OFFICE OF THE NEW YORK STATE COMPTROLLER

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An Economic Snapshot of Brooklyn

Major Findings

- The Brooklyn population has grown by 19 percent since 1980, reaching 2.6 million in 2017 (31 percent of the City's total population).
- Brooklyn had nearly 1 million immigrants in 2016 (36 percent of the population).
- The number of businesses increased by 32 percent since the end of the recession in 2009, faster than in the four other boroughs and almost double the citywide rate.
- Business sales increased by 48 percent since 2009 to reach a record of \$13.6 billion in 2016.
- Private sector employment reached a record of 613,400 jobs in 2017, an increase of 39 percent since 2009.
- Employment in the tech industry in Brooklyn reached a record of 9,800 jobs in 2017. With an average salary of \$92,900, tech is among the borough's highest-paying industries.
- The unemployment rate fell from 9.9 percent in 2010 to 4.6 percent in 2017, the lowest annual level since the data series was created in 1990.
- Household income increased by 31 percent since 2010 to reach \$55,200 by 2016, a much faster rate of growth than in any other borough.
- Educational attainment grew faster than in any other borough since 2000, and only Manhattan had a higher share of college graduates.
- Despite a drop in the number of households who live in poverty, one-fifth of all households had incomes below the federal poverty level.
- The number of households that devoted at least half of their incomes to rent increased by 17 percent between 2007 and 2016.
- Annual subway ridership has doubled since 1980 to more than 384 million.

Brooklyn is the most populous of the five boroughs that make up New York City. It has a large foreign-born population, which has contributed to its success, and is one of the most diverse counties in the nation.

Private sector job growth has been strong since the recession ended in 2009, outpacing the rest of New York City, New York State and the nation. Brooklyn has gained 172,600 private sector jobs, far more than the 1,400 lost during the recession. Downtown Brooklyn is the City's largest business district outside of Manhattan, and job growth has been strong there as well.

The Brooklyn Tech Triangle is now home to more than 1,350 innovation companies. The tech sector has become one of the fastest-growing employment sectors in the borough, increasing by 57 percent since 2009.

The borough is also home to world-class cultural and academic institutions, which are integral to the local economy and residents' quality of life. With its many restaurants, active nightlife and diverse neighborhoods, Brooklyn is attractive to young professionals.

Brooklyn has an extensive transportation network, making it easily accessible to Manhattan. The L subway tunnel between Brooklyn and Manhattan, however, is scheduled to be closed for repair for 15 months beginning in April 2019.

Brooklyn has set employment records for eight consecutive years, and the unemployment rate has fallen to a record low. Despite impressive gains in household income, the borough still faces challenges, including poverty and a shortage of affordable housing. Nonetheless, Brooklyn's economy is booming, creating new opportunities for its residents.

Introduction

An estimated 15 million visitors come to Brooklyn each year, stimulating the local economy by spending at local bars, hotels, restaurants, shops and other attractions.¹

The borough is a center for arts and culture. Well-known attractions include the Brooklyn Museum, the Brooklyn Children's Museum, the Brooklyn Academy of Music, the Jewish Children's Museum and Barclays Center, which hosts the Brooklyn Nets, the New York Islanders, concerts and other events.

Steiner Studios, located at the Brooklyn Navy Yard, is the biggest U.S. film and television studio complex outside of Hollywood. Other smaller stages and production studios are located throughout the borough.

Prospect Park, designed and constructed by Frederick Law Olmsted and Calvert Vaux (the architects of Central Park), is a major recreational amenity. Another popular outdoor attraction, Coney Island, features three miles of beach and boardwalk, amusement parks, the New York Aquarium and MCU Park, home to the Brooklyn Cyclones baseball team. Other attractions include Brooklyn Bridge Park, the Brooklyn Botanic Garden and the Jamaica Bay Wildlife Refuge.

Eighteen higher education institutions have campuses in Brooklyn, including four City University of New York (CUNY) schools, the State University of New York (SUNY) Downstate Medical School, Pratt Institute, St. Joseph's College, Brooklyn Law School, NYU Tandon School of Engineering and St. Francis College.

