



Office of the
New York City Comptroller
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Bureau of Policy and Research
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POLICY BRIEF

INTERNET INEQUALITY: BROADBAND ACCESS IN NYC





Access to the Internet is the fourth utility of the modern age—as central to our daily lives as electricity, gas and water. Yet high-speed Internet and the connections it facilitates to education, employment, culture, and commerce remain beyond the reach of millions of New Yorkers.

This is a critical moment for New York City’s digital future. On December 8th, the Franchise Concession and Review Committee (FCRC) will hold a public hearing on the City’s proposal to transform our network of 20th century payphones into the world’s largest public WiFi network. In addition, regulators at the state and federal level are reviewing the proposed merger of Comcast and Time Warner Cable, and evaluating whether the merger is in the public interest. These events present unique opportunities to expand the quality, reach, and affordability of Internet access throughout the five boroughs.

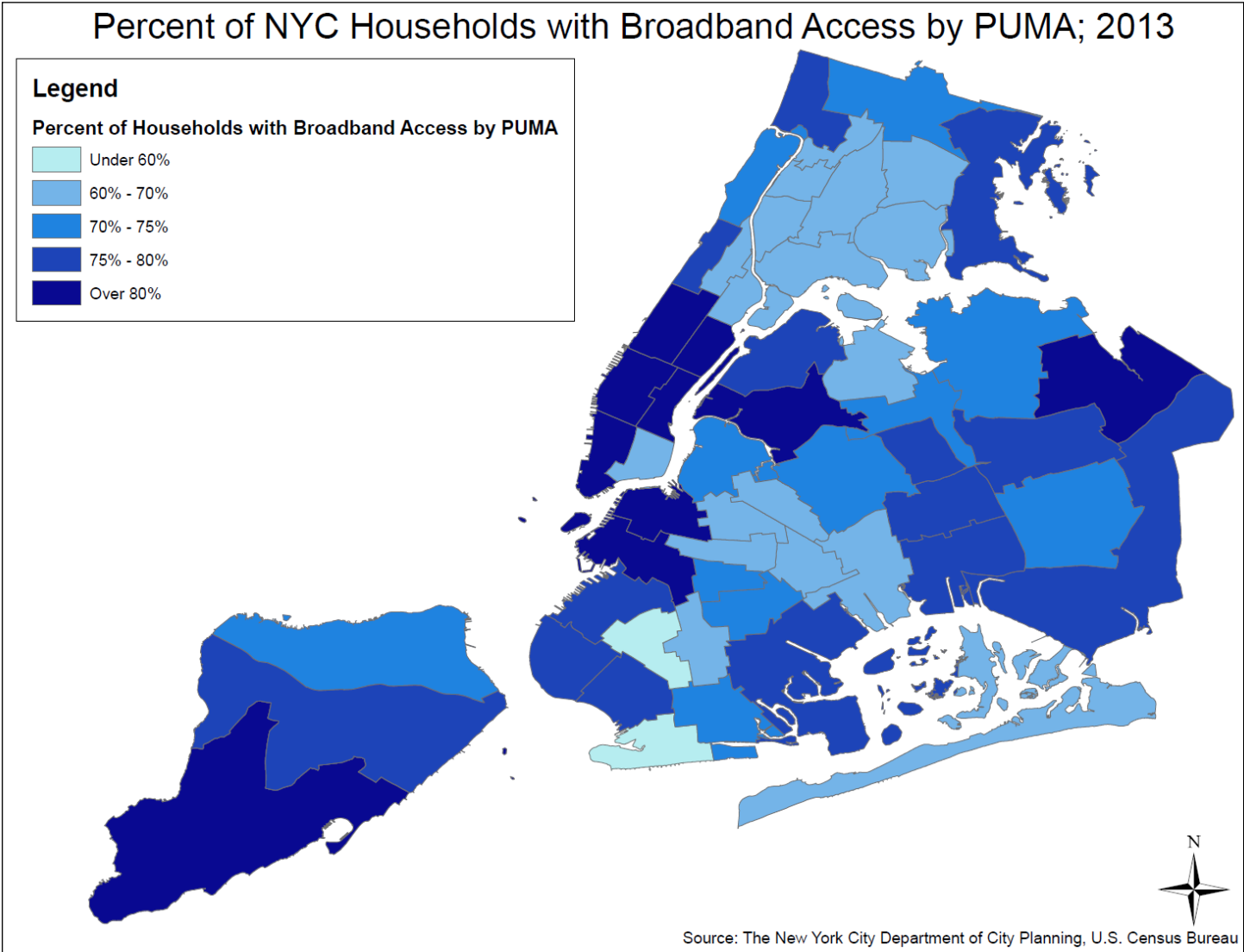
The Census Bureau recently released the results of the 2013 American Community Survey (ACS) which, for the first time ever, asked questions about computer ownership and Internet access. This report, from the Office of Comptroller Scott M. Stringer, analyzes data from the ACS to chart the scope of the Digital Divide in New York City.

