

Finding NYC Neighborhood Census Data

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Abstract

This document summarizes the types of geographies you can use to study neighborhoods, the common census datasets that are available for these areas, and the sources you can use to access and download data.

What's a neighborhood?

Neighborhoods are areas that are informally and locally defined. The Census Bureau doesn't define and collect data for neighborhoods; you have to use different census geographies to approximate them.

	<p>Boroughs (Counties) - Counties are legal subdivisions of states. NYC is unique as it's composed of multiple counties, and for historical reasons the five NYC counties are locally referred to as boroughs. City agencies classify data using borough names (Bronx, Brooklyn, Manhattan, Queens, Staten Island) while federal agencies like the US Census Bureau use county names (Bronx, Kings, New York, Queens, Richmond).</p> <p>Dataset availability: 2010 Census, 1 and 5-year ACS</p>
	<p>PUMAs (Public Use Microdata Areas) - Statistical areas created by the US Census Bureau to have approximately 100,000 residents; they're created by aggregating census tracts. There are 55 in NYC (PUMAs # 03701 to 04114) and they can be used to represent groups of a few neighborhoods. The City refers to these areas as sub-boroughs and correlates them with community districts. Most NYC PUMAs are contained within boroughs and typically do not cross borough boundaries.</p> <p>Dataset availability: 1 and 5-year ACS</p>
	<p>ZCTAs (ZIP Code Tabulation Areas) - Statistical areas created by the US Census Bureau to approximate residential USPS ZIP Codes; there are over 200 in NYC. The Census Bureau creates ZCTAs by aggregating small statistical areas called census blocks based on the location of addresses within the blocks. While not ideal for representing neighborhoods, ZIPs are often used for this purpose since most people are familiar with them. ZCTAs do not correspond with other census geographies.</p> <p>Dataset availability: 2010 Census and 5-year ACS</p>

	<p>NTAs (Neighborhood Tabulation Areas) - Statistical areas created by the NYC Department of City Planning for presenting and publishing census data; the Census Bureau does not publish data for NTAs. The City created these 195 areas by aggregating census tracts based on local and city conventions for neighborhood definitions. NTAs are contained within PUMAs and do not cross PUMA boundaries.</p> <p>Dataset availability: 2010 Census and 5-year ACS</p>
	<p>Census Tracts - Statistical areas created by the US Census Bureau to have approximately 4,000 residents (with a range of 1,200 to 8,000). There are over 2,000 tracts within NYC. Tracts are contained within NTAs and PUMAs and do not cross these boundaries. Typically you would aggregate tracts to create neighborhoods (like the City did when it created NTAs), since the tracts are relatively small. Tract data published in the 5-year ACS can often have a large margin of error.</p> <p>Dataset availability: 2010 Census and 5-year ACS</p>

Which census data?

There are many census datasets but there are two primary ones you'll likely use: the Decennial Census (i.e. 2010 Census, 2000 Census, etc.) and the American Community Survey (ACS). The collection method, frequency of data, number and type of statistics, and geographic coverage varies for each dataset.


Decennial Census : a 100% count of the population taken every ten years, with the latest year being 2010. The number of variables is limited to basic demographic characteristics of the population: race, gender, age, households, family relations, housing units, housing occupancy, and tenure (owner versus renter occupied). Decennial census data is available for practically all geographic areas.


American Community Survey (ACS) : an annual survey of the population, with values published as estimates at a 90% confidence interval with margins of error for 1-year and 5-year periods. The number of variables is more extensive than the decennial census; in addition to basic demographic characteristics the ACS also includes socio-economic data like citizenship, educational attainment, income, occupation, home value, and much more. Geographically the data is more limited; geographic areas with 65k residents or more are published annually, and areas with less than 65k residents down to census tracts are published as 5-year averages.


Where can I find data?


Census data is available from several sources; sources at the top of this list are the easiest to use but provide a limited amount of data. Sources further down the list provide a fuller range of data and give you the flexibility to build your own tables, but you'll have to invest some time to learn how to navigate and effectively use them.

<p>Neighborhoods</p>	<p>Maps in the Neighborhoods tab, NYC Data Guide http://guides.newman.baruch.cuny.edu/nyc_data</p>
<p><i>Data: profiles for boroughs, PUMAs, ZCTAs</i></p>	
<p>The maps embedded in this research guide provide a convenient way to access the most recent demographic profiles for a neighborhood: selecting a place takes you directly to its profile on the Census Bureau's website. Data is limited to 5-year ACS profiles for PUMAs and 5-year ACS and 2010 Census profiles for ZCTAs. The page also contains links to profiles for boroughs.</p>	

	NYC Census Factfinder http://maps.nyc.gov/census/
<i>Data: profiles for NTAs and tracts</i>	
<p>The City has created its own map-based factfinder that makes finding basic 2010 Census and 5-year ACS profiles for tracts and NTAs relatively easy. The City created Neighborhood Tabulation Area (NTAs) out of census tracts and is the only source that provides them. Click on a tract or NTA to get a profile, or locate an area using an address or landmark. You can also create custom profiles by selecting census tracts to build your own neighborhoods. Margins of error are provided for all ACS data, and are calculated for areas that you create. There's also a demographic change profile for the 2000 to 2010 Census.</p>	