Brooklyn has an extensive transportation network that includes subways, buses, the Long Island Rail Road and three ferry routes. Annual subway ridership has doubled since 1980 to more than 384 million. The Mayor has also proposed a new light-rail line along the waterfront between Sunset Park in Brooklyn and Astoria in Queens. In addition, the borough benefits from a number of major highways and bridges (including the world-famous Brooklyn Bridge).

Demographic Trends

The Brooklyn population declined by 14 percent (371,000 residents) between 1970 and 1980, faster than the citywide decline.² Since then, it has fully recovered, growing by 19 percent to reach 2.6 million in 2017, and making up 31 percent of the City's total population.

Kings County (i.e., Brooklyn) is now the most populous county in New York State and the second most densely populated county in the nation after Manhattan. If it were an independent city, it would be the fourth-largest in the nation.

Brooklyn is among the most racially and ethnically diverse counties in the nation.³ In 2016, Whites accounted for 36 percent of the borough's residents, Blacks or African Americans accounted for 30 percent, Hispanics or Latinos accounted for 19 percent and Asians accounted for 12 percent. Since 1980, population growth has been driven by an increase in the Asian population, which grew from 41,000 to 314,000 in 2016 (the latest year for which demographic data are available).

The median age was 34.8 in 2016, lower than the citywide median (36.2) and the second-lowest among the five boroughs. Children under age 18 made up 23 percent of the population, a larger share than citywide (21 percent). Residents aged 65 or older made up 13 percent of the population, the second-lowest share among the boroughs.

The fastest-growing segment of the population was between the ages of 55 and 64, which increased by 44 percent between 2000 and 2016. The largest increase was in the segment of the population aged 25 to 34, which rose by nearly 94,000 during this period.

Since 2000, the share of residents (aged 25 and over) with a bachelor's degree or higher rose by nearly 15 percentage points to reach 36 percent by 2016 (similar to the citywide share). Educational attainment grew faster in Brooklyn than in any other borough since 2000, and only Manhattan had a higher share of college graduates.

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Immigrant Population

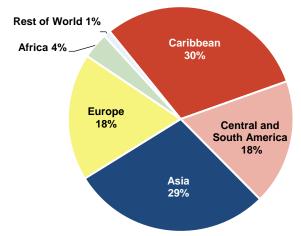
Brooklyn had 958,000 foreign-born residents in 2016, representing 36 percent of the population. This was the sixth-highest share of any county in the nation after Miami-Dade (FL), Queens (NY), Hudson County (NJ), Santa Clara County (CA) and the Bronx (NY).⁴ Immigrants represented 48 percent of the work force and made up 57 percent of the self-employed entrepreneurs.

Immigrants from the Caribbean accounted for 30 percent of the foreign-born population (see Figure 1), with the largest numbers from Jamaica, the Dominican Republic and Haiti. Brooklyn is home to one of the largest communities of West Indians outside of the Caribbean.

Immigrants from Asia made up 29 percent of the foreign-born population (nearly half came from China). Mexicans represented nearly one-third of the immigrants from Central and South America. (The U.S. Census Bureau includes Mexico as part of Central America even though it is located in North America.) Together, Eastern European and Russian immigrants accounted for three-quarters of those from Europe.

Four of the 10 Census-defined neighborhoods in New York City with the highest shares of immigrants are located in Brooklyn. In the areas of Bensonhurst, Coney Island, East Flatbush and Sheepshead Bay, about half of the residents were immigrants in 2016.

FIGURE 1 Immigrants by Place of Birth



Sources: U.S. Census Bureau, ACS 2016; OSC analysis

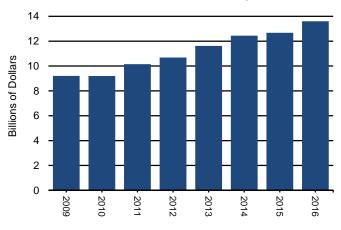
Strong Business Growth

Brooklyn had a total of 61,300 businesses in 2017, an increase of 32 percent since the end of the recession in 2009 and the most since 1975 when the data series began.⁵ This was the fastest rate of growth among the five boroughs and almost double the citywide growth rate (17 percent). Nearly three-quarters (71 percent) of the businesses had fewer than five employees and 84 percent had fewer than 10 employees.

