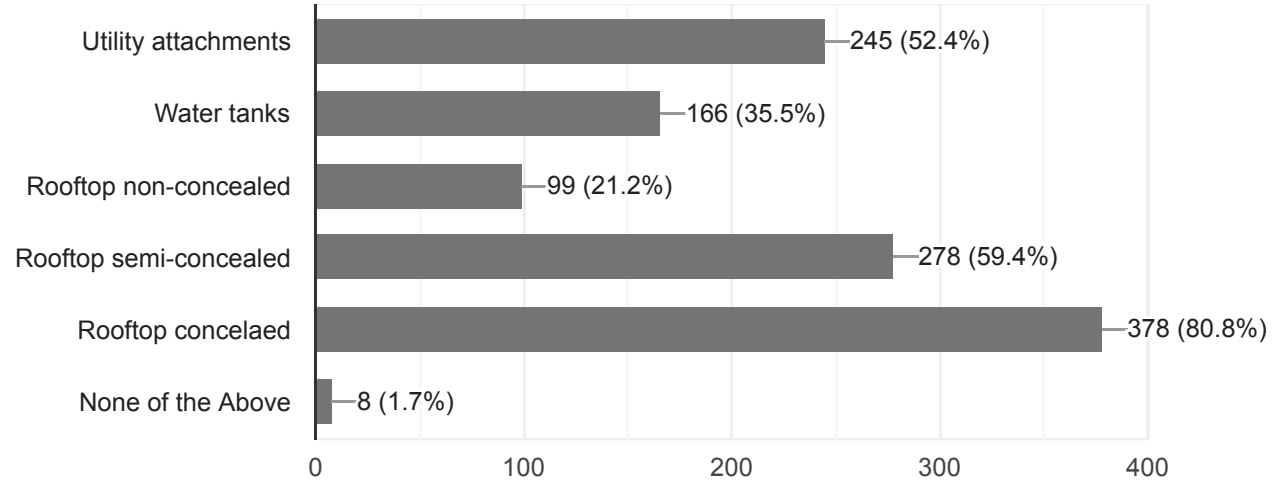
473 responses



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

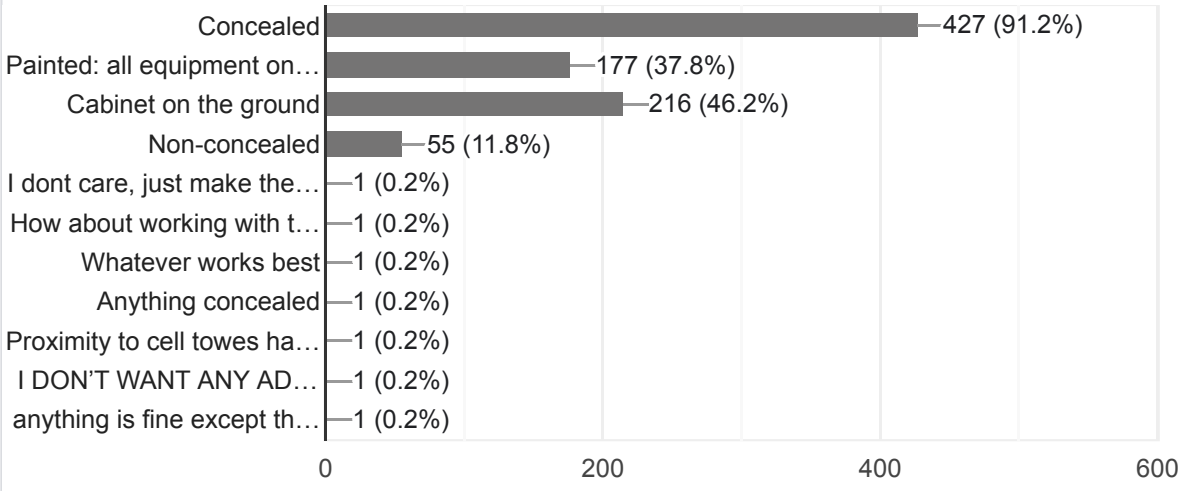
468 responses



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

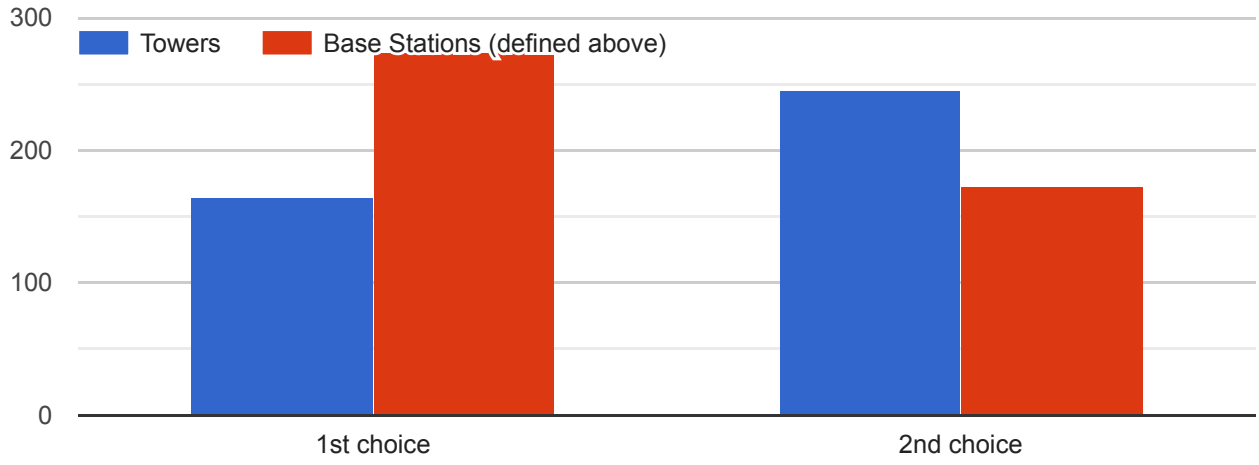
Copy

468 responses



Which do you prefer?

