

“White Paper” from *New York* describing Round 5 (Spring, 2012) Data Submission to the NTIA under the SBI

April 1, 2012

Executive Summary

The Broadband Mapping Team at the New York State Office of Cyber Security (OCS) is pleased to submit our Round 5 (Spring 2012) data for the State Broadband Initiative (SBI).

Our goals for Round 5 were to: 1) maintain the very high level of participation from New York providers, 2) Add to and enhance our data verification methods and, 3) improve the completeness and quality of the data delivered. We believe we have met those goals.

We had 87 providers participate in the fall 2011, Round 4 submission. That number has been reduced to 84 in Round 5; 3 new providers were added, but 6 Resellers were eliminated from our reporting. We anticipate an increase in that number in the future as we continue to reach out to small fixed wireless companies. We believe mapping these provider’s serviceable areas is a very important component required to fine tune NYS’s served and un-served boundaries.

We are very pleased with the enhancements to our verification methods implemented this round and are energized to continue to find innovative ways to use disparate data available from commercial, government and public sources to validate and identify inconsistencies in provider reported availability data.

Lastly, we made small but significant steps in improving the Community Anchor Institution data (attributes and location), middle mile points and, by working even closer with our providers, we were able to improve the quality of the availability data using the new 2010 Census geography.

The remainder of this paper provides a summary of our data collection results and describes our methodology for performing data verification.

Provider Participation Summary Tables for Round 5:

0	Potential Providers identified
4	Actual Providers identified
84	Total Participating Providers with data in the submission
66	Wireline Providers
19	Wireless Providers (2 are both Wireless & Wireline)
1	Provider is middle-mile only
42	Providers submitted Middle Mile Data

Technology Type	Wireline Census Block Provider Count	Wireline Service Availability by Census Block	Wireline Street Segment Provider Count	Service Availability by Street Segment	Wireless Provider Count	Wireless Services by Shapefile	Middle Mile Provider Count	Middle Mile Points
Asymmetric xDSL	38	300,197	34	25,218	0	0	26	1,494
Symmetric xDSL	2	61,448	1	52	0	0	0	0
Other Copper Wireline	2	87,666	2	210	0	0	0	0
Cable Modem - DOCSIS 3.0	6	224,355	5	17,018	0	0	3	10
Cable Modem Other	14	55,437	12	15,943	0	0	0	0
Optical Carrier/Fiber to the End User	22	123,514	17	2,225	0	0	9	663
Satellite	0	0	0	0	3	3	0	0
Terrestrial Fixed Wireless - Unlicensed	0	0	0	0	10	16	1	10
Terrestrial Fixed Wireless - Licensed	0	0	0	0	1	1	0	0
Terrestrial Mobile Wireless	0	0	0	0	6	14	2	16
Other (middle-mile only)	0	0	0	0	0	0	1	2

Verification List:

1. Automated tools
 - a. Domain and topology rules in delivery geodatabase
 - b. Submission scripts
 - c. Feature dataset cross checks
2. Provider website research
3. Crowd-sourced data
 - a. NYS Speed Test data points
 - b. FCC Speed Test records
 - c. NYS Broadband Map feedback
4. Use of government data sources
 - a. FCC Aggregated 477 Data
 - b. NYS DMV data
 - c. NYS Lottery terminal data
 - d. NYS Streets and Address ranges
 - e. NYS Address Points
 - f. NYS Orthoimagery
 - g. NYS Public Service Commission Cable Franchise Agreements data
5. Commercial data sources

- a. TomTom Data ILEC, CLEC and Rate Center Exchange Boundary data
 - b. Online look up tools for middle mile & central office locations
 - c. NAVTEQ address points
 - d. Pictometry oblique aerial imagery/Google's Street View
 - e. APNIC Whois database (publically available IP Address search engine)
- 6. Select Community Anchor Institution (CAI) locations
 - 7. Provider verification maps
 - 8. Clip wireless data to NYS Boundary
 - 9. Removal of 'uninhabited areas'
 - 10. Other Grantee State Broadband Maps and National Broadband Map
 - 11. Broadband Organizations: NYSTA, CTANY, WISPA

Explanation of Verification Activities:

1. **Automated verification** was accomplished via the following methods:
 - a. Business rules built into the SBI data transfer model: validate features and validate topology
 - b. Repeatedly running the NTIA supplied Python script, the Massachusetts modified Python submission script and frequency statistics script, as well as a New York modified version of the NTIA submission script combining elements of the NTIA and Massachusetts scripts
 - c. ESRI 'Frequency' tool used on Provider Name, DBA Name, FRN across feature datasets with cross comparisons to ensure consistency across all of these datasets
2. **Provider Website Research:** In Round 4, a careful study was made of the websites for New York State's 80+ broadband providers. The goal was to verify the technology and data transfer speeds that were voluntarily self-reported to the NYS Broadband Mapping Team. To corroborate these reports, speed data was collected from the provider's websites, and the maximum download and upload speeds were reclassified and coded into speed tiers between 1 and 11. The vast majority corresponded to self-reported speeds; however, we found 26 discrepancies of varying magnitudes. For Round 5, we used these findings to question and clarify reported speeds with providers.

Recently we re-examined the websites of providers where advertised speeds did not agree with those reported to the Broadband Mapping Team. Two of the websites revealed some slight revisions; Armstrong Telephone Co and Berkshire Telephone Corp. adjusted their maximum download speeds and Hometown Online (WVT Communications) website no longer reported speed specifics. Twelve other provider websites do not provide speed specifics. Conversely, providers (primarily the ones that provide a host of technologies) ranging from DSL to Fiber and Ethernet modified their website to better document their speed offerings. Still, there were a number of smaller companies that indicated to our broadband team they provide a higher speed of internet service than what is evidenced on their website. For

example, DFT Local Service Corp reported to us they have “11” speed technology, but it is not detailed on their website. We have uncovered only code “7” level speed, which is what their fastest DSL service registers. Also, two of the providers; Castle Communications of Willsboro, and Fishers Island Telephone Corporation, still did not have a working website.

