New York City Population Projections by Age/Sex & Borough, 2010-2040



BRIEFING BOOKLET

New York City Population Projections by Age/Sex & Borough, 2010–2040



THE CITY OF NEW YORK Michael R. Bloomberg, Mayor

DEPARTMENT OF CITY PLANNING

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December 2013

ACKNOWLEDGMENTS

Joseph J. Salvo, Arun Peter Lobo, and Erica Maurer of the Population Division executed these population projections and demographic analyses, and wrote the accompanying report.

Adam Attar, Joel Alvarez, Donnise Hurley, Will Levin, Anna Triebwasser, Johanna Lovecchio, and Tamara Agins helped review the document. The report was prepared under the general direction of Eric Kober, Director of the Housing, Economic and Infrastructure Planning Division of the New York City Department of City Planning.

The borough offices of the Department provided detailed feedback on issues related to land use and zoning. We thank the Directors and Deputy Directors of each of the borough offices (as well as their staff): Carol Samol and Ryan Singer of the Bronx office, Purnima Kapur and Winston Von Engel of the Brooklyn office, Edith Hsu-Chen and Adam Wolff of the Manhattan office, John Young and Deborah Carney of the Queens office, and Len Garcia-Duran and Nicole Campo of the Staten Island office.

We are grateful for the technical assistance provided by Robert Scardamalia, the former Chief Demographer for the New York State Department of Economic Development.

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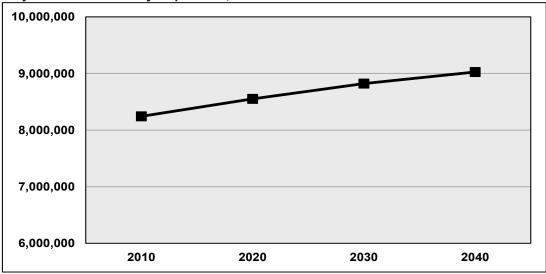
Introduction

- This report presents an analysis of New York City's population projected through 2040. These projections were done for each of the city's five boroughs by age and sex, at five year intervals for 2010 through 2040. The projections for the city as a whole were created using a demographic cohort-component model, which uses data on births, deaths, and migration to move the current age cohorts forward.
- The cohort-component model creates a projection based on a set of assumptions about fertility, mortality, and migration, using data from the city's recent past. While the rates of fertility and mortality tend to change slowly over time, migration rates can vary substantially. More important, because the city's population is so large, small deviations in assumed rates can have big numeric effects on the city's population going forward. Despite the limitations of the model, this exercise provides a useful tool for those who need to plan for the city's future.
- Demographic methods are necessary but not sufficient for the creation of useful projections by borough as these projections need to be examined in the context of the city's planning environment. Building on the work that was first conducted as part of PlaNYC in 2006, these projections include a planning component to ensure that projected population and housing can be reasonably accommodated, given the city's current land use and zoning.
- The planning component can dampen the tendency for demographic projections to show linear increases when there is insufficient capacity for new residential development. This means that over time, as areas of the city approach their reasonable built capacity, population growth is likely to slow.
- Like the demographic model, the planning component is subject to re-evaluation, as changes in land use and zoning occur over time.

New York City Population Growth, 2010-2040

- New York City's population is projected to grow from 8.2 million persons in 2010 to 9 million in 2040.
- With over 300,000 residents added in the first decade, the city is on its way to a 2020 population that is projected at 8.6 million. The city's population is projected at 8.8 million in 2030, and at 9 million in 2040.
- Between 2010 and 2040 the city's population is expected to increase by 783,000 residents, or 9.5 percent.
- The growth rate between 2010 and 2040 is expected to be lower than that experienced in the 1980-2010 period (1.2 million or 16.6 percent), but it is sufficient to propel the city across the 9 million mark by 2040.
- The basic demographic processes that have defined New York since the 1950s will likely continue, with substantial outflows from the city offset by immigration and natural increase (the difference between births and deaths).