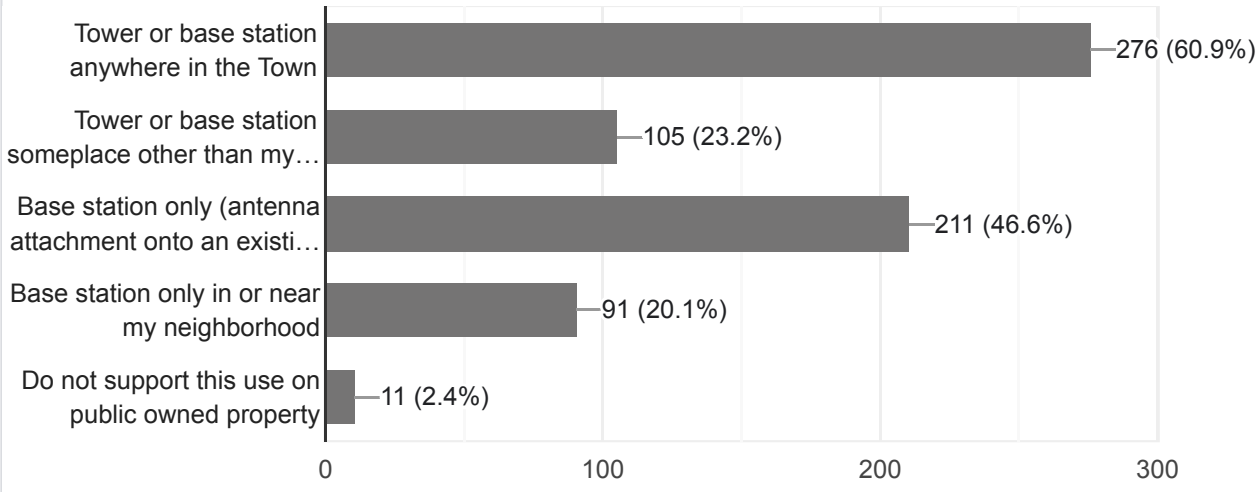
Copy



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

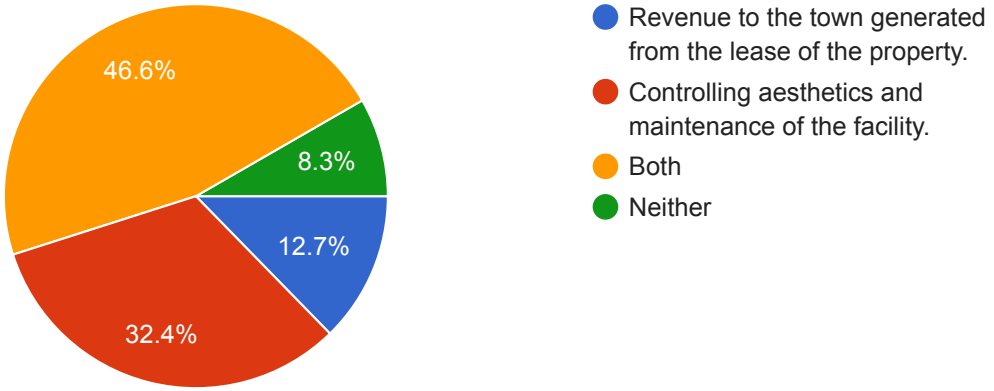
453 responses



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.

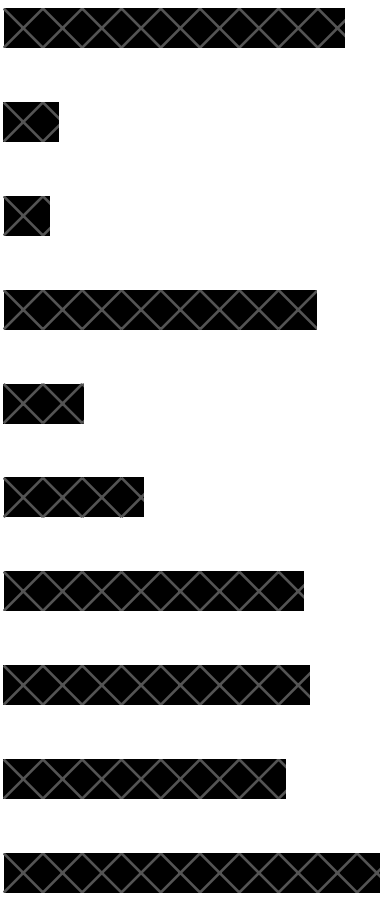
Copy

457 responses



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

475 responses



Thank you for working to address this!

I would be interested in feasibility of “small cell” technology in my neighborhood

Reception is terrible in our house. In the event of a power loss that knocks out cell reception we are screwed if there were a medical emergency. We appreciate that this is finally being looked at in a coordinated manner.

This survey is poorly constructed. Where is the option for a retired person who lives here, but does not work?

Would just like to say that our cell phones are basically useless unless we are on wifi at home and in town.

Keep installations to a minimum is purely residential areas.

Cell service is particularly critical when power goes out, as most people no longer have traditional landlines. This issue is more than convenience — it is significant safety issue.

I have been thinking of dropping verizon since it has gotten so bad. I couldnt make a call the other day from route 133 to the town of chappaqua. kept getting no service notification on my phone. annoying

Cell service in the Whippoorwill area is unusable and creates a safety risk without a clear backup to the personal WiFi network in my house

Thank you for doing this and involving all of us in the decisions

Our home address and surrounding area requires some enhancements to wireless coverage. Our household is unable to make a call if our wireless provider has an outage which leaves us vulnerable during storms.

Verizon Wireless service is terrible in many parts of town.

I think we also need to consider that fact that both German and Israeli studies confirm substantially elevated rates of cancer and birth defects within one mile of cell phone towers. We need to keep these off the school grounds. And away from homes for you are creating what real estate appraisers call an ‘external obsolescence’ by placing such a tower near a home.

Coverage with minimal impact to wildlife and neighborhoods would be ideal. Unfortunately the equipment definitely looks industrial, especially the towers. It's all pretty ugly.

Some wireless providers are better than others. Eg, AT&T works decently at my residence but no other providers work at all.

We really need cell service in town. It’s horrible for public and businesses to be disconnected

Please ask Verizon to remove the layers of old, unsightly wire that are no longer working.

Our house was struck by lightening several years ago. We had no electricity, smelled smoke. Wanted to call fire department. Husband ran to neighbors, but no one was home. Husband ran down Douglas road until he got signal on iPhone. It took 45 minutes to get fire dept. Here. We are elderly. If power is out, and our cells and devices are useless, what do we do in a medical emergency?