The data shows that millions of New Yorkers do not have computers and/or broadband at home, and that there are disparities based on age, education level, employment status, race and neighborhood.

- 27 percent (730,000) of NYC households lack broadband Internet at home.¹
- 17 percent (533,000) of NYC households do not have a computer at home.²
- More than one-third (34 percent) of households in the Bronx lack broadband at home, compared to 30 percent in Brooklyn, 26 percent in Queens, 22 percent in Staten Island, and 21 percent in Manhattan.
- 40 percent of New Yorkers with less than a high school education lack broadband at home compared to 11 percent of New Yorkers with a bachelors or advanced degree.
- 34 percent of people outside the workforce lack broadband at home, while 21 percent of unemployed New Yorkers lack access.
- The 15th Congressional District (Bronx) has the highest percentage of households without broadband at 36 percent, while the 12th Congressional District (Upper East Side/Queens) has the fewest households without broadband at 15 percent.
- 21 percent of NYC youth (0-18 years) lack broadband at home, while 45 percent of seniors (65+) lack broadband at home.
- 27 and 26 percent of Black and Hispanic households, respectively, lack broadband at home, compared to 21 percent of White households and 15 percent of Asian households.



- As shown in the map below, nearly half (47 percent) of households in Brooklyn Community District 12 (Borough Park, Kensington, and Ocean Parkway) lack broadband at home, while only 11 percent of households in Manhattan Community Districts 1 and 2 (Battery Park City, Greenwich Village, and SoHo) lack access.



Two major causes of Internet inequality in New York City are the high cost and poor quality of broadband compared to other cities. Bringing broadband into more New Yorkers’ homes requires addressing both speed and affordability. As noted in the Open Technology Institute’s (OTI) 2014 “Cost of Connectivity Report,” consumers from Seoul and Paris to Kansas City and Chattanooga, are able to access a 1 gigabit connection for less than \$70 per month.³ By comparison, the top speed available for consumers in New York City is half the speed of those cities (500 megabits), at a cost of \$299.99 a month.⁴

In other words, New York City consumers with the fastest available broadband pay at least four times as much to download material at half the speed as citizens of other global cities.

OTI analyzed the “best deals under \$40/month,” and ranked New York City 20th among 24 global cities. New York’s Time Warner Cable 15 megabit connection for \$39.99/month paled in comparison to San Francisco’s Webpass service which offers 200 megabits for \$30/month. New York also failed to measure up to gigabit services across Europe and Asia.



As the *New York Times* summarized, “At nearly every speed, Internet access costs more in the United States than in Europe.”⁵

The findings of this report reinforce the importance of ensuring that the City takes concrete steps to improve the quality, availability, and affordability of high-speed Internet across the five boroughs. This includes leveraging the LinkNYC proposal with an eye towards expanding high-speed Internet access in a manner that is reliable, equitable, and affordable for all our neighborhoods.

