

# New York City Government Poverty Measure 2020

Measuring Poverty in  
Year One of the COVID-19 Pandemic



The City of New York  
May 2023

**NYC**  
Mayor's Office for  
Economic Opportunity

# Preface

This poverty report is mandated by the New York City Charter, which requires the Mayor's Office for Economic Opportunity to release an annual update to the NYC Government (NYCgov) poverty measure along with a survey of efforts to reduce poverty in the city.

The NYCgov poverty measure differs from the official New York City poverty rate released by the federal government. The poverty measure accounts for the high cost of housing in the city. It also adds to income noncash resources such as nutrition and housing assistance and tax credits such as the Child Tax Credit. The official measure accounts for none of these items. This report helps the City to monitor poverty and near poverty across the five boroughs and to understand its impact on specific segments of the population. This edition of the report contains data through 2020, the first year of the COVID-19 pandemic.

Due to disruptions caused by the pandemic, this year's report provides less robust poverty data than past reports. Overall, readers should consider its findings to be "marked with an asterisk" and therefore not directly comparable to prior year estimates.

In 2020, the pandemic turned economic life upside down. New Yorkers spent a significant period of time avoiding public spaces. Many saw their earnings fall due to job loss or reduced work hours. At the same time, routine expenses such as childcare and commuting took on new patterns. Temporary federal public benefits added billions of dollars to family resources and to the economy, which evidence suggests lowered the poverty rate.

Especially relevant to this report is the fact that data collection was severely disrupted by the pandemic. Each year the NYCgov poverty measure is based on data from the U.S. Census Bureau's annual American Community Survey (ACS) supplemented by city, state, and other national data. The 2020 ACS survey, however, was suspended for several months. The response rate was lower than expected when it resumed, with uneven responses across demographic categories. The result was a population profile that did not meet the Census Bureau's quality standards.

To compensate, the Census Bureau issued the 2020 data as a set of "experimental" one-year data. It made a variety of adjustments, including weighting households to represent expected populations.

Based on the experimental data, the 2020 NYCgov poverty rate is 16.6 percent. This rate cannot be compared to prior NYCgov poverty rates because of the difference in the underlying census data.

A cautious comparison can be made to 2019 using a similar weighting scheme for that year's data. In that comparison, the poverty rate falls by 0.8 percentage points in 2020 – a statistically significant decline that seems plausible in light of the billions of dollars in temporary aid New York City households received. Because of underlying data problems, the trend's trajectory is more reliable than the actual rate.

This year's report provides some insight into poverty rates during a particularly challenging year, including the impact of temporary pandemic-related government aid. But it comes with significant limitations and is best read keeping that in mind.

**Carson Hicks**

Acting Executive Director  
Mayor's Office for Economic Opportunity

**Christine D'Onofrio**

Director, Poverty Research  
Mayor's Office for Economic Opportunity

This report is authored by the staff of the NYC Office for Economic Opportunity, 2022-2023:

Jihyun Shin, Deputy Director for Poverty Research  
John Krampner, Research Associate  
Anne Hill, Senior Research Associate

This report, related technical notes and prior year reports are available at:  
<https://www.nyc.gov/site/opportunity/poverty-in-nyc/poverty-measure.page>

# In Memorium

Mark Levitan, 1948–2021



The NYCgov poverty measure was conceived and developed under the leadership of Mark Levitan. The first edition of this report, released in 2008, was a groundbreaking experiment in measuring poverty. It was also a landmark local poverty measure, drawing from the then-new American Community Survey to understand how poverty differed across New York City’s neighborhoods.

As Director of Poverty Research in the City’s Center for Economic Opportunity (now NYC Opportunity), Mark was tasked with informing policymakers about “what works” in reducing poverty. The NYCgov poverty measure made it possible to measure the impact of multiple government programs in alleviating poverty and became early evidence in our understanding of the importance of income supports. The report continues to be a valuable resource for City policymakers.

Mark’s doctoral research in labor economics and his experience as a worker and labor organizer in Detroit’s auto factories were fundamental to his interpretation of the new poverty data. From its inception, the report focused on how people meet their basic material needs, including those New Yorkers who work full time and still can’t cross the poverty threshold. Mark’s concern for human dignity amid poverty remains an inspiration and focus in our approach to poverty research.

# Contents

Preface .....	ii
Mark Levitan Memorial Page .....	iv
Introduction: Measuring Poverty in the First Year of the The COVID-19 Pandemic.....	6
Chapter 1: The Poverty 2020 Measure .....	12
Chapter 2: Major Citywide Initiatives .....	20
Chapter 3: Data Quality and City-level Poverty Estimates .....	25
Conclusion: Poverty Estimates in the Present and Future Editions .....	41
Acknowledgements.....	43

Introduction

# **Measuring Poverty in the First Year of the Covid-19 Pandemic**

## Introduction

# Measuring Poverty in the First Year of the Covid-19 Pandemic

This annual release of the New York City Government (NYCgov) poverty measure reports on poverty in 2020, the first year of the pandemic. The turmoil of that year affected the report's underlying data and contents. Due to limited data collection in 2020, **reliable estimates for New York City can only be produced for the citywide poverty rate. The poverty rates usually published for demographic and geographic subgroups are not available.** As a result, the 2020 report is a departure from prior years and is shorter in nature due to the unique circumstances of that year.

The NYCgov poverty measure is adapted to the realities of the city's economy. The poverty threshold accounts for housing costs that are higher than the national average. The income measure includes additional resources, such as public benefits and tax credits, but it also acknowledges spending on medical costs and work-related expenses such as childcare and commuting. These threshold adjustments and additional income resources are not included in the U.S. poverty measure for New York City. The NYCgov poverty rate, poverty threshold, and income measure are historically higher than those same figures in the U.S. official measure.

The ability to estimate the NYCgov poverty rate faced two obstacles in 2020. First, the disruption of normal patterns of economic life upended many data trends and made it difficult to interpret results with confidence. Second and more importantly, pandemic lockdowns disrupted data collection. The result is a poverty measure based on a data set unlike any other in previous years.

**Economic Disruption.** Economic life turned upside down in 2020. New Yorkers spent a significant part of the year locked down or avoiding public spaces. Many saw their earnings reduced due to job loss or reduced work hours. However, the earnings

of essential workers – often low and middle wage workers – were not disrupted. At the same time, workers in industries normally central to the city’s economy, such as retail, hospitality, and entertainment, saw a sudden loss of income. At the height of the pandemic, the city suffered over 700 COVID-19-related deaths per day and many more hospitalizations.<sup>1</sup> Families facing grief and trauma also had to deal with the lost income of family wage earners.

Simultaneous with the shift in earnings, routine expenses took on new patterns. The costs of childcare and commuting fell as working from home became the new normal for many. Housing costs in the city fell due to rent freezes and a softened rental market. Eviction moratoriums also offered housing relief.

A bundle of temporary federal public benefits were important stabilizers that added billions of dollars to family resources and to the city’s economy. Economic Impact Payments (EIP) were issued in mid-spring and December of 2020. Additional benefits included expanded unemployment and Supplemental Nutrition Assistance Program (SNAP) payments. Pandemic EBT (P-EBT) cards for temporary food benefits were provided to parents of all schoolchildren, helping to cover the cost of meals children would otherwise have received at school. These measures quickly and notably increased income. Most people in poverty were eligible for some or all of these benefits and many automatically received them.<sup>2</sup> Families with the lowest incomes saw the greatest percentage increase in income due to emergency benefits.

Evidence suggests that emergency benefits lowered the poverty rate. The U.S. Supplemental Poverty Measure (SPM), a method of measuring poverty that is similar to the NYCgov method, saw a 2.6 percentage point drop in the national poverty rate for 2020 – the lowest poverty rate since the SPM began in 2009. The EIP stimulus payments and expanded unemployment insurance moved as many as 11.7 million individuals out of poverty.<sup>3</sup>

**Data Disruption.** The poverty measure is based on data from the Census Bureau’s annual American Community Survey (ACS), supplemented by City and State agency data and other national surveys. The ACS was not immune from the impact of the pandemic and was suspended for several months in 2020. Responses were fewer than usual when the survey resumed, with a response rate of just 68 percent among those sampled in New York State. During the prior five years the average New York

---

1 New York City Department of Health and Mental Hygiene, “Cases, Hospitalizations, and Deaths.” COVID-19: Data. <https://www1.nyc.gov/site/doh/covid/covid-19-data-totals.page>

2 Non-citizens were excluded. Those who did not file taxes had a harder time claiming EIP funds.

3 Liana Fox and Kalee Burns, The Supplemental Poverty Measure: 2020. U.S. Census Bureau, September 2021. <https://www.census.gov/content/dam/Census/library/publications/2021/demo/p60-275.pdf>

4 Response rate for living quarters only. American Community Survey Response Rates, New York State Living Quarters, 2005–2020. <https://www.census.gov/acs/www/methodology/sample-size-and-data-quality/response-rates/index.php>

State response rate had been 89 percent.<sup>4</sup> Those who did respond had “...significantly different social, economic, and housing characteristics than those who didn’t respond.”<sup>5</sup> Respondents were more likely to be married couples with higher incomes who lived in single family homes. It is reasonable to expect that nonresponse rates were higher in New York City than elsewhere in the state. The data collected were not a reliable representation of the population and did not meet the Census Bureau’s quality standards for public release. The 2020 data were instead issued as a set of “experimental” one-year data with unique adjustments.

The experimental data release compensated for nonresponse by incorporating administrative data from the Internal Revenue Service (IRS) and the Social Security Administration (SSA). All households in the survey were weighted to represent the expected population using a set of experimental weights.<sup>6</sup> Chapter 3 provides additional information about the experimental files, data quality, and data specific to New York City.

### Experimental Poverty Rates for 2020 and 2019

**The 2020 NYCgov poverty rate of 16.6 percent is based on the experimental ACS release. This poverty rate cannot be compared to published NYCgov poverty rates from prior years.**<sup>7</sup> Each year the poverty report tracks changes in the poverty rate over time. It is an important indicator in tracking policy outcomes and is used to monitor both the state of poverty at the city level and differences in poverty across groups and communities. This year-to-year comparison is not available for 2020. The population represented by experimental weights in the 2020 data file is different enough from the population represented in the 2019 file that it makes meaningful comparisons difficult. There are particular problems with using data at the borough and community district level. NYC Opportunity follows specific guidance the Census Bureau issued on this point, including cautions about the use of local population estimates.<sup>8</sup>

---

5 U.S. Census Bureau. “Pandemic Impact on 2020 American Community Survey 1-Year Data,” October 27, 2021. <https://www.census.gov/newsroom/blogs/random-samplings/2021/10/pandemic-impact-on-2020-acs-1-year-data.html>

6 Each year the surveyed households – always a small subset of the population – are assigned weights that represent their share of the population based on multiple characteristics as projected in the decennial census and other Census data. The weighted survey is equal to the population of New York City and is reliable at the city level. In 2020 this was not possible. As a substitute, the experimental weights were designed to replicate income distribution at the state level. This is one factor making city poverty estimates difficult. <https://www.census.gov/newsroom/blogs/random-samplings/2021/11/nonresponse-acs-covid-administrative-data.html>; <https://www.census.gov/newsroom/press-releases/2021/experimental-2020-acs-1-year-data.html>

More on the experimental weights, including nonresponse weighting, is found in Chapter 3.

