

New York Housing Conference – NYC Housing Tracker Data Dictionary/Methodology

This document includes sources for the data used and calculations done in the production of the New York Housing Conference’s City Council Housing Tracker. Summary data files can be found on the NYHC Github here: <https://github.com/thenyhq/citycouncildistricthousingtracker>

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City Council HOUSING PRODUCTION DATA

Total housing production includes existing housing units and net new housing units completed with a certificate of occupancy (including all types: private, market rate, public, affordable etc.). The net new units take into account new construction, demolitions, and alterations that changed unit counts. The data is from the Department of City Planning Housing Database:
<https://www1.nyc.gov/site/planning/data-maps/open-data.page#housingdevelopment>

Affordable housing production counts units that have closed on financing before they begin construction, including 2014 – 2022, and come from NYC HPD through NYC Open Data. The data includes all units counted towards the city’s affordable housing plan:
<https://data.cityofnewyork.us/Housing-Development/Housing-New-York-Units-by-Building/hg8x-zxpr>

Charts showing housing production by income omits data categorized as “other” for its affordability level.

We ranked Council districts based on the total number of new construction affordable housing units financed in the district between 2014 and 2022.

Note: The total housing production numbers and the affordable housing production numbers cannot be directly compared annually because they are tracked at different times. Affordable housing production is counted when the deal closes on financing, which mostly happens before construction. Market rate housing production is tracked when the building receives a certificate of occupancy, which happens after construction ends.

You can also download tables showing affordable housing production by Council district here at NYHC's Github: <https://github.com/thenyhcitycouncildistricthousingtracker>

2023 Affordable Housing Income Ranges – Area Median Income (for a family of two)

Extremely Low Income
0-30% AMI
< \$33,900

Very Low Income
31-50% AMI

\$33,900 - \$56,500

Low Income
51-80% AMI
\$56,500 - \$90,500

Moderate Income
81-120% AMI
\$90,500 - \$135,600

Middle Income
121-165% AMI
\$135,600 - \$186,450

Upper Middle Income
> 165% AMI
> \$186,450

<https://www.nyc.gov/site/hpd/services-and-information/area-median-income.page>

DEMOGRAPHIC, EXISTING STOCK, & HOUSING NEEDS DATA

Census Tract Data

The demographic and housing/household characteristics found in the tracker were Census Tract level estimates aggregated to the City Council District level. Census Tracts were assigned to Council Districts using the crosswalk found in the nycensus data package: <https://github.com/natalieoshea/nycensus>

The crosswalk did not have a matching council district for 45 NYC census tracts. They are parkland, cemeteries, large green spaces like golf courses, and airports. All have been manually matched and included in the data, with the exception of 3 tracts which's areas are entirely made up of water; these tracts have "N/A" in the "Council District" column. All of which can be found here at NYHC's Github:

<https://github.com/thenyh/citycouncildistricthousingtracker/blob/main/Parkland%20and%20omitted%20census%20tracts>

The final crosswalk used for the tracker can be found here: https://github.com/thenyh/citycouncildistricthousingtracker/blob/main/master_crosswalk

Related data for every NYC census tract was pulled from the U.S. Census website. The tracker's statistics stem from estimates in the tables as follows:

2020 Decennial Census Redistricting Data

Every decade the U. S. Census Bureau conducts a decennial census. These censuses attempt to count every person in the country and collect basic demographics like, age, sex, and race. The decennial census is the most accurate and geographically detailed way to understand who lives where.

- *(Table P2)*
 - Total Population*
 - Race
 - Density

2015-2019 American Communities Survey (5-Year Estimates)

The American Community Survey (ACS) is the most comprehensive nationwide survey, bringing the gaps in the Decennial Census and providing much more detail. The monthly ACS surveys samples approximately 300,000 addresses. These are then released into includes both annual releases of survey data and "5-year roll-ups" of estimates ranging from demographic and financial information to household characteristics and employment. The tracker utilizes the 5-year estimates of the ACS.