ENDNOTES

1. The ACS defines “broadband” as Internet Service other than dial-up service, including digital subscriber line (DSL), cable modem, fiber-optic, mobile broadband, and satellite service.
2. The ACS defines “computer” as including desktops, laptops, netbooks, notebook computers, handheld computers, smart mobile phones, and other handheld wireless computers. It does not include GPS devices, digital music players, or other electronic devices with “limited computing capabilities,” such as smart appliances.
3. <http://www.newamerica.org/oti/the-cost-of-connectivity-2014/>; Chattanooga has built one of the nation’s fastest municipal fiber networks—a model that OTI states, “tend to deliver better value to their customers when compared on a price-per-megabit basis to competing cable and telecom providers in their own cities.” As Comptroller Stringer stated in his 2012 Start-up City report, while the cost/complexity of a citywide municipal fiber network in New York may be prohibitive, it is essential that the City explore ways to take advantage of existing public assets to lay fiber. Indeed, while the old pneumatic tube system that once carried mail throughout the five boroughs has been dismantled, there are other options for laying fiber, including working with the MTA to leverage the fiber build out in its tunnels and exploring whether ConEd’s underground network could support a fiber plant that could yield a “smart grid” (as in Chattanooga or Lafayette, Louisiana).
4. The report notes that Time Warner Cable recently began upgrading its highest speed offerings in NYC, potentially offering 300 Mbps for a price of \$64.99. While this would represent a dramatic improvement in quality and price, it would still leave access beyond the reach of low-income New Yorkers.
5. <http://www.nytimes.com/2014/10/31/upshot/why-the-us-has-fallen-behind-in-internet-speed-and-affordability.html?abt=0002&abg=1>.
6. http://www.newamerica.net/publications/policy/the_cost_of_connectivity.
7. All data is drawn from the U.S. Census Bureau’s 2013 American Community Survey.

**APPENDIX⁷*****City Totals (Households)***

	New York City
	Estimate
Total:	3,084,861
Has a computer:	2,551,959
With dial-up Internet subscription alone	17,635
With a broadband Internet subscription	2,251,572
Without an Internet subscription	282,752
No computer	532,902

Type of Internet at Home (Households)

	New York City
	Estimate
Total:	3,084,861
With an Internet subscription:	2,296,434
Dial-up alone	18,123
DSL:	231,330
With mobile broadband	67,051
Without mobile broadband	164,279
Cable modem:	1,339,487
With mobile broadband	467,344
Without mobile broadband	872,143
Fiber-optic:	301,376
With mobile broadband	111,367
Without mobile broadband	190,009
Satellite Internet Service:	22,458
With mobile broadband	8,483
Without mobile broadband	13,975
Two or more fixed broadband types, or other:	291,042
With mobile broadband	141,130
Without mobile broadband	149,912
Mobile broadband alone or with dialup	92,618
Internet access without a subscription	112,521
No Internet access	675,906

*Age*

	New York City
	Estimate
Total:	8,226,741
Under 18 years:	1,772,498
Has a computer:	1,609,066
With dial-up Internet subscription alone	6,876
With a broadband Internet subscription	1,401,672
Without an Internet subscription	200,518
No computer	163,432
18 to 64 years:	5,425,873
Has a computer:	4,911,945
With dial-up Internet subscription alone	25,765
With a broadband Internet subscription	4,408,011
Without an Internet subscription	478,169
No computer	513,928
65 years and over:	1,028,370
Has a computer:	667,475
With dial-up Internet subscription alone	10,749
With a broadband Internet subscription	570,125
Without an Internet subscription	86,601
No computer	360,895

Education Level

	New York City
	Estimate
Total:	5,677,038
Less than high school graduate or equivalency:	1,085,728
Has a computer:	776,794
With dial-up Internet subscription alone	6,511
With a broadband Internet subscription	648,610
Without an Internet subscription	121,673
No computer	308,934
High school graduate (includes equivalency) , some college or associate's degree :	2,538,348
Has a computer:	2,124,162
With dial-up Internet subscription alone	15,418



	New York City
	Estimate
With a broadband Internet subscription	1,859,848
Without an Internet subscription	248,896
No computer	414,186
Bachelor's degree or higher:	2,052,962
Has a computer:	1,959,899
With dial-up Internet subscription alone	12,395
With a broadband Internet subscription	1,833,972
Without an Internet subscription	113,532
No computer	93,063

Employment Status

	New York City
	Estimate
Total:	6,641,520
In the civilian labor force:	4,298,901
Employed:	3,882,804
Has a computer:	3,581,797
With dial-up Internet subscription alone	18,240
With a broadband Internet subscription	3,252,152
Without an Internet subscription	311,405
No computer	301,007
Unemployed:	416,097
Has a computer:	376,016
With dial-up Internet subscription alone	1,982
With a broadband Internet subscription	330,153
Without an Internet subscription	43,881
No computer	40,081
Not in labor force:	2,342,619
Has a computer:	1,793,120
With dial-up Internet subscription alone	17,090
With a broadband Internet subscription	1,545,094
Without an Internet subscription	230,936
No computer	549,499

