

NEW YORK CITY'S CURRENT POPULATION ESTIMATES AND TRENDS

NYC Department of City Planning
Population Division
March 2024

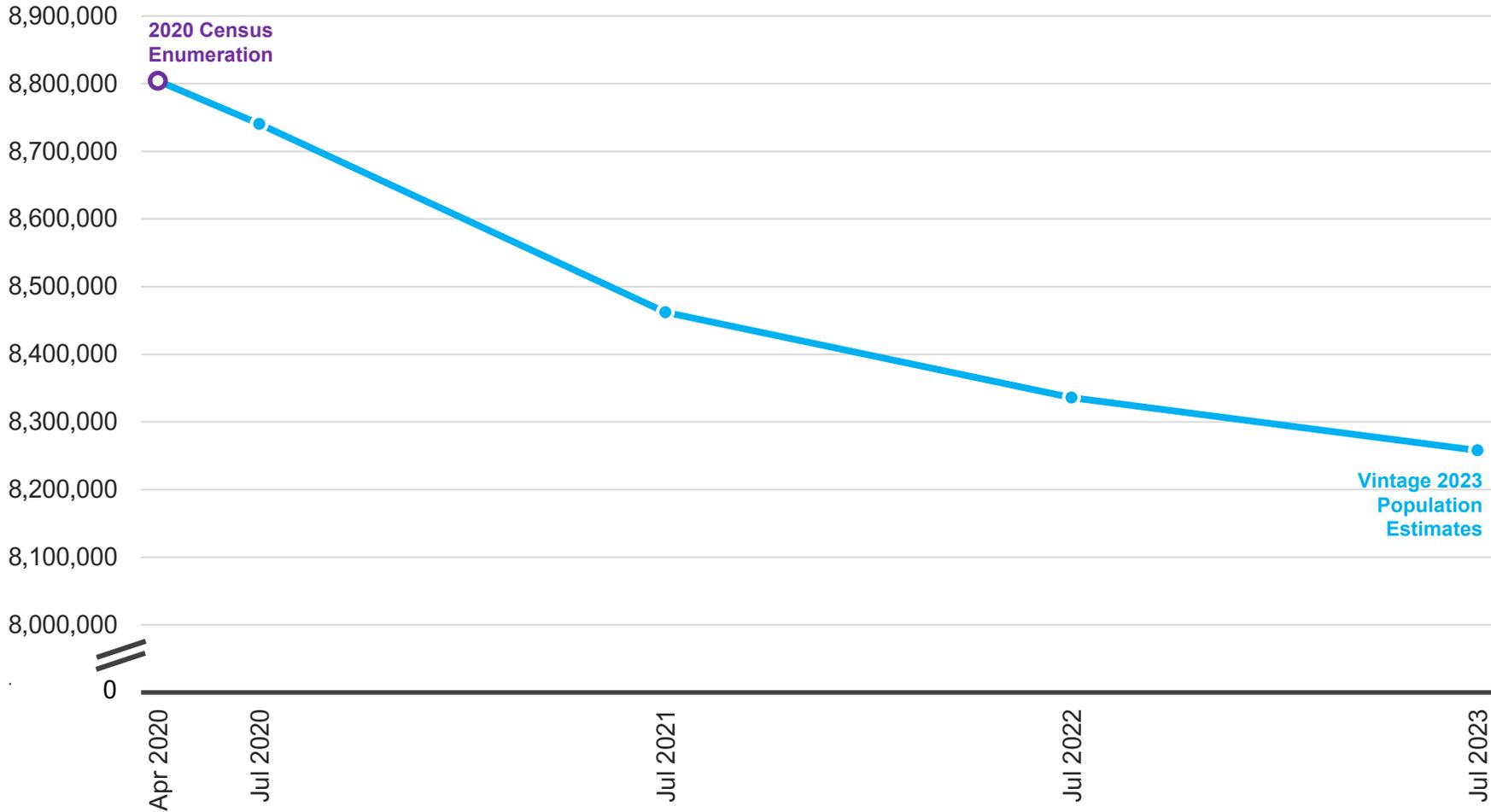
Overview

- NYC's population was estimated at 8.26 million as of July 1, 2023, a decrease of 78,000 since July 1, 2022, and of 546,000 since the April 1, 2020 Census enumeration of 8.80 million. Population losses have attenuated each year between 2020 and 2023, with the bulk of estimated losses occurring early in the pandemic.
- The most recent estimate does not incorporate an increase in NYC's shelter population between 2022 and 2023. The NYC Department of City Planning intends to work with the Census Bureau through their Challenge Program to add over 50,000* people who were missed in the most recent estimate. This adjustment offsets approximately two-thirds of the estimated population decrease, resulting in minimal population change between 2022 and 2023.
- NYC's long-term population trajectory is one of growth, however, and a range of data sources suggest that NYC's population losses have ended, and the city may have even returned to population growth.
 - Net domestic migration, the most variable and impactful of the components of change, has returned to roughly pre-pandemic volumes, with the timing of this return varying by data source.
 - Net international migration also rebounded by 2022.
 - In addition to high housing production since the onset of the pandemic, occupancy rates increased substantially between 2021 and 2023, indicating high demand for housing in NYC.
- The Population Estimates Program revises recent estimates with each vintage, often by tens-of-thousands. Considering this uncertainty, NYC's population may be considered largely unchanged between 2022 and 2023.

