Section 5: Schools, Health, and Crime

Despite the past decade’s economic downturn, indicators of school quality, health, and crime have continued to improve in New York City. More high school seniors are graduating, infant mortality and asthma rates are down, life expectancy is up, and crime rates have declined. Yet, despite these positive changes, the experience of white New Yorkers remains markedly different from that of black and Hispanic New Yorkers. Substantial disparities along racial and ethnic lines continue to offset the otherwise impressive progress the city has made in these areas.

1. Student performance continues to improve, but racial and gender disparities persist.

Figure 5.1 shows that during the 2011–2012 school year, 60 percent of the students in grades three through eight performed at grade level in math and 46.9 percent performed at grade level in English language arts. This is a 2.7 percentage point increase in proficiency in math and a 3.0 percentage point increase in English over the last year.1

The four-year high school graduation rate—defined as the share of students who entered high school four years earlier and graduated on time—increased from 65.1 percent in 2010 to 65.5 percent in 2011 following a steady increase of 19 percentage points from 2005 to 2011. As Figure 5.2 illustrates, the Regents diploma rate (a subset of total graduation rate that has more rigorous criteria than the alternative “local,” or non-Regents, diploma) increased to 55.6 percent, up 25.6 percentage points since 2005. The year 2011 was the last during which a local diploma was available to graduates. In the future, all high school students will have to qualify for a Regents diploma in order to graduate.

Figure 5.3 illustrates that since 2005 New York City has outpaced the other four largest school districts in New York State (Buffalo, Rochester, Syracuse, and Yonkers) in improving its overall graduation rate and has narrowed the gap with New York State as a whole from 19.3 percentage points in 2005 to 11.3 percentage points in 2011.

While overall achievement is improving and proficiency rates have increased for all racial and ethnic groups in both English language arts and math, Figures 5.4 and 5.5 show that disparities in academic achievement by race, ethnicity, and gender persist. White and Asian students have higher scores than black and Hispanic students. Girls continue to achieve higher proficiency rates than boys.

High school graduation rates also differ markedly by race and ethnicity. Again, the graduation rates for all racial and ethnic groups improved between 2005 and 2011, but white and Asian students have much higher graduation rates than their black and Hispanic counterparts. Figure 5.6 shows that more than 76 percent of white and 79 percent of Asian students who began high school in 2007 graduated on time, compared to fewer than 60 percent of black and Hispanic students. As for gender, a higher percentage of female students completed high school than male students.

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1 Starting in 2010, the New York State Education Department changed the scale score required to meet each of the proficiency levels, increasing the number of questions students needed to answer correctly to meet proficiency. Although proficiency levels from 2010 and later years cannot be directly compared to earlier years, proficiency levels also increased steadily from 2000 to 2010.
Figure 5.1: Share of Students in New York City Performing at Grade Level
- Math
- English Language Arts

Source: New York City Department of Education

Figure 5.2: Four-Year High School Graduation Rate in New York City (Measured in August)
- All
- Regents Diploma

Source: New York City Department of Education

Figure 5.3 Four-Year High School Graduation Rate, New York City and New York State (Measured in August)
- New York City
- New York State
- Big Four (Buffalo, Rochester, Syracuse, and Yonkers)

Source: New York City Department of Education, New York State Education Department

Figure 5.4: Students Performing at Grade Level in English Language Arts in New York City

Source: New York City Department of Education

Figure 5.5: Students Performing at Grade Level in Math in New York City

Source: New York City Department of Education

Figure 5.6: Four-year High School Graduation Rate in New York City (Measured in August)

Source: New York City Department of Education
2. Health outcomes continue to gradually improve, but racial disparities persist.

New York City residents continue to experience gradual improvements in health. Over the past decade, infant mortality, asthma hospitalizations, and elevated blood lead levels have declined, while life expectancy has increased. As with educational indicators, however, distressing racial disparities in health outcomes persist.

A. Asthma hospitalization rate continues to decline.

The rate of asthma hospitalizations has gradually but steadily declined over the past decade from a high of 3.5 hospitalizations per 1,000 residents in 2003 to a low of 2.8 hospitalizations per 1,000 residents in 2011. As Figure 5.7 shows, the asthma hospitalization rate is considerably higher in New York City than throughout the United States. In 2010 there were only 1.4 asthma hospitalizations per 1,000 U.S. residents, less than half the rate in New York City. Asthma is most prevalent in the Northeast Region of the United States and is more common in cities than in rural areas.

