



## Current and Projected Populations

### Current Population Estimates



### Summary

The U.S. Census Bureau has estimated New York City's population at 8,550,405, as of July 2015. This represented an increase of 375,300 residents (or 4.6 percent) over the April 2010 decennial census count of 8,175,133. The city has not witnessed such a robust pace of growth since the 1920s. Population growth has been fueled by the continued surplus of births over deaths, partly due to record high life expectancy coupled with a net influx of people into the City, a phenomenon not experienced for over a half-century.

Each of the City's five boroughs registered gains in population. Brooklyn saw the largest increase, up 5.3 percent, followed by the Bronx (5.1 percent), Queens (4.9 percent) and Manhattan (3.7 percent); Staten Island showed the smallest gain (1.2 percent) over the 63-month period. The increase for the Bronx brings it close to its historical high, achieved in 1970, when the population of the borough was at 1.472 million.

### Complete Analysis of U.S. Census Bureau Estimates for July 1, 2015

#### Introduction

The U.S. Census Bureau prepares estimates of total population for all counties in the United States on an

annual basis, using a demographic procedure known as the “administrative records method” (described below). This method assumes that post-census population change can be closely approximated with vital statistics data on births and deaths, along with other administrative and survey data that provide a picture of migration patterns.

## Total Population

According to U.S. Census Bureau population estimates, New York City’s population increased from 8,175,133<sup>1</sup> in April of 2010 to 8,550,405 in July of 2015. This is an increase of 375,300 residents or about 4.6 percent over the 2010 mark. Among the boroughs, Brooklyn saw the largest change in population in this 63-month period, growing by 5.3 percent or 132,000 persons, followed by the Bronx (5.1 percent or 70,300 persons), Queens (4.9 percent or 108,400 persons), and Manhattan (3.7 percent or 58,600 persons). The lowest growth occurred in Staten Island (1.2 percent or 5,800 persons).

New York City’s population increase since April of 2010 represented 89.8 percent of the total increase in New York State, which raised the city’s share of the State’s population, from 42.2 percent to 43.2 percent.

Change in Population, U.S. Census Bureau Estimates April 2010 to July 2015				
	Census 2010	Estimates 2015	Change: Census 2010 and Estimates 2015	
			Number	Percent
<b>New York State</b>	19,378,102	19,795,791	417,689	2.2
<b>New York City</b>	<b>8,175,133</b>	<b>8,550,405</b>	<b>375,272</b>	<b>4.6</b>
<b>Bronx</b>	1,385,108	1,455,444	70,336	5.1
<b>Brooklyn</b>	2,504,700	2,636,735	132,035	5.3
<b>Manhattan</b>	1,585,873	1,644,518	58,645	3.7
<b>Queens</b>	2,230,722	2,339,150	108,428	4.9
<b>Staten Island</b>	468,730	474,558	5,828	1.2
<i>NYC as % of NYS</i>	42.2	43.2	89.8	

Sources: 2010 Census; U. S. Census Bureau Current Estimates Program

## Components of Population Change

Demographers divide population change into components. *Natural increase* represents the difference between births and deaths. *Net migration* represents the balance between persons entering and leaving an area. Together, these components describe how populations change over time. The U.S. Census Bureau constructs population estimates for all counties in the United States by separately estimating the components of change. Births and deaths are compiled using data from the national vital statistics system. Net migration is calculated by estimating the rate of net migration for persons coming in from and leaving for other counties in the 50 states (*net domestic migration*) and the balance of people who immigrate from and emigrate to other nations and Puerto Rico (*net international migration*). The net domestic migration rate is derived using income tax returns from the Internal Revenue Service and Medicare enrollment data from the Social Security Administration (see methods discussion below).

It is important to keep in mind that New York City has a very dynamic population, with several hundred thousand people coming and going each year. This “churn” has long characterized the City, and represents a fluidity that is difficult to characterize using the net migration measures presented herein. This dynamism is a testament to the City being a magnet for those seeking opportunities, then moving on, only to be replaced by the next set of individuals aspiring for a better life. This very vibrant picture is what makes New York City’s

population extraordinary and different from most other places in the nation and, perhaps, the world.

The most recent estimates from the U.S. Census Bureau indicate the following for the 2010-2015 period:

- a) Positive natural increase – the surplus of births over deaths added 341,300 persons to New York City's population between April of 2010 and July of 2015.
- b) Net migration was positive for the city overall, with a net migration gain of 49,600 persons for the period. While small by the standards of the City's overall population, the picture of positive net migration represents a reversal of longstanding pattern of population losses through migration. The recent gain through migration was the result of a net inflow of 452,500 persons through international migration, which offset a net domestic migration loss of 402,900 persons. For the first time in over a half-century, migration fueled population growth.
- c) Every borough, except Staten Island, displayed positive net migration between April 2010 and July of 2015.

