RE: Case 14-C-0370

- In the Matter of a Study on the State of Telecom in NY State.
- Connect New York Coalition Petition

New Reports Expose Verizon NY's Financial Shell Game and the NYPSC's Role.

New Networks Institute

Bruce Kushnick, Executive Director

Letter & Summary Report

- Part 1: Letter Accompanying New Reports from Fixing Telecom
- Part 2: Summary Report

FILED: From Fixing Telecommunications

- Report 1: Verizon's Manipulated Financial Accounting & the FCC's "Big Freeze"
- Report 2: Data Report on Verizon NY's Financial Accounting.

February 22, 2016

PART 1: Overview

This week, the NY State Public Service Commission (NYPSC) is holding a technical conference with the purpose of discussing their 2015 report "Staff Assessment of Telecommunications Services"¹, and to address the mostly ignored Connect NY Coalition Petition, which was filed in July 2014 and called for a series of investigations.²

NOTE: Some sections of the Petition rely on data from our previous reports, including "It's All Interconnected", published by the Public Utility Law Project, (PULP) in May 2014.³ This report was filed by PULP in the current proceeding as well.

The State sent out an agenda,⁴ and claims that this event is designed to "help the Commission and the State Legislature identify areas where there may be market failures or opportunities to advance the public interest".

This week, New Networks Institute (NNI) filed two reports from our new series, 'Fixing Telecommunications', with the State, which provides significant enhancements of our previous work and directly relates to these NY State proceeding; the reports focus on Verizon NY's financial accounting and are mainly based on Verizon NY's own annual reports. Moreover, the new reports directly contradict the NY PSC's findings and calls for new audits and investigations,

• Link to the new⁵ and previous reports⁶ <u>http://newnetworks.com/fixingtelecom/</u>

While this is about Verizon and New York, this is playing out across America, and every state is going through similar, if not almost identical 'assessments' — but the subplot appears to be to use it to allow the incumbent, in this case Verizon NY, to get rid of basic regulations and obligations.

Overview

First, foremost and ironically significant, the NYPSC neglected to make the most important point in their report or statements — Verizon NY is the state-based telecommunications 'utility', like water, power, or even public roads, and has had a franchise since 1896 to offer telecommunication services. In fact, except for a passing

¹ http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={3DDDC8A5-E94A-4873-886C-3D73F68EC9AB}

² http://newnetworks.com/2014/07/connectnypetition/

³ http://newnetworks.com/verizonfiostitle2/

⁴ http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={FB49ABB6-DAE1-4C74-BBA6-7E8DCA194C5B}

⁵ <u>http://newnetworks.com/fixingtelecom/</u>

⁶ http://newnetworks.com/verizonny/

reference, the term 'utility' is no where to be found. Commonly known as the "Public Switched Telephone Network", PSTN, Verizon NY, the incumbent utility, however, is not like any other telecom companies in New York as it controls the critical telecom infrastructure — the wires, and it gets financial perks, such as utility rights of way, to be the caretaker of the State's broadband future (or lack thereof).

And it is the job of the New York State Public ("utility") Commission to supply oversight and protect the Public Interest.⁷ (It is also known as "New York State Department of Public Service").

"The primary mission of the New York State Department of Public Service is to ensure affordable, safe, secure, and reliable access to electric, gas, steam, telecommunications, and water services for New York State's residential and business consumers, while protecting the natural environment."

Unfortunately, the system is broken. Here is a summary of the Verizon-NY State broadband time line. For full details: <u>http://newnetworks.com/verizonnytimeline/</u>⁸

- In 2004, Verizon announced FiOS, the cable TV and broadband Internet service.
- In 2005, Verizon claimed that the fiber optic wire it uses for FiOS was nothing more than an enhancement and part of the state telecommunications utility and the State agreed.
- In 2006, the State granted Verizon 'deregulation' to essentially raise rates due to 'massive deployment of fiber optics' (FiOS) and 'losses';
- By 2009, Verizon had gotten three rate increases on local phone customers over 84% in extra phone charges, which helped to force many to drop their phone line and use wireless. (This is known as 'Harvesting'', i.e.; raise rates until the customer revolts and leaves or is gouged.)
- In 2010, Verizon announced it was done with the FiOS fiber optic deployments.
- By 2012, Verizon announced it would 'shut off the copper'.
- In 2013, Verizon decided to force customers harmed by the Sandy Storm onto their more expensive an inferior wireless services, including VoiceLink or Jet Pack (expensive broadband as compared to DSL)—Fire Island revolted.