The number of firms increased in every business sector during this period, with the exception of manufacturing, which had a small decline. Growth was driven by leisure and hospitality, business services, personal services (e.g., nail and hair salons) and retail trade. The retail sector was responsible for the largest number of businesses (9,800 firms), leisure and hospitality added the most firms (2,700, a 70 percent increase), and the information sector grew the fastest (79 percent).

Taxable business sales grew by 48 percent between 2009 and 2016 (slightly faster than the citywide growth rate of 44 percent), reaching a record of \$13.6 billion in 2016 (see Figure 2).⁶ The areas of Crown Heights, Williamsburg and Bedford-Stuyvesant had the fastest growth, with sales more than doubling in each neighborhood.

FIGURE 2
Taxable Business Sales in Brooklyn



Sources: NYC Department of Finance; OSC analysis

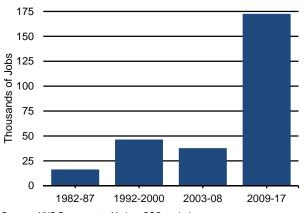
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Record Employment

The current job expansion in New York City has been the largest in the post-World War II era. The boroughs outside of Manhattan have contributed nearly half of the private sector job gains between 2009 and 2017, a larger share than in any other expansion since the data series was created in 1975.

Since 2009, Brooklyn added 172,600 private sector jobs, far more than the 1,400 lost during the recession and nearly four times as many as in the second-strongest expansion (see Figure 3). Health care and leisure and hospitality were responsible for nearly half of the job gains between 2009 and 2017.

FIGURE 3
Job Gains in Brooklyn by Expansion Period

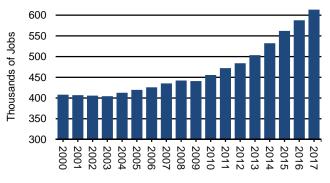


Sources: NYS Department of Labor; OSC analysis

Since 2009, private sector employment in Brooklyn has increased by 39 percent, outpacing the growth in the rest of New York City (and every other borough), New York State and the nation. Employment grew by 4.4 percent in 2017, nearly twice as fast as in the City overall, and set a new record of 613,400 (see Figure 4).

The average salary of private sector jobs was \$42,500 in 2017, which was the lowest among the five boroughs. In the past three years, the average salary has grown considerably faster (7.3 percent) than the citywide rate (5.4 percent). Private sector wages increased by 55 percent since 2009 to \$26 billion in 2017, faster than any other borough.

FIGURE 4
Private Sector Employment in Brooklyn



Sources: NYS Department of Labor; OSC analysis

Health care is the largest employer in Brooklyn with 149,100 jobs in 2017 (nearly one-quarter of all private sector jobs), paying an average salary of \$44,300. Since 2009, the sector has added 52,100 jobs (a 54 percent increase), more than any other sector (see Figure 5, next page).

Retail trade is the second-largest employer with 77,100 jobs, paying an average salary of \$32,600. The sector grew by 36 percent between 2009 and 2017 (more than twice as fast as in the rest of the City), with growth concentrated in grocery stores, online retailers and pharmacies.

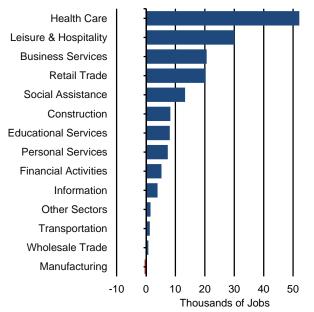
Social assistance is the third-largest employment sector with 61,800 jobs, but it is also the lowest-paying, with an average salary of \$28,300. Since the recession ended, employment has increased by 27 percent (13,300 jobs).