**The Census Bureau's
Vintage 2023 Population Estimates for NYC**

Census Bureau Estimates Population Decline Through July 2023

2020 Census and Vintage 2023 Population Estimates, New York City

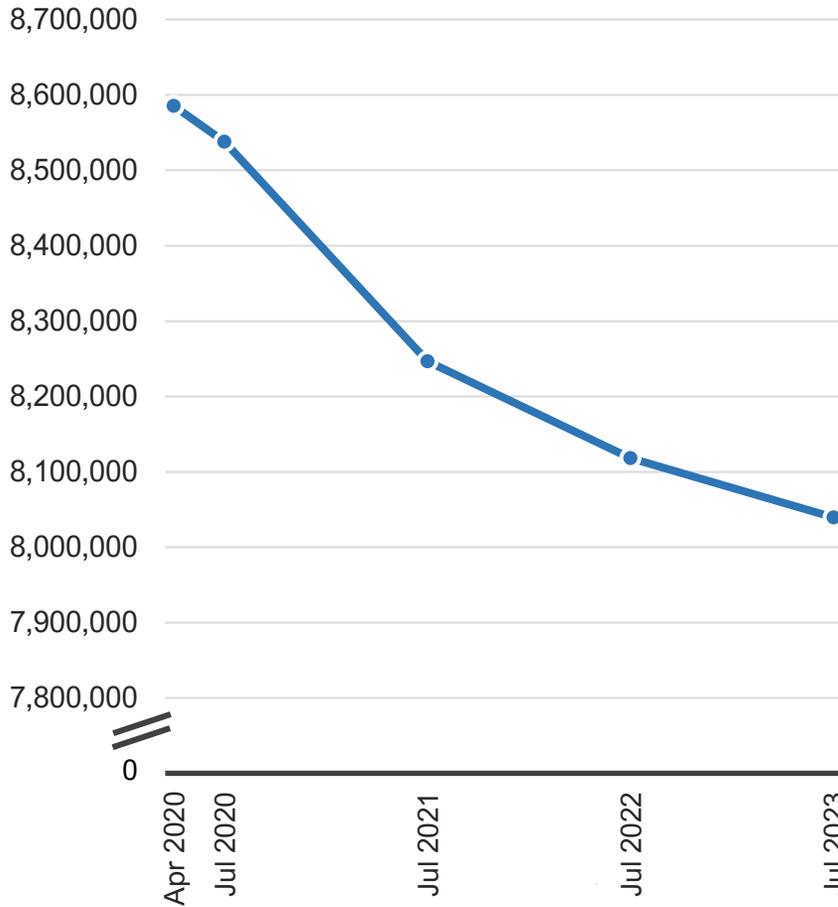


- NYC's population is estimated at 8.26 million as of July 1, 2023. This represents a one-year decrease of 78,000 from July 1, 2022, and reflects the smallest annual population loss since 2020.
- Since the Census date of April 1, 2020, the city has lost 546,000 people. Population losses since 2020 were frontloaded at the start of the pandemic, with about 63% of the population losses between the Census and the current estimate occurring before July 1, 2021.

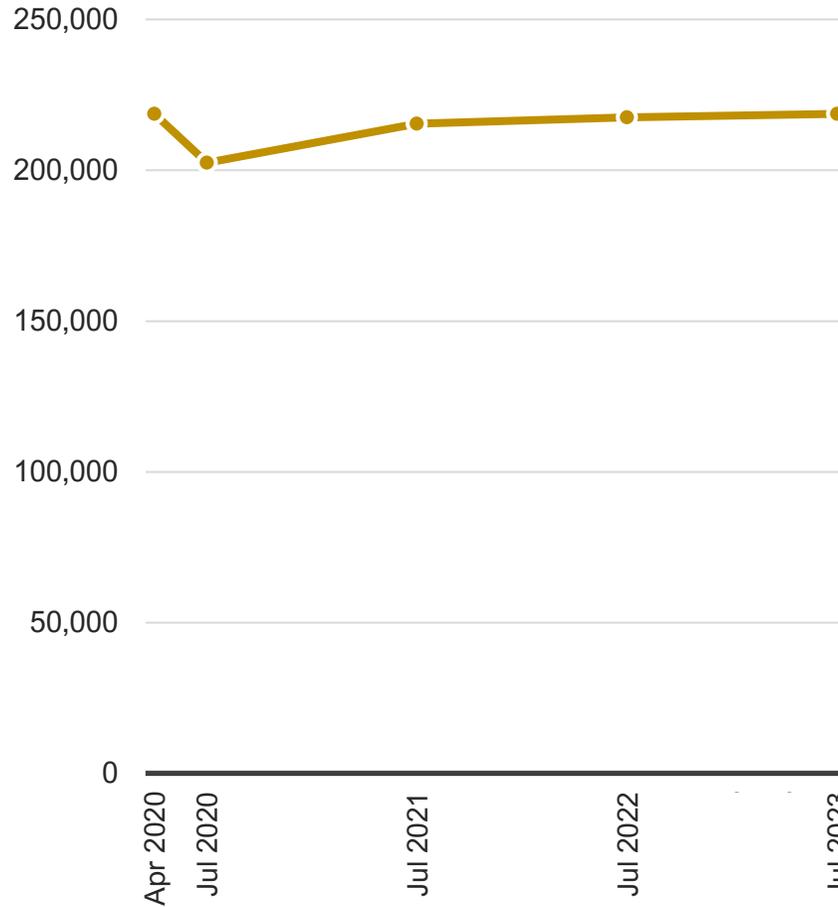
Underestimation of the Group Quarters Population