Cumulative Estimates of the Components of Population Change for New York City and Counties: April 1, 2010 to July 1, 2015					
Geographic Area	Total Population Change*	Natural Increase	Net Migration		
		(Births- Deaths)	Total	Net International Migration	Net Domestic Migration
<b>New York City</b>	<b>375,443</b>	<b>341,339</b>	<b>49,561</b>	<b>452,499</b>	<b>-402,938</b>
Bronx	70,337	64,274	7,212	90,151	-82,939
Brooklyn	132,025	135,380	1,339	127,723	-126,384
Manhattan	58,644	47,000	15,520	85,362	-69,842
Queens	108,609	84,612	29,029	142,235	-113,206
Staten Island	5,828	10,073	-3,539	7,028	-10,567

\*Note: The estimated components of population change will not equal the numerical population change because of a small residual after controlling to the national totals.

Source: Population Division, U.S. Census Bureau

### New Patterns of Recent Growth: 2014-2015 vs. 2010-2014

The robust pace of growth in the post-2010 period has not been seen since the 1920s. However, the most recent 2014-2015 estimates point to a relatively lower growth rate as compared to 2010-2014. The increase over the past year, 2014-2015 was 55,200 or 0.6 percent, compared to 75,300 or about 0.9 percent annual average growth for the 2010-2014 period.

In the 2014-2015 period, Brooklyn experienced net outflows, a reversal of the pattern in prior years. Growth in Brooklyn was at the City average (0.6 percent) in the past year, while the Bronx (0.9 percent) and Queens (0.7 percent) had higher than average growth. Indeed, the Bronx had the highest growth of any county in New York State, while Queens added the most people in numerical terms.

Change in Population, U.S. Census Bureau Estimates April 2010, July 2014, and July 2015							
	Census 2010	Estimates 2014	Estimates 2015	Annual Change 2010-2014		Change 2014 to 2015	
				Number	Percent	Number	Percent
<b>New York State</b>	19,378,102	19,748,858	19,795,791	87,237	0.5	46,933	0.2
<b>New York City</b>	<b>8,175,133</b>	<b>8,495,194</b>	<b>8,550,405</b>	<b>75,308</b>	<b>0.9</b>	<b>55,211</b>	<b>0.6</b>
Bronx	1,385,108	1,441,757	1,455,444	13,329	1.0	13,687	0.9
Brooklyn	2,504,700	2,620,720	2,636,735	27,299	1.1	16,015	0.6
Manhattan	1,585,873	1,636,966	1,644,518	12,022	0.8	7,552	0.5
Queens	2,230,722	2,322,450	2,339,150	21,583	1.0	16,700	0.7
Staten Island	468,730	473,301	474,558	1,076	0.2	1,257	0.3

Sources: 2010 Census; U.S. Census Bureau Current Estimates Program

Cumulative Estimates of the Components of Population Change for New York City and Counties: July 1, 2014 to July 1, 2015					
Geographic Area	Total Population Change*	Natural Increase	Net Migration		
		(Births- Deaths)	Total	Net International Migration	Net Domestic Migration
New York City	55,211	60,943	4,252	96,102	-91,850
Bronx	13,687	11,488	3,144	19,067	-15,923
Brooklyn	16,015	24,836	-5,541	27,121	-32,662
Manhattan	7,552	7,745	2,158	18,312	-16,154
Queens	16,700	15,307	4,664	30,051	-25,387
Staten Island	1,257	1,567	-173	1,551	-1,724

\*Note: The estimated components of population change will not equal the numerical population change because of a small residual after controlling to the national totals.

Source: Population Division, U.S. Census Bureau

## U.S. Census Bureau Population Estimates Methodology

Each year, the U.S. Census Bureau produces estimates of the population for states, counties, cities and other places, as well as for the nation as a whole. They utilize data from a number of sources to estimate the change in the population for each year since the most recent decennial census. These population estimates use the 2010 Census counts as a base.

The U.S. Census Bureau subtracts the number of resident deaths from the number of resident births annually for each county in the U.S., to derive growth due to **natural increase**. Births are tabulated by residence of the mother, regardless of where the birth occurred. Similarly, deaths are tabulated by the most recent residence of the decedent, not where the death occurred. Birth and death certificates from the National Center for Health Statistics are used as the data source. The data on births and deaths are generally considered to be the most reliable part of the components of change analysis.