7 The most recently published poverty timeline appears in the NYCgov 2019 Poverty Measure, page 7. See: [https://www1.nyc.gov/assets/opportunity/pdf/21\\_poverty\\_measure\\_report.pdf](https://www1.nyc.gov/assets/opportunity/pdf/21_poverty_measure_report.pdf)

8 Ibid. “The Census Bureau does not recommend comparing the 2020 ACS 1-year experimental estimates with our standard ACS estimates...or comparing the 2020 1-year PUMS (Public Use Micro Sample) data with...PUMS-based estimates from previous years...estimates for PUMAs should be used with caution as the experimental weights are not optimized to produce estimates for these areas.” The NYCgov poverty measure relies on PUMS-based ACS data.

### The 2019 Experimental File: 2019X

The only available comparison between 2020 and prior year poverty rates is a 2019 file prepared with the same experimental weighting procedure as the 2020 file. To avoid confusion with the release of the original 2019 file, in this report the file released by the Census Bureau is referred to as 2019X.<sup>9</sup>

The comparison between the 2020 and 2019X files is not perfect. For both years, a weighting process is used to compensate for households that did not respond. However, the response rate for living quarters in New York State was 81 percent in 2019 compared to the steep drop to 68 percent in 2020. This means that 2020 data has a greater share of households represented by experimental weights than in the 2019X file.

#### Poverty Rates with Experimental Weighting, 2020 and 2019

**2020: 16.6 percent**  
**2019X: 17.4 percent**

Poverty fell 0.8 percentage points in 2020 compared to 2019X. This statistically significant change seems plausible given results seen in other estimates and the billions of dollars in federal aid low and moderate income households received. The trend's direction is more reliable than the absolute share of people in poverty. The remainder of this report parses what can be learned from the change in the citywide poverty rate in 2020.

Chapter 1 provides details on the 2020 poverty threshold and resource components and measures the impact of expanded benefits on the poverty rate. The remainder of the chapter looks at the distribution of degrees of poverty (shares of the population living various distances below or above their threshold) and the poverty gap: total dollars needed to move all of those in poverty over the poverty threshold. Chapter 2

<sup>9</sup> <https://www.census.gov/programs-surveys/acs/technical-documentation/user-notes/2022-07.html>

addresses the problem of poverty in New York City with an overview of selected programs that work toward moving New Yorkers out of poverty. Chapter 3 provides additional information on data quality when using the 2020 experimental file.

The report concludes with a series of technical notes on the 2020 threshold and resource components, with a focus on changes relevant to the 2020 poverty estimate. The technical notes replace the usual set of appendices provided with the report.<sup>10</sup>

---

<sup>10</sup> The most recent full set of technical appendices from the 2019 data year report are available at: <https://www1.nyc.gov/site/opportunity/poverty-in-nyc/poverty-measure.page>

Chapter 1

# **The 2020 Poverty Measure**

## Chapter 1

# The 2020 Poverty Measure

### Poverty Threshold and Resources in 2020

The NYCgov poverty measure is an income measure of poverty that is composed of two parts: (i) a poverty threshold that represents the minimal socially acceptable measure of resources necessary for a family of a given size,<sup>1</sup> and (ii) a measure of a family's resources available to meet their threshold costs. If a family's resources are below their assigned threshold, they are in poverty.

### NYCgov Poverty Threshold

The NYCgov poverty threshold is always higher than the U.S. threshold. There are several reasons for this difference.

The U.S. poverty threshold is based on three times the cost of a Department of Agriculture minimum food plan. It is the same for all locations across the United States and does not account for regional differences in cost of living.

The NYCgov threshold is based on five years of U.S. consumer spending on necessities -- food, clothing, shelter, and utilities -- lagged one year. The shelter portion is adjusted to account for the relatively higher price of housing in New York City. The one-year lag in data means the threshold is unaffected by the events of 2020. The 2020 threshold includes expenditure data from 2015 to 2019.<sup>2</sup>

---

1 See technical Appendix A from "The New York City Government Poverty Measure, 2019," The Poverty Universe and Unit of Analysis, for a detailed definition of family. We define a family as a "poverty unit" -- those people in a household who, by virtue of their relationships to each other, share resources and expenses. A family can be as small as one person or as large as an extended, multi-generational unit including blood relatives, unmarried partners and their children, and other unrelated children. A household may include more than one poverty unit. [https://www.nyc.gov/assets/opportunity/pdf/NYCgovPoverty2021\\_Appendix\\_B.pdf](https://www.nyc.gov/assets/opportunity/pdf/NYCgovPoverty2021_Appendix_B.pdf)

2 The NYCgov threshold prior to adjusting for housing costs is based on the same Bureau of Labor Statistics data used in the U.S. Supplemental Poverty Measure. See addendum to this report on poverty thresholds.

**The NYCgov Poverty Threshold for 2020 was \$38,337 for a two-adult, two-child family.**

- This represents a 4.1 percent annual increase over the 2019 threshold (\$36,817 for a two- adult, two-child family).<sup>3</sup>
- It is \$12,091 higher than the U.S. official poverty threshold of \$26,246 for 2020.

**Table 1.1 shows 2020 NYCgov poverty thresholds for a range of family sizes.**

Size of Family	Number of Children							
	0	1	2	3	4	6	7	7
1 Person	17,768							
2 People	\$25,053	\$26,812						
3 People	\$38,337	\$33,744	\$31,830					
4 People	\$46,889	\$42,705	\$38,337	\$36,530				
5 People	\$54,817	\$50,919	\$46,889	\$42,705	\$40,982			
6 People	\$62,279	\$58,599	\$54,817	\$50,919	\$46,889	\$45,236		
7 People	\$69,375	\$65,868	\$62,279	\$58,599	\$54,817	\$50,919	\$49,324	
8 People	\$76,172	\$72,807	\$69,375	\$65,868	\$62,279	\$58,599	\$54,817	\$53,272

Source: U.S. Bureau of the Census with additional calculations by NYC Opportunity.

### NYCgov Resources

The NYCgov measure of resources includes elements that measure the effectiveness of public policy and the need for that support.

- The U.S. poverty measure only counts pre-tax cash income as a resource.
- The NYCgov poverty measure counts all sources of cash income, including earnings, Social Security and disability payments, unemployment insurance, and direct public assistance. Non-cash benefits include food assistance (i.e., SNAP, WIC, and school meals programs) and net taxes that include tax credits (e.g., the Earned Income Tax Credit/EITC). Medical costs and work-related travel and childcare costs are deducted from household resources.

<sup>3</sup> Originally published as \$36,262. The 2019 threshold has been revised based on changes in the SPM threshold beginning in 2019.

- Federal pandemic relief measures in 2020 provided households with additional resources in the form of direct cash transfers, expanded benefits, and deferred rent increases. The Families First Coronavirus Response Act and the CARES Act (Coronavirus Aid, Relief, and Economic Security Act) provided multiple forms of relief beginning in March 2020. New York State had the discretion to expand or extend certain benefits. The following benefits were available for all or part of 2020 and are relevant to income and expenses included in the NYCgov poverty measure.
  - Unemployment Insurance (UI) benefits were extended to traditionally ineligible recipients such as the self-employed. UI payments included an additional \$600 per week for part of 2020 and \$300 per week later that year. Eligible weeks were extended from the usual 26 to 53.<sup>4</sup> UI benefits from 2020 are included in the ACS's other personal income (OIP) variable and in the NYCgov measure of household income.
  - The NYCgov 2020 poverty rate accounts for two Economic Impact Payments (EIP). The CARES Act provided the first EIP of up to \$1,200 per adult and \$500 for children under 17 in the qualifying income range. The Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act issued a second payment in December of 2020: \$600 per adult and \$600 for children under 17 in the qualifying income range. A qualifying family of four would have received a first payment of \$3,400 and a second payment of \$2,400 in 2020.
  - Additional funding for nutrition assistance was provided. SNAP benefits were expanded so all households received the maximum amount for their household's size, even if they were eligible for a lesser amount. The administrative data include the added benefits. All children eligible for free school meals received a P-EBT card to cover the cost of meals while schools were closed. In New York City, all students are eligible for free meals and all children enrolled in schools that participate in the National School Lunch program received a P-EBT card. The P-EBT amount of \$422 per child was assigned to approximately 600,000 New York City children of all income levels, replacing the benefit usually estimated from universally free school meals.
  - The costs of transit and childcare shrank due to pandemic-related lockdowns. For workers who reported being employed and usually commuted to work, the cost of transit was reduced by 11 weeks. Childcare costs were reduced to zero for 16 weeks due to school and daycare closures.

---

<sup>4</sup> New York State Department of Labor. <https://dol.ny.gov/coronavirus-aid-relief-and-economic-security-cares-act#:~:text=Pandemic%20Unemployment%20Compensation%3A%20Additional%20payments,%2F5%2F2021%20while%20unemployed>

- Rent increases and eviction proceedings were frozen while mortgage payments and foreclosures were suspended. This had an indirect effect on the poverty rate since the poverty threshold includes expected housing costs based on existing leases. Many families pay below the estimated market rate rent for their housing unit for multiple reasons, including living in rent regulated or public housing. NYCgov methodology counts the difference between market rate and this lower rent as an income supplement. Historically, more families report paying market rents each year.<sup>5</sup> A rent freeze means those who expected a rent increase instead continue to receive a housing adjustment, as long as their rent remains below market rate. An eviction freeze means fewer apartments turned over to new tenants with a rent increase on each new lease.

### Poverty in 2020

Each year the NYCgov poverty rate is published with comparisons to prior years. The share of the population in poverty rises and falls over time in response to economic conditions and antipoverty policies. Poverty rates are disaggregated by subgroups such as age, gender, race, ethnicity, and location. As previously discussed, this was not possible with the 2020 data. The following section instead provides details on the aggregate citywide poverty rate and a few comparisons to 2019X data – the experimental file that is comparable to the 2020 data. The focus is on the distribution of resources and benefits and the resulting differences in the depth of poverty: how far above or below the poverty threshold individuals are located.