- *(Table DP04)*
 - Total Housing Units*
 - Rental and homeownership rate*
 - Units in structure (1, 2, 3-4 etc.)
 - Rent Burdened
- *(Table S1701)*
 - Below Poverty*
 - 65 and older*
 - Families with children under 18
- *(Table DS1101)*
 - Renter-occupied*
 - Owner-occupied*
- *(Table DP03)*
 - Unemployment Rate*
- *(Table B19025)*
 - Median Household Income*

- (Table B25004 and DP04)
 - Vacancy Rate*

Statistics without an asterisk (*) were aggregated as they were from the census site, while all others required calculation to develop.

Census Data Calculations

For Race, White, Black, and Asian are made up of those racial categories minus those with Hispanic ethnicity. The "Hispanic" categorization includes all individuals who responded with "Hispanic" as their ethnicity despite what race(s) respondents noted. "Other" includes the percentage left after accounting for these four groupings.

The Racial Diversity Index calculates the probability that two randomly chosen people in a given geographic area will be of a different race. NYHC used the categories listed above – Asian, Black, Hispanic, and white to calculate the index, excluding the category of other, which is the percentage that were not in one of those four groups. The index is calculated using the following formula: $1 - (\text{Percent Asian}^2 + \text{Percent Black}^2 + \text{Percent Hispanic}^2 + \text{Percent white}^2)$.

A higher number indicates a more racially diverse population. If a Council district is inhabited by a single racial/ethnic group, its Racial Diversity Index would be zero while if the population is evenly distributed among the four groups (25% of residents are Asian, 25% are Black, 25% are Hispanic and 25% are white), its Racial Diversity Index would be 0.75.

Density was calculated using the total land area converted from square feet to acres, divided by the total population.

The vacancy rate was calculated using estimates for all unoccupied rental units (for rent and not for rent) divided by the sum of total of occupied rental units and unoccupied rental units.

The units-in-structure estimates are percentages of the sum total of the structure types listed and "mobile homes" and the "Boats, vans, etc." responses from the ACS.

Rent burden was calculated using the estimate of those respondents with a Gross Rent as a Percentage of Household Income (GRPI) of 30-49 percent and 50 or more percent of total rental unit count (with vacant rental units subtracted).

Median Household Income was estimated using linear interpolation. The estimates are presented in inflation-adjusted 2021 dollars calculated using the U.S. Bureau of Labor and Statistics historic Consumer Price Index tables found here: https://www.bls.gov/regions/mid-atlantic/data/consumerpriceindexhistorical_us_table.htm

Households Entering DHS Shelters

This data shows the number of individuals in shelter that came from the community board. More specifically, it shows the number of individuals that were in shelter as of April 2023 when we pulled the data whose last address was in the community board. We used the NYC Open Data set Associated Address by Borough and Community District. The data was not detailed enough to be calculated at the council district level so we included it by community board. The tracker displays the data for community boards that overlap with that council district.

<https://data.cityofnewyork.us/Social-Services/Associated-Address-by-Borough-and-Community-Distri/ur7y-ziyb>

Rent Regulated Units

Rent stabilized units courtesy of the Community Service Society of New York via the U.S. Census 2017 New York City Housing and Vacancy Survey.

Housing Code Violations Per 100 Units

Code violations come from NYC Open Data Housing Maintenance Code Violations dataset. We included only violations with an issue date (NOVIssueDate) in 2022 (1/1/2022 - 12/31/2022). We divided the number of violations in the district by the number of units in the district multiplied by 100.

<https://data.cityofnewyork.us/Housing-Development/Housing-Maintenance-Code-Violations/wvxf-dwi5>

Expiring Affordable Units 2023 - 2027

In 2023 we added data on the number of affordable housing units with affordability restrictions expiring in the next five years (2023 – 2027). We used the NYU Furman Center’s [Core Data](#). Because many buildings are in multiple programs, we created a field that shows the latest expiration date among all the programs the building uses. We then filtered for buildings where the last expiration date was in calendar years 2023 - 2027.

New York Housing Authority (NYCHA) Data

Two data points in the tracker are sourced from NYCHA, detailing the level of need (capital construction work) and the total amount of housing run by NYCHA in each council district.