In conclusion, the discrepancies uncovered in Round 4 relating to providers’ websites versus their reports to the broadband team still indeed exist for Round 5, although a slight refinement has occurred over the past 6 months. Most discrepancies are still within one or two speed code numbers (six are more than two apart), and while some of the websites boast higher speeds than self- reports, about half, like the DFT noted above, report to us greater speeds than their websites indicate. Our team realizes that websites cannot always be faulted for providing misinformation to the public. For example, some providers, such as Armstrong Telephone Company (owned by Armstrong Group--- or simply *Armstrong*) have a footprint outside of New York, and the services they offer in New York State are more limited than elsewhere. Therefore, these provider websites appear to indicate a discrepancy from what they report to New York versus their online presence. In this case there is not a discrepancy, rather a misunderstanding on the part of our Broadband Team due to the vague information presented online. This could be a reason why many companies that do not provide the same level of services to their entire territory choose to remain vague on their website, despite the desire for more detailed information by the public at large.

3. Use of crowd-sourced data:

- a. NYS Speed Test data points and attributes were used to verify provider reported availability. The NYS speed test website includes a data collection form which requests:
 - i. Street address at which the test was taken
 - ii. Service provider
 - iii. Service technology

After satellite provider records and sub-broadband speed records were removed, 6,426 records were successfully geocoded and used for verification. Four levels of verification were established for points that fell within areas of reported service availability. They are:

- Code 1 = Provider and technology matched
- Code 2 = Provider matched and technology unknown
- Code 3 = Provider matched but technology is mismatched
- Code 5 = Provider and technology unknown but Broadband is available in the location

Each census block and street segment availability record involved with this verification activity was assigned one of the above codes.

- b. FCC speed test records were used to verify provider reported availability. FCC speed test records lack provider information but we were able to successfully establish the provider via a publically available IP Address search engine (the APNIC Whois Database). Those records were then used to verify provider reported availability in the same manner as was used with the NYS speed test

points. Because the technology was not known, the highest verification code assigned was 2 (Provider Matched and Technology = 'Unknown'). Here is a statistical summary:

	Number	Percentage
Total Number of FCC Wireline Speed Test Points	66,043	N/A
Total Number / Percentage Successfully Geo-coded	36,641 / 62,642	58%
Total Number / Percentage Successfully IP Searched	21,766 / 36,641	59%

c. NYS Broadband Map feedback:

While the volume of email responses has been lower during Round 5, we continue to receive, investigate, and reply to all feedback from responders to our New York State Broadband Map. New York considers this one of our most valuable sources of independent verification.

Public reports of inaccurate availability are logged and investigated within the block or segment using submitted provider data and provider websites, where applicable. If an address within the block or segment was identified by the provider's site as potentially served, that block or segment retained that provider's coverage on our map. If no addresses within the block or segment were identified as potentially served, we removed coverage of that block or street segment for that provider from our Map. Additionally, "suspect" blocks and streets were also investigated in previous rounds for overstated coverage and removed if we determined that coverage was inaccurate. These verification activities have continued during Round 5.

Here are summary statistics for this feedback activity during Rounds 4 and 5:

	Number	
Public emails received during Round 4 & 5	134	
	Block Records	Street Records
Number of locations investigated and verified	107	5
Number of locations investigated and removed	149	213

In an effort to gather more public feedback as well as improve the user experience, New York updated its broadband map on February 15, 2012 with enhanced functionality. Users can now report errors to displayed availability as well as "unserved" locations directly through an interface on the map. While we still encourage response via email, our goal is to increase our Round 6 feedback dramatically by making the process as easy as possible.

4. **Use of government data sources:**

- a. **Aggregated FCC 477 data** were used to identify providers by tract, speeds above and below 3 mbps, and business vs. residential offerings. Before our Round 5 data outreach and data collection we examined our Round 4 data against the aggregated FCC 477 data and made notes for each provider on how well our broadband data matched the subscribership area, speeds

above and below 3 mbps, and the extent of their business and residential offerings. These findings helped drive our outreach and communication with providers. We were also able to address speed issues and refine the availability footprints of some providers based on this data. In one case we were able to change our State Broadband Map to reflect that one of our providers provides broadband to business customers only, where before we displayed that they served both business and residential customers. In addition, we are looking into using aggregated FCC 477 data will be used to possibly help remove our bias in our calculation of housing units with broadband availability.

- b. The **NYS Department of Motor Vehicles** supplied three datasets in Round 4 for our independent verification activities. A list of 2,080 unique Satellite Offices, Dealer Locations and Inspection Station Locations were used to verify provider reported availability. *All of these facilities have broadband connections.* The Dealer and Inspection Location datasets did not have provider or technology information associated with the locations. Therefore, the highest verification code assigned to any Census Blocks containing the points and Street Segments within 500 feet of the points was a 5 because we were only able to confirm that there was broadband at those locations. However, the DMV Satellite Offices dataset came with provider information, so any Census Blocks containing the points and Street Segments within 500 feet of the points that matched the provider name were assigned a verification code of 2.
- c. **The NYS Lottery** supplied a new dataset to add to our independent verification sources for Round 5. The majority of the Lottery data we received did not have provider or technology information associated with it, so it could not be determined if many of the sites *actually* had access to a broadband connection. However, there were 276 Lottery terminal locations that had provider information associated with them. These locations were *confirmed* to have broadband connections and therefore any Census Blocks containing the points and Street Segments within 500 feet of the points that matched the provider name were given a verification code of 2.
- d. **NYS Streets and Address Ranges** is a dataset we use to submit all of our provider data in census blocks > 2mi². They are also used as part of our geocoding. Street address ranges are also used in verification of provider data by testing addresses along segments with online provider service look-up tools.
- e. **NYS Address Points** were used in the verification of provider data from public reports through investigation of in-block addresses and then testing those addresses with online provider service look-up tools.
- f. **NYS Orthoimagery** was used as an aid during provider data processing.
- g. **NYS Public Service Commission Cable Franchise (PSC) Agreements data** was used in the verification of cable broadband availability. The dataset contains information about which cable providers are franchised by municipality and indicates if they provide cable broadband in the municipality or not. This dataset was used during data processing as a frame of reference for the cable broadband data we received and to flag and correct possible overstatement of provider data.