### Impact of Government Assistance

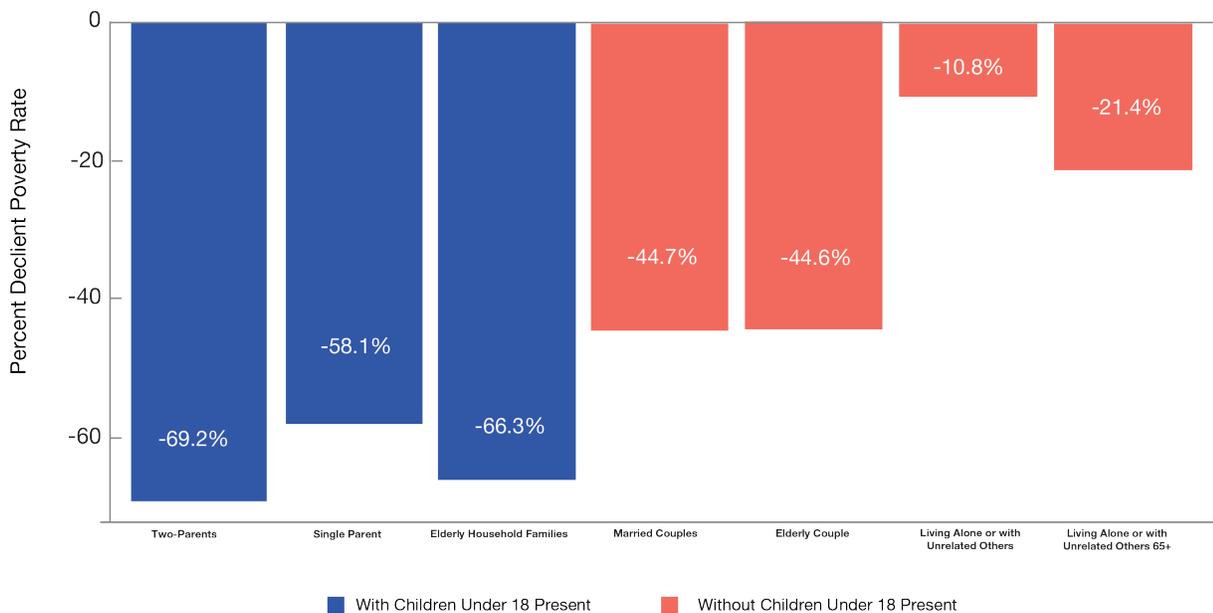
Figure 1.1 shows the impact of combined government assistance and tax credits by family type. In 2020, this assistance was greatly expanded by the COVID-19 benefits previously discussed in the NYCgov Resources section. The disbursement of COVID-19 benefits was unique. Most existing antipoverty programs are targeted to families with children and provide very limited relief to nonelderly childless adults. Yet in 2020, billions of dollars became available to adults without children. Their EIP credits, for example, were equal to those of adults with children.

---

<sup>5</sup> The majority of new housing units added each year are market rate. Rent regulated apartments may revert to market rate during a vacancy if they meet the legal requirements to do so.

Figure 1.1 shows that combined assistance resulted in a drop in poverty rate as high as 69.2 percent for families with children, not that different from the usual benefit impacts. Poverty reduction for families without children was nearly 45 percent, especially for married couples where two EIP payments were received. In previous years, the combined benefit effect for all childless families averaged under 20 percent (not shown).<sup>6</sup>

**Figure 1.1**  
**Percent Decline in Poverty Rate Due to Impact of Combined Government Assistance and Tax Credits by Selected Family Type**

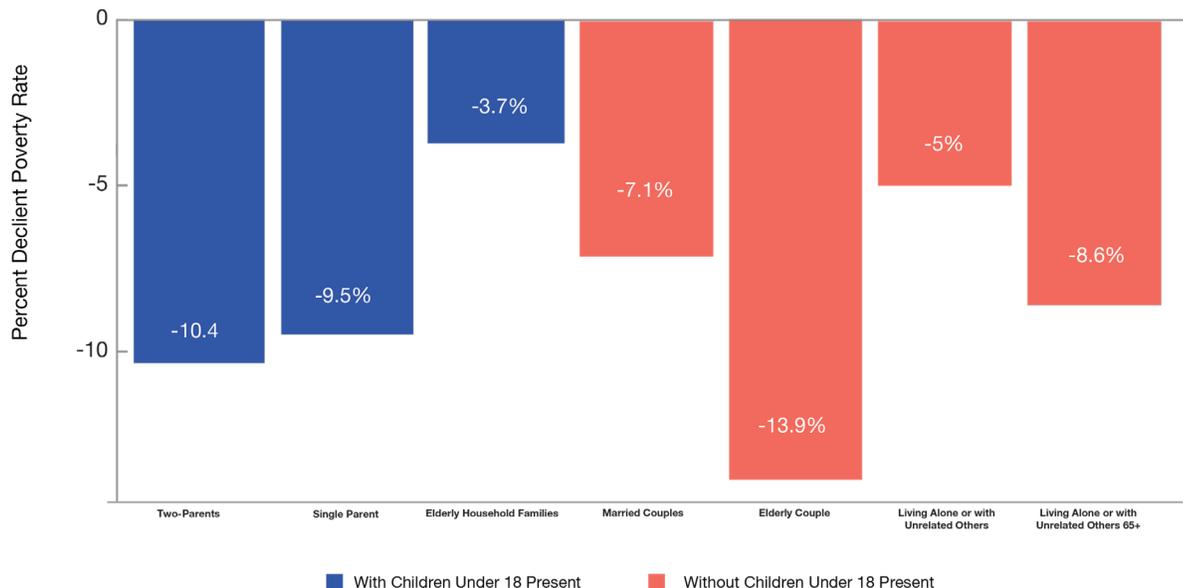


Source: 2020 ACS 1-Year Public Use Micro Sample data file with experimental weights as augmented by NYC Opportunity.

Figure 1.2 isolates the effect of the EIP payment alone. For two-parent and single-parent families with children, the EIP payment lowered poverty rates by 10.4 and 9.5 percent, respectively. The effect was greater for elderly couples, who saw a 13.9 percent poverty rate drop. For elderly couples the net effect of Social Security Income and medical expenses leaves them in poverty but close to their poverty threshold. The \$3,600 EIP payment appeared to be enough to move many of those households out of poverty. EIP payments ended in early 2021 and were replaced by an expanded Child Tax Credit that was not available to childless adults.

<sup>6</sup> Each year this report includes data on how much each resource component (e.g., SNAP, childcare costs) is responsible for pulling people into poverty or moving them over their poverty threshold. Data quality issues prevent a reliable presentation of such data for 2020. Any distortion in the population by geography or income level will distort the imputation process used to assign benefits. The individual impact of any single resource component is less reliable than the combined effect of all components.

**Figure 1.2 Percent Decline in Poverty Rate Due to Economic Impact Payment by Selected Family Type, 2020**



Source: 2020 ACS 1-Year Public Use Micro Sample data file with experimental weights as augmented by NYC Opportunity.

### Degrees of Poverty

The poverty rate, while useful, simply marks the difference between those whose resources are above and those whose are below their poverty threshold. Yet not all poverty is alike. Some families live quite close to their threshold and require only a small amount of resources to cross the line. Others live far below their threshold, with less than half the resources they need to move out of poverty. All of these families are classified as poor because the poverty rate is simply a headcount of those who live below the threshold. However, the further they are from the threshold the more intense their experience of poverty. Basic needs remain unmet, stress levels can be higher, and it is more difficult to acquire the resources needed to escape poverty. Figure 1.3 compares degrees of poverty between the 2019X file and the 2020 experimental file. The addition of EIP payments and expanded benefits can be seen in the decline in the share of people who fall between 20 and 100 percent of the poverty threshold and the increase in those who fall between 150 and 200 percent of it. The added benefits were not enough to lift those in deepest poverty out of poverty. Since COVID-19 benefits were tied to income rather than poverty rates, many who live close to yet above the poverty threshold were able to move closer to 200 percent or more of their poverty threshold, especially when added income was concurrent with decreased work-related spending.

**Figure 1.3. Distribution of the Population by Degrees of Poverty, 2019X and 2020**



Source: 2019-2020 American Community Survey Micro Sample data files with experimental weights augmented by NYC Opportunity.

### The Poverty Gap

The poverty gap is the amount of resources each person in poverty needs to cross their threshold and move out of poverty. It can be summed up across the population to quantify the poverty gap for New York City, in other words, the amount of resources needed to totally eliminate poverty in a given year.

**The poverty gap estimated from the experimental data files is \$6.3 billion in 2019X and \$6.2 billion in 2020.**

The poverty gap is a function of changes in both poverty resources and the poverty threshold. The 4.1 percentage point increase in the 2020 threshold was met in the aggregate by changes in resources that year. The result was a statistically unchanged poverty gap between the two years.

Chapter 2

# Policy Responses

## Chapter 2

# Policy Responses

### Major Citywide Initiatives

This is the first poverty report released during the Adams administration. Although it includes figures that reflect a time prior to the administration's inception, the report highlights the persistent problem of poverty. The Adams administration began its term with a strong commitment to reducing poverty and increasing opportunity for all New Yorkers. In its first year, the administration launched an array of initiatives designed to do so, including:

- **Increased Childcare Expenditures.** Mayor Adams made it a priority to increase childcare funding, which helps to reduce poverty in two ways: by lowering the amount working families have to pay out of pocket for childcare and freeing up parents to work and earn more. The mayor and New York City parents advocated for an expansion of State childcare funding and in April of 2022, the State allocated \$4 billion for childcare in New York City over four years.<sup>1</sup> In June, the mayor released "Accessible, Equitable, High-quality, Affordable: A Blueprint for Child Care & Early Childhood Education in New York City," a report that outlined essential steps for investing in childcare and early childhood education, including allocated funding for undocumented families.<sup>2</sup>
- **Office of Child Care and Early Childhood Education.** The City opened the first-ever Mayor's Office of Child Care and Early Childhood Education. The new office, which builds on Mayor Adams' Blueprint for Child Care and Early Childhood Education, aims to ensure that New York families have access to equitable, high-quality, and affordable early education and childcare. It will lead strategy and coordinate planning among City agencies, promoting innovation in partnership with families, providers, experts, and the private sector, and it will promote effective advocacy, communication, and public engagement.

