

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 Census Bureau to have approximately 100,000 residents; they're created by aggregating census blocks. There are 55 in NYC (PUMAs # 03701 to 04114) and they can be used to represent groups of a few neighborhoods. The City correlates them with the 59 community districts that represent community boards, although the boundaries between the two do not coincide perfectly. 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 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 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 counties 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. 2020 Census, 2010 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, sex, age, households, family relations, housing units, housing occupancy, and tenure (owner versus renter occupied). Decennial census data is available for practically all geographic areas. The next census will be conducted on April 1, 2020, and the first data from that census will be released one year later.


American Community Survey (ACS) : an annual survey of the population, with values published as estimates at a 90% confidence level with margins of error for 1-year and 5-year periods. The ACS is more extensive than the decennial census, and beyond the basic demographic characteristics it includes socio-economic data on 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 create 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/nbhoods</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 Population FactFinder https://popfactfinder.planning.nyc.gov/
<i>Data: profiles PUMAs, NTAs, tracts, blocks</i>	
<p>The City has created its own map-based factfinder that makes finding basic 2010 Census and 5-year ACS profiles 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, NTA, or PUMA to get a profile, or locate an area using an address or landmark. You can also create custom profiles by selecting multiple areas 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 https://www1.nyc.gov/site/planning/planning-level/nyc-population/nyc-population-data.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 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, 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 tracts, and you also have the ability to make attractive maps. A <i>serious</i> downside is that the margins of error for ACS data are <i>not</i> 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 data.census.gov https://data.census.gov/cedsci/
<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 it the ultimate source. In data.census.gov boroughs are referred to by their county names. There are no pre-compiled tables for point and click download; you must query the database to retrieve profiles and comparison tables. Given the enormity of this resource, learning to use it can be a challenge. For an introduction see <i>data.census.gov: 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 [data.census.gov](http://www.census.gov/programs-surveys/cbp.html) or from the Business Patterns website at: <http://www.census.gov/programs-surveys/cbp.html>.

The NYC Comptroller's Office publishes an annual report entitled *NYC Neighborhood Economic Profiles* for the city's boroughs and PUMAs, where they have re-calculated the Business Patterns dataset for these geographies and provide related socio-economic data from the decennial census and the ACS: <https://comptroller.nyc.gov/reports/nyc-neighborhood-economic-profiles/>.

Other Resources

Community District Profiles : Another website from NYC City Planning that provides a variety of summary data, and some census data, for the City's 59 Community Districts: <https://communityprofiles.planning.nyc.gov/>

Census Reporter : this resource was designed for journalists to provide an easy way to explore, visualize, and download the latest data from the American Community Survey: <https://censusreporter.org/>

Missouri State Data Center : an alternative to the data.census.gov, they have created simple interfaces for accessing profiles for all geographies in the US (not just in Missouri), and you can compare up to four places in one profile. You can also generate reports for historical trends, and there are advanced tools for creating customized extracts for downloading data in bulk: <https://census.missouri.edu/>

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: <http://guides.newman.baruch.cuny.edu/databases>

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/>

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>

To Learn More

Visit the Newman Library Research Guides for:

- New York City Data http://guides.newman.baruch.cuny.edu/nyc_data
- US Census Data http://guides.newman.baruch.cuny.edu/us_census

The GIS Lab has written a number of tutorials for using different census data portals: <https://www.baruch.cuny.edu/confluence/display/geoportal/Census+Tutorials>.