Capital Needs

The Capital Need figure is an estimate of physical need provided by NYCHA to the New York Housing Conference. The estimate is based on the Physical Needs Assessment conducted by NYCHA surveying building conditions, including a comprehensive inspection of various building components and sub-components, which range from roofs to corridors to heating/cooling systems. The estimate excludes add-on for Lead-Based Paint Abatement, Asbestos Abatement, Pest & Waste Management, Electrification, as well as developments that have converted under the PACT Program. Physical Needs estimates for developments located in multiple districts are equally distributed across those districts.

Unit Count

The total NYCHA unit counts by council district are based off of the number of current units in the 2021 NYCHA Development Databook produced by NYCHA's Performance Tracking and Analytics Department (PTAD); it includes data for all 285 developments in NYCHA's public housing portfolio as of March 2021, however, the tracker includes only the 275 projects (167,083 units). The 10 excluded developments are FHA REPOSSESSED HOUSES Groups 1 through 10.

There are 6 developments that have units located in multiple council districts. These developments had a total of 4230 units that were divided into a council district based on the borough block lot (BBL) information for the development's buildings listed on NYCHA's Development Maps found here: <https://www1.nyc.gov/site/nycha/about/developments.page>

Per building unit counts were found by using NYC Department of City Planning's New York City's Zoning & Land Use Map (ZOLA) and the PLUTO database. The "residential units" cited on ZOLA and PLUTO includes units not found in the "current units" provided in NYCHA's data. This discrepancy impacts the counts for 4 of the developments with 3352 units combined. Instead of splitting the units evenly, the tracker shows an estimation based off the proportionate unit split in ZOLA, and therefore the margin of error for the council district NYCHA unit count for each is closer to 0 than it is to +/- the number of units in the development.

NYCHA DEVELOPMENT	NUMBER OF CURRENT UNITS (NYCHA DATA BOOK)	NUMBER OF RESIDENTIAL UNITS (NYC DCP ZOLA)	RESIDENTIAL UNITS SPLIT BY COUNCIL DISTRICTS (%)							
			10	11	14	36	41	8	9	
MARBLE HILL	1682	1696	64	9	27					
STERLING PLACE REHABS (SAINT JOHNS-STERLING)	83	147				21	79			
STERLING PLACE REHABS (STERLING-BUFFALO)	125	179				84	16			
TAFT	1462	1464						46	54	
TOTAL	3352	3486								

The 2021 NYCHA Development Databook can be found here:
<https://www1.nyc.gov/assets/nycha/downloads/pdf/pdb2021.pdf>

Housing Choice Voucher (HCV) Program (formerly Section 8) Units

Section 8-unit counts use the US Department of Housing and Urban Development's (HUD) Data Dictionary for Picture of Subsidized Households: 2021. The tracker uses Housing Choice Voucher total units defined as the "Number of units under contract for federal subsidy and available for occupancy" by HUD. Entries with values labeled as "missing" were omitted. The census tracts listed were matched using the tracker's master crosswalk and unit counts were aggregated to the council district level.

NYC Mayor

Affordable Housing Production

Affordable housing production counts units that have closed on financing before they begin construction, including 2014 – 2022, and come from NYC HPD through NYC Open Data. The data includes all units counted towards the city's affordable housing plan. Affordable homeownership data also comes from this dataset.

<https://data.cityofnewyork.us/Housing-Development/Housing-New-York-Units-by-Building/hg8x-zxpr>

HPD Capital Spending

Capital spending data comes from the NYC Independent Budget Office's [Fiscal History](#) Capital Expenditures Since 1985.

Affordable Housing Metrics & Homelessness to Housing Metrics

Data can be found in the [Mayor's Management Report](#). Average cost of shelter is calculated by multiplying the average cost per day for shelter facilities and the average length of stay in shelter, which is shown in days.

People in NYC DHS Shelters

Data comes from NYC DHS, collected by the [Coalition for the Homeless](#).

NYCHA Needs

NYCHA units preserved comes from NYCHA. Capital needs reflects the total needs in the 2017 Physical Needs Assessment plus additional needs to remediate lead paint. Capital spending comes from NYCHA.