---

<sup>1</sup> <https://www.nyc.gov/office-of-the-mayor/news/208-22/mayor-adams-celebrates-4-billion-allocated-childcare-state-budget>

<sup>2</sup> New York City Office of the Mayor, "Accessible, Equitable, High-quality, Affordable. A Blueprint for Child Care & Early Childhood Education in New York City". <https://www1.nyc.gov/assets/home/downloads/pdf/office-of-the-mayor/2022/Childcare-Plan.pdf>

- Increased EITC.** Mayor Adams made a commitment early in his mayoralty to expand EITC, which is one of the most effective ways to reduce poverty. In April of 2022, the mayor announced enhanced benefits for over 800,000 families and a commitment to invest \$250 million in EITC annually, along with a one-time State payment estimated at \$100 million.<sup>3</sup> For nearly 20 years, the City’s EITC match had remained at 5 percent of the federal EITC. Under the City’s expansion, the minimum New York City EITC rose to 10 percent of the federal EITC. The lowest income households will now receive up to 30 percent of the federal EITC. A single parent with one child and an annual income of \$14,750, for example, will experience a 400 percent increase in benefits from \$181 to \$905.
- Scholarship Accounts for 97 Percent of Kindergarteners.** The Adams administration is working to increase educational opportunity for all New York City children and to reduce the racial wealth gap. As part of this effort, in May of 2022 the mayor announced that 97 percent of kindergarteners across the city had NYC Scholarship Accounts from the NYC Kids RISE Save for College Program, which allows them to accumulate savings for college or career training.<sup>4</sup> There is strong evidence that college completion and career training reduce poverty.<sup>5</sup> NYCgov poverty data consistently shows that an individual with only a high school diploma is three times more likely to be poor than a college graduate. Those who do not graduate high school are four times more likely to be poor.
- NYCBenefits Request for Proposals (RFP).** Mayor Adams has called for making access to government benefits more efficient and easier to navigate. To this end, the Deputy Mayor’s Office for Strategic Initiatives (DMSI) and the Human Resources Administration (HRA) announced the release of the NYCBenefits RFP.<sup>6</sup> This cross-agency, cross-sector effort promotes a systematic approach to helping hundreds of thousands of New Yorkers access the billions of dollars in benefits that are currently unused.
- MyCity.** The City launched MyCity, a new portal for City services and benefits that makes it easier for New Yorkers to interact with and access support from a wide array of City agencies. MyCity’s landing page has a “Jobs” link that takes users to Jobs NYC/Job Ready, and a “Benefits” link that connects to ACCESS NYC, a benefits portal that allows New Yorkers to screen for federal, state, and city benefits they may be eligible for and to take the next steps. MYCity also offers

3 New York City Office of the Mayor, “Mayor Adams Applauds Earned Income Tax Credit Enhancement in State Budget, Fulfilling Pledge to Bolster Social Safety Net for Working Families”, April 16, 2022. <https://www.nyc.gov/office-of-the-mayor/news/212-22/mayor-adams-applauds-earned-income-tax-credit-enhancement-state-budget-fulfilling-pledge-to>

4 New York City Office of the Mayor, “Mayor Adams Announces 97% of Kindergartners Citywide now Have an NYC Scholarship Account for College and Career Training”, May 4, 2022. <https://www.nyc.gov/office-of-the-mayor/news/274-22/mayor-adams-97-kindergartners-citywide-now-have-nyc-scholarship-account-for>

5 Annie Lowrey, “A Cheap, Race-Neutral Way to Close the Racial Wealth Gap,”The Atlantic, June 29, 2020. <https://www.theatlantic.com/ideas/archive/2020/06/close-racial-wealth-gap-baby-bonds/613525/>

6 Research Foundation of City University of New York, September 9, 2022. <https://www.rfcuny.org/rfwebsite/about/announcements/nycbenefits-request-for-proposals-rfp/>

resources for childcare assistance and for starting, operating, and growing businesses in New York City.

In addition to the initiatives mentioned above, the City has launched an array of other programs designed to improve the lives of low-income New Yorkers, including creating a new NYC Small Business Opportunity Fund that offers low-interest loans to small businesses across the city; making major investments in the Mayor's Office of Minority and Women-Owned Business Enterprises; expanding "Big Apple Connect" to deliver free internet and television to more than 300,000 New Yorkers at 200 NYCHA developments; and investing up to \$10 million to repair rent-stabilized homes through "Unlocking Doors," a program that works to connect individuals experiencing homelessness with homes.

### **NYC Opportunity and the Adams Administration Priorities**

The Adams administration has new priorities for City government with its focus on the central idea of "getting stuff done" and delivering results for New Yorkers. These priorities are reflected in NYC Opportunity's work and include increased use of partnerships, greater cross-agency collaboration, and integrating community voice, all of which guide the work. The first two examples that follow were launched during the Adams administration: the NYC Workforce Data Portal and MyFile NYC. The remainder have received increased attention due to their alignment with the administration's priorities.

- **NYC Workforce Data Portal.** The public-facing Workforce Data Portal is an online portal designed to break down silos and make available City-administered workforce data from a wide variety of agencies and sources.<sup>7</sup> The data are aggregated across a set of standardized indicators or "common metrics" designed to make it easier to create comparisons across programs.
- **MyFile NYC.** NYC Opportunity, along with the Department of Homeless Services (DHS) and the New America Foundation Digital Impact and Governance Initiative, has launched MyFile NYC.<sup>8</sup> The pilot project is designed to help applicants of safety net benefits and programs retrieve the specific documents they need to be approved for those benefits and programs.

---

<sup>7</sup> NYC Data Workforce Portal. <https://www.nyc.gov/site/opportunity/portfolio/workforce-data-portal.page>

<sup>8</sup> MyFile NYC. <https://www.nyc.gov/site/opportunity/portfolio/my-file-nyc.page>

- **Designed by Community Fellowship.** The NYC Opportunity Service Design Studio's Designed by Community Fellowship is a paid fellowship and project funding opportunity to support community members in designing and developing hyperlocalized solutions to the COVID-19 crisis for – and with – New York City Housing Authority (NYCHA) communities.<sup>9</sup> The program is a collaboration with the Mayor's Fund to Advance New York City and Citi.
- **No Wrong Door.** NYC Opportunity's No Wrong Door initiative works to improve the support the City offers to justice-impacted young adults and the provider organizations that connect them to services. Based on Learning Community meetings with provider organizations in spring 2022, the office launched the Community Navigator Institute in East Harlem, which provides community-led training in service navigation tools and frameworks, delivered by individuals with lived experiences in the legal system.
- **Collaborative Innovation Projects.** NYC Opportunity has launched poverty related cross-agency initiatives designed to improve access to services for city residents through stronger interagency collaboration, including i) a collaboration with the Department of Education and the DHS to address attendance for students in temporary housing, ii) a partnership with the Administration for Children's Services and the Department of Health and Mental Hygiene (DOHMH) to improve how families access needed early childhood services, and iii) a partnership with DOHMH and HRA to use human-centered design to improve ten domestic violence shelters.
- **Jobs NYC/Job Ready.** Jobs NYC/Job Ready is a one-stop portal for residents seeking work and training opportunities throughout New York City government and beyond. A collaboration of the Mayor's Office for Economic Opportunity and the Mayor's Office of Talent and Workforce Development, with additional support from the NYC Office of Technology and Innovation, Jobs NYC/Job Ready, which was formerly known as Working NYC, cuts across agency lines to offer a wide array of resources, including population-specific information and hubs where residents can connect to employment opportunities and social services. Jobs NYC/Job Ready, which was relaunched last year with a refreshed design and new content, offers wraparound services and a hub for hundreds of low-barrier City jobs, with a focus on underserved populations. Jobs NYC/Job Ready is linked to from the landing page of MyCity, the new portal for City services and benefits that makes it easier for New Yorkers to interact with and access support from a wide array of City agencies.

---

<sup>9</sup> Designed by Community Fellowship. <https://civicservicedesign.com/announcing-the-2021-designed-by-community-fellowship-204543b35b68>

Chapter 3

# **Data Quality and City-level Poverty Estimates**

## Chapter 3

# Data Quality and City-level Poverty Estimates

Since the first release of the NYCgov poverty measure in 2008, the ACS has served as a critical source of data about New Yorkers. Its rich information on demographics, income sources, housing, geography, and more make it possible to estimate the resources and expenses included in the poverty measure. The 2020 ACS data could have provided a comprehensive portrait of how the pandemic changed economic circumstances for New Yorkers and how the effects differed across populations. However, the pandemic impeded the data collection process, reducing the reliability and accuracy of the 2020 data for local communities. This chapter considers the pandemic's impact on ACS data collection, the extent to which this influenced estimates of the city's population compared with pre-pandemic benchmarks, and how these factors subsequently limit the ability to estimate annual NYCgov poverty estimates for subpopulations and communities in the city.

Due to data quality issues in the 2020 ACS data, the Census Bureau decided against releasing the standard ACS one-year data products.<sup>1</sup> Instead it released a limited set of experimental data<sup>2</sup> that used a new weighting method called entropy balancing.<sup>3</sup> The 2020 ACS Public Use Micro Sample (PUMS) one-year data file that included the experimental weights was released with the disclaimer to “use with caution.” Data users are particularly advised not to compare the 2020 experimental data to PUMS data from prior years.<sup>4</sup> They are additionally urged to assess whether experimental estimates from PUMS data are suitable for their particular use.

There is no substitute for the annual ACS data in constructing the poverty measure. Understanding the nature of data quality issues in the 2020 experimental ACS data for New York City is critical to understanding the limitations of the NYCgov poverty measure for 2020 itself.

---

1 U.S. Census Bureau. “Pandemic Impact on 2020 American Community Survey 1-Year Data,” October 27, 2021.

2 <https://www.census.gov/programs-surveys/acs/data/experimental-data/1-year.html>

3 U.S. Census Bureau. “Pandemic Impact on 2020 American Community Survey 1-Year Data,” October 27, 2021.

4 U.S. Census Bureau. “American Community Survey 2020 1-Year Experimental PUMS File Readme,” November 30, 2021. <https://www.census.gov/programs-surveys/acs/data/experimental-data/2020-1-year-pums.html>

## 3.1 The American Community Survey and the Pandemic in 2020

### Data Collection Issues

The ACS is conducted annually. Details across a given year are captured by monthly samples. Each month the survey contacts a new set of households so a continuous measurement of data can occur over the year. The combined annual sample is designed to insure adequate representation across demographic characteristics such as race, ethnicity, and income.

In the spring and summer of 2020, the U.S. Census Bureau made changes to ACS data collection operations to protect the health and safety of Census Bureau staff and the public. From mid-March to June 2020, the survey's mail-out operation was completely suspended. Since the mail-out is the initial point of contact for those invited to participate, many households in the March through June panels did not know they were to participate. During this period, data collection was carried out by telephone only.<sup>5</sup> In-person follow-up interviews with nonresponding households were also suspended and only resumed in some areas of the country starting in July 2020. Normal survey operations partially resumed in October 2020 when more staff returned to the office.

These operational disruptions jeopardized the integrity of crucial demographic, social, and economic data. First, the survey received substantially fewer responses. Nationwide survey participation dropped 32 percent, from 2.06 million households in 2019 to 1.41 million in 2020.<sup>6</sup> The high nonresponse rate meant the size of the New York City sample declined approximately 19.4 percent from 67,140 in 2019 to 54,095 in 2020. This is the smallest New York City sample since the first ACS data became available in 2005. A smaller sample size means data can be less reliable, especially for small geographic areas and underrepresented populations.

A more serious concern is the significant nonresponse bias in the 2020 ACS data. Survey participants were more likely to be white, college educated, live in a single-family home, and have a high income.<sup>7</sup> The bias that results from a nonrepresentative sample (i.e., nonresponse bias) is a serious threat to accurate poverty estimates.

---

<sup>5</sup> U.S. Census Bureau. "ACS Research and Evaluation Report Memorandum Series # ACS21-RER-04," October 27, 2021.