Group Quarters Population is Estimated as Distinct from Total Population

Estimated Population in Households
New York City, 2020 to 2023



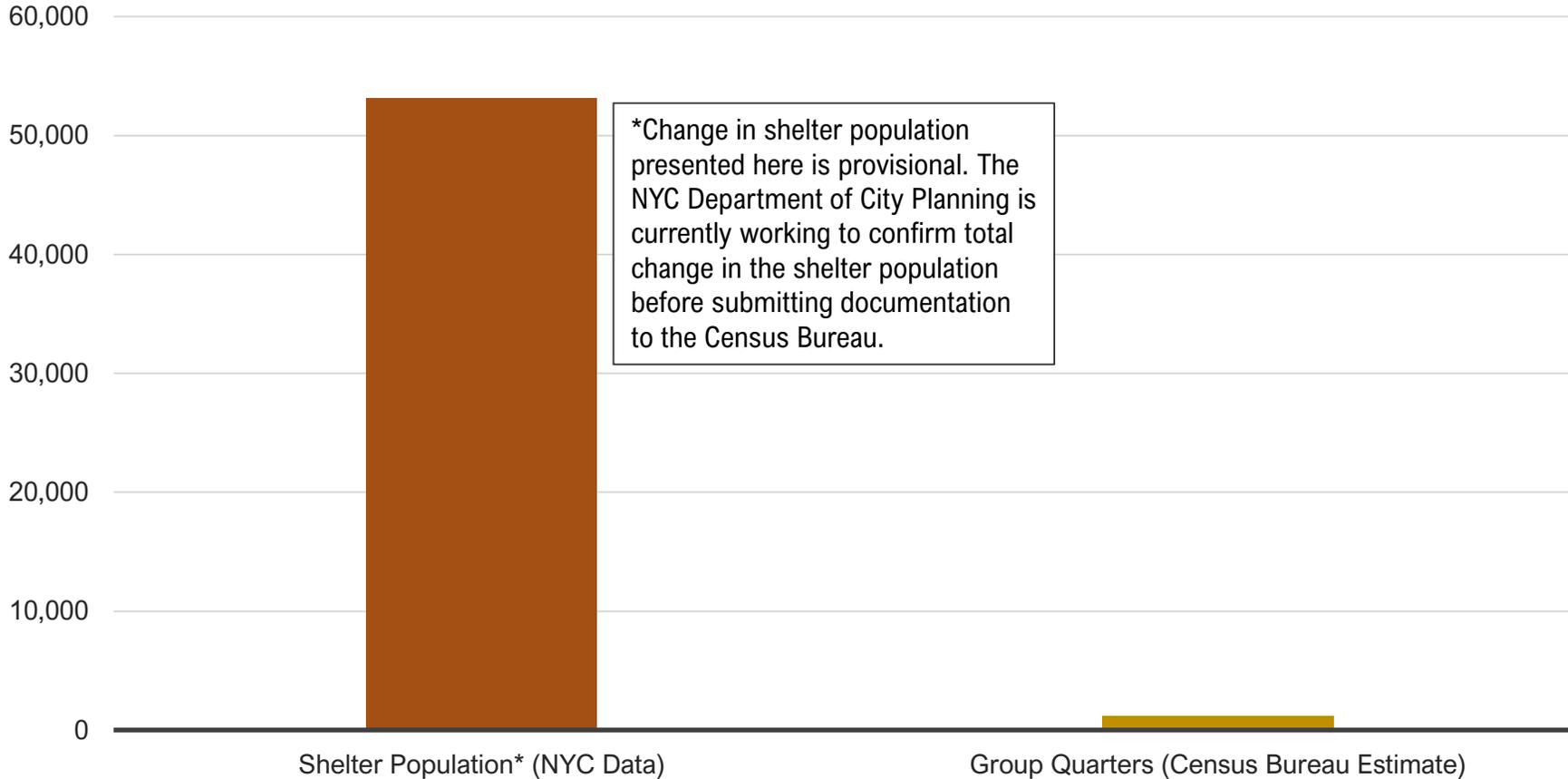
Estimated Population in Group Quarters
New York City, 2020 to 2023



- The Census Bureau estimates the population living in group quarters (GQ) as well as the total population including those living in households.
- GQ includes facilities such as college dormitories, skilled nursing homes, correctional facilities, and temporary shelters.
- The Census Bureau estimates indicated virtually no change in the GQ population between 2022 and 2023, however this does not align well with NYC data.