⁷http://www3.dps.ny.gov/W/PSCWeb.nsf/ArticlesByTitle/39108B0E4BEBAB3785257687006F3A6F?Ope nDocument

⁸ <u>http://newnetworks.com/verizonnytimeline/</u>

Mobile First — Subplot: Wires Last.

In 2010, Verizon started changing senior management to become a 'mobile-first' company. In fact, many of the staff were from Verizon Wireless (and its predecessors and other wireless companies). The Wireless company has not only taken control of the state utility, but was able to get Verizon NY, the wired company, to charge local phone customers to fund some, if not most of the fiber optic wires to the wireless cell towers, as part of the sleazy dealings listed above.

To sum up, Verizon's plan has been to:

- Build out the wires-to-the-cell sites as part of the state-wired utility.
- Dump the majority of expenses into Local Service to make it look unprofitable.
- Claim Local Service is unprofitable to get rid of regulations and to 'shut off the copper'.
- Claim the Local Service networks are unprofitable to get more rate increases, which 'harvests' customers and pushes them onto wireless.
- Create a separate, hidden wired network, (which includes "special access", broadband and data services) which is a monopoly, but uses the same copper wires or the new fiber wires of the PSTN.
- In areas where Verizon does not upgrade, they have a deal with the cable company to bundle their wireless service.
- Give the Verizon affiliates and subsidiaries financial benefits that harm competition while increasing the 'unprofitable-ness' of Local Service.

And this was made possible by a two things: the State's utter failure to actually audit the company's financials, even when there were rate increases. The NYPSC never did any rate case or investigation into cross-subsidies for at least a decade.

But more importantly, the FCC created a series of accounting rules in 2001, which we dubbed the "Big Freeze", that 'froze' the calculations of how to apply expenses to match the year 2000 — 16 year ago, and the consequence was to allow Verizon (and all of the other phone companies in every state), to dump the overwhelming majority of Verizon's expenses into only Local Service — which made Local Service look very unprofitable while essentially giving the other Verizon subsidiaries a free ride, at the expense of all competition.

And the Big Freeze, with the State's "light touch regulation", allowed Verizon to manipulate the accounting of the State utility, as well as the agenda.

There are a host of bad things that came out from all of this.

Instead of wiring the cities, Verizon ignored or didn't finish the majority of New York State's municipalities, leaving major gaps, including in New York City.

Verizon New York did not pay income taxes and created massive losses that are used to make public policy decisions to raise rates or shut off copper customers.

Starting in 2009, Verizon NY showed losses with an average of \$2.3 billion a year and a resulting 'income tax benefit' of \$1.1 billion. For this six year period, 2009-2014, Verizon NY lost \$13.63 billion and had an income tax benefit of \$6.34 billion.⁹

As the new NNI reports show, each wired phone customer paid \$1000.00-1500.00 or more, extra, for a fiber optic service that most will never get.

In fact, the price of local service should have been in steep decline because the actual expenses were slashed. (I.e., it was fully depreciated so, except for maintenance and staff, there are no serious costs. The company also slashed staff so those expenses were reduced as well.)

And the special access networks, which are nothing more than business broadband and data services, are mostly based on copper, and yet have been removed from any discussion of the copper networks shut off or the profits from the networks.

The FCC recently detailed that the majority of Special Access was 'mostly copperbased', and was over \$24 billion nationwide. In New York, Verizon's Special Access was over \$1.8 billion in revenue in 2014 and is larger than local phone service revenues.

Hidden Networks? There are 0 access lines reported for this \$1.8 billion or even the nationwide \$24 billion, even though they use the identical, legacy copper wires that have been in place for decades. Using the FCC data, and the Verizon NY revenues, there are an estimated 65 million 'total access lines' as defined by the FCC's last analysis of Verizon New York.