<sup>6</sup> U.S. Census Bureau. "Sample Size and Data Quality," <https://www.census.gov/acs/www/methodology/sample-size-and-data-quality/>

<sup>7</sup> U.S. Census Bureau. "Pandemic Impact on 2020 American Community Survey 1-Year Data," October 27, 2021.

## Mitigating Nonresponse Bias

As the introduction to this report noted, surveyed households are a small subset of all households. Each sampled household is assigned a weight that represents the share of all similar households in the full population. The resulting weighted population is true to the size and characteristics of the New York City population. The survey weighting scheme includes an adjustment for nonresponses when the collected sample is not representative of the true population. Survey nonresponse weighting is typically done by identifying a set of control totals for the population that the survey sample should match and calculating weights to adjust sample totals to population totals. Survey nonresponse weighting could reduce nonresponse bias.<sup>8</sup> The standard weighting procedure to control for nonresponse in the ACS, however, controls only for differences by sex, age, race, and Hispanic origin. Given that 2020 respondents differed from respondents in a typical year in other significant ways, the standard nonresponse weighting scheme may not adequately address the unprecedented level of nonresponse bias in the data.

Recognizing this issue, the Census Bureau created 2020 experimental public use weights using an alternative weighting method – an entropy balancing technique<sup>9</sup> – in addition to the standard ratio estimation procedures. The alternative method reweights the respondent sample so the distribution of characteristics in the sample data matches the target population. It does so by incorporating the following administrative/third party data<sup>10</sup> into the weighting procedure:

- Income, employment, financial, and household structure data from IRS 1040 and 1099 forms
- Program benefits data from the SSA
- Demographic data from the 2010 Census and the SSA
- Industry data from the Census Bureau’s Business Register
- Third-party data on home values (commercial housing data from Black Knight Inc.)

---

<sup>8</sup> In the case of the 2020 ACS, nonresponders differed from responders in that they were less likely to be white, higher income, and living in a single-family home.

<sup>9</sup> U.S. Census Bureau. “Addressing Nonresponse Bias in the American Community Survey During the Pandemic Using Administrative Data,” ACS21-RER-05 and SEHSD Working Paper #2021–24.

<sup>10</sup> The added administrative and third-party data can compensate for survey nonresponse but have limitations. Administrative records may not cover the entire population of interest or may have issues with data quality, timeliness, units of observation, etc.

## Data Quality Issues in the New York City ACS Sample Data

The adjustment method used by the Census Bureau is far from perfect in rendering unbiased and reliable survey estimates for the city’s population for two reasons. First, administrative data utilized by the Census Bureau do not cover the entire population of interest. Specifically, segments of the population that were hard to reach by 2020 ACS data collection – most notably non-citizens without a taxpayer identification number (ITIN or Social Security) – are not likely to be captured in IRS or SSA data. Most importantly, reweighting techniques are optimized for accuracy at the state level, meaning there is less accuracy at sub-state levels which is a problem when generating poverty estimates for the New York City population.<sup>11</sup>

The following sections provide an overview of selected estimates using the experimental weights and benchmarks those estimates against data from prior years that use standard production weights. This is done to illustrate when demographic compositions of the city’s population appear out of line with expectations. Section 1 notes where some estimates appear reasonable. Section 2 highlights examples of reasonable estimates that, upon further examination, should be viewed with caution. Section 3 illustrates how estimates of geographic location affect overall population estimates. The conclusion is that even seemingly reasonable experimental estimates may be misrepresenting actual populations.

In each of the sections below, the corresponding figures link data from 2014 through 2019 with a solid line. The dotted line segment represents the 2019 and 2020 data using experimental weights.

### 3.2 Assessing Data Quality for New York City

#### **No discernible differences in demographic distributions: sex, age, and race/ethnicity**

Some population estimates seem reasonable and accurate at first glance, specifically estimates of the demographic categories controlled for in the standard weighting procedure: sex, age, and race/ethnicity.

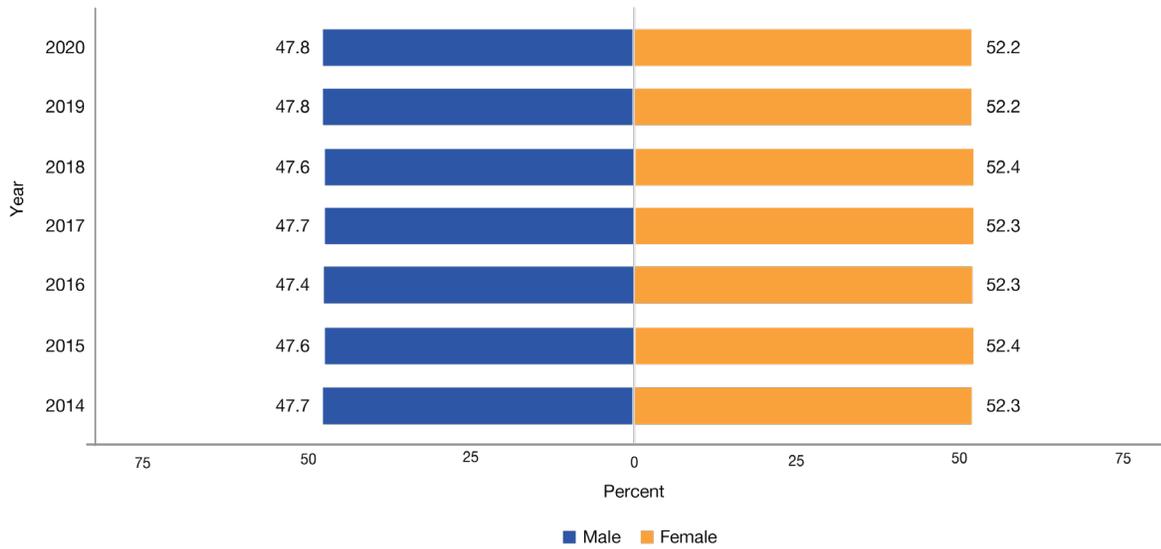
#### **Sex**

No real difference in population estimates by sex was observed between the 2019 and the 2020 ACS (see Figure 3.1). This outcome was expected, as the city’s male and female distribution tends to be stable over time and the sex variable in the ACS is one of the demographic variables controlled for in the standard survey weighting process.

---

<sup>11</sup> <https://www.census.gov/programs-surveys/acs/technical-documentation/user-notes/2022-07.html>

**Figure 3.1. New York City Population by Sex**

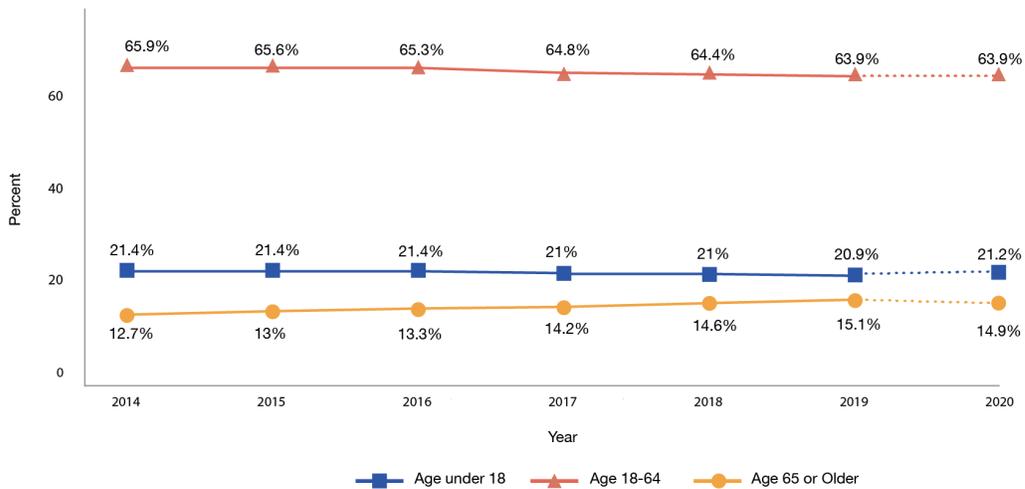


Sources: 2014-2020 American Community Survey Public Use Micro-sample Constrained to Living Quarters. A bar plot with transparent color represents the estimate generated from the 2020 Experimental ACS

**Age**

Likewise, there was no unusual level of change in the age composition of New Yorkers between the 2019 and the 2020 ACS. A small change was observed in the young and the elderly populations – an increase in young and a decrease in elderly that continued historical trends (see Figure 3.2). The age variable is one of the demographic variables controlled for in the ACS weighting process.

**Figure 3.2 New York City Population by Age**



Sources: 2014-2020 American Community Survey Public Use Micro-sample Constrained to Living Quarters  
 Note: Dotted Lines represent a break in a time-series that is introduced by a change in survey weighting for the 2020 Experimental ACS

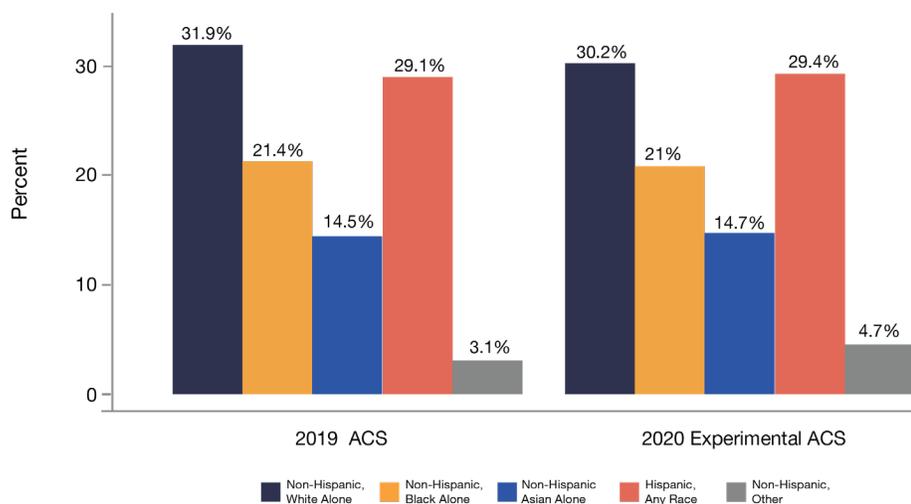
### Race/Ethnicity

The Census Bureau changed how it asked about race in the 2020 Decennial Census and the 2020 ACS.<sup>12</sup> Previous surveys asked respondents to check relevant boxes to identify as White, Black, Hispanic/Latino/Spanish origin, American Indian/Alaska Native, Asian by country of origin, Native Hawaiian/Other Pacific Islander, or some other race or origin. The 2020 survey added write-in options to each race category to collect more details about origin, tribe, or race. For example, self-identified White respondents were asked to specify their origins as German, Irish, English, Italian, Lebanese, Egyptian, etc.