Census Bureau's Estimated Change in Group Quarters Does Not Align with NYC Data

Change in Shelter Population (NYC Data) and
Change in Estimated Group Quarters Population (Census Bureau Estimates)
New York City, July 2022 to July 2023

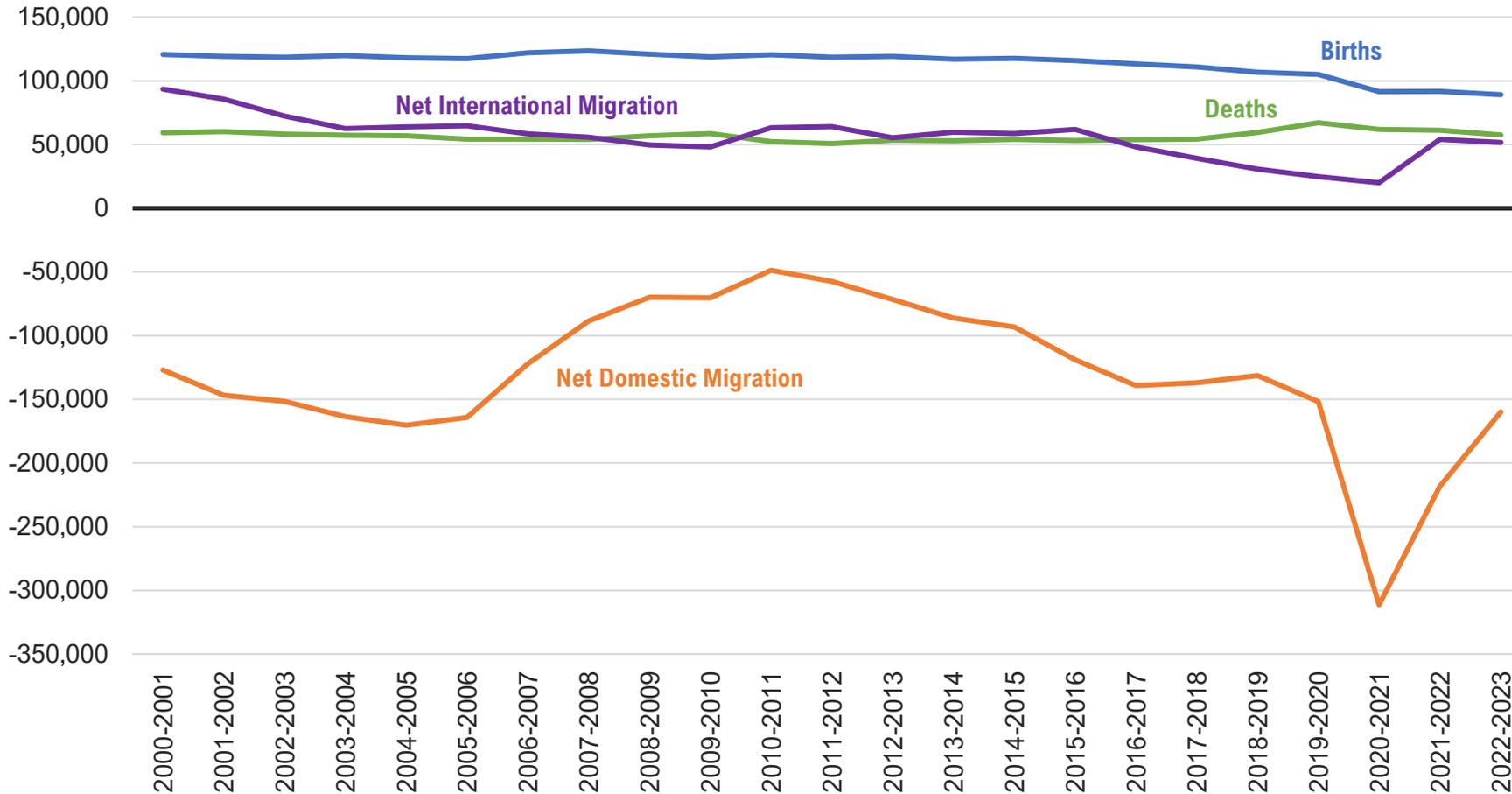


- The population living in shelters, increased by roughly 50,000* between 2022 and 2023, according to NYC data.
- NYC intends to work with the Census Bureau through their Challenge Program to include this increase in the population living in shelters into the overall population estimate.
- The change in the shelter population would offset about two-thirds of NYC's estimated population loss. Incorporating this population reduces NYC's estimated losses between 2022 and 2023 to about 25,000.
- There is no reason to believe that the populations in other types of group quarters changed meaningfully between 2022 and 2023.