	NYC Department of City Planning - Population Division http://www1.nyc.gov/site/planning/data-maps/nyc-population.page
<i>Data: varies by geography and dataset, comparison tables for boroughs, PUMAs, NTAs, tracts</i>	
<p>The Dept of City Planning has compiled reports in easy-to-download spreadsheets that provide you with all the basic socio-economic and demographic data from the 2010 & 2000 Census and ACS. The City provides data for NTAs (which they created), PUMAs (which are correlated with Community Districts), and boroughs. Tract-level data is provided only for the decennial census. While the ready-made tables are easy to access, you are limited to the most common variables. Given their size, some of the tables can be a little unwieldy.</p>	

	Social Explorer Access via the list of library databases at http://guides.newman.baruch.cuny.edu/databases
<i>Data: profiles and comparison tables for boroughs, PUMAs, ZCTAs, tracts</i>	
<p>This library database provides historical decennial census and ACS data for the most common census geographies via a user-friendly mapping interface. Choose the geography, dataset, and variables, click on the places of interest, and download a variety of census reports that include data for each place and summaries of all places. It's easy to use for constructing your own neighborhoods out of census tracts, and you also have the ability to make attractive maps. A serious downside is that the margins of error for ACS data are not included, which limits your ability to interpret how precise the data is (the margins can be quite large for small groups or areas). You MUST access this database via your library (all CUNY libraries have a subscription); there is a Social Explorer website but it provides a limited number of variables that you can map but not download.</p>	

	US Census Bureau American Factfinder http://factfinder.census.gov
<i>Data: profiles and comparison tables for: Boroughs, PUMAs, ZCTAs, tracts</i>	
<p>This is the Census Bureau's primary portal for accessing and downloading all of its current datasets. All variables for all geographies for all datasets are available as soon as they are released, making the AFF the ultimate source. It's also a public domain service that will always be available. In the Factfinder boroughs are referred to by their county names. There are no pre-compiled tables; you build and download your own profiles and comparison tables. Given the enormity of this resource, learning to use it can be a challenge. For an introduction see <i>The American Factfinder: A Brief Demonstration</i> that's available in the Newman Library subject guides for NYC Data and US Census Data.</p>	

Is there census data for businesses?

The Census Bureau publishes the Business Patterns dataset, which they compile annually from a government register of businesses. The total number of known business establishments with paid employees is classified by type of business, with summary data on number of employees and payroll. The data is only available for counties and ZIP Codes. It can be downloaded via the American Factfinder or from the Business Patterns website at: <http://www.census.gov/programs-surveys/cbp.html>.

Other Resources

NY Times Mapping the 2010 US Census : a user-friendly web map that allows you to explore county and census tract data for the entire nation. Does not provide data for download. <http://projects.nytimes.com/census/2010/map>

Missouri State Data Center : as an alternative to the Factfinder, they have created simple interfaces for accessing profiles for all geographies in the US, and you can compare up to four places in one profile. 2010 Census: http://mcdc1.missouri.edu/sf1_2010/sf1_2010_menu.html ACS: <http://mcdc1.missouri.edu/acspfiles/acspfilemenu.html>

NHGIS : from the Minnesota Population Center, this is the source for downloading all historic census data back to 1790. Users must register but registration is free: <https://www.nhgis.org/>

Infoshare : this library database provides census data for NYC and NYS, and is unique in that it also provides useful data outside the census (vital statistics, education data, crime, etc) for locally defined areas that are not readily available elsewhere. There is a time-lag in the appearance of new datasets: <http://guides.newman.baruch.cuny.edu/databases>

Neighborhood Change Database : this library database provides census tract data from 1970 to 2010 that has been normalized, so that geography is stable and can be compared across time. Baruch College users can access it via the library's databases page (other CUNY users must visit Baruch's campus in order to access it): <http://guides.newman.baruch.cuny.edu/databases>

DNainfo Where's Your Neighborhood : this media source for neighborhood news asked New Yorkers to draw boundaries that represent their neighborhood. Since neighborhoods are informal and locally defined, this source is helpful for identifying general consensus around boundaries: <https://visualizations.dnainfo.com/nycneighview/>

To Learn More

Visit the Newman Library Research Guides on New York City Data http://guides.newman.baruch.cuny.edu/nyc_data and US Census Data http://guides.newman.baruch.cuny.edu/us_census. The GIS Lab at the Newman Library has written a number of tutorials for using The American Factfinder, the NYC Census Factfinder, and the Social Explorer: <https://www.baruch.cuny.edu/confluence/display/geoportal/Census+Tutorials>. The Census Bureau, Social Explorer, and the City also provide videos or written instructions for using their resources.