This change in the survey instrument alone makes the 2020 ACS race variable incomparable to previous years, even though race is one of the variables controlled for in the data weighting process. The estimate of Non-Hispanic White-Alone population decreased from 31.9 percent in the 2019 ACS to 30.2 percent in the 2020 ACS (see Figure 3.3). In addition, the Non-Hispanic Other category that includes “two or more races” had a large increase from 3.1 percent to 4.7 percent. The difference may also be confounded by data quality issues from 2020 ACS data collection, including the likely exodus of higher income New Yorkers during the pandemic.<sup>13</sup>

Lastly, there was no marked change in the share of people reporting Hispanic origin. The variable for Hispanic origin is also among variables controlled for in the ACS weighting process. The 0.3 percentage point increase in the Hispanic population (from 29.1 percent to 29.4 percent) follows the trend set in the previous several years.

**Figure 3.3 Racial and Ethnic Makeup of NYC Population, 2019–2020**



Source: 2019–2020 American Community Survey Public Use Microsample Data Limited to Living Quarters

<sup>12</sup> <https://www.census.gov/newsroom/blogs/random-samplings/2021/08/improvements-to-2020-census-race-hispanic-origin-question-designs.html>

<sup>13</sup> <https://www.nytimes.com/2022/06/28/nyregion/wealthy-pandemic-nyc.html>

### **Undercounting: non-citizens, high school graduates, and people in multifamily homes**

As previously discussed, the 2020 ACS data heavily skewed toward households with higher incomes, educational attainment, and home ownership. This pandemic-driven nonresponse bias is addressed by the use of experimental weights. However, experimental weights do not correct for this bias at the city level. The following sections use citizenship, educational attainment, and homeownership as examples of why there is limited ability to use the 2020 data for subgroup analyses. Non-citizens, high school graduates, and renters in multifamily homes are more likely to be economically disadvantaged. As a result, unresolved bias in population estimates for these groups creates bias in citywide poverty estimates.

#### **Citizenship**

Figure 3.4 plots the two trend lines of the non-citizen estimates. The solid blue line shows a time trend in the 2014–2019 ACS data under normal production weights. The dashed orange line represents estimates from the 2019 ACS data with experimental weights and the 2020 experimental ACS data.

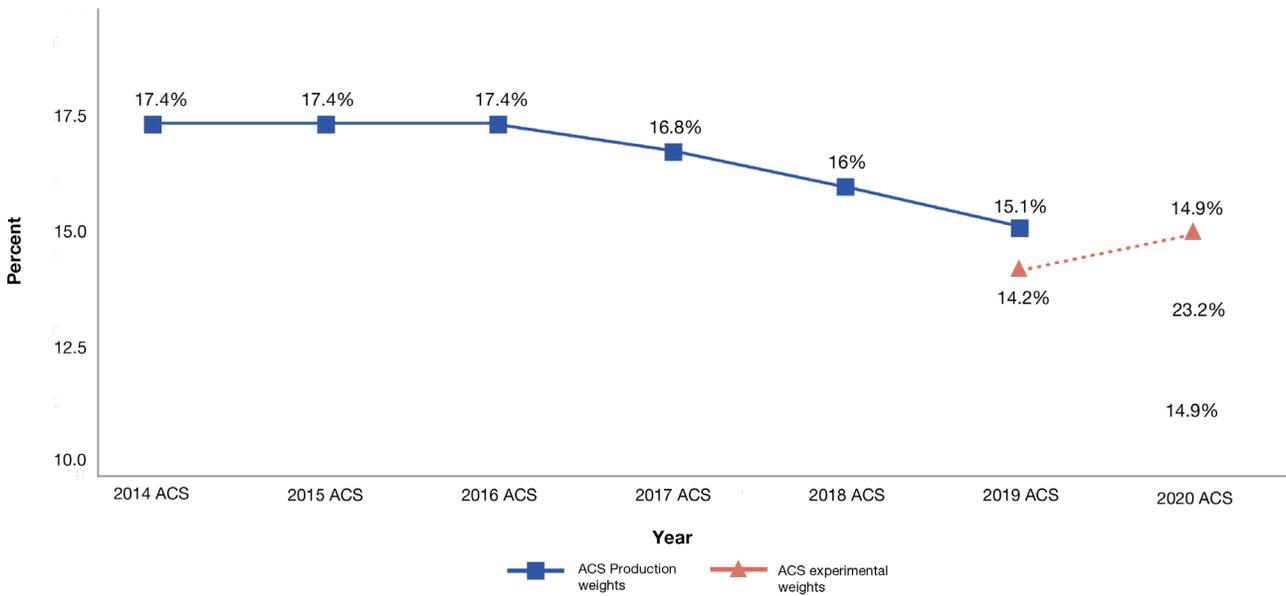
As the figure’s solid blue line illustrates, the share of non-citizens in the city has steadily declined since 2017.<sup>14</sup> In the 2020 ACS, the share of non-citizens decreased by 0.3 percentage points from the non-experimental value of 15.1 percent to 14.9 percent. Compared to the preexisting downward trend, the 2020 non-citizen estimate appears to be plausible.

However, incongruity arises when experimental weights are used with the 2019 data. Looking at the disjointed data points for 2019 (i.e., 2019 non-citizen estimates generated under the normal standard production weights and experimental weights), it is obvious that the experimental weighting method undercounts the non-citizen estimate by almost one percentage point – from 15.1 percent under normal production weights to 14.2 percent under experimental weights. Note that these estimates are based on the same sample data but with different weights. Instead of suggesting a 0.3 percentage point reduction in the non-citizen share, the comparison between the similarly weighted survey data from 2019 and 2020 suggests the non-citizen share of the New York City population increased by 0.7 percentage points. Figure 3.4’s disconnected line graph is a perfect example of why experimental results from 2020 should not be compared to data from previous years.

---

<sup>14</sup> The downward trend may be due to national policies that caused a chilling effect on immigration beginning in 2017.

**Figure 3.4 Non-citizen Estimates Under Standard Production Weights and Experimental Weights**



Sources: 2014-2020 American Community Survey Public Use Micro-sample Constrained to Living Quarters  
 Note: The dashed line represents estimates generated under the experimental weights for 2019 and 2020

**Educational Attainment**

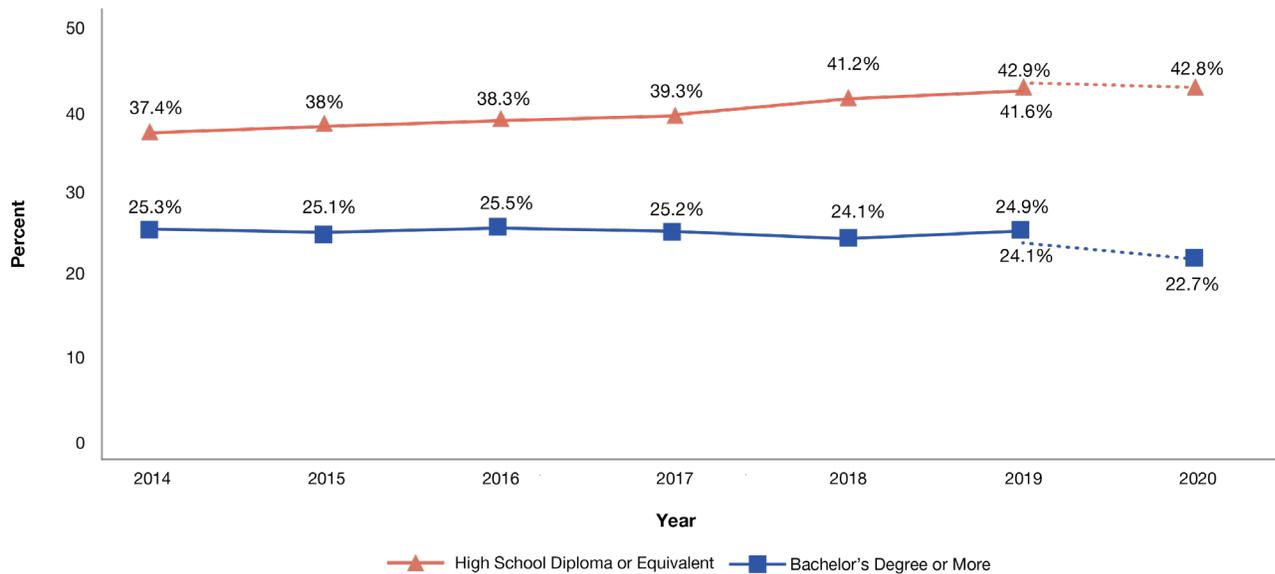
Figure 3.5 shows the percentage of the city’s working-age population that earned a high school diploma or a bachelor’s degree from 2014 to 2020.

The city’s college educated population rose in recent years (2017–2019), with a year-over-year increase that ranged from 0.4 to 1.89 percentage points (see the solid blue line in Figure 3.5). Significantly more working-age adults had attained at least a four-year college degree in the 2020 ACS (42.8 percent) than in the 2019 ACS (41.6 percent) – an increase of 1.2 percentage points. Given the recent trend in college attainment, the 1.2 percentage point increase in the the college educated population in 2020 does not seem extreme.

However, as the figure’s dashed line represents, an apples-to-apples comparison between similarly weighted (experimental) surveys from 2019 to 2020 leads to quite a different conclusion: the percentage of working-age adults with a bachelor’s degree or higher remained the same between the two years. A troubling aspect of the experimental weights is that they apparently overinflated the share of the population with a college education in the 2019 ACS data by 1.3 percentage points – from 41.6 percent to 42.9 percent. A plausible explanation could be that administrative and third-party data integrated into the reweighting process may also imbalance and/or misrepresent population variability.

A similar issue emerged in the population estimate for working-age adults with a high school diploma or equivalent degree. The pre-pandemic trend was somewhat stable, staying around 25 percent (see the solid blue line in Figure 3.5). This share of the population dropped by 2.2 percentage points, from 24.9 percent in 2019 to 22.7 percent in 2020. This is by far the largest decline, given that year-over-year changes beginning in 2014 only range from 0.2 to -0.8 percentage points. The alternative estimate for 2019, however, show that experimental weights undercounted the city population with a high school or equivalent education by 0.8 percentage points. The similarly weighted ACS data from 2019 to 2020 suggest that the share of the population with a high school education declined by 1.4 rather than 2.2 percentage points for the year 2019–2020.