Pls get this issue fixed, it is baffling how in 2022 we do not have full cell coverage in a town in America with such high median household income and where residents pay the level of taxes we pay. Thank you for working towards fixing this.

We need better reception and connectivity. It is getting impossible to use phones in more and more places around town. In 2022, this shouldn't be an issue we are facing

Would like better service in my home. Service people have trouble connecting to towers

during power outages we have no services at all which is dangerous.

What is very important is that the Town of New Castle follow through to ensure that there are back up generators as required on ALL TOWERS that service the Town! I cannot stress this enough. When we have power outages, and it is not infrequent, we have NO PHONE SERVICE of any kind at all. As most all phones now rely on VOIP, with no power, we have no telephone service, no email, no text availability and no way to reach the outside world in an emergency other than to get in a car and drive a few miles to find service which is often impossible with downed trees and wires. This happens ALL THE TIME in a power outage and IS DANGEROUS!!!!! The Town must follow through to ensure that there are back up generators that come on during power outages. This is 2022 and hardly anyone has land line old fashioned copper wires phones so we are all at the mercy of cell service in a power outage. Especially dangerous for older residents who live alone or those who rely on service for medical reasons. It is not acceptable!

System should provide service even during storms and power outages

thank you for doing this. it will be awesome to be able to drive around town and not have calls drop consistently. it will also be awesome to have great cell service at my house.

This survey talks about various towers etc., but it does not mention whether there are any health concerns.

Re: Our service - it is a good thing that we have a landline. We have trouble making cell calls from our area and that is ridiculous. (We have to drive 1/2 a mile away to get better cell service.)

Thank you for this effort.

I work at the library, three doors from my home, and can't place a call or send a text from one to the other! When trying to place a call from my car, as I drive around town, I'm given the message that no network is available. If the base station option is chosen, can a tower be incorporated into the new construction planned for North Greeley Avenue? Alternately, the stadium lights on the Rec.Field might offer a concealed option. Otherwise, I opt for the "tree", maybe by the highway as in Mamaroneck/White Plains.

I have AT&T and live in the heart of Chappaqua. The wireless service at my home has become so unreliable that I can no longer take important business-related calls on my cell phone, as I estimate that over 50% of calls are dropped. It has become a significant hardship.

Fix route 120 service!!!

20 years ago, ugly cell phone towers lowered property values. Now, an absence of cellular signal lowers property values. Please tell all the old who are still angry about getting a traffic light near Starbucks to help drag this town into the world of modern public utilities.

My house currently gets an extremely poor cell signal. As this is our main source of communication, wireless service does need to be upgraded. Service has deteriorated over the years.

The service is getting worse and worse instead of better.

Thank you

Thank you for asking residents about their preferences on this matter.

It is critical to mandate all equipment is resistant to weather damage (hurricanes and strong winds) and has adequate power generation to maintain communications during power outages. One possibility would be to add wifi capability as well near these towers.

wireless service has significantly worsened in the last couple of months

No option was given for retirees. We live in town but do not work in town or elsewhere. BTW: Ambulance Corps property is not town owned.

As should be clear, I think the service is awful around Chappaqua and I don't care about the aesthetics of improving it - just want to have it improved dramatically. Thank you

High connectivity balanced with low visibility would be our choice

Beyond and more important than the convenience of using our mobile devices around town is the safety benefit of increasing cell connectivity in the event of an emergency.

not any easy thing to do. Good luck!

Would love to have better reception around town, especially in case of emergencies.

service really needs to be addressed - its gotten worse over the past 2 years!

Build a 5 G ready infrastructure. Aesthetics don't matter. Electricity/tel pols are ugly and invasive, yet with live with them because we are used at this point. We need to do the same with wireless infrastructure.

The wireless service in the center of Chapp is essentially nonexistent. I'd rather that be fixed first rather than in Millwood where I live because it is SO BAD and my kids and I have trouble communicating with each other for pickups etc when they go to town

I don't support a large tower put next to anyone's property, but would support it in a larger town owned property. Base stations more appropriate for residential neighborhoods as there are electric polls all over town.