Census Bureau Population Estimates Program Components of Change

Net Migration Volumes Have Returned to Pre-pandemic Levels

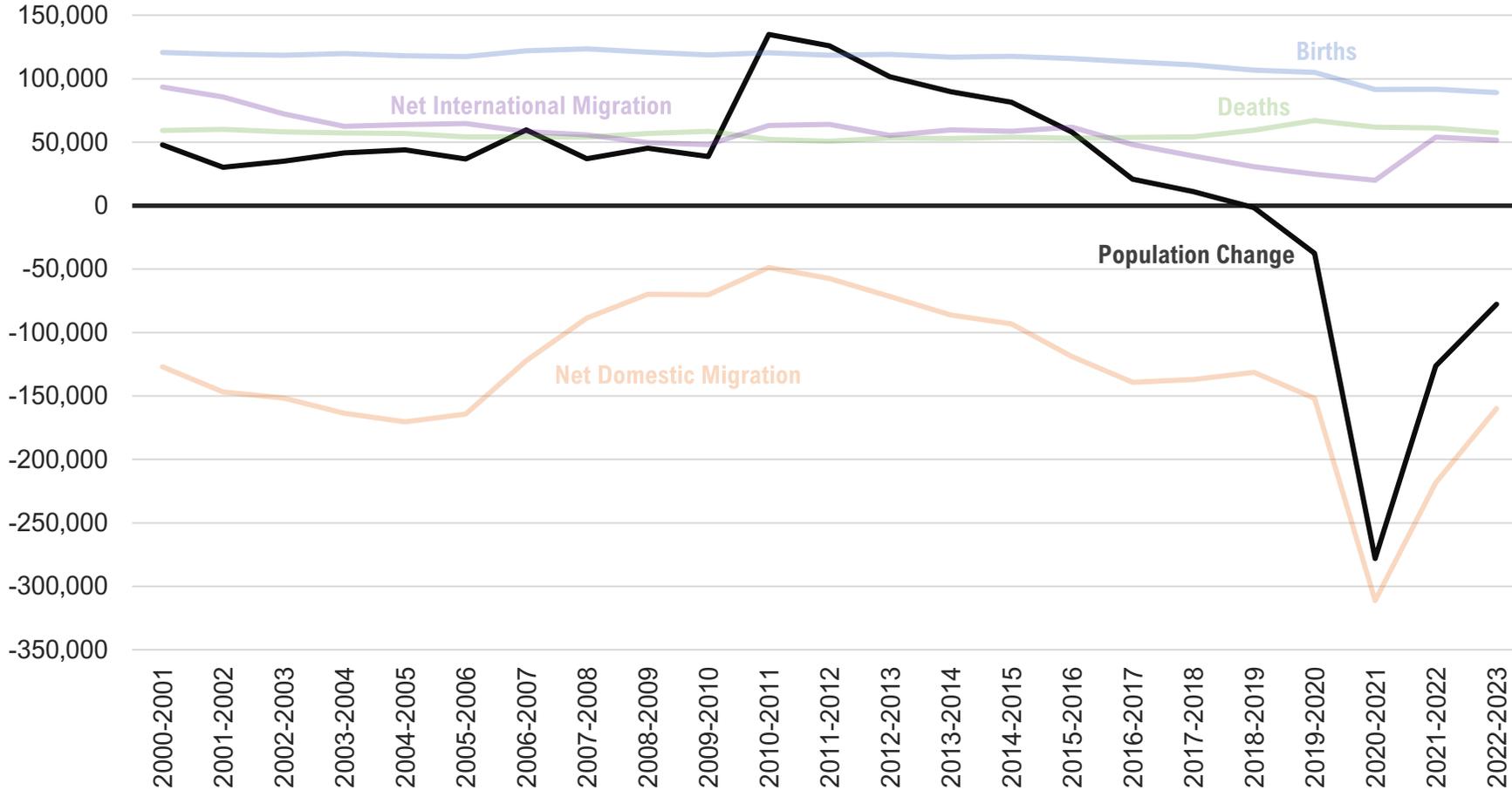
Population Estimates Program Components of Change
New York City, 2000 to 2023



- Population change can be separated into components – births, deaths, net international migration, and net domestic migration.
- Each of these components of change were impacted at the start of the pandemic.
- Net international migration returned to pre-pandemic trends by the 2021-2022 period.
- Net domestic migration outflows returned to roughly pre-pandemic volumes in the 2022-2023 period.