***Race*****White**

	New York City
	Estimate
Total:	3,579,114
Has a computer:	3,129,997
With dial-up Internet subscription alone	18,842
With a broadband Internet subscription	2,833,464
Without an Internet subscription	277,691
No Computer	449,117

Hispanic

	New York City
	Estimate
Total:	2,390,252
Has a computer:	2,033,944
With dial-up Internet subscription alone	8,663
With a broadband Internet subscription	1,763,921
Without an Internet subscription	261,360
No Computer	356,308

Black

	New York City
	Estimate
Total:	2,007,171
Has a computer:	1,715,077
With dial-up Internet subscription alone	13,714
With a broadband Internet subscription	1,458,894
Without an Internet subscription	242,469
No Computer	292,094

Asian

	New York City
	Estimate
Total:	1,121,127
Has a computer:	1,035,076
With dial-up Internet subscription alone	5,592
With a broadband Internet subscription	953,366
Without an Internet subscription	76,118
No Computer	86,051

***Borough***

	The Bronx	Queens	Brooklyn	Manhattan	Staten Island
	Estimate	Estimate	Estimate	Estimate	Estimate
Total:	481,143	784,243	925,489	726,357	167,629
Has a computer:	379,285	648,836	744,507	635,020	144,311
With dial-up Internet subscription alone	2,096	5,564	5,605	3,952	418
With a broadband Internet subscription	316,333	581,129	647,912	576,119	130,079
Without an Internet subscription	60,856	62,143	90,990	54,949	13,814
No computer	101,858	135,407	180,982	91,337	23,318

Congressional District

Percent of households with broadband connection at home	
Congressional District 4 (113th Congress)	83.9
Congressional District 5 (113th Congress)	73.9
Congressional District 6 (113th Congress)	74.9
Congressional District 7 (113th Congress)	69.8
Congressional District 8 (113th Congress)	68.8
Congressional District 9 (113th Congress)	72.9
Congressional District 10 (113th Congress)	78.9
Congressional District 11 (113th Congress)	77.4
Congressional District 12 (113th Congress)	85.2
Congressional District 13 (113th Congress)	67.6
Congressional District 14 (113th Congress)	72.9
Congressional District 15 (113th Congress)	64.2
Congressional District 16 (113th Congress)	76.7

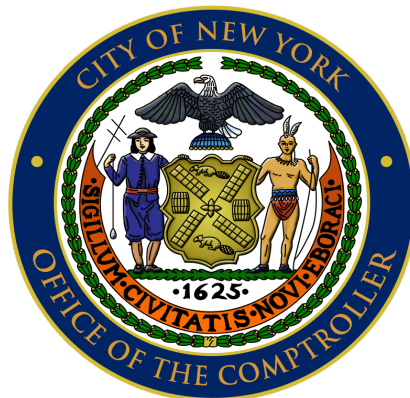
Community District

Percent of households with broadband connection at home	
NYC-Bronx Community District 1 & 2--Hunts Point, Longwood & Melrose PUMA	66
NYC-Bronx Community District 3 & 6--Belmont, Crotona Park East & East Tremont PUMA	60.1
NYC-Bronx Community District 4--Concourse, Highbridge & Mount Eden PUMA	63.2
NYC-Bronx Community District 5--Morris Heights, Fordham South & Mount Hope PUMA	67.9
NYC-Bronx Community District 7--Bedford Park, Fordham North & Norwood PUMA	62.3
NYC-Bronx Community District 8--Riverdale, Fieldston & Kingsbridge PUMA	77.4
NYC-Bronx Community District 9--Castle Hill, Clason Point & Parkchester PUMA	64.8
NYC-Bronx Community District 10--Co-op City, Pelham Bay & Schuylerville PUMA	76.2
NYC-Bronx Community District 11--Pelham Parkway, Morris Park & Laconia PUMA	69
NYC-Bronx Community District 12--Wakefield, Williamsbridge & Woodlawn PUMA	71.6
NYC-Manhattan Community District 1 & 2--Battery Park City, Greenwich Village & Soho PUMA	88.7
NYC-Manhattan Community District 3--Chinatown & Lower East Side PUMA	67.4
NYC-Manhattan Community District 4 & 5--Chelsea, Clinton & Midtown Business District PUMA	85.2