B. The infant mortality rate in New York City is lower than that for the U.S.

Unlike asthma rates, New York City residents enjoy consistently better birth outcomes than the U.S. population. Figure 5.8 shows that in 2010, the infant mortality rate in New York City was 4.9 deaths per 1,000 live births, lower than the national rate of 6.2 deaths and much lower than Philadelphia’s rate of 10.7 deaths. Throughout the economic boom and recession, this rate declined consistently in New York City.

C. The incidence of elevated blood lead levels has fallen steadily.

Figure 5.9 shows that the incidence of elevated blood lead levels in children in New York City has also consistently improved over the past decade, falling from 21.1 cases per 1,000 children tested in 2000 to just 3.8 cases per 1,000 children tested in 2011. Lead-based paint—the primary cause of elevated blood lead levels—was banned in 1978 but is still found in many older buildings. Despite the older housing stock in New York City, this rate is actually lower than the rate throughout the United States. As awareness of the dangers of lead poisoning has increased, and city health departments have devoted more attention to the issue, the rate of lead poisoning has declined dramatically in many places, including Chicago and Philadelphia.

D. Life expectancy of New York City residents is at an all-time high.

Over the past decade, New York City residents have seen extraordinary gains in life expectancy, adding over three years to the expected life span for both men and women. Figure 5.10 shows that New York residents have enjoyed a longer life expectancy than the average U.S. resident throughout the past decade. Further, the life expectancy for New Yorkers has increased faster than it has for U.S. residents. In 2010, the life expectancy for women in New York was 2.3 years longer, and for men in New York was 1.9 years longer, than for their gender in the U.S. as a whole.
Figure 5.7: Asthma Hospitalization Rate per 1,000 Residents

Sources: New York State Department of Health Statewide Planning and Research Cooperative System, Infoshare, Centers for Disease Control and Prevention National Center for Health Statistics, Chicago Department of Public Health, California Department of Public Health as cited on www.kidshealth.org

Figure 5.8: Infant Mortality Rate per 1,000 Live Births


Figure 5.9: Elevated Blood Lead Levels per 1,000 Children Tested

Sources: Centers for Disease Control and Prevention National Center for Environmental Health, Chicago Department of Public Health, Pennsylvania Department of Health, Public Citizens for Children and Youth

Figure 5.10: Life Expectancy at Birth

Sources: New York City Department of Health and Mental Hygiene Summary of Vital Statistics, Centers for Disease Control and Prevention National Center for Health Statistics

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2 Asthma hospitalization rate data is not collected for individual municipalities on a national level. We were not able to find local sources for all of our comparison cities and so are only able to present a subset of comparison cities here.

3 Infant mortality rate data is not collected for individual municipalities on a national level. We were not able to find local sources for all of our comparison cities for all years and so are only able to present a subset of comparison cities and years here.

4 Elevated blood lead level data is not collected for individual municipalities on a national level. We were not able to find local sources for all of our comparison cities and so are only able to present a subset of comparison cities here. Data on New York City in this figure should not be compared to Elevated Blood Lead Levels data elsewhere in the report, because the sources differ.
E. Racial disparities in health outcomes continue.

While the health outcomes of New York City residents have improved over the past decade, persistent racial disparities remain. Figure 5.11 shows that in 2010, the asthma hospitalization rate was nearly five times higher for black New Yorkers than for white New Yorkers, and about three times higher for Hispanic New Yorkers than for white New Yorkers.

Figure 5.12 shows that the infant mortality rate improved for all racial and ethnic groups in New York City between 2001 and 2011; however, the rate remains stubbornly higher for the black and Hispanic population than for the white or Asian population.

Figure 5.13 shows that there are stark differences in the median life span across racial and ethnic groups and gender. For example, in 2010, white women lived 18 years longer on average than black men.
3.
Crime has fallen to historically low levels.

In the 1990s, New York City experienced a precipitous drop in crime, with serious crime reports falling by more than 60 percent over the decade. Between 2000 and 2011, crime in the city continued to fall, although not as rapidly, declining by 35 percent. After the two decades of declines, crime in New York City has fallen to historically low levels. In 2011, there were 515 reported murders citywide—fewer than in any year since 1963—the first year for which there are reliable statistics available.

Between 2000 and 2011, violent crime fell in all of the city’s seventy-six police precincts but one. As Figure 5.14 shows, however, the magnitude of these drops varied across the city. Of the 10 precincts that experienced the largest declines (with a -58.3 percent drop in violent crime, weighted by precinct population), seven are in Manhattan, two are in Brooklyn, one is in Queens, and none are in the Bronx or Staten Island. Meanwhile, the 10 precincts that improved least during the same interval (experiencing a -11.1 percent drop in violent crime, weighted by precinct population) are more evenly distributed among the boroughs: with four in Queens, two in Brooklyn, two in the Bronx, one in Staten Island, and one in Manhattan.