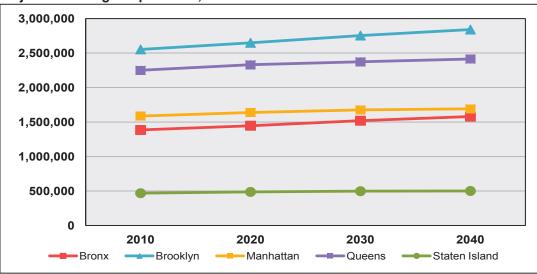




Source: DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040

Borough Population Growth, 2010-2040

- The projected 2040 populations for four of the five boroughs represent a historical high. Only Manhattan's 2040 projected population will be far below its historical peak population of 2.3 million, achieved in 1910.
- The Bronx is projected to grow from 1,385,000 in 2010 to 1,579,000 in 2040, an increase of 14 percent—the highest level of growth among the city's boroughs.
- Brooklyn's population, which stood at 2,553,000 in 2010, is projected to grow to 2,841,000 in 2040, an increase of 288,000 or 11.3 percent.

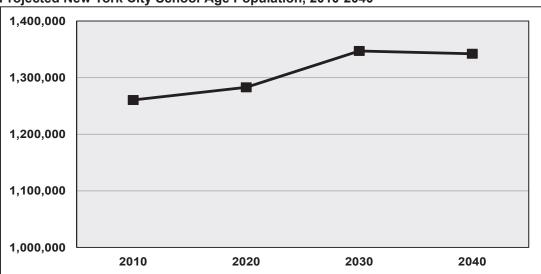


Projected Borough Populations, 2010-2040

- Queens is expected to increase 7.2 percent in the 30-year projection period. The population will increase from 2,250,000 in 2010 to 2,413,000 in 2040.
- Staten Island's population, which reached 469,000 in 2010, is projected to cross the one-half million mark (501,000) in 2040, an overall increase of 6.9 percent.
- Manhattan is projected to grow by 6.7 percent between 2010 and 2040, from 1,586,000 to 1,692,000.

New York City School-Age Population (ages 5 to 17), 2010-2040

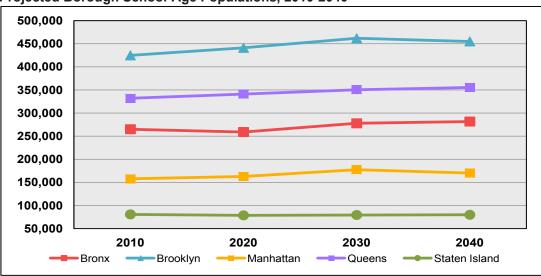
- The school-age population, which stood at 1,260,000 in 2010, is projected to change modestly over the current decade, with the number increasing by 1.8 percent to 1,283,000 in 2020.
- As the large cohorts of women born in the 1980s and 1990s (baby boom echo) enter their peak reproductive years, levels of childbearing will once again rise. This will increase the number of school-age children between 2020 and 2030 by 64,000, or 5 percent. The number of school children in 2030 is projected to be 1,347,000, after which it is projected to dip slightly to 1,342,000 in 2040.
- Given the larger increase in the general population, those of school-age will comprise just 14.9 percent of the population in 2040, down from 15.3 percent in 2010.



Projected New York City School-Age Population, 2010-2040

Borough School-Age Population (ages 5 to 17), 2010-2040

- Projected changes in the school-age population differ by borough. Manhattan is projected to see the largest overall increase during the next 30 years, with its school-age population projected to grow 7.8 percent, from 158,000 in 2010 to 170,000 in 2040.
- Growth in the school-age population will also occur in Brooklyn (7.1 percent), Queens (7.1 percent), and the Bronx (6.3 percent). Staten Island is the only borough where an overall decline in the school-age population is projected (-1.1 percent).
- Though the school-age population in most boroughs will be growing over time, other age groups are expected to increase even faster. As a result, the share of the school-age population in the Bronx, Brooklyn, and Staten Island is expected to decline between 2010 and 2040, with the share remaining largely unchanged in Manhattan and Queens.