Meanwhile, the State proclaims there is competition. Unfortunately, competition requires that prices go down, not up continuously. With three rate increases and increases to every service, the State seems to have forgotten to mention these facts. And since Verizon controls the physical wires, it controls telecommunications, wireline and even wireless, to end customers or even when a competitor is renting the networks to compete.

⁹ NOTE: 2013 showed a profit from a one time 'extraordinary' pension income deal.

The NYPSC either has no clue, or worse, it has been captured. Their assessment report is a travesty that is an attempt to hide the actual harms to the State, customers and cities that are not and will get wired with fiber optics

What Should Happen Next?

Read the first two reports from Fixing Telecommunications, first.

The reports from Fixing Telecommunications are an enhancement and extension of the data that was used in the Connect New York Coalition petition for an investigation. These reports show that the Petition was an appetizer to what really needs to be done to fix telecommunications.

New Networks Institute, established in 1992, is now a consortium of telecommunications experts, analysts, forensic auditors and lawyers.

PART II

Summary Report: Exposing Verizon NY's Financial Shell Game & the NYPSC's Role

This section is designed to give a quick sketch of some of the issues with the State report and exposing the current financial shell game. (See the Reports for details.)

- 1) The State report manipulated the costs of services to customers.
- 2) Customers were overcharged based on "massive deployment of fiber optics" and manipulated losses.
- 3) \$200 Million or \$8.5 billion? Verizon manipulated the utility construction budgets.
- 4) Where did all the money go? It cross-subsidized wireless and FiOS, a cable service.
- 5) The FCC's "Big Freeze" created cross-subsidies.
- 6) Outrageous expense dumping of 'Corporate Operations' in Local Service.
- 7) The State and Verizon manipulated the accounting of access lines.
- 8) Verizon New York FiOS deployment only passed 45%-62%.

1) The State Report Manipulated the Costs of Services to Customers

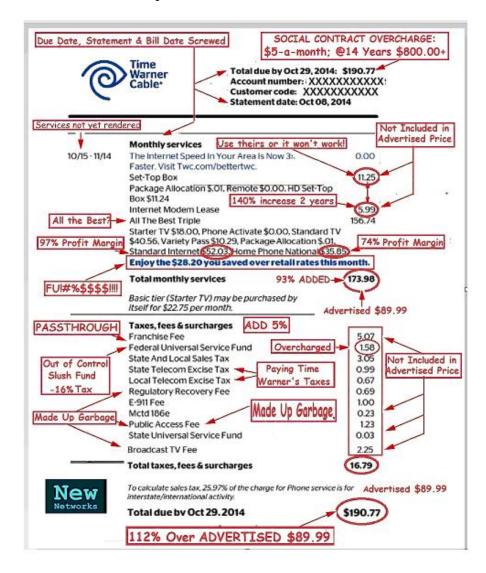
This chart is from the State Telecom Assessment report and details the pricing of the Double and Triple Play by Verizon and Time Warner Cable. The State doesn't use actual phone or communications bills. Instead, they only used the promotional pricing of Verizon and Time Warner Cable, without the made up fees, etc.

FINDING: The State's pricing information is off by 30%-120%.

Bundle	Triple Bundle Price	(Video+Data) Bundie	incremental Charge for Phone Triple Bundle less Video+Data Bundle
Verizon Triple Bundle 2 Cliannel Packs 25Mbps Dato Unitmited Demestic and Canadian Calling, Framo (24monthi)	\$74.99	\$59.99	\$15.00
Time Warner Cable Triple Bundle 200-Channels 30Mbps Unimited Cats in the U.S., Canada, Puetto Rica, Mexico, Kang Kong, Premo (12 manths)	\$89.99	\$89.99	\$0.00