5. Continued use of commercial data sources:

- a. **TomTom ILEC, CLEC and Rate Center Exchange Boundary data** were used to verify provider reported availability. The TomTom data included boundaries for many of the broadband providers we have received data from. During data processing, TomTom boundaries for each provider included in the dataset were overlaid onto the provider blocks and street segments footprint to ensure that the availability data sent to us by the providers fell reasonably within the respective boundary in the commercially available TomTom data. All of the provider footprints that had matching boundaries in the TomTom data fell within their respective boundary. In one case, Verizon New York, the ILEC boundary was used to remove outlier data. Discontinuous blocks and streets submitted that fell more than one mile outside Verizon's ILEC boundary were removed. The TomTom Exchange Boundary data was used to further improve broadband availability and middle mile data for Frontier Communications. Their DSLAM data is CLLI-coded which are tied to specific exchanges. By using the exchange boundary dataset we were able to improve the accuracy of many of Frontier's DSLAM and Central Office locations, and thereby improve the blocks and streets broadband data for Frontier overall.
 - b. **Online look up tools for middle mile & central office locations**- Additional publicly available CLLI code location lookups were used to supplement the refinement of Frontier's DSLAM locations: *Marigold Technologies* Central Office Lookup Tool (<http://www.marigoldtech.com/lists/co.php>) and *TelcoData.us* (<http://www.telcodata.us/>) online search tools. Further research into these or other publicly available datasets may help us add to, refine, and verify our middle mile and broadband availability data for all of our facilities-based broadband providers.
 - h. **NAVTEQ Address Points** were also used as an aid during provider data processing, for geocoding address data, and also in the verification of provider data by testing addresses with online provider service look-up tools.
 - c. **Pictometry oblique aerial imagery/Google's Street View** . In the process of improving the CAI point location accuracy, we are using the CAI's website, Bing's Bird View (Pictometry Oblique Aerial Imagery) and Google's Street View function to provide us information to accurately put the points on the rooftop of the building. The CAI website can provide information about name, address, and exterior pictures of the CAI. With this information, we can use Google's Street View to identify the exact location of the building, either by matching the pictures or looking at signs. If Google's Street View failed to provide enough clues to be certain, we will use the Bing's Bird View to identify the exterior look of the building and try to match that with the pictures from the homepage. Additionally, we can look for adjoining clues such as a playground around the building if we are looking to improve a school CAI point.
 - d. **APNIC Whois database**, as mentioned above, was used add provider information to FCC speed test records.
6. **Select CAI locations** were used to verify provider reported availability. Through our continuing relationship with the University at Albany's Center for Technology in Government (CTG), we acquired new, complete broadband service details for 899 CAIs during the Round 5 data gathering process. Each of these records was used to verify the provider reported data. Where the information matched, the highest verification code was assigned (1 = Provider and technology matched). We also selected

Colleges, Hospitals, Federal Correctional Facilities, State Prisons and State Police Stations from our total collection of previously identified CAIs to be used as an additional verification data source. While we do not have complete service details for many of these facilities, we strongly believe all have broadband connections.

7. **Provider verification maps:** For providers with significant changes from the previous round, we created review maps showing Round 5 availability aggregated to census blocks and street segments. The providers were given at least five days to respond and initiate any changes or corrections. Changes were made based on provider feedback. Changes were documented for future reference. These OCS generated maps were later compared to the provider footprints in the geodatabase to ensure that the data loaded correctly. Many of the providers have multiple review maps, so each of these maps had to be examined and compared to the corresponding area in the data.
8. **Clipping all wireless data to the NYS boundary file** to help ensure topological compliance for all wireless availability to be wholly within New York State.
9. **Removal of ‘uninhabited areas’:** These areas have been classified as land where development cannot occur, and where household wireline broadband will not be needed at any foreseeable time. If the center of a census block with no population or housing units falls within an uninhabitable area, the entire census block $\leq 2\text{mi}^2$ or all street segments within an identified block $> 2\text{mi}^2$ are classified as uninhabited. We remove uninhabited blocks and streets from the provider submission data. The classifications of uninhabited lands include, but are not limited to: water, wilderness lands, reforestation areas, as well as portions of state parks, federal nuclear sites, and recreation areas. 21,675 census blocks out of 350,169 total census blocks in New York have been classified as uninhabited.
10. **Other Grantee State Broadband Maps** and the **National Broadband Map** were used to compare and identify providers and coverage areas particularly along NYS boundaries
11. **Broadband Organizations: NYSTA, CTANY, WISPA :** Since the outset of the program, we have cultivated and maintained excellent relationships with the New York State Telecommunications Association and the Cable Television Association of New York. During Round 5, we began working with the Wireless Internet Service Providers Association. We consider the collaboration and feedback we receive from these associations to be an important means for improving our broadband availability data and expanding the participation of facilities-based broadband providers in the SBI program.

New York Methodology Outreach List:

As directed by the SBI Program Office in the March 26, 2012 delivery webinar, New York has included only providers who submitted data, or those who have been identified as true potential providers, in our Round 5 Data Package.xls.

The following “outreach list” is a summary of providers not included in Data Package.xls. This list represents the volume of companies that New York has researched, contacted and, in some cases, received data from in previous and current data cycles. The list includes:

- Companies found to be “not a provider”
- Providers who do not serve New York
- Broadband equipment companies
- Providers who chose to opt-out of the program
- Resellers

Providers are identified by DBA name, provider type, and status. Comments are included for additional details.

Filing Company DBA	Provider Type: Broadband=1 Reseller=2 Other=3 N/A=4	Provided Data Will provide data Will Not provide data Non-Responsive	Comments (Correspondence)
2nd Century Communication	4	Will Not Provide Data	Purchased by Covad
3M Telecom Systems Division	4	Will Not Provide Data	Supplier of equipment to broadband providers
8x8, Inc.	4	Will Not Provide Data	Voice only.
A.R.C. Networks, Inc	4	Will Not Provide Data	Cannot identify this company or what they provide
ABA Net, LLC	4	Will Not Provide Data	Voice services
ACC Business	2	Will Not Provide Data	Emailed to indicate they cannot participate
ACC National Telecom	4	Will Not Provide Data	Voice/data infrastructure company
Access One, Inc.	2	Will Not Provide Data	Business only reseller.
Access Point, Inc.	2	Will Not Provide Data	Reseller.
Accessline Communications Corporation	4	Will Not Provide Data	Voice only.
ACCESSLINE COMMUNICATIONS CORPORATION	4	Will Not Provide Data	voice/telephony services
Ace Innovative Networks	2	Will Not Provide Data	Have contacted previously but reseller status was low priority for R5.
Ace Innovative Networks, Inc.	2	Will Not Provide Data	Reseller of Verizon.
Acella, Inc.	4	Will Not Provide Data	Voice only.
ACN Communications	4	Will Not Provide Data	Reseller "requires a pre-existing connection"
ACN Digital Phone	4	Will Not Provide Data	Voice/phone only.
Adelphia Cable	1	Will Not Provide Data	Does not provide services to NYS customers
Aeroblaze Broadband	4	Will Not Provide Data	Website listed will not open, no Google results.
Airband	4	Will Not Provide Data	Does not operate or have a market in New York
Airespring, Inc.	2	Will Not Provide Data	"Airespring, Inc. is a reseller of underlying carriers Only."
Allegiance Telecom, Inc.	4	Non-Responsive	Purchased by Qwest; no answer through two phone lines
Alliance Group Services, Inc.	3	Will Not Provide Data	Quote: Connects CLECs and ILECs to global network
AlreadyNet	3	Non-Responsive	Discovered in R5. Not a Provider
American Fiber Network, Inc. (AFN)	3	Will Not Provide Data	Company solely provides EVDO wireless cards
American Fiber Systems, Inc.	3	Will Not Provide Data	Sold to Zayo