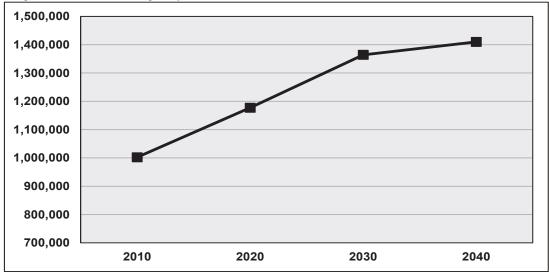


Projected Borough School-Age Populations, 2010-2040

Source: DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040

New York City Population 65 Years and Over, 2010-2040

- Between 2010 and 2040, the population 65+ will increase by a dramatic 40.7 percent, from 1,002,000 in 2010 to 1,410,000 in 2040
- The aging of large baby boom cohorts, as well as a decline in fertility and improvements in life expectancy, all contribute to the general aging of the population.
- By 2040, every baby boomer will be at least 75 years old and the share of the population that is 65+ will increase to 15.6 percent, compared to 12.2 percent in 2010.

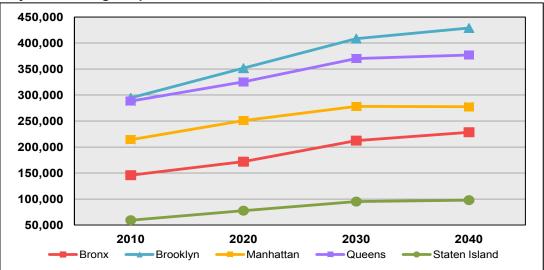


Projected New York City Population 65 and Over, 2010-2040

Source: DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040

Population 65 and Over by Borough, 2010-2040

- Staten Island will experience the largest percentage increase in persons 65+, from 59,000 in 2010 to 98,000 in 2040, a 65 percent jump. Persons 65+ comprised 12.7 percent of Staten Island's population in 2010 and will account for almost one-fifth of that borough's population in 2040, the highest in the city.
- Despite its high fertility, the Bronx will experience the second largest increase (57 percent); even with the large gain, its projected population 65+ of 228,000 will comprise just 14.5 percent of the population, the smallest share of any borough.

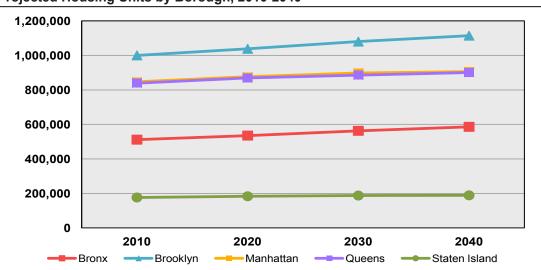


Projected Borough Population 65 and Over, 2010-2040

- Brooklyn will continue to have the largest population 65+ in the city, numbering 429,000 in 2040, a 45.6 percent increase. The population 65+ in Queens is expected to increase 30.8 percent, to 377,000 in 2040, while that of Manhattan will see an increase of 29.6 percent, to 277,000 in 2040.
- In each borough, the share of those 65+ in the overall population is projected to increase between 2010 and 2040.

New York City and Borough Housing, 2010–2040

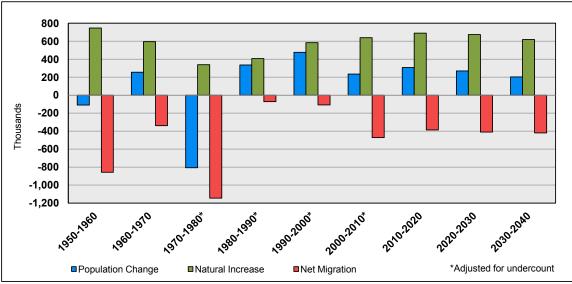
- New York City's total housing unit count, which stood at 3,375,000 in 2010, is projected to increase by 9.5 percent, bringing the housing unit count to 3,696,000 by 2040.
- The Bronx will see the biggest percent increase between 2010 and 2040, 14.5 percent, increasing the number of housing units from 512,000 in 2010 to 586,000 in 2040.
- Brooklyn's over 1 million housing units in 2010—the most of any borough—is projected to grow by 11.4 percent, to 1,115,000 units in 2040.
- Manhattan, Queens, and Staten Island, with more limited growth potential, are each projected to increase by 7 percent between 2010 and 2040.