I liked the bell tower but not with a cross on it.

Just need good cell service everywhere in town!!!!!!

Try to strike a balance between functionality and aesthetics

I would support using town/quasi town-owned land EXCEPT IN, ON OR NEAR SCHOOLS or public areas where people congregate for long periods of time

There are already too many structures(power lines) and eyesores in my neighborhood, that I do not want to add to them.

Please do whatever you can to fix this that won't give us all cancer!

Thanks

Reliable cell service is extremely important to first responders

Fix the coverage. Put the towers on town property.

We MUST have better cell service

Since the tower went up in millwood we get less service than before and we live down the road from it. Does it even work!!!!

Service is important but our town should maintain asthetics by NOT putting in big towers

I don’t care about the look, quality access to wifi is more important than the superficial BS of our town. We NEED wifi, we WANT things to look pretty. See the difference?

I have had cellular service at my house for the 18 years I have lived here. And this year is, by far, the worst it has ever been in 18 years. I would love to know what changed.

Am really frustrated with cell coverage in town

Please provide more consistent service!

Don’t listen to the nimbys!

Would LOVE to get service to be better

Thank you for trying to fix this issue!

Generally, would love to do anything we can to make our cell service consistent and reliable.

Let’s get with the times and update the infrastructure in this town.

I think we should be able to achieve both aesthetics and connectivity. As much as possible the connectivity sites should be hidden. I don’t think we should sacrifice connectivity, however.

Please make it better

Thank you for addressing this issue!

Hard to make judgments from pictures. I trust in our towns ability to choose logical and non-intrusive options for increasing function without being ugly. The ones that look like Light poles seem most appropriate.

I have horrible service and can never make a call while driving around town, please help! Thanks

Thank you

Thank you!

Thanks for doing this. It’s important that we fix cell service, especially at the train station, for safety reasons. I’m good with any kind of tower really!! Improved service is my propriety. Thanks again.

Repeated complaints to multiple current and past carriers yields no solution - in part because those who take calls are either off-shore, have little knowledge, and follow protocol scripts rather than logic and intelligence.

Proximity to cell towes has been associated with cancer clusters, so advice keeping them away from schools.

Service is horrible, so would love to see an aesthetically acceptable improvement. Thank you!

PLEASE DO NOT PLACE ANY ADDITIONAL TOWERS IN THE TOWN OF CHAPPAQUA NEAR ANY HOMES OR BUSINESSES. THE INCREASE IN RADIATION IS HARMFU AND CAN LEAD TO CANCER AND OTHER HEALTH ISSUES. PLEASE, PLEASE DONT’ SACRIFICE HEALTH FOR A STRONGER INTERNET CONNECTION.

Cell service has been an issue for a long time. Glad to see it is being addressed. Obviously anything that improves service with minimal visual impact is preferred. Thanks.

very frustrated with wifi/internet service on metro north corridor

Would not support at a school

My husband, a physician relies on his phone to talk to his patients, communicate with hospital etc. We can not give up our landline because of the inconsistency of reliable Verizon service. ATT was worse. He returned his phone to the university hospital because it rarely worked at all in our home.

Do whatever needs to be done as I have to move around my home when on cell phone calls and sometimes have to go outside. We still have a land line as a result

This issue has made it challenging to communicate via mobile devices which creates significant concerns since >90% of people reply on their cellphones as their primary phone and needs quick action. This hasn't been an issue in the past, more in the last few years, so should be rectifiable.

Please prioritize this issue -- it's been ongoing for way too long!

I'm new to town (with husband and toddler)and really frightened by the fact that I can't make or receive phone calls at home and that my GPS doesn't work. My father is elderly and I need him to be able to reach me no matter where I am. Thanks for looking into this issue!!

This is the number 1 most important issue for our household.

I have very spotty cell service from T-Mobile. Cell booster does not seem to help. Problem is intermittent.

Thanks for doing this!!

More and more, we are relying on good wireless connection to conduct video meetings while we drive our kids from activity to activity. Being able to contact someone is also vital during emergencies and power/internet outages. This happens very frequently in our town because of downed trees.

Thanks for doing this! Service is inconsistent and it can feel dangerous when driving to have no service.