**Figure 3.5 Working Age Population by Educational Attainment**



Sources: 2014-2020 American Community Survey Public Use Micro-sample Constrained to Living Quarters  
 Note: Dashed lines represent estimates generated under the experimental weights for 2019 and 2020

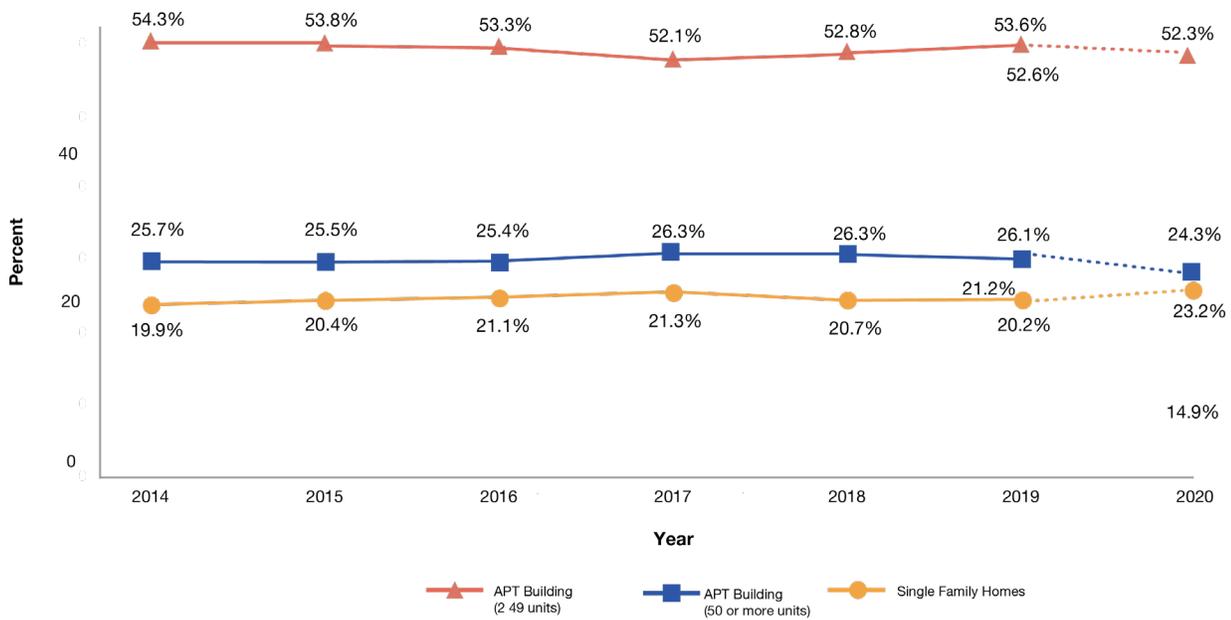
**Housing Type**

The 2020 ACS data show a dramatic increase in the percentage of New Yorkers living in single family homes and a decrease in the percentage of those living in apartment buildings with 50 or more units. As Figure 3.6 shows, the distribution of New Yorkers by housing type had been relatively stable in recent years, with a small year-over-year fluctuation that typically changed no more than 0.7 percentage points over any two-year span. The percentage of people living in a single-family home increased by

3 percentage points, from 20.2 in 2019 to 23.2 in 2020. At the same time the percentage of individuals living in buildings with 50 or more units decreased by 1.7 percentage points, from 26 percent in 2019 to 24.3 percent in 2020. These unexpectedly large changes not only move in the opposite direction of the trend set in the previous few years but are also in disagreement with external benchmarks such as administrative data on housing permits.<sup>15</sup>

The reason for the sudden shift becomes clear when viewing the 2019 data transformed with experimental weights. The reweighting of the 2019 data shifts the distribution of housing structure type. The share of the population living in single family homes is inflated by a full percentage point and the share in multifamily homes with 2–49 units is understated by a full percentage point. The 2020 data continue this trend. Unfortunately, the use of experimental weights for both 2019 and 2020 ACS data did not replicate the historical year-over-year trend in housing structure type.

**Figure 3.6 NYC Population Share by Housing Type**



Sources: 2014-2020 American Community Survey Public Use Microsample Data Limited to Living Quarters  
 Note: Dashed lines represent estimates generated under the experimental weights for 2019 and 2020

<sup>15</sup> NYC Department of Housing data on residential building permits issued for new construction and demolition/significant alteration collectively indicate that between 2019 and 2020, the city’s housing inventory increased, especially for multifamily housing units. The official report can be accessed at: <https://rentguidelinesboard.cityofnewyork.us/wp-content/uploads/2021/06/2021-HSR.pdf>

The review of citizenship, education and housing estimates above highlights a fundamental issue with the use of experimental weights. The availability of experimental weights for the 2019 ACS made it possible to contextualize 2020 data. The reweighting of 2019 data with experimental weights creates a shift away from low-income households toward high-income households. Although the combined effects of the experimental 2019 and 2020 data reduced year-over-year change for some measures, it did not adequately bring results in line with historic trends in city population estimates – especially populations with a high school education and those in single vs. multifamily homes. In other words, concerns over the representativeness of the New York City sample are warranted.

### **3.3 Unexpected Geographic and Demographic Shifts in Borough populations**

As the section above illustrates, the New York City portion of the 2020 ACS sample is not representative of its population. The problem does not end there. Geographic shifts among some of the population also raise multiple concerns.<sup>16</sup>

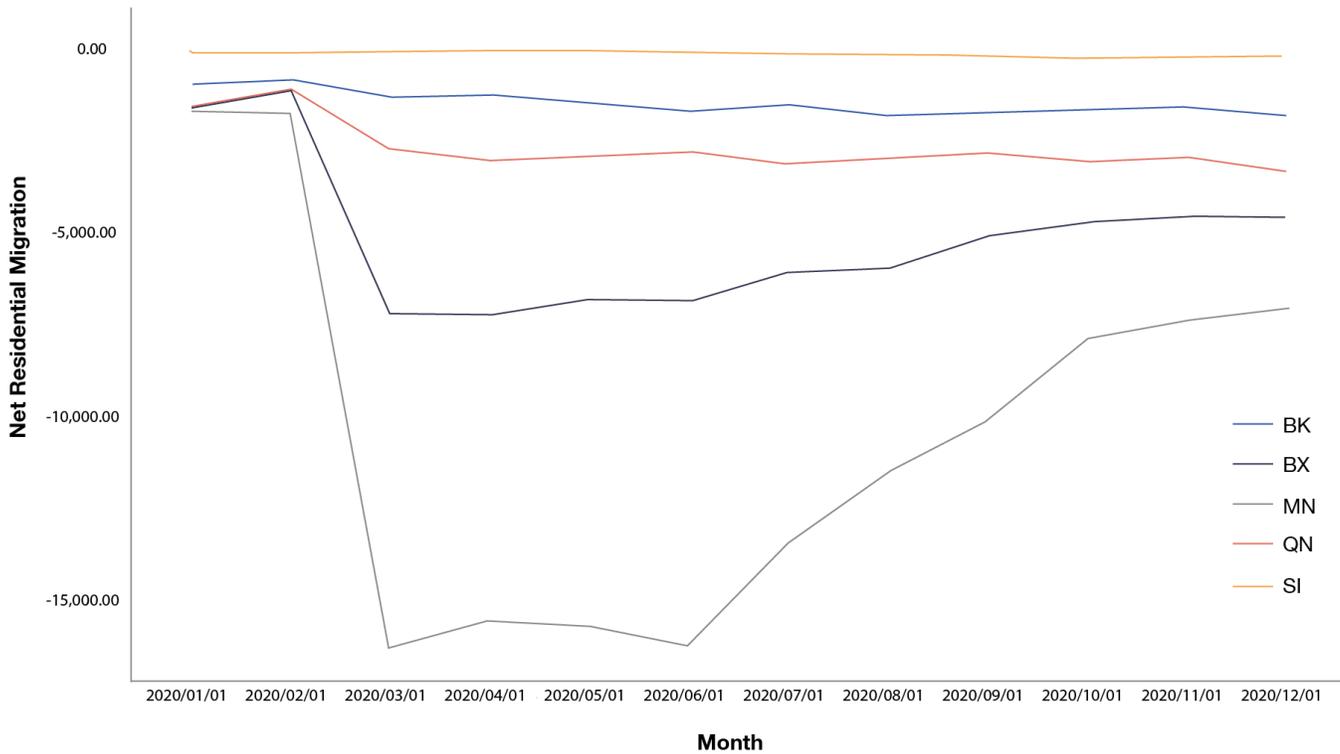
Population size by borough is nearly identical in 2019 and 2020. Since borough populations change slowly year over year, this is another instance where the data appear to match the expected trend. However, they may be misleading. Other data show that many who had the means to do so left the city during the riskiest part of the pandemic. Populations in some areas declined – whether on a short-term or a permanent basis. Figure 3.7 shows that while net temporary residential move-outs were greatest in Manhattan, net loss also occurred in Brooklyn and Queens.<sup>17</sup> Population declines in Manhattan and Brooklyn alone generated a decline of thousands in the city’s overall population.

---

<sup>16</sup> In this section the 2020 data are compared to the original 2019 ACS, the benchmark for weighting populations. The 2019X data are not used as a reference point in this discussion.

<sup>17</sup> A move is classified as temporary if the mover indicates “temporary” when submitting a change of address form.

**Figure 3.7 Monthly Net Residential Moves by Borough, 2020**



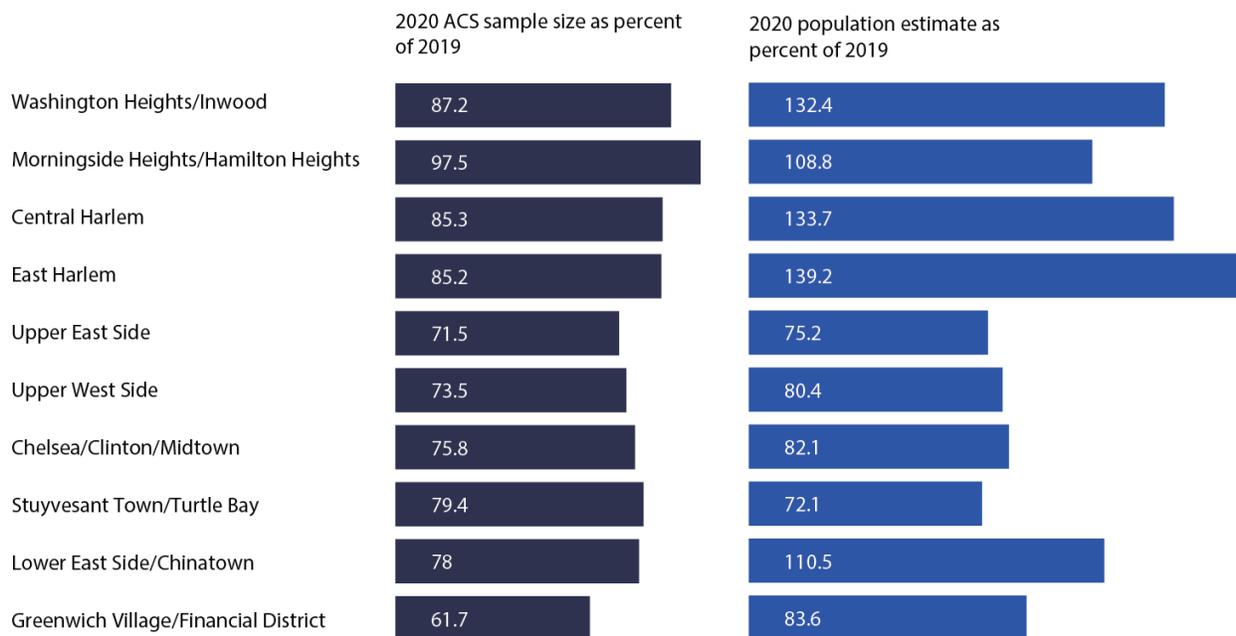
Sources: NYC Opportunity’s analysis of change-of-address (COA) data published by USPS

This population loss is not immediately apparent in the ACS. The absence of a year-over-year change in 2020 only becomes visible when looking at populations across community districts (CDs) within boroughs and the shifting locations of racial and ethnic groups across and within boroughs.