The leisure and hospitality sector was responsible for 58,500 jobs with an average salary of \$29,600. The sector more than doubled between 2009 and 2017, adding 30,100 jobs. Most of the growth occurred in restaurants and bars. Since 2009, 64 new hotels have been built in Brooklyn, and hotel employment has more than doubled. Visitors spent \$2.1 billion in Brooklyn in 2016.7

The business services sector added 20,600 jobs (an increase of 60 percent) to reach 55,100 in 2017 (with an average salary of \$47,200). Employment services were responsible for 40 percent of the job gains, but janitorial, accounting and computer services also made large contributions.

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FIGURE 5
Job Gains or Losses by Sector in Brooklyn, 2009-2017



Note: "Other Sectors" includes utilities and warehousing. Sources: NYS Department of Labor; OSC analysis

Although employment in the construction sector declined by 14 percent (3,700 jobs) between 2008 and 2011 because of the recession, it grew by 40 percent (9,200 jobs) over the next six years. A 63 percent increase in construction permits during this period helped fuel job growth.⁸ By 2017, the sector was responsible for a record 32,100 jobs with an average salary of \$60,000.

Since 2009, the information sector has increased by 58 percent (adding 3,900 jobs), driven by motion picture and sound recording, and telecommunications. The financial activities sector grew by 18 percent, adding 5,300 jobs.

Food and beverage manufacturing has grown by 31 percent to 7,300 jobs, and electrical equipment manufacturing has almost tripled to 600 jobs. The Brooklyn Chamber of Commerce has noted that while large-scale manufacturing has declined, modern small-scale manufacturing have been growing at an increasing rate. Manufacturing in Brooklyn has stabilized at about 20,000 jobs, while the rest of the City has continued to experience job losses.

Focus on the Tech Industry

Brooklyn is home to several of New York City's tech centers. Employment at tech firms has grown by 57 percent (3,500 jobs) since 2009 to reach a record of 9,800 jobs in 2017. With an average salary of \$92,900, tech is among the borough's highest-paying industries.

The Brooklyn Tech Triangle covers Downtown Brooklyn, Dumbo and the Brooklyn Navy Yard. The Tech Triangle is home to more than 1,350 innovation companies, the largest cluster of tech activity outside of Manhattan.

The New York City College of Technology and the NYU Tandon School of Engineering are located in Downtown Brooklyn. MetroTech is the nation's largest urban academic-industrial research park.

Dumbo (an acronym for Down Under the Manhattan Bridge Overpass) is located within the Brooklyn Heights Census-defined neighborhood and is home to more tech companies than any other neighborhood in Brooklyn. The five buildings formerly owned by the Jehovah's Witnesses have been developed into a new tech hub. Etsy, the popular e-commerce company, is headquartered there.

The Brooklyn Navy Yard has been transformed into a modern tech, manufacturing and industrial campus, including the New Lab workspace for tech hardware companies in fields like artificial intelligence. It is set to add over 2 million square feet of space by 2020.

In Sunset Park, Industry City is undergoing a 10year, \$1 billion renovation plan. The 7,700-squarefoot Innovation Lab provides continuing education and job training to help prepare area residents for jobs in the tech industry.

The New York Science and Technology Center at the Brooklyn Army Terminal (BioBAT) caters to life sciences and tech firms seeking to expand beyond the start-up phase.

In Central Brooklyn, the SUNY Downstate Medical Center operates the Advanced Biotechnology Incubator for biotech companies.

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Neighborhood Job Growth

Private sector employment in New York City increased by 23 percent between 2009 and 2017. In Brooklyn, 11 of the 18 Census-defined neighborhoods experienced significantly faster growth (see Figure 6).