Assuming police prioritize high-crime areas, we might expect to observe the largest declines in precincts that had comparatively high rates of violent crime in 2000. As Table 5.1 shows, however, the violent crime rate in the 10 most-improved precincts is below average, at just 7.8 reported offenses per 1,000 residents compared to a citywide rate of 9.5.

Moreover, the top four most improved precincts are all in Manhattan: the Financial District, the Garment District, and the Theater District, and all have large daytime populations that far exceed their residential populations. As a result, the violent crime rates in these precincts may not be directly comparable to most other precincts. If we exclude these four precincts, the 2000 violent crime rate of the 10 most-improved precincts was 7.4 offenses per 1,000 residents. As Table 5.1 shows, this rate is below the 2000 aggregate violent crime rate in the 10 least-improved precincts (8.1) and less than half the aggregate violent crime rate in the city’s 10 most violent precincts (20.0). Thus, while nearly every precinct in the

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5 The FBI’s Uniform Crime Reporting (UCR) Program tracks eight serious felonies: murder/nonnegligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. Because arson statistics are not reliably reported to the FBI, they are excluded from this analysis.

6 The FBI considers murder/nonnegligent manslaughter, forcible rape, robbery, and aggravated assault violent crimes; the remaining tracked offenses are considered property crimes. We use this definition throughout this analysis.

7 The violent crime rate in 113th Precinct in Queens (South Jamaica/JFK Airport) rose 9.7 percent from 2000 to 2011.

8 Data for all tables and figures in this subsection are drawn from the FBI’s UCR data from 2000–2011. The Furman Center estimates precinct populations using decennial census data.

9 In 2000, precincts 22 (Central Park) and 14 (Garment District) had the highest violent crime rates in the city. For the reasons described above we exclude them from this calculation.

10 Central Park (estimated 2010 population: 25) is the most egregious case—it shows a violent crime rate of more than 1.5 offenses per resident, a rate that likely does not reflect the experience of the park’s 38 million annual visitors. http://www.centralparknyc.org/visit/general-info/faq/
city experienced a decrease in reported violent crime from 2000 to 2011, the largest improvements were in precincts with violent crime rates already below the citywide rate.

Other large cities around the nation also enjoyed significant declines in crime over the last decade. Table 5.2 shows the changes in crime rates across the five most populous cities in the country.

Los Angeles achieved the largest declines across all three categories. Indeed, the decline in violent crime in Los Angeles between 2000 and 2011 (-62.1%) rivals even the much-touted declines New York City experienced in the 1990s (-60.3%). As Figure 5.15 shows, Los Angeles’s violent crime rate actually dipped below New York City’s in 2010, and has remained lower through 2011.

Although violent crime rates in Chicago, Houston, and Philadelphia also fell from 2000 to 2011, they have remained well above those observed in Los Angeles and New York City. With respect to murder rates alone, the picture is largely the same, as shown in Figure 5.16.

Although Philadelphia and Houston both saw violent crime fall between 2000 and 2011, both experienced significant spikes in their murder rates in 2005 and 2006. Subsequently, however, Houston’s murder rate has fallen rapidly (approaching that of New York City and Los Angeles), while Philadelphia’s has remained high—more than three times that of New York City.

Table 5.2: Changes in Crime Rates of U.S. Cities, 2000–2011

<table>
<thead>
<tr>
<th>City</th>
<th>Violent Crime Rate</th>
<th>Property Crime Rate</th>
<th>Total Serious Crime Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>-33.8%</td>
<td>-35.6%</td>
<td>-35.3%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>-62.1%</td>
<td>-36.2%</td>
<td>-40.3%</td>
</tr>
<tr>
<td>Chicago</td>
<td>-38.3%</td>
<td>-22.9%</td>
<td>-24.8%</td>
</tr>
<tr>
<td>Houston</td>
<td>-11.3%</td>
<td>-10.4%</td>
<td>-10.5%</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>-20.7%</td>
<td>-21.4%</td>
<td>-21.3%</td>
</tr>
</tbody>
</table>

Source: Federal Bureau of Investigation Uniform Crime Reporting Program

Figure 5.15: Violent Crime Rates of U.S. Cities, 2000–2011

Source: Federal Bureau of Investigation Uniform Crime Reporting Program

Figure 5.16: Murder Rates of U.S. Cities, 2000–2011

Source: Federal Bureau of Investigation Uniform Crime Reporting Program

Because Chicago does not conform to the FBI’s standard for reporting rapes, rape is omitted from our multicity violent crime rate calculations.