American Telephone Co. LLC	4	Will Not Provide Data	"Not a provider" on Form C.
American Tower	3	Will Not Provide Data	Wireless tower company/infrastructure
Amextel	4	Will Not Provide Data	Voice services
AMp Networks LLC	4	Will Not Provide Data	Very unclear what they provide.
ANPI	3	Will Not Provide Data	Infrastructure/backbone- not end user.
Apptix, Inc.	4	Will Not Provide Data	Voice only.
Aptela, Inc.	4	Will Not Provide Data	Voice only.
Atlantech Online, Inc.	2	Will Not Provide Data	Reseller, few NY customers, not willing to participate.
Atlantic Telecommunications Services Corp.	4	Will Not Provide Data	Company provides cable services related to the NYS legislature (6/29/10 phone)
Backbone Communications Inc.	2	Non-Responsive	Reseller to businesses only; concentrated in NYC.
Bandwidth.com	2	Will Not Provide Data	CLEC. Buys services in bulk & resells portions to various customers
BCN Telecom Inc	4	Will Not Provide Data	Voice services
Bell Canada	4	Will Not Provide Data	Does not provide services to NYS customers
Bellsouth	4	Will Not Provide Data	Bellsouth serves 9 southern states; is related to AT&T.
Belmont Telecom	4	Will Not Provide Data	VoIP Wholesale, Long Distance, Roaming.
BestWeb Corp.	2	Will Not Provide Data	Not interested in participating.
BetterWorld Telecom LLC	3	Will Not Provide Data	Outside of NY state.
Birch Communications, Inc.	3	Will Not Provide Data	Outside of NY state.
Blue Wireless	1	Non-Responsive	Discovered from Tom Tom data summary. Left message with Rene Whalen. No Response.
BridgeCom International, Inc.	4	Will Not Provide Data	Purchased by Broadview Network Holdings
Bridgevoice, Inc.	4	Will Not Provide Data	International voice carrier.
Broadband Dynamics, LLC	2	Will Not Provide Data	Cannot determine what this company does- most likely reseller
Broadcore, Inc.	2	Will Not Provide Data	Reseller, data will be provided through Level 3.
Broadstar, LLC	3	Will Not Provide Data	Offers broadband within rental/condo communities. not public, more a reseller to communities
Broadview Networks	2	Will Not Provide Data	
BroadvoxGo!, LLC	3	Will Not Provide Data	Trunking and VoIP. not a provider.
Broadwing Communications	2	Will Not Provide Data	Broadwing's data will be provided by Level3
BT COMMUNICATIONS SALES LLC	4	Will Not Provide Data	Cannot identify services provided.
Budget Phone	4	Will Not Provide Data	Pre-pay phone- not a provider. Cannot identify website.
Buffalo Wireless	3	Non-Responsive	Not a Provider

BullsEye Telecom	2	Will Not Provide Data	Reseller, does not serve many NY customers, does not wish to participate.
Burlington Telecom	3	Will Not Provide Data	Not a broadband provider in NY.
Business Automation Technologies	2	Will Not Provide Data	Reseller, no NY customers
Business Productivity Solutions	4	Will Not Provide Data	Cannot determine services. Not a broadband provider.
Cable Positive	4	Will Not Provide Data	Provides educational programming about HIV/AIDS
Cable Services Company, Inc.	4	Will Not Provide Data	Provides broadband construction services, not broadband.
Cablevision Systems	4	Will Not Provide Data	This company provides internal networking and voice systems.
Call Catchers Inc.	4	Will Not Provide Data	Virtual receptionist- not a provider, not in NY.
Catskill Mountain Cablevision	4	Will Not Provide Data	Now owned by Mid-Hudson Cable
Cause Based Commerce Incorporated	4	Will Not Provide Data	Voice only.
Cavalier Telephone; Cavalier Business Communications; Cavalier Telephone and TV	2	Will Not Provide Data	Reseller, does not serve many NY customers, does not wish to participate.
CBN Connect, Inc.	3	Will Not Provide Data	Infrastructure/Backbone
Chain Lakes Cable	4	Will Not Provide Data	Company does not provide broadband to NYS customers.
Charter Communications Plattsburgh	4	Will Not Provide Data	
Cincinnati Bell	1	Will Not Provide Data	Discovered on FCC 477 list; does not offer wireline service in NY.
Cingular Wireless	3	Will Not Provide Data	Provides data through AT&T
Citizens Cablevision	4	Will Not Provide Data	Provides through Citizens Telephone of Hammond
Comcast Networks	3	Will Not Provide Data	
CommPartners, LLC	3	Will Not Provide Data	VoIP, co-location, reseller.
Communication Solutions Partners	3	Will Not Provide Data	Internet reseller previously researched. Website not active any longer.
Communications Network Billing, Inc.	4	Will Not Provide Data	Phone only
Comp Direct USA	3	Will Not Provide Data	Has nothing to do with broadband.
Computer SOS	4	Will Not Provide Data	Does not offer wireless to end user, only wireless networking.
ConnectMe, L.L.C.	4	Will Not Provide Data	Has nothing to do with broadband.
Cordia Communications Corp.	4	Will Not Provide Data	Phone only
CornerStone Telephone Company	2	Will Not Provide Data	Re-seller of Verizon services
Cox Communications	3	Will Not Provide Data	Does not provide services to New York State.
Crown Castle International	3	Will Not Provide Data	Does not provide end user services. Infrastructure only.
CSP Telecom	4	Will Not Provide Data	Voice services only.
Current Communications	4	Will Not Provide Data	Discovered on WISPA list, No wireless offerings.
Custom Network Solutions	3	Will Not Provide Data	Telecom solutions, T1, VoIP, Reseller.
cyberMIND	4	Will Not Provide Data	Does not provide broadband services.
Cypress Communications, Inc.	3	Will Not Provide Data	Not a BB provider. Trunking/colocation, etc.