Table 14: Example Bundled and Standalone Pricing

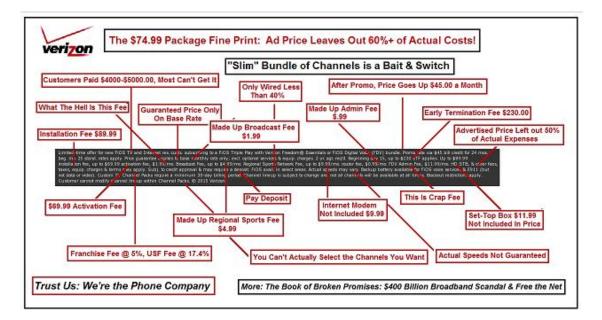
And this is the author's Time Warner Cable Triple Play after the 12 month promotion ended, having gone up over 112% for this \$89.99 package. The current bill is for \$203.07 - 126% above the advertised price.¹⁰



No one can ever get the advertised price, ever, as even the promotional price is missing 30%-50% of all charges a customer must pay. Moreover, there is no direct competition to primary services so every part of the bill has had increases — almost continuously.

¹⁰ Time Warner Cable's Advertised \$89.99 Triple Play: Now \$190.77. What the F@\$#X\$!?, Huffington Post, http://www.huffingtonpost.com/bruce-kushnick/time-warner-cables-advert_b_6009364.html

Verizon is no better and has the same deceptive advertising, marketing and billing practices.



Quoting just the promotional price vs doing actual communication bill surveys shows a serious lack of how to analyze basic data, but also it covers over the actual costs to customers to make it look like things are 'cheaper' and that there is competition — when it doesn't exist.

2) Customers were Overcharged based on "Massive Deployment of Fiber Optics" and Manipulated "Losses",

In New York State, local phone customers have had at least three major, separate rate increases starting in 2006 for 'massive deployment of fiber optics' and 'losses', i.e., 100% of local phone customers paid for 'greenfield' upgrades of the state utility but only 50%-60%, or so, ever got upgraded – or will get upgraded.

Verizon NY rate increase, June 2009: Statement by NY Public Service Commission.¹¹

¹¹ NYPSC Press Release: CASE 09-C-0327–Minor Rate Filing of Verizon New York Inc. to Increase the Monthly Charges for Residence Local Exchange Access Lines (1MR and 1FR) by \$1.95 per month, State of New York, 6/19/09

https://www3.dps.ny.gov/pscweb/WebFileRoom.nsf/Web/B849A020314983A3852575D900530827/\$File/pr09054.pdf

"We are always concerned about the impacts on ratepayers of any rate increase, especially in times of economic stress,' said Commission Chairman Garry Brown. 'Nevertheless, there are certain increases in Verizon's costs that have to be recognized. This is especially important given the magnitude of the company's capital investment program, including its massive deployment of fiber optics in New York. We encourage Verizon to make appropriate investments in New York, and these minor rate increases will allow those investments to continue."

And the statement continues and claims that there were major losses that needed to be addressed:

"The rate increases will generate much needed additional short-term revenues as the company faces the dual financial pressures created by competitive access line losses and the significant capital it is committing to its New York network....For 2008, Verizon reported an overall intrastate return of negative 6.7 percent and a return on common equity of negative 48.66 percent."

Unfortunately, as we show, the construction budgets were diverted to other lines of business, which also helped to create massive losses. And the 'access line' accounting leaves out the majority of actual, copper-based lines in service.

3) Manipulation of the Utility Construction Budgets — "\$200 Million" or \$8.5 Billion?

Verizon claims to have spent \$200 million for copper maintenance, but Verizon New York's Local Service was charged \$8.5 billion in network expenses, from 2009-2014.

Verizon's own filing at the FCC claimed that:¹²

"Verizon since 2008 has spent more than \$200 million on its copper network."

And, \$200 million is for all of the Verizon states. Later, this statement was picked up by the Communications Workers of America, (CWA) and the cities who aren't being properly upgraded and they challenged Verizon.