Net Domestic Migration Has the Largest Impact on Estimated Population Change

Population Estimates Program Components of Change
New York City, 2000 to 2023

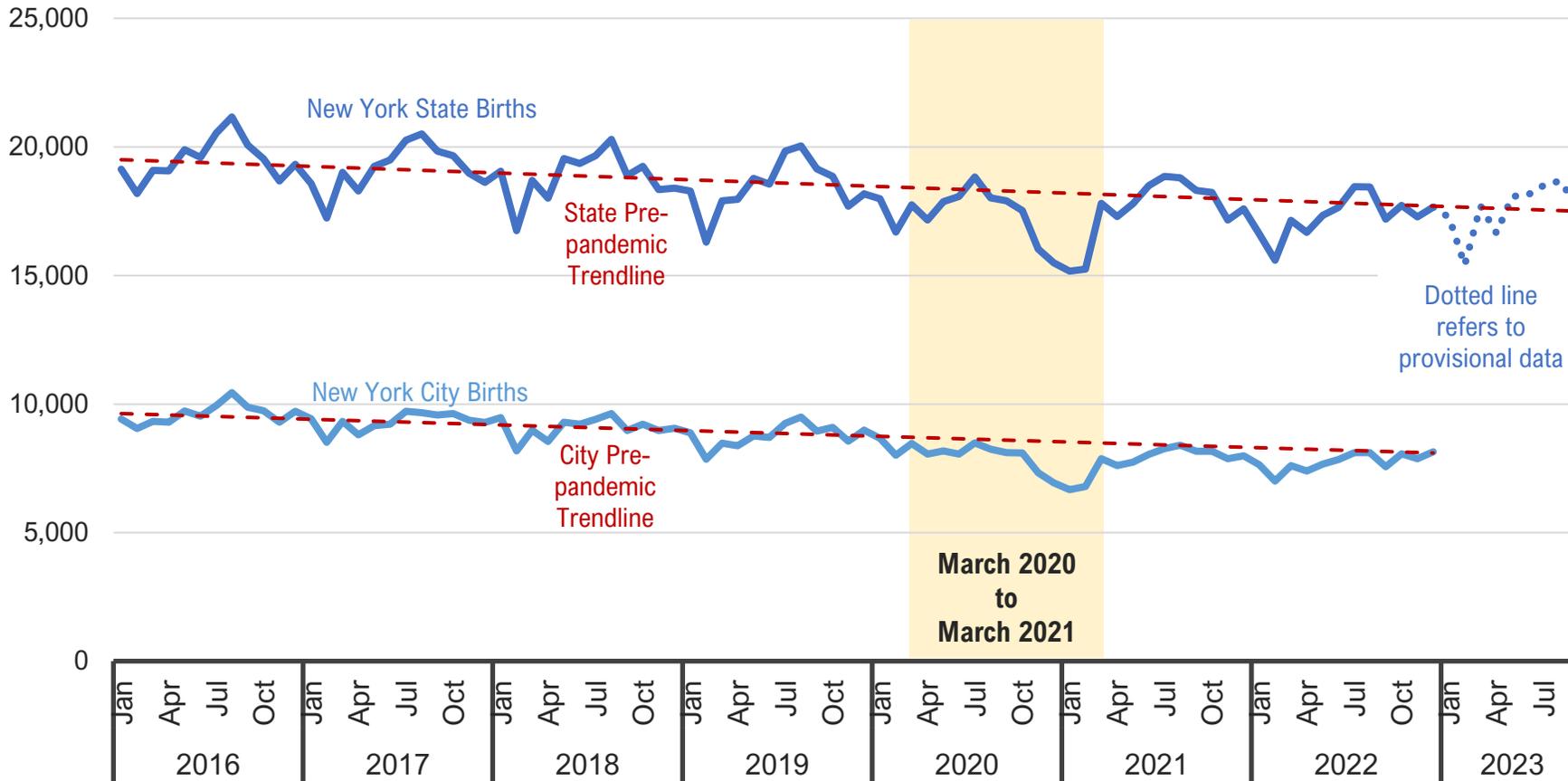


- Net domestic migration is the most volatile, and generally the most impactful component of overall population change.
- Net domestic migration is consistently negative, meaning more people move out of NYC to the rest of the U.S. than move into NYC from the rest of the U.S.
- NYC’s population often grows in years with relatively small net domestic outflows, due to more births than deaths, as well as net international inflows.
- Post-2020, relatively large net domestic outflows led to population decreases.

Alternative Indicators of the Components of Change

CDC Births are in Line with Pre-pandemic Trends

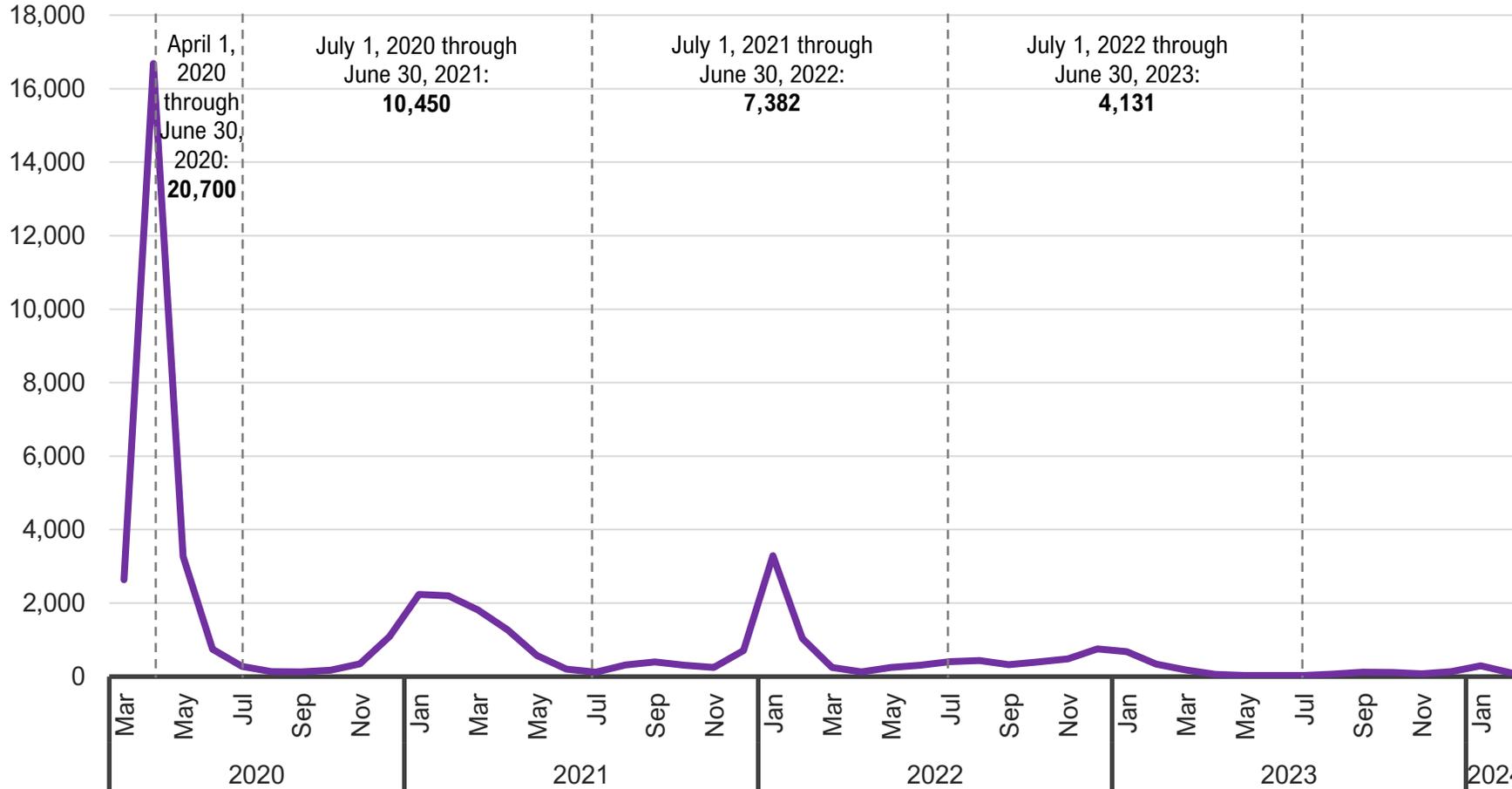
Births,
New York State, January 2016 to September 2023 and
New York City, January 2016 to December 2022