DANC	4	Will Not Provide Data	DANC is primarily a backbone infrastructure company
Deposit Cable Television Inc.	4	Non-Responsive	Phone out of service; no online information (3/22/10)
Devine Communications, Inc.	4	Will Not Provide Data	Cannot identify company. Does not provide broadband.
DFT Communications/Netsync	2	Will Not Provide Data	
DHAKA TELECOMMUNICATION CORP	4	Will Not Provide Data	Bangladesh Not a NY/US provider
diDi Wireless Communications	4	Non-Responsive	Not a Provider
Direcway	3	Non-Responsive	Satellite service, not BB speed ave 500kbps as of this date, check again for future rounds...see if available in NYS
Dish Network	3	Will Not Provide Data	Television only
Douglas Computing Tech	2	Will Not Provide Data	Reseller, few NY customers, not willing to participate.
Downsville Community Antenna	4	Will Not Provide Data	Planning to close in summer 2010
Doylestown Cable TV	3	Will Not Provide Data	Does not serve NY.
Dream Catcher Communications	4	Will Not Provide Data	Provides advertising & marketing to NYS agencies and government offices
DSCI	2	Will Not Provide Data	Business only reseller. Left message.
DSL Communications, LLC	3	Will Not Provide Data	Cannot determine companies services.
DSL Extreme	2	Non-Responsive	Identified as a reseller, low priority for R4 outreach.
DSL.net	4	Will Not Provide Data	Company dissolved in December 2009.
DSLi	3	Will Not Provide Data	Serves S. Florida only
Earthlink	2	Will Not Provide Data	Reseller
East 2 West Networks Inc.	4	Non-Responsive	Phone disconnected; web site cannot be found.
East Telecom, Inc.	4	Will Not Provide Data	No website or contact information
ECR Voice, LLC	4	Will Not Provide Data	Phone services only.
Electric Lightwave	2	Will Not Provide Data	Purchased by Integra Telecom, which serves only the Northwest
Empire City Subway	3	Will Not Provide Data	Not a broadband provider.
Empire One Telecom (EOT)	2	Will Not Provide Data	Reseller
Encompass Communications	4	Will Not Provide Data	Calling Card Services
Endstream Communications, LLC	3	Will Not Provide Data	Does not supply end-user internet.
Engineered Communication Systems, Inc	4	Will Not Provide Data	Cannot verify company type- no valid website.
Enhanced Communications Network, Inc.	4	Will Not Provide Data	Voice only. From website: leading telecommunications carrier providing local service in California, New Jersey and New York.
Eventis Telecom Inc.	2	Will Not Provide Data	Reseller, does not serve many NY customers, does not wish to participate.
Equant, Inc.	4	Will Not Provide Data	Not a broadband provider.
Ernest Communications	4	Will Not Provide Data	Business only reseller.

Eschelm Telecom	3	Will Not Provide Data	Owned by Integra Telecom, which serves only the Northwest
Eureka Telecom	4	Will Not Provide Data	Cannot identify company- Eureka Telecom or Eureka Broadband.
EURO CONNECT	4	Will Not Provide Data	Voice services only.
Evercom Systems, Inc.	3	Will Not Provide Data	Does not provide broadband services.
eVolve Business Solutions LLC	4	Will Not Provide Data	VoIP only.
Evolve IP, LLC	3	Will Not Provide Data	Cloud computing- not a provider.
ExteNet Systems	3	Will Not Provide Data	Identified as broadband equipment business for wireless companies.
FASTNET	4	Will Not Provide Data	Discovered on WISPA list, may be part of PAETEC and does not have wireless.
Fidelity Voice Services LLC	3	Will Not Provide Data	Not a provider for NY.
Fionda VOIP, LLC	4	Will Not Provide Data	VoIP company- may not be in NY.
First Communications, LLC	3	Will Not Provide Data	Fiber backbone in NY. Will make contact for R5 for middle-mile.
Fribley Enterprises	4	Will Not Provide Data	Phone out of service; no online information
Gafachi	3	Will Not Provide Data	Provides wholesale VoIP services to providers and resellers.
GAW High Speed Internet	4	Will Not Provide Data	Does not appear to serve NY
Global Capacity Group, Inc.	4	Will Not Provide Data	Provides network services to telecom industry. Not a provider to end users.
Global Crossing	4	Will Not Provide Data	Letter indicates they cannot provider in 7-10 days.
Global Protection Communications Systems	3	Will Not Provide Data	Provides fiber infrastructure.
Globalinx	4	Will Not Provide Data	Reseller, VOIP. No applicable to program.
Globalnet Telecom, Inc.	4	Will Not Provide Data	Hosted PBX provider- no broadband.
GlobalPhone Corp.	4	Will Not Provide Data	Hosted PBX provider- no BB
Gore Mountain Cable TV	3	Will Not Provide Data	Cable TV only- PSC lists their franchises as 'No Broadband'
Granite Telecommunications, LLC	2	Will Not Provide Data	Reseller, does not serve many NY customers, does not wish to participate.
Great North West Telegraph Co	4	Will Not Provide Data	Company is closed.
GreatCall, Inc.	3	Will Not Provide Data	No data- cell/voice only
GTC Communications	3	Will Not Provide Data	Cannot identify company.
Hancel, Inc.	4	Will Not Provide Data	Cannot find any information on this company.
Hancock Video	3	Will Not Provide Data	Hancock Video does not provide broadband.
Hickory Tech	4	Will Not Provide Data	Added in R5, found on 477 data. Does not serve NY.
High-Speed Solutions	2	Will Provide Data	Reseller
Hilltop Communications, Inc.	3	Will Not Provide Data	Part of GTEL (Germantown Telephone)