Members of the New York State Assembly and Senate wrote:¹³

¹² http://apps.fcc.gov/ecfs/document/view?id=60001324779

¹³ http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={4D9BCE15-D2BE-4ABF-B878-231325D26CF7}

"We ask that you address a particular matter that has come to our attention this month. In an ex parte letter filed by Verizon for the Federal Communications Commission's (FCC) recent proceeding regarding the retirement of copper facilities, Verizon attempts to rebut labor and consumer group evidence that Verizon is de facto abandoning its traditional landline copper telephone network through lack of proper maintenance and repair. In its defense, Verizon wrote: '[S]ince 2008, Verizon has spent more than \$200 million on its copper network.' This shockingly small level of investment in the copper network confirms what we hear regularly from businesses and consumers: Verizon's traditional landline service is unreliable, repairs are never permanent, deteriorated cable is not replaced, and new installations are delayed...Verizon's statement to the FCC amounts to an admission, on the record in a formal regulatory proceeding, that it has spent virtually nothing over the past seven years on its traditional copper network...Verizon has been systematically misleading the Commission about its commitment to ensuring high quality service to customers who remain on the traditional landline network."14

Verizon's mea culpa, as stated in their letter to the FCC on September 18th, 2015, claims that this was an incomplete picture of all expenses for the copper wire maintenance, etc.¹⁵

But this is only a small part of a massive financial shell game and one has only to compare this statement with actual data. This next exhibit, taken from Verizon New York annual reports, shows that Verizon NY's Local Service paid \$8.4 billion in "Plant" and "Non-Specific Plant" expenses from 2009-2014.

	Local Service		
2009	\$ 1,742,225,114		
2010	\$ 2,146,564,484		
2011	\$ 1,509,735,152		
2012	\$ 1,502,196,441		
2013	\$ 1,382,194,463		
2014	\$ 1,526,422,738		
Total "Plant"	\$ 8,427,143,928		
Sources: Verizon NY, New Networks Institut			

Verizon New York, Local Service "Plant Expenses", 2009-2014

¹⁴ Ibid.

¹⁵ Ibid.

If Verizon New York is adding over a \$1.4-\$2.1 billion in network costs annually to the Local Service category, where is all of this money going? Verizon stopped upgrading the networks around 2010-2012, and it slowed down maintaining the state copper-based utility networks over the last decade.

And even if Verizon spent \$200 million in just New York, and in just one year, it would still be a fraction of the network costs that have been allocated against the copper-based local phone service revenues.

4) Where Did All The Money Go? Cross-Subsidized Wireless and FiOS, a Cable Service.

In 2011, the NY State Attorney General's Office detailed that 75% of the capital expenditures in New York State went to fund the building of the fiber optic wires to cell sites and to FiOS, not to the maintain the state's copper networks.

"Verizon New York's claim of making over a 'billion dollars' in 2011 capital investments to its landline network is misleading. In fact, roughly threequarters of the money was invested in providing transport facilities to serve wireless cell sites and its FiOS. Wireless carriers, including Verizon's affiliate Verizon offering wireless, directly compete with landline telephone service and the company's FiOS is primarily a video and Internet broadband offering....Therefore, only a fraction of the company's capital program is dedicated to supporting and upgrading its landline telephone service."¹⁶

In short, the money to maintain and upgrade the networks as part of the state utility was diverted to fund other lines of business, even though customers were charged for "massive deployment of fiber optics" and 'losses'.

5) The "Big Freeze" Created Cross-Subsidies

In 2001, the FCC created a set of accounting rules that 'froze' the expenses charged to each line of business to be based on the year 2000, and thus made all proceeding years be based on the percentages from the year 2000.

The FCC's Big Freeze, then, has distorted all accounting and financials for the last 15 years and no government agency, not the FCC or the State, can calculate the actual charges to end users or competitors and can't, then, calculate whether the prices are 'fair and reasonable'.

¹⁶ http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={E46EDB40-99B2-4664-8BE4-A9646D09BBBF}

And since this is a federal issue, this problem is not specific to Verizon New York but is being played out in every state and every phone company throughout America.

6) Outrageous Expense Dumping of 'Corporate Operations' in Local Service

Thus, every year the same shape model has been applied to the expenses. And it is shocking to see when every year is lined up. This next exhibit is of the FCC's Big Freeze impact of applying 'Corporate Operations' expenses in Verizon New York to Local Service.¹⁷

	Corporate Expenses	Revenues
2003	65.00%	65.3%
2009	60.70%	49.0%
2010	60.80%	44.1%
2011	60.80%	39.4%
2012	60.70%	34.9%
2014	60.40%	27.6%
Source	s. Varizon NV New Natur	arks Institute

Verizon NY Local Service Revenues and Corporate Expense, 2003-2014

Sources: Verizon NY, New Networks Institute

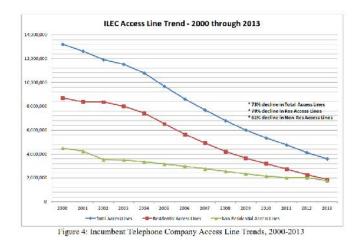
While 'Local Service' revenues declined, the expenses remained virtually identical year after year.