Figure 3.8 uses Manhattan CDs as an example. While all Manhattan CDs saw a dramatic decrease in sample size (column A), the reduction was not uniformly distributed and the decrease ranged from 61.7 percent to 97.5 percent. The 2020 borough-level data are close to 100 percent of the 2019 population, but this does not hold true for sub-geographies such as CDs with a range of changes from the prior year. For example, the 2020 Upper West Side sample was just 73.5 percent of the 2019 sample. Experimental weights, which compensated for some of the sample loss, produced a 2020 population that was 80.4 percent of the 2019 population. By comparison, East Harlem’s 2020 survey sample was 85.2 percent of its 2019 sample. After weighting, that resulted in a 2020 East Harlem population that was 139.2 percent of its 2019 population. The experimental weights overcompensated for the Manhattanwide undersample of a population that resembled East Harlem residents in characteristics including income, age, and race.

The 2020 Manhattan population characteristics resemble those of 2019 but do not accurately align at the neighborhood level. The resulting population shifts across CDs are likely to result in biased estimates of the number of people in Manhattan in poverty. This bias is why the current edition of the report cannot disaggregate poverty estimates by borough of residence.

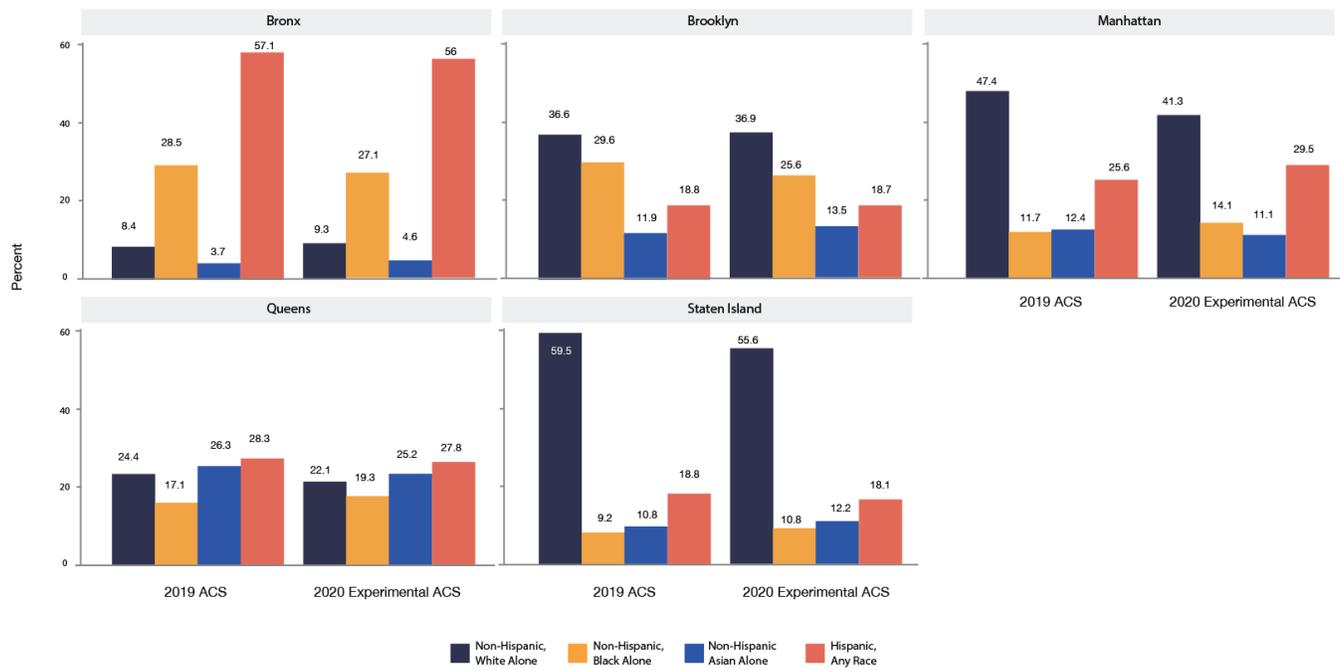
**Figure 3.8 Comparisons of Sample Size and Population Estimates Across Subcounty Areas in Manhattan**



Source: 2019-2020 American Community Survey Public Use Microsample Data Limited to Living Quarters  
 Note: Population estimates are generated under the experimental weights for 2019 and 2020

Another effect of the substantial shifts in geographic distributions is the change in locations of racial and ethnic subpopulations. Section 3.1 explained how the racial and ethnic makeup of the citywide population appears unchanged from 2019. However, Figure 3.9 shows notable changes in racial and ethnic composition at the borough level from 2019 to 2020. For example, Brooklyn’s non-Hispanic Black population declined by four full percentage points. Given the geographic biases described above, such large shifts in the survey data may not be accurate.

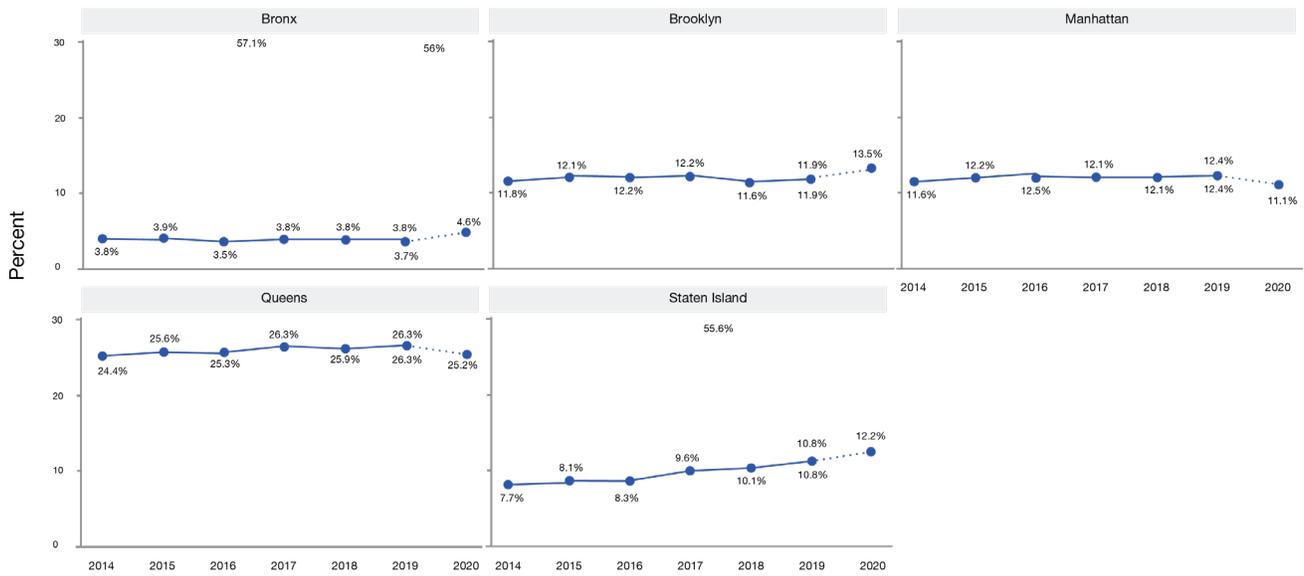
**Figure 3.9 Racial and Ethnic Makeup of Borough Populations**



Source: 2019-2020 American Community Survey Public Use Microsample Data Limited to Living Quarters  
 Note: Population estimates are generated under the experimental weights for 2019 and 2020

Figure 3.10 uses the example of Non-Hispanic Asian population estimates across the five boroughs. The Asian population unexpectedly declined in Queens and Manhattan while it significantly grew in the Bronx, Brooklyn, and Staten Island. This pattern does not appear in other data sets. The statistical “relocation” of population estimates from, for example, Manhattan’s Chinatown to wealthier parts of Brooklyn will distort estimates of poverty by race and ethnicity.

**Figure 3.10 Percentage of Non-Hispanic Asian Population by Borough**



Source: 2014-2020 American Community Survey Public Use Microsample Data Limited to Living Quarters  
 Note: Dashed lines represent estimates generated under the experimental weights for 2019 and 2020

Conclusion

# **Poverty Estimates in 2020 and Looking Ahead**

## Conclusion

### Poverty Estimates in 2020 and Looking Ahead

NYC Opportunity's assessment of the 2020 ACS data found that despite adjustments for nonresponse bias, there remains a meaningful and significant shift in the demographic composition of the city's sample that is contrary to our understanding, historical trends, or external benchmarks. This unreliable shift in composition is why this edition of the report only releases citywide poverty estimates at the expense of more nuanced insights.

The Census Bureau issued guidance that 2020 data should not be compared to prior year trends. Our analysis confirms that there is reason to be cautious even when 2020 experimental ACS estimates seem reasonably comparable to survey data from previous years. We note that a key source of data problems in using the 2020 data for a poverty estimate is adopting data targeted to accuracy at the statewide level for city-level populations.

For lack of a better alternative, we instead compared 2020 experimental estimates to 2019 experimental estimates to gauge how the pandemic impacted the economic well-being of New Yorkers and to estimate the importance of expanded benefits in mitigating the pandemic's economic shocks on low-income city residents.

Data collection for the 2021 ACS appears to be less affected by the pandemic. The 2021 survey experienced no suspension and the Census Bureau issued no warnings about comparative use of the data. The next edition of this report will provide more nuanced insights into the effects of the pandemic and pandemic relief policy on poverty rates across population groups and geographic areas.

# Acknowledgements

## Acknowledgements

This report would not be possible without the advice and assistance of many people since its inception. Our colleagues at NYC Opportunity provide ongoing support: Carson Hicks, Acting Executive Director; Adam Cohen, Special Policy Advisor for providing the City's anti-poverty policy response; and Mari Nakano and Lyndsey Richardson, leaders of the Design Team at NYC Opportunity's Service Design Studio.

Many government colleagues have generously shared their expertise about public policy, the city's administration of benefits programs, and agency-level data. Assistance has been provided by NYC Department of Social Services; NYC Department of Social Services; NYC Department of City Planning; the Metropolitan Transportation Authority; Long Island Railroad; Port Authority of New York and New Jersey; NYC Department of Education's Office of School Support Services; and the New York State WIC Program Evaluation and Analysis Unit, Division of Nutrition, New York State Department of Health. Trudi Renwick, Liana Fox and Jonathan Rothbaum of the Social, Economic and Housing Statistics Division, U.S. Census Bureau gave essential guidance on use of 2020 and 2019 experimental data sets.

Eileen Salzig has provided invaluable editing and proofreading across many editions of this document. The report design is by the Viney Group.