Horizonone Communications, Quantumlink Communications, Voip Communications, Optic Communications, ANI Networks	4	Will Not Provide Data	Voice services only.
Hotwire Communications, Ltd.	2	Will Not Provide Data	Reseller, does not serve many NY customers, does not wish to participate.
Hudson Valley DataNet	3	Will Not Provide Data	Merged with Lighttower Fiber networks.
Hughes Network Systems	1	Will Not Provide Data	Satellite company; did not send data.
iBasis	4	Will Not Provide Data	Voice services.
iCore Networks, Inc.	4	Will Not Provide Data	Phone services.
IDT Corporation	4	Will Not Provide Data	Phone services.
IKANO	3	Will Not Provide Data	No end-users. Infrastructure only.
InPhonex.com, LLC	4	Will Not Provide Data	Phone services.
Insight Broadband	3	Will Not Provide Data	Serves only Ohio and Kentucky
Integra Telecom	3	Will Not Provide Data	Provides broadband in the Northwest
Integrated Services, Inc.	4	Will Not Provide Data	Voice services.
Intellifiber Networks	3	Non-Responsive	Infrastructure fiber for business and providers. No end users. Will look for middle mile in future rounds.
Interface Security Systems, LLC	4	Will Not Provide Data	Not a provider.
InterGlobe Communications	2	Will Provide Data	Reseller- low priority for R4 outreach
Internet Professionals & Network Solutions (IPNS)	2	Will Provide Data	Reseller- low priority for R4 outreach
Internet@ntc, Inc.	4	Will Not Provide Data	No idea who or what they are/do.
Interstate FiberNet, Inc.	4	Will Not Provide Data	Part of Deltacom- now part of Earthlink Business. Business only.
ION	3	Will Not Provide Data	Infrastructure only.
IP Communications, LLC.	4	Will Not Provide Data	Phone services.
IP Networked Services, Inc.	3	Will Not Provide Data	Business only reseller.
IPC Network Services, Inc.	4	Will Not Provide Data	Network equipment business- not a provider
Jet Wave Corporation	3	Will Provide Data	Email sent to Mr. Klein- cannot find any information on this company.
Jivitel Communications	4	Will Not Provide Data	Voice only.
Kosmaz Technologies LLC	4	Will Not Provide Data	Voice services only.
LaunchNet	2	Will Provide Data	Reseller
LCR Telecommunications, LLC	4	Will Not Provide Data	Wholesale long distance.
LDC Telecommunications Inc	4	Will Not Provide Data	Cannot identify company. website blocked.
LDMI Telecommunications, Inc.	3	Will Not Provide Data	Same address as Talk America; website goes to Cavalier.
LI Sky	4	Non-Responsive	Discovered in R5. Not a Provider
Light Tower Fiber Long Island LLC	1	Will Not Provide Data	Cannot provide service within 7-10 days.
LightEdge Solutions, Inc.	3	Will Not Provide Data	Does not provide broadband to NY customers, does not wish to participate.

Lightspeed Fiber Network	3	Will Not Provide Data	Lightspeed closed; phone transfers to Thalle Industries Inc., which does not provide broadband services.
LightSquared LP	3	Will Not Provide Data	Wireless backbone/wholesaler.
Lightyear Network Solutions, LLC	2	Will Not Provide Data	Reseller- may not fit 7-10 day req.
Line Systems, Inc.	2	Will Not Provide Data	Reseller.
Localnet	4	Will Not Provide Data	Dial up service only
Looking Glass Networks, Inc.	3	Will Not Provide Data	Acquired by Level3 Communications in 2006
Luzip Telecom Inc.	4	Will Not Provide Data	Voice only.
M5 Networks, Inc.	4	Will Not Provide Data	Voice only.
Magellan Hill	4	Will Not Provide Data	Telecom management company.
Matrix Telecom, Inc.	4	Will Not Provide Data	Reseller.
McGraw Communications, Inc.	3	Will Not Provide Data	Business only reseller, co-location, etc.
MCI Communications Services, Inc.	3	Will Not Provide Data	Voice only- data services provided by Verizon.
MCImetro Access Transmission Services LLC	3	Will Not Provide Data	Cannot identify.
Mediacom	4	Will Not Provide Data	Does not provide broadband to NY customers
Megapath	2	Will Not Provide Data	Requested removal from call list.
Meriplex Communications, Ltd.	2	Will Not Provide Data	Reseller, no NY customers
Metropolitan Fiber System of New York	1	Will Not Provide Data	Verizon Business Global letter indicates MFS cannot provide in 7-10 days
Metropolitan Telecommunications Holding Company	3	Will Not Provide Data	Reseller, does not provide broadband.
MFS of New York, Inc.	3	Will Not Provide Data	Verizon Business Global letter indicates MFS cannot provide in 7-10 days
Middleburgh Telephone	3	Will Not Provide Data	Seamless Geoport Communications does not provide BB
Milestone Communications of NY	3	Will Not Provide Data	Does not provide broadband to NY customers
Millicorp	4	Will Not Provide Data	VoIP and voice only.
Mitel Netsolutions Inc.	2	Will Not Provide Data	Reseller.
MIX NETWORKS, INC.	4	Will Not Provide Data	Voice services.
MKL.net	4	Non-Responsive	Discovered in R5. Not a Provider
My Tel Co, Inc.	4	Will Not Provide Data	part of Cordia- VoIP only.
Navigator Telecommunications, LLC.	4	Will Not Provide Data	Voice services
NBC TV	3	Will Not Provide Data	NBC TV - does not provide broadband services
NECC TELECOM	4	Will Not Provide Data	Voice/long-distance service.
Net One International, Inc.	4	Will Not Provide Data	Voice/long distance/calling cards
NetCarrier	4	Will Not Provide Data	Voice/pbx/data. not a bb provider.
Netifice Communications	3	Will Not Provide Data	purchased by Megapath in 2006