In fact, the revenue losses of the local networks can be attributed to the other lines of business not paying common costs, which created the impression the local networks were 'unprofitable', which led to massive rate increases, which helped to 'migrate' the customers to wireless through the 'harvesting' of local, utility phone customers.

7) The State & Verizon Manipulated the Accounting of Access Lines

This is what the State is reporting about access lines.

¹⁷ We use 2003 because it is the only 'early' annual report we could find on the NYPSC site.



Woe is Verizon, losing all those lines. According to NY State:

"Once monopoly providers of landline telecommunications services providing retail voice and data services to about 13 million subscribers in 2000, the incumbent local exchange carrier industry has lost over 73% of its access lines, with an overall industry negative rate of return."

What a shame it is all just made up. We do not argue that as the price of service continued to rise, customers dropped the lines that were used for voice phone calling.

But something is amiss. This is the last FCC published information, supplied by Verizon New York, about the Total Access Lines, in 2007. It shows that there were 47 million total lines in 2007. (And unfortunately, the State's chart above is for all incumbent access lines, not just New York State.)

		2007	2006
Switched Acces	Lines in Service:		
Main Access Lines		4,658,451	5,116,406
PBX & Centrex Trunks		460.379	463,709
Centrex Extensions		999.354	963,213
Other Switched Access Lines		1.064.404	1,417,158
Total Switched Access Lines	-	7,182.588	7,960,486
Central Office Switches Excluding Remote	e Switches	301	301
Remote Switches		300	299
Central Office Switches		601	600
Basic Rate ISDN Control Channels		52,486	67,019
Primary Rate ISDN Control Channels		14,952	14,442
Access Lines in Se	ervice by Customer:		
Business Switched Access Lines:	Single Line	145,466	151,497
•	Multiline Other Than Payphone	2,677,605	2,799,836
	Payphone Lines	88.614	99,305
Residential Switched Access Lines:	Lifeline	263,473	276,013
	Non-Lifeline/Primary	3,584,790	4,137,632
	Non-Lifeline - Non-Primary	422,640	496,203
Total Switched Access Lines		7,182,588	7,960,486
Special Access Lines (Non-Switched):	Analog (4kHz or Equiv)	25,765	27,279
	Digital (64kbps or Equiv)	39,615,573	35,005,428
Total Access Lines (Switched and Special))	46,823,926	42,993,193
Local Private Lines		595.918	592,305

**	37	TT 1 4		2007 2005
verizon	New	York Access	Lines,	2000-2007

(FCC Statistics of Common Carriers, for the Year Ending December, 31, 2007)

Starting with the 2007 ARMIS data, and combining different available data, including Verizon New York annual reports for 2009-2014, we found:

- In 2014, there are approximately 65 million 'special access' lines and 'equivalents' in NY State. (See report for details.)
- According to Verizon, there were only 2.7 million POTS access lines; about 4% of total lines in 2014.
- Special Access line accounting is not included in the access line accounting supplied by Verizon, or any telephone company.

Moreover, the FCC' recent data showed that mostly copper-based special access services represented 60% of this \$40 billion market in revenue — i.e., in America, in 2013, there was \$24 billion in revenues for copper-based TDM, telecommunications-based, special access services.

But the kicker: There is no documentation on the number of actual copper-based lines in service -0 lines - how can that be?

And in Verizon New York's financial accounting we find that special access has grown over 38% in revenues from 2009-2014, and had reached \$1.8 billion in revenue in 2014, while Local Service was only \$1.4 billion. But again, 0 copper or even fiber optic special access lines are accounted for.

All of this is exasperated by this 'deceptive' framework.