Projected Housing Units by Borough, 2010-2040

New York City's Population: A Look Back and a Look Ahead, 1950-2040

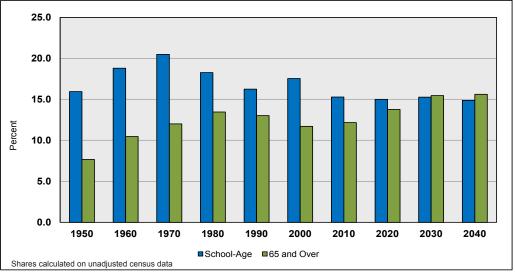
- While New York City's population grew each decade in the first half of the 20th century, the population declined from nearly 7.9 million in 1950 to under 7.8 million in 1960. High baby boom fertility and domestic inflows in the 1950s were unable to offset the large out-migration to the suburbs.
- With the enactment of the 1965 Immigration Amendments, immigration increased in the late 1960s, and by 1970 the city's population rebounded to an adjusted total of over 8 million. (For the decennial censuses from 1970 to 2010, the Department of City Planning created an adjusted city population that included an estimated undercount in each of these decennial censuses.)
- The increase in immigration in the 1970s, while substantial, was insufficient to counter the very large domestic outflow. As a result, the city's population declined in the 1970s, dropping to 7.1 million (adjusted for the undercount) in 1980.
- Lower domestic out-migration in the 1980s, a higher level of immigration, and greater natural increase all resulted in a return to growth, with the city's adjusted population reaching 7.6 million in 1990. When adjusted for the undercount, the city's population grew by over 6 percent in the 1990s, officially crossing the 8 million mark in 2000 for the first time.
- Despite 9/11 and a deep economic downturn later in the decade, New York City's population increased between 2000 and 2010. The increase was fueled by a continuation of immigrant flows, lower net domestic migration losses, and a boom in the housing market. Population increased by more than 230,000 persons or about 3 percent in the 2000-2010 period.



New York City Components of Population Change, 1950-2040

Souce: NYC Vital Statistics data; DCP adjusted decennial census data; DCP Population Projections, 2020-2040

- For 2020, the population is derived from the projected number of housing units, based on housing permit and completion data from earlier in the decade. For the post-2020 period, migration rates were evaluated to ensure that projected population could be accommodated given current land use and zoning. The city is projected to grow to a high of 9 million persons in 2040.
- In 1950, the share of school-age children was more than twice that of those 65 years and over. With moderation in births and continued aging of the baby boom generation, the share of the population that is 65+ has been growing relative to persons of school-age. By 2030, the population 65+ is expected to equal those of school-age for the first time, with each constituting about 15 percent of the population. By 2040 the population 65 and over is projected to surpass those of school-age.

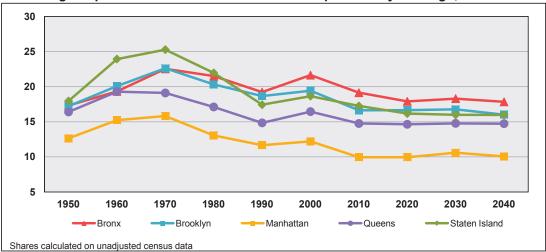


Share of School-Age and 65+ Population, New York City, 1950-2040

Source: Unadjusted decennial census data, 1950-2000; DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040