- The Centers for Disease Control provide data on monthly births in New York State and New York City.
- Births have been on a downward trends in recent years, including before the pandemic. Births have also been declining nationally (not shown).
- Births in NYS and NYC were lower than would have been expected for several months after the onset of the pandemic, but returned to pre-pandemic trends by spring 2021.
- NYC’s birth patterns typically mirror New York State’s. Provisional data for NYS for 2023 suggest this trend will continue in NYC as well.

Covid-19 Related Deaths Were Frontloaded at Start of Pandemic

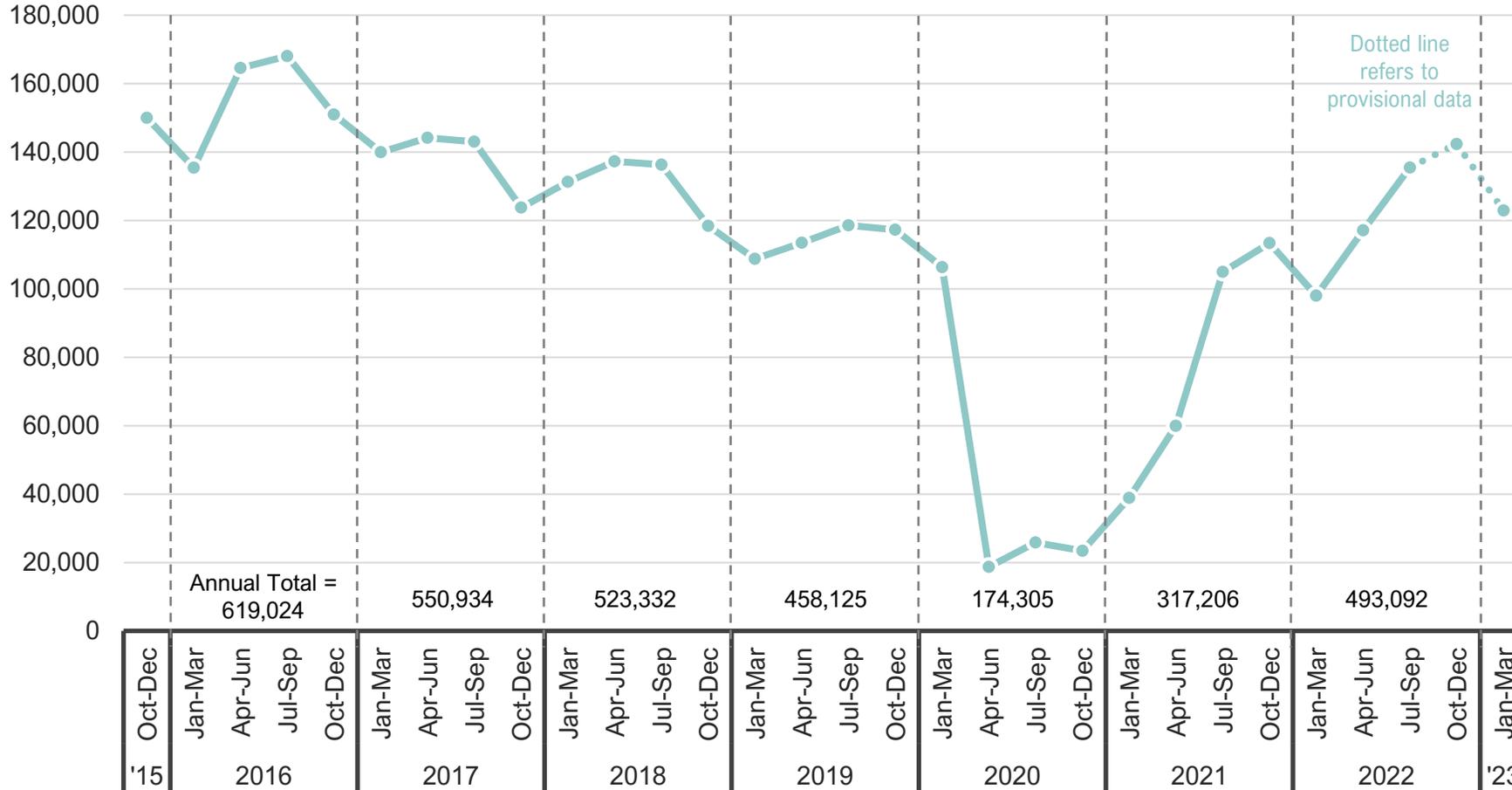
Monthly Covid-19 Deaths
New York City, March 2020 to February 2024



- Covid-19 deaths peaked early in the pandemic, with nearly twice as many deaths in the three-month period from April through June 2020 as in the following year.
- Despite smaller peaks in 2021 and 2022, Covid-19 deaths have consistently declined year over year.