**Net domestic migration** represents the net exchange between a county and other counties in the 50 states. This component is estimated for three age groups (0-17, 18-64 and 65 years and older). For ages 0 to 64, the U.S. Census Bureau uses data on filers and dependents from federal income tax returns supplied by the Internal Revenue Service (IRS). In-migrants and out-migrants between counties as well as non-movers are identified by comparing the addresses of income tax filers from year-to-year to determine residence at two points in time. For example, to produce the July 1, 2015 estimates, the addresses of tax filers in 2013 and 2014 are compared. In-migrants to a county were defined as those with an address in the county in 2014, but outside the county in 2013; out-migrants are those with an address in the county in 2013, but outside the county in 2014; and individuals who filed tax returns at the same address at both points in time are non-migrants. Since every U.S. resident may not file or be claimed as an exemption on a tax return, these data cannot be used to directly estimate the number of county-to- county migrants. Instead a net domestic migration **rate** needs to be calculated by taking the difference between the numbers of in- and out-migrants (net-migrants) and dividing it by the sum of the non-movers and out-migrants.<sup>2</sup> Because many retired persons do not file tax returns, the U.S. Census Bureau uses addresses from Medicare enrollment data in much the same way as they use IRS data to determine domestic migration for the population 65 years and over.

**Net International Migration** is the result of net flows to and from foreign countries and Puerto Rico and is estimated in the following parts: immigration of the foreign-born, emigration of the foreign- as well as native-born, and net migration between the U.S. and Puerto Rico. Immigration of the foreign-born is estimated using the ACS question on residence in the prior year. Foreign-born persons who indicated that they lived abroad in the prior year are considered immigrants.

Emigration of the foreign-born is estimated using the residual method. For example, the foreign-born population is aged forward to obtain the expected population in the year 2015. The expected population is then compared to the population estimated in the 2015 ACS. Subtracting the estimated from the expected populations provides the residual, which then serves as the basis of emigration rates for the foreign-born. Emigration rates of the native-born are based on research by Schachter (2008) using data from over 80 countries.<sup>3</sup> This work compares estimates of U.S. citizens living overseas measured for two consecutive time periods and uses the difference to develop estimates of net native migration.

<sup>1</sup> While there is little doubt that New York City has experienced a substantial population increase post-2010, it is probably overstated. Brooklyn and Queens likely experienced an undercount in the 2010 Census, the result of misclassifying housing units as vacant. A conservative estimate is that this problem understated the population of the two boroughs by 65,000 persons. This means that the population of the city in 2010 was easily in excess of 8,240,000 – and not the 8,175,100 base from the 2010 enumeration that is used in the calculations of change.

See Salvo, J.J. and A.P. Lobo (2013). “Misclassifying New York’s Hidden Units as Vacant in 2010: Lessons Gleaned for the 2020 Census.” *Population Research and Policy Review*, 32(5), 729-751.  
<http://link.springer.com/article/10.1007/s11113-013-9298-1>

<sup>2</sup> One reason why small changes in estimates need to be interpreted with caution relates to the effects that tumultuous events can have on the administrative data used to create population estimates. Such is the case with super storm Sandy and its impact on the utility of tax return data to estimate migration levels for the boroughs.


<sup>3</sup> Schachter, Jason. 2008. “Estimating Native emigration from the United States,” Memorandum dated December 24, delivered to the US. Census Bureau.

This work compares estimates of U.S. citizens living overseas measured for two consecutive time periods and uses the difference to develop estimates of net native migration.

## **Projecting the Future**




### **New York City Population Projections by Age/Sex and Borough, 2010-2040 (Updated from the original PlaNYC Projections, 2000-2030)**

 Full Report (2.2 mb) – A detailed analysis of the total population projected to 2040, as well as the projected school-age and 65+ populations. Includes an in-depth description of the projection methodology.

 Briefing Booklet (775 kb) – An illustrated guide to the projection methodology and to the major findings.

#### **[View Original PlaNYC Projections, 2000-2030](#)**


### **New York City Population Projections by Age/Sex and Borough, 2000-2030**

 Full Report (680 k) – A detailed analysis of the total population projected to 2030, as well as the projected school-age and elderly populations. Includes an in-depth description of the projection methodology.

 Briefing Booklet (720 k) – an illustrated guide to the projection methodology and to the major findings.

#### **Related Links:**

- Visit PLANYC 2030 - Learn about the challenges New York City will face over the next 25 years -- and how you can help solve them.
- Mayor Bloomberg's Sustainability Address - Mayor Michael R. Bloomberg cited DCP's population projections in his December 12, 2006 address regarding planning for a sustainable future.
-  City Planning Press Release: City Planning Demographers Paint Picture of City's Future Population At 9.1 Million, Detailing How City Will Grow By 2030.

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