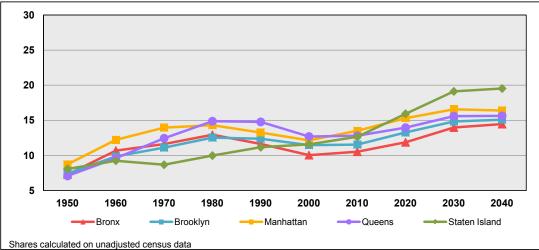
Borough Populations, 1950-2040

- Looking back to 1950 and ahead to 2040, the share of the school-age population peaked in each borough in 1970. In Staten Island, the school-age population accounted for over one-quarter of the population in 1970, approximately 23 percent in Brooklyn and the Bronx, 19.1 percent in Queens, and 15.8 percent in Manhattan. By 2040, these shares will be substantially lower in each borough.
- Since 1950, the share of the population 65+ in Staten Island has increased each decade, except for a dip in 1970. In the other boroughs, 1980 marked the peak share of the population 65+. In that year, the population 65+ accounted for 14.9 percent of the population of Queens, 14.3 percent in Manhattan, 12.9 percent in the Bronx, and 12.5 percent in Brooklyn. However, in each borough, the share of the population 65+ began to increase again in 2010, and is expected to surpass their previous peaks over the 2020-2040 projection period
- The increasing shares of the population 65+ will fuel increases in the median age for each borough. (The median age is the age where one-half of the population is under that age, and one-half is over.)



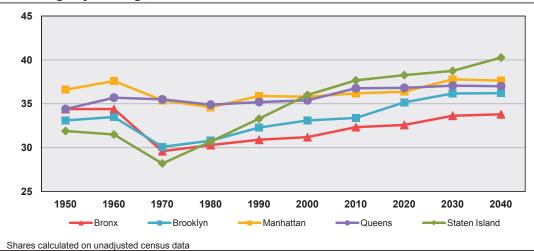


Source: Unadjusted decennial census data, 1950-2000; DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040



Population 65 and Over as a Percent of the Total Population by Borough, 1950-2040

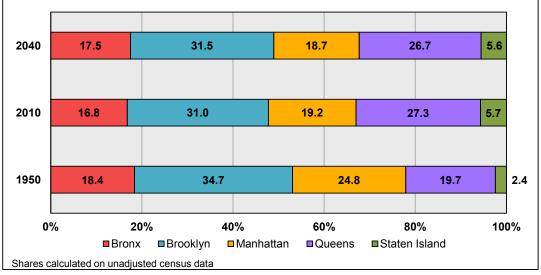
Source: Unadjusted decennial census data, 1950-2000; DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040



Median Age by Borough, 1950-2040

Source: Unadjusted decennial census data, 1950-2000; DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040

- With respect to overall population growth, Staten Island was the only borough to experience growth each decade between 1950 and 2010. It accounted for 2.4 percent of the city's population in 1950 and 5.7 percent in 2010; it is projected to comprise 5.6 percent of the population in 2040. Given that its growth is fueled by increases in its population 65+, its median age will rise nearly 12 years, from a low of 28.2 years in 1970 to 40.3 years in 2040.
- With the exception of the 1970s, the population of Queens increased each decade between 1950 and 2010. Its share of the city's population has grown from 19.7 percent in 1950 to 27.3 percent in 2010, and it will account for 26.7 percent in 2040. The median age in Queens will increase, from a low of 34.4 years in 1950 to 37.0 years in 2040.
- The Bronx's share of the city's population, which stood at 18.4 percent in 1950 and 16.8 percent in 2010, is projected to increase to 17.5 percent by 2040. The Bronx will see its median age increase, from a low of 29.6 years in 1970 to 33.8 years in 2040. It will likely remain the city's youngest borough.
- Brooklyn, which comprised 34.7 percent of the city's population in 1950 and 31.0 percent in 2010, is projected to account for 31.5 percent in 2040. Its median age will increase, from a low of 30.1 years in 1970 to 36.2 years in 2040.
- Manhattan's population peaked in 1910 at 2.33 million, when it comprised nearly one-half of the city's population. It reached a 20th century low of 1.43 million in 1980, with continued below-average growth in the next two decades. By 2010, Manhattan accounted for just 19.2 percent of the city's population, and it is expected to account 18.7 percent by 2040. Its median age is projected to climb from a low of 34.6 years in 1980 to 37.6 years in 2040.
- The large increase in the share of the population 65+, combined with declines in the share of the city's school-age population, portends a new demographic era in the city's history.