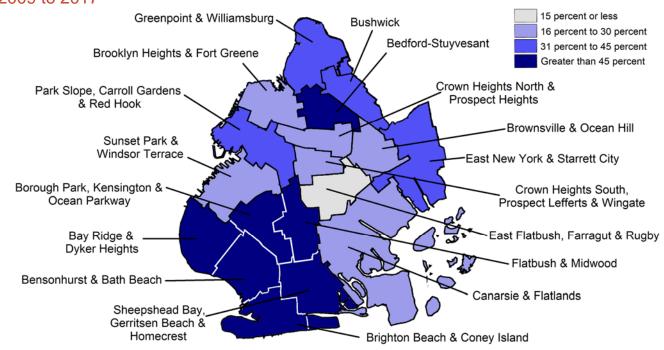
Job growth exceeded 50 percent in the areas of Bedford-Stuyvesant (77 percent), Flatbush (70 percent), Borough Park (66 percent), Bensonhurst (62 percent) and Sheepshead Bay (59 percent). These areas accounted for 44 percent of the private sector job gains in Brooklyn since 2009, even though they accounted for only one-third of the jobs. Since 2000, employment has doubled in Borough Park, Flatbush and Coney Island.

Other neighborhoods with large job gains include Greenpoint, Brooklyn Heights and Park Slope. Combined, these three areas were responsible for one-quarter of the jobs added in Brooklyn between 2009 and 2017, and 58 percent of the newly added leisure and hospitality jobs.

Downtown Brooklyn experienced solid private sector job growth, increasing by 29 percent since 2009. Growth was driven by health care and the leisure and hospitality sectors. The vacancy rate for office space in Downtown Brooklyn was 6.4 percent during the fourth quarter of 2017, lower than in the three major Manhattan markets (i.e., Downtown, Midtown and Midtown South). 10

The unemployment rate in Brooklyn fell from the recessionary peak of 9.9 percent in 2010 to 4.6 percent in 2017, the lowest annual level since the data series was created in 1990.¹¹ (The rate declined further to 4.2 percent in April 2018.) Some neighborhoods, however, still have high unemployment rates, including the Brownsville and Ocean Hill area, which had the highest rate in the City in 2016 (the latest year for which data are available). The areas of Borough Park, Sunset Park and Park Slope had the lowest rates in Brooklyn.¹²

FIGURE 6
Job Growth in Brooklyn by Census-Defined Neighborhood 2009 to 2017



Sources: NYS Department of Labor; OSC analysis

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Household Income

Median household income fell by 3 percent between 2008 and 2010 because of the recession, but then increased by 31 percent to reach \$55,200 by 2016, much faster than in any other borough (see Figure 7). After adjusting for inflation, household income was 14 percent higher than the prerecession peak in 2008.

FIGURE 7
Household Incomes and Poverty Rates

	Household Income	Growth Since 2010	Poverty Rate
Bronx	\$37,500	15%	28.4%
Brooklyn	\$55,200	31%	20.0%
Manhattan	\$77,600	22%	15.5%
Queens	\$62,200	17%	13.6%
Staten Island	\$77,200	9%	14.5%
New York City	\$58,900	21%	18.4%

Sources: U.S. Census Bureau, 2016 ACS; OSC analysis

The impact of gentrification and the arrival of higher-income residents is evident in a number of neighborhoods, including the Greenpoint and Williamsburg area, and Bedford-Stuyvesant, where household incomes more than doubled between 2000 and 2016. In contrast, there has been little growth in household incomes in the Brownsville and Ocean Hill area, and East New York, where average incomes are among the lowest in the City.

An estimated 5,500 fewer households were living in poverty in 2016 compared to six years earlier. Still, one-fifth of the households had incomes below the federal poverty line, slightly higher than the citywide rate (18.4 percent). The poverty rate ranged from 10.6 percent in the Canarsie area to 35.6 percent in Brownsville and Ocean Hill.

The median household income for senior households was \$30,900 in 2016, lower than the citywide median for this population (\$34,600).¹³ Consequently, seniors had a higher poverty rate (25.3 percent) than the citywide rate for this population (21.6 percent).