Percent of households with broadband connection at home	
NYC-Manhattan Community District 6--Murray Hill, Gramercy & Stuyvesant Town PUMA	87.7
NYC-Manhattan Community District 7--Upper West Side & West Side PUMA	84.1
NYC-Manhattan Community District 8--Upper East Side PUMA	88.5
NYC-Manhattan Community District 9--Hamilton Heights, Manhattanville & West Harlem PUMA	76.3
NYC-Manhattan Community District 10--Central Harlem PUMA	65.9
NYC-Manhattan Community District 11--East Harlem PUMA	61.5
NYC-Manhattan Community District 12--Washington Heights, Inwood & Marble Hill PUMA	72.4
NYC-Staten Island Community District 1--Port Richmond, Stapleton & Mariner's Harbor PUMA	72.6
NYC-Staten Island Community District 2--New Springville & South Beach PUMA	77.8
NYC-Staten Island Community District 3--Tottenville, Great Kills & Annadale PUMA	84.5
NYC-Brooklyn Community District 1--Greenpoint & Williamsburg PUMA	70.4
NYC-Brooklyn Community District 2--Brooklyn Heights & Fort Greene PUMA	83
NYC-Brooklyn Community District 3--Bedford-Stuyvesant PUMA	61.3
NYC-Brooklyn Community District 4--Bushwick PUMA	66.6
NYC-Brooklyn Community District 5--East New York & Starrett City PUMA	68
NYC-Brooklyn Community District 6--Park Slope, Carroll Gardens & Red Hook PUMA	85.3
NYC-Brooklyn Community District 7--Sunset Park & Windsor Terrace PUMA	76.9
NYC-Brooklyn Community District 8--Crown Heights North & Prospect Heights PUMA	66
NYC-Brooklyn Community District 9--Crown Heights South, Prospect Lefferts & Wingate PUMA	73.1
NYC-Brooklyn Community District 10--Bay Ridge & Dyker Heights PUMA	78.5
NYC-Brooklyn Community District 11--Bensonhurst & Bath Beach PUMA	75.1
NYC-Brooklyn Community District 12--Borough Park, Kensington & Ocean Parkway PUMA	53.1
NYC-Brooklyn Community District 13--Brighton Beach & Coney Island PUMA	58.1
NYC-Brooklyn Community District 14--Flatbush & Midwood PUMA	68.4
NYC-Brooklyn Community District 15--Sheepshead Bay, Gerritsen Beach & Homecrest PUMA	74.7
NYC-Brooklyn Community District 16--Brownsville & Ocean Hill PUMA	60.5
NYC-Brooklyn Community District 17--East Flatbush, Farragut & Rugby PUMA	71.5
NYC-Brooklyn Community District 18--Canarsie & Flatlands PUMA	79
NYC-Queens Community District 1--Astoria & Long Island City PUMA	76.7
NYC-Queens Community District 2--Sunnyside & Woodside PUMA	80.6
NYC-Queens Community District 3--Jackson Heights & North Corona PUMA	68.8
NYC-Queens Community District 4--Elmhurst & South Corona PUMA	72.3
NYC-Queens Community District 5--Ridgewood, Glendale & Middle Village PUMA	71.1
NYC-Queens Community District 6--Forest Hills & Rego Park PUMA	78.1
NYC-Queens Community District 7--Flushing, Murray Hill & Whitestone PUMA	70.3
NYC-Queens Community District 8--Briarwood, Fresh Meadows & Hillcrest PUMA	75.7
NYC-Queens Community District 9--Richmond Hill & Woodhaven PUMA	78.4
NYC-Queens Community District 10--Howard Beach & Ozone Park PUMA	79.9
NYC-Queens Community District 11--Bayside, Douglaston & Little Neck PUMA	83.3
NYC-Queens Community District 12--Jamaica, Hollis & St. Albans PUMA	70.7
NYC-Queens Community District 13--Queens Village, Cambria Heights & Rosedale PUMA	78.4
NYC-Queens Community District 14--Far Rockaway, Breezy Point & Broad Channel PUMA	67.7





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