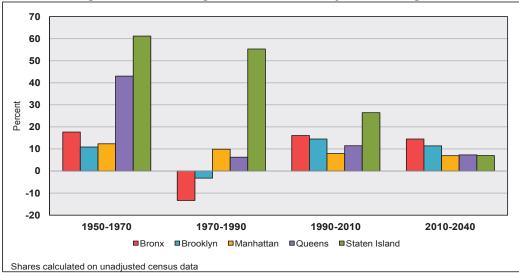


Borough Share of New York City Population, 1950-2040

Source: Unadjusted decennial census data, 1950-2000; DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040

New York City's Housing: A Look Back and a Look Ahead, 1950-2040

- The city's overall housing count has increased each decade since 1950, when there were 2,433,500 housing units, and is projected to rise to 3,696,000 by 2040. The pattern by borough, however, has been quite distinct, reflecting the economic and housing conditions in each era..
- In the 1950s and 1960s, despite rising levels of suburbanization, the five boroughs of New York City all saw substantial increases in housing units
- This changed in the 1970s and the 1980s, when the city's economy faltered. Net losses of housing units were reported in the Bronx and in Brooklyn, with the largest declines occurring in the 1970s. Although Manhattan and Queens showed growth in housing, the changes were lower than in the prior two decades. Staten Island continued to see growth at a very fast pace between 1970 and 1990.



Percent Change in Total Housing Units, New York City and Boroughs, 1950-2040

Source: Unadjusted decennial census data, 1950-2000; DCP adjusted 2010 decennial census data; DCP Population Projections, 2020-2040

- With programs in place to encourage housing development and rehabilitation in the latter part of the 1980s and the 1990s, substantial increases in housing units were evident in several areas of the Bronx and Brooklyn. Both boroughs recovered from their housing losses, with Brooklyn surpassing its previous peak in 2000, and the Bronx in 2010. Manhattan and Queens continued to register increases in their housing units, though Staten Island had the largest percent increase in housing units between 1990 and 2010.
- Looking at the history of housing growth along with current land use provides a context for evaluating whether projected population increases can be accommodated in each of the five boroughs. The Bronx and Brooklyn have the highest potential for continued growth. Since 1950, Manhattan, Queens, and Staten Island have experienced continuous growth in their housing numbers. Their high levels of growth are unsustainable given their current patterns of land use.

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	2010	2020	2030	2040
New York City	8,242,624	8,550,971	8,821,027	9,025,145
Bronx	1,385,108	1,446,788	1,518,998	1,579,245
Brooklyn	2,552,911	2,648,452	2,754,009	2,840,525
Manhattan	1,585,873	1,638,281	1,676,720	1,691,617
Queens	2,250,002	2,330,295	2,373,551	2,412,649
Staten Island	468,730	487,155	497,749	501,109

New York City Population by Borough, 2010-2040

New York City School-Age Population (ages 5-17) by Borough, 2010-2040

	2010	2020	2030	2040
New York City	1,260,400	1,282,814	1,347,036	1,342,097
Bronx	265,052	259,013	277,830	281,688
Brooklyn	424,704	441,049	461,688	454,949
Manhattan	157,856	162,931	177,440	170,114
Queens	331,926	341,062	350,544	355,340
Staten Island	80,862	78,759	79,535	80,005

New York City 65 and Over Population by Borough, 2010-2040

	2010	2020	2030	2040
New York City	1,002,208	1,177,215	1,364,178	1,409,708
Bronx	145,882	171,856	212,334	228,476
Brooklyn	294,610	351,609	408,424	428,845
Manhattan	214,153	250,806	278,043	277,444
Queens	288,219	325,300	370,214	377,060
Staten Island	59,344	77,644	95,163	97,883

New York City Housing Units by Borough, 2010-2040

	2010	2020	2030	2040
New York City	3,375,002	3,503,175	3,614,576	3,696,359
Bronx	511,896	535,487	563,105	586,147
Brooklyn	1,000,293	1,038,258	1,080,203	1,114,581
Manhattan	847,090	876,326	897,769	906,079
Queens	839,067	869,387	885,721	900,485
Staten Island	176,656	183,718	187,779	189,067

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