Housing

Brooklyn had an estimated 968,800 housing units in 2016.¹⁴ Of that amount, nearly three-quarters were rental apartments and more than half of these were rent-regulated. While the number of rental units increased by 69,600 between 2006 and 2016, many of these units were market-rate apartments.¹⁵ According to the New York City Rent Guidelines Board, more than 16,400 rent-stabilized apartments were lost to decontrol.

According to the New York City Housing Authority, Brooklyn has 58,447 public housing units, more than in any other borough, which provide homes to 134,529 residents. Red Hook is the largest public housing development in the borough. Many developments are in disrepair and require significant capital improvements.

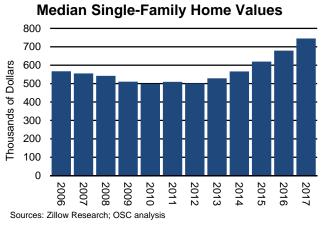
The median rent (including utilities) in the borough has increased by 50 percent since 2006 to reach \$1,340 in 2016 (see Figure 8, next page). Median rents ranged from \$970 in Brownsville and Ocean Hill to \$2,030 in the Park Slope area. According to Zillow Research, the median rent for market-rate apartments was much higher (\$2,650).¹⁶

Median rent has soared in a number of neighborhoods undergoing gentrification, making it more difficult for long-term residents not residing in rent-regulated apartments or public housing to remain in their homes. For example, median rent increased by more than 50 percent between 2006 and 2016 in the Census-defined neighborhoods of Greenpoint and Williamsburg, Bedford-Stuyvesant, Bushwick, and Brownsville and Ocean Hill.

Despite income gains, affordability remains a challenge, as rent has increased faster than household income. More than half (54 percent) of all households devoted 30 percent or more of their incomes to rent in 2016 (the level at which rent is considered a burden).¹⁷ Nearly one-third (31 percent) faced a severe rent burden, devoting at least half of their incomes to rent. The number of households that faced a severe rent burden increased by 17 percent between 2007 and 2016 (28,300 households).

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Zillow Research estimates that the average median value for single-family homes fell by 12 percent between 2006 and 2010 as the recession pushed down home values.¹⁸ Values began to recover in 2013, reaching \$745,250 in 2017, a new record and 31 percent higher than the prerecession peak (see Figure 8).

Nearly half of the neighborhoods in the borough experienced at least a 50 percent increase in home values from their prerecession peaks.¹⁹ Values ranged from less than \$500,000 in Brownsville, East New York, Canarsie and East Flatbush to more than \$3 million in Cobble Hill, Boerum Hill and Park Slope.









According to a 2016 press release from the Office of the Brooklyn Borough President.

U.S. Census data prior to 2000 are from IPUMS NHGIS, University of Minnesota, www.nhgis.org. Census data for 2017 are from the Population Estimates Program. Data for 2005 through 2016 are from the American Community Survey (ACS) 1-year estimates.

Based on available ACS data for 2016.

Private sector business and employment data (both published and unpublished) are from the New York State Department of Labor's Quarterly Census of Employment and Wages (QCEW) program.

The New York City Department of Finance reports annual taxable sales data for the year ending February 28. The Office of the State Comptroller attributes the data to the calendar year that includes the most months.

Tourism spending estimated by Tourism Economics.

Construction permits as reported by the New York City Department of Buildings.

⁹ As defined by the Brooklyn Chamber of Commerce.

¹⁰ According to Jones Lang LaSalle Inc.

¹¹ Borough and citywide unemployment rates are from the New York State Department of Labor.

¹² Neighborhood unemployment rates are from the ACS 1-year estimate for 2016.

¹³ Households where the primary householder is age 65 or older.

¹⁴ ACS, 1-year estimate for 2016.

¹⁵ ACS and the Housing and Vacancy survey.

¹⁶ According to data from the Zillow Rent Index from Zillow Research.

¹⁷ ACS, 1-year estimate for 2016. The data exclude subsidies, such as federal Section 8.

¹⁸ According to data from the Zillow Home Value Index from Zillow Research.

¹⁹ Neighborhood definitions used by Zillow Research cover smaller geographic areas than the Census-defined neighborhoods used in other sections of this report.