If the State or FCC is 'deregulating' a line, it is NOT only for a voice call, but all other services are impacted — fax, competitive DSL, alarm circuits, etc. — as they rely on wires that are part of the state utility.

The CDC numbers are useless.

The Center for Disease Control (CDC) data is often quoted but it does not represent 'wireless-only households' as it doesn't count the wires; it counts voice calling only. The alarm circuits (26% of households), the wires used for cable service, the wires for the home office aren't counted; neither are the small business ATM machines, credit card readers and a host of wires that go to the WiFi hot spots. They are the same copper wires and the FCC and State have neglected any accounting.

In fact, the AT&T-paid-for survey report that is quoted by the State Commission shows that 84% of households in New York State have a wired broadband connection at home and 26% of homes have an alarm circuit.¹⁸

The State has no clue about the actual number of copper wires in service today and it is making public policy decisions that are NOT data-driven. Period.

8) Verizon New York FiOS Deployment Only Passed 45%-62%.

How many fiber optic lines were installed? Only 45% to 62% of "Housing Units and Businesses" have been 'passed'—that's it.

42 ST	52	
NY State	Verizon	NY City
7,234,743	6,438,921	3,070,298
8,126,026	7,232,163	3,371,062
1,956,733	1,741,492	944,129
9,191,476	8,180,414	4,014,427
10,082,759	8,973,656	4,315,191
inesses	4,000,000	2
-	NY State	% coverage
	6,438,921	62%
	7,232,163	55%
	8,180,414	49%
	8,973,656	45%
	NY City	% coverage
inesses	2,000,000	
	3,070,298	65%
	3,371,062	59%
	4,014,427	50%
	4,315,191	46%
	7,234,743 8,126,026 1,956,733 9,191,476 10,082,759 inesses	7,234,743 6,438,921 8,126,026 7,232,163 1,956,733 1,741,492 9,191,476 8,180,414 10,082,759 8,973,656 inesses 4,000,000 NY State 6,438,921 7,232,163 8,180,414 10,082,759 8,973,656 inesses 4,000,000 NY State 6,438,921 7,232,163 8,180,414 8,973,656 8,180,414 8,973,656 9 NY City 9 inesses 2,000,000 3,070,298 3,371,062 4,014,427 10,014,427

Verizon New York FiOS Deployment in New York State and NYC, 2015

Sources: Verizon, FCC, Census, New Networks Institute

<u>Verizon's own press release</u> claimed that it had "over 4 million homes and businesses" in New York State, at the end of 2014, which includes New York City.¹⁹

¹⁸ See, Siena College, Cell Phones Used by 90 Percent of New Yorkers (issued March 4, 2015), https://www.siena.edu/news-events/article/cell-phones-used-by-90-percent-of-new-yorkers.

"Fiber-optic networks strengthen communities, and last year Verizon continued deployment of its 100 percent fiber-optic network, with its FiOS TV and FiOS Internet services. At year's end, FiOS services were available to more than 4 million New York and Connecticut homes and businesses. Verizon has placed more than 161 million feet of fiber optic cables in the two states."

Note: We used Census data about the "housing units", "households", and "businesses" in New York State and New York City, as these terms vary the outcomes. And we use the FCC data pertaining to market size of Verizon in New York State.

NOTE: The quote from Verizon is for 'homes and businesses', while the New York City franchise appears to use "households" in some places, but in other places uses "residential dwelling units". They are not the same. There are 300,000 more 'housing units' than 'households' according to the US Census, (and almost 800,000 more in New York State total).

Simple Math Kicks in.

Using Only "Homes":

- a) If Verizon has 4 million homes and businesses
- b) There are 6.4 million households covered by Verizon in New York State, and if
- c) $\frac{1}{2}$ of the deployments are upstate and the other half are in New York City,
- d) Then, Verizon can only have 2 million covered in New York City.
- e) Census tells us that New York City has 3 million homes.
- f) 65% coverage—at best.

Using the Other Terms

- g) The Verizon New York quote states that there are 4 million "homes and businesses", then availability in New York City is only 50%.
- h) And if we use "housing units" and "housing units and businesses", the number drops further.

¹⁹ http://www.manhattancc.org/wcnews/NewsArticleDisplay.aspx?articleid=1271