Netlogic, Inc.	2	Will Not Provide Data	Reseller, does not serve many NY customers, does not wish to participate.
Netsville	4	Will Not Provide Data	Discovered on WISPA list. Does not provide wireless to end user- networking only.
Network Billing Systems LLC	2	Will Not Provide Data	Reseller.
Network Communications International Corp.	4	Will Not Provide Data	Provides voice services for inmate/correctional population
Network Innovations	1	Will Not Provide Data	Provides broadband in MA & NH; very limited data service in NY
Network Operator Services, Inc	3	Will Not Provide Data	Cannot identify this company.
Network Service Billing, Inc.	4	Will Not Provide Data	Voice/long-distance services
New Edge Networks	2	Will Not Provide Data	Reseller that cannot provide within 7-10 days.
New Jersey DataNet Telecom, LLC	3	Will Not Provide Data	From our research: New Jersey DataNet Telecom, LLC, was the CLEC subsidiary of DataNet Communications Group. Lightower Fiber Acquired DataNet Communications Group.
New York RSA 2 Cellular Partnership (Verizon Wireless)	3	Will Not Provide Data	Provides data through Verizon wireless/Cellco Partnerships
NexGen Networks Corporation	2	Will Provide Data	Non responsive in previous rounds.
NextGen Telephone	4	Will Not Provide Data	From their website: &NextGen Telephone has ceased operations effective January 24, 2011."
Nextlink Wireless	2	Will Not Provide Data	
NextWave Wireless	2	Will Not Provide Data	No end user service
nexVortex, Inc.	2	Will Not Provide Data	Reseller.
NightOwl Internet Gateway	3	Will Not Provide Data	Email indicated company provides BB primarily in Missouri; not in NYS
NobelTel	4	Will Not Provide Data	Voice services only
North Penn Telephone	3	Will Not Provide Data	Offices located in NY, does not serve NY.
Northeast Optic Networks	3	Will Not Provide Data	Merged with Sidera
Northland Networks	2	Will Not Provide Data	Northland leases all of its facilities from its parent company, Oneida County Rural Telephone. (3/9/10 email)
Northstar Telecom	3	Will Not Provide Data	Called previously- not responsive. May not provide in NY.
NOS Communications, Inc.	4	Will Not Provide Data	Toll free and out-bound telephone services
NOSVA Limited Partnership	4	Will Not Provide Data	Same as NOS communications- voice services only.
NTCNet Telecom, Inc.	3	Will Not Provide Data	From research: NTCNet Telecom, Inc. is a small CLEC that operates as a subsidiary of Newport Telephone Company.
Nuvox	4	Will Not Provide Data	
NYSYS Broadband	1	Will Not Provide Data	Discovered on WISPA list. Business only fixed wireless in Rochester area. Called 12/14 and left voicemail.
Ojo Service LLC	4	Will Not Provide Data	Video/voice service.

OLS Inc.	4	Will Not Provide Data	Cannot identify this company or its services.
Omnipoint Communications	3	Will Not Provide Data	Small northeast wireless company, acquired by VoiceStream which is now T-Mobile.
One Communications	2	Will Not Provide Data	
One Source Networks	2	Will Not Provide Data	Global partner- reseller.
OneLink Communications, Inc.	4	Will Not Provide Data	Company located in Puerto Rico
Online Image	4	Will Not Provide Data	Discovered on WISPA list. Does not supply BB.
OnWav, Inc	2	Will Not Provide Data	Reseller- does not serve NY.
Open Access	4	Will Not Provide Data	Discovered on WISPA list. Website redirects to Lighttower Fiber
Open Access Inc.	3	Will Not Provide Data	Open Access is now LightTower Communications
Optimum TV	3	Will Not Provide Data	Company provides data through CSC holdings
Pac-West Telecomm, Inc.	3	Will Not Provide Data	Broadband Infrastructure
PAD Business Solutions	2	Will Not Provide Data	Reseller, does not serve many NY customers, does not wish to participate.
PAETEC	2	Will Not Provide Data	Company acquired by Windstream.
Pannon Telecom, Inc.	4	Will Not Provide Data	International voice/phone
PCCW Global, Inc.	3	Will Not Provide Data	HKT is Hong Kong Telephone- PCCW is subsidiary.
Peerless Network of New York, LLC	3	Will Not Provide Data	Backbone voice services.
PeoplePC	2	Non-Responsive	Non responsive in previous rounds.
Phone.com, LLC	4	Will Not Provide Data	Voice only.
PNG Telecommunications	4	Will Not Provide Data	Phone services only
posTrack Technologies, Inc.	4	Will Not Provide Data	Voice services for colleges.
PowerDSL	3	Will Not Provide Data	Likely reseller, web search returns inactive website and little results.
PowerNet Global	2	Will Not Provide Data	Likely reseller, very unclear website
Premier Wireless	1	Will Not Provide Data	Premier Wireless was closed
Proximiti Technologies, Inc.	3	Will Not Provide Data	Primarily voice and phone tracking Offers internet as reseller.
QTel	4	Will Not Provide Data	VoIP- provides DSL in select areas only.
QuantumShift Communications, Inc.	3	Will Not Provide Data	Manages carrier service. Not a provider.
Qwest Communications Company	3	Will Not Provide Data	Qwest is now Century Link. http://www.centurylink.com/index.html
RAI Telecom, Inc.	3	Will Not Provide Data	VoIP services.
Razorline LLC	4	Will Not Provide Data	May not be in NY. Voice services.
Real Linx	2	Will Not Provide Data	Reseller
Reliance Globalcom	2	Non-Responsive	Reseller
RGT Utilities, Inc.	4	Will Not Provide Data	Utility company in Calif. cannot identify website or more information.

RGTS (Rockefeller Group Technology Solutions)	2	Will Not Provide Data	Provides broadband to specific businesses, does not wish to be on the map, has confidentiality concerns; Legal department advised them not to participate (6/29/10 phone)
RNK Communications	4	Will Not Provide Data	Reseller/voice services- difficult to identify services provided. Not and end user BB provider.
SAVVIS Communications	3	Will Not Provide Data	Cloud, Colocation, VoIP, etc. No BB provider. Acquired by CenturyLink.
SBA Communications Corp.	3	Will Not Provide Data	Provides tower site management and locations for cell and wireless companies.
SBC	4	Will Not Provide Data	phone goes directly to AT&T.
Semperon	2	Will Not Provide Data	Reseller with network partnerships
Silv Communication Inc.	4	Will Not Provide Data	Worldwide telephone service. Not a BB provider.
SinglePipe Communications	4	Will Not Provide Data	Company hard to find. Possible merge- voice services only.
Smart Choice Communications	2	Will Not Provide Data	Cooperative, but waiting until reseller decision made.
S-One Communications, Inc.	3	Will Not Provide Data	Cannot identify this company or services it provides.
Spa Net	3	Will Not Provide Data	Discovered on WISPA list but does not advertise wireless on website.
Spectrotel, Inc.	2	Will Not Provide Data	Reseller.
Speedus	4	Will Not Provide Data	Discovered on WISPA list. Nothing to do with BB service.
Stage 2 Networks	4	Will Not Provide Data	Voice and Hosted business phone
Sterling Telecom	2	Will Not Provide Data	Quote website: Wholesaler of Verizon Phone Service to Businesses.
Stratos Offshore Services Company	3	Will Not Provide Data	Provides communication services to US military and government entities outside of the country.
T2 Technologies	2	Will Not Provide Data	Reseller, may be business only. Not sure where/who they serve.
TCE Net	1	Will Not Provide Data	Company has 12 wireless customers, is not advertising to expand, will phase out these customers. Primarily serves dial up customers.
TCO Network, Inc.	2	Will Not Provide Data	Reseller, may be business only.
TCSweb Communications	4	Will Not Provide Data	Discovered on WISPA list. Website not active, no good Google results.
TDS Telecom	3	Will Not Provide Data	Provides data under 6 other subsidiaries
Tekmenwireless	3	Will Not Provide Data	Not a BB Provider
Telco Experts, LLC	2	Will Not Provide Data	
TelCove	3	Will Not Provide Data	Website redirects to Level 3.
Telcove	3	Will Not Provide Data	Website redirects to Level 3.
Telecom	2	Will Not Provide Data	From internet: dba Telecom and Verizon

Telefonica USA	3	Will Not Provide Data	Reseller, does not provide broadband.
Telekenex, Inc.	2	Will Not Provide Data	Business only reseller.
TelePacific	3	Will Not Provide Data	Reseller, no NY customers
Teleport Communications	3	Will Not Provide Data	Cannot identify company or services they provide.
Telergy Metro	3	Will Not Provide Data	Acquired by Con Ed communications, which was acquired by RNC.
Telesphere Networks Ltd.	4	Will Not Provide Data	Telephony services.
Telnes Broadband	2	Non-Responsive	Reseller, few NY customers, not willing to participate.
Telovations, Inc.	3	Will Not Provide Data	Reseller, no NY customers
TELZEQ Communications	4	Will Not Provide Data	Provides voice services and phone equipment
The Flat Planet Phone Company Inc.	4	Will Not Provide Data	Voice/telephony/ PBX
Thinking Phone Networks, LLC	4	Will Not Provide Data	Voice only.
TNCI	2	Will Not Provide Data	Business only reseller.
Towerstream	1	Will Not Provide Data	Opt out - business only. Too much work to participate.
Transbeam	2	Non-Responsive	Reseller
Tremcom International, Inc.	4	Will Not Provide Data	Voice services, long distance, etc.
TruCom Corporation	3	Will Not Provide Data	Cannot identify this company or the services it provides.
TTI National, Inc.	4	Will Not Provide Data	From Website: for state-to-state, in-state long distance, local toll (limited availability) and international calls to existing customers. In addition Toll-Free service and Calling Cards are also available.
UCN	4	Will Not Provide Data	Cannot identify this company or what services it provides.
Unison Communications, Inc.	2	Will Not Provide Data	Business only reseller. Quote: We interconnect with major carriers.
UNITED STATES CELLULAR CORPORATION	3	Will Not Provide Data	Not located in NY.
US LEC	3	Will Not Provide Data	Merged with PAETEC, was a "Will Provide" for previous rounds but no data provided R4.
Valstar, Inc.	3	Will Not Provide Data	Cannot identify this company or services it provides.
Vanco Direct	3	Will Not Provide Data	Cannot identify this company, aka Global Capacity Direct.
Velocity Networks Inc	2	Will Not Provide Data	Business only reseller.
Verio	3	Will Not Provide Data	Verio offer web hosting among other things, NTT is global reseller.
Verizon Avenue Corp.	3	Will Not Provide Data	no longer active.
Verizon Business Global LLC	3	Will Not Provide Data	Email indicates they cannot provide in 7-10 days
Verizon Network Integration Corp.	3	Will Not Provide Data	
Verizon New York	3	Will Not Provide Data	
Verizon Online	3	Will Not Provide Data	

Verizon Select Services, Inc.	3	Will Not Provide Data	formerly GTE Comm. Corp., focus on long-distance service.
Verizon Wireless	3	Will Not Provide Data	Provides data as Verizon Wireless
Verizon Wireless	4	Will Not Provide Data	Verizon Wireless services are now reported under Cellco Partnership dba Verizon Wireless.
Verizon Wireless	3	Will Not Provide Data	tower management company for Verizon Wireless
V-Global Communications	4	Will Not Provide Data	Voice and VoIP services.
VIA ONE TECHNOLOGIES INC.	4	Will Not Provide Data	Cannot identify this company or services they provide.
Vocal IP Networx Ltd	4	Will Not Provide Data	Voice and telephony services only.
Voda Networks, Inc.	2	Will Not Provide Data	Reseller. from website: Partnered with industry leading providers.
VolPnet Technologies	4	Will Not Provide Data	Voice only.
VolPStreet, Inc.	4	Will Not Provide Data	VoIP services only.
Vonage	4	Will Not Provide Data	Provides phone services only.
VPN Systems	3	Will Not Provide Data	Discovered on WISPA list. Does not provide BB service.
Warp Drive Products	3	Will Not Provide Data	Discovered on WISPA list. Does not provide BB service.
Wave2Wave Communications Inc	2	Will Not Provide Data	Company is a reseller, low priority, no outreach for R4
WavHost	3	Will Not Provide Data	Discovered on WISPA list. Webpage does not open, cannot get good search results on company.
WCS Wireless License Subsidiary, LLC	4	Will Not Provide Data	Cannot verify any information on company.
WDT	2	Will Not Provide Data	Reseller- unsure of service to NY.
White Fence	3	Will Not Provide Data	Company connects customers with broadband providers.
Wholesale Carrier Services, Inc.	2	Will Not Provide Data	Reseller- low priority for R4 outreach
WilTel Communications, LLC.	3	Will Not Provide Data	Acquired by Level 3.
Winstar	3	Will Not Provide Data	Company was reseller but since has gone bankrupt.
Worldlink USA Inc.	4	Will Not Provide Data	Unsure of actual company- best search turns up maritime communications company.
Worldwide Marketing Solutions	4	Will Not Provide Data	Research indicates website hosting, many pending lawsuits and scam reports.
Xand Corporation	3	Will Not Provide Data	Network systems- not BB provider
XCHANGE TELECOM CORP.	4	Will Not Provide Data	Voice services only.
Xcyncroj	4	Will Not Provide Data	Cannot identify company or services. Number is out of service
XO Communications Services, Inc. (Affiliated Entity)	2	Will Not Provide Data	
Zayo Group	3	Will Not Provide Data	Reseller, no NY customers
Zone Telecom, Inc.	4	Will Not Provide Data	Voice services, VoIP, etc.