International Migration to the United States Has Returned to Pre-pandemic Levels

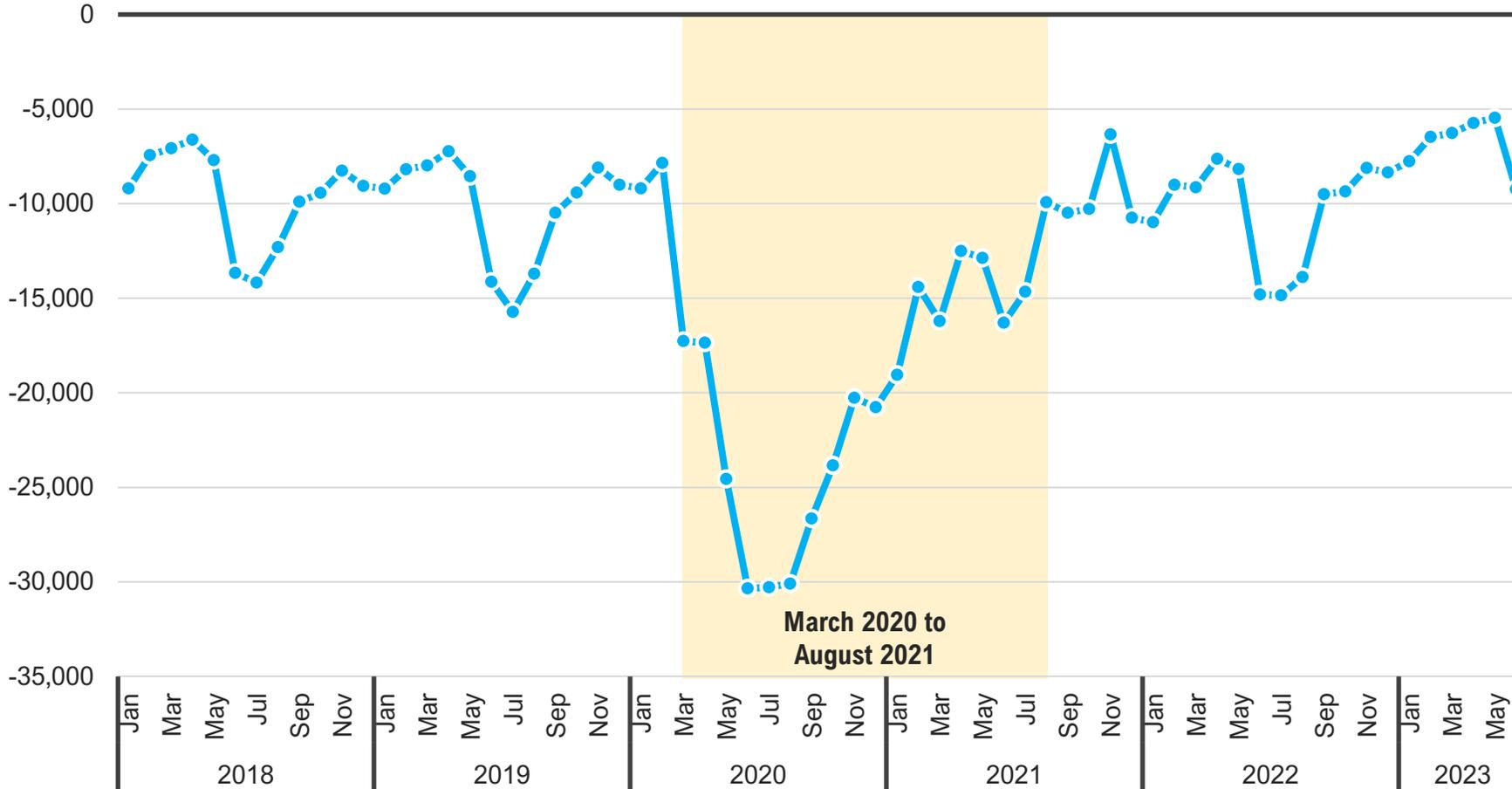
Persons Obtaining New Arrival Lawful Permanent Resident Status
United States, Oct-Dec 2015 to Jan-Mar 2023



- New Lawful Permanent Resident (LPR) arrivals to the United States dropped precipitously at the start of the pandemic.
- From mid-2021 to early 2023, the most recent data available, new arrivals were in line with pre-pandemic levels.
- Patterns of immigration to NYC are likely to broadly mirror national trends.

USPS Net Residential Moves Have Rebounded to Pre-pandemic Levels

Net Permanent* Residential** Moves
New York City, January 2018 through June 2023



- Since the 1940s, more people have moved out of NYC than have moved in.
- Immediately after the onset of the pandemic, losses suggested by net changes-of-address (CoA) were far greater than 2018/2019 levels.
- CoAs were back in line with pre-pandemic volumes by the second half of 2021.
- CoA data come with many caveats. See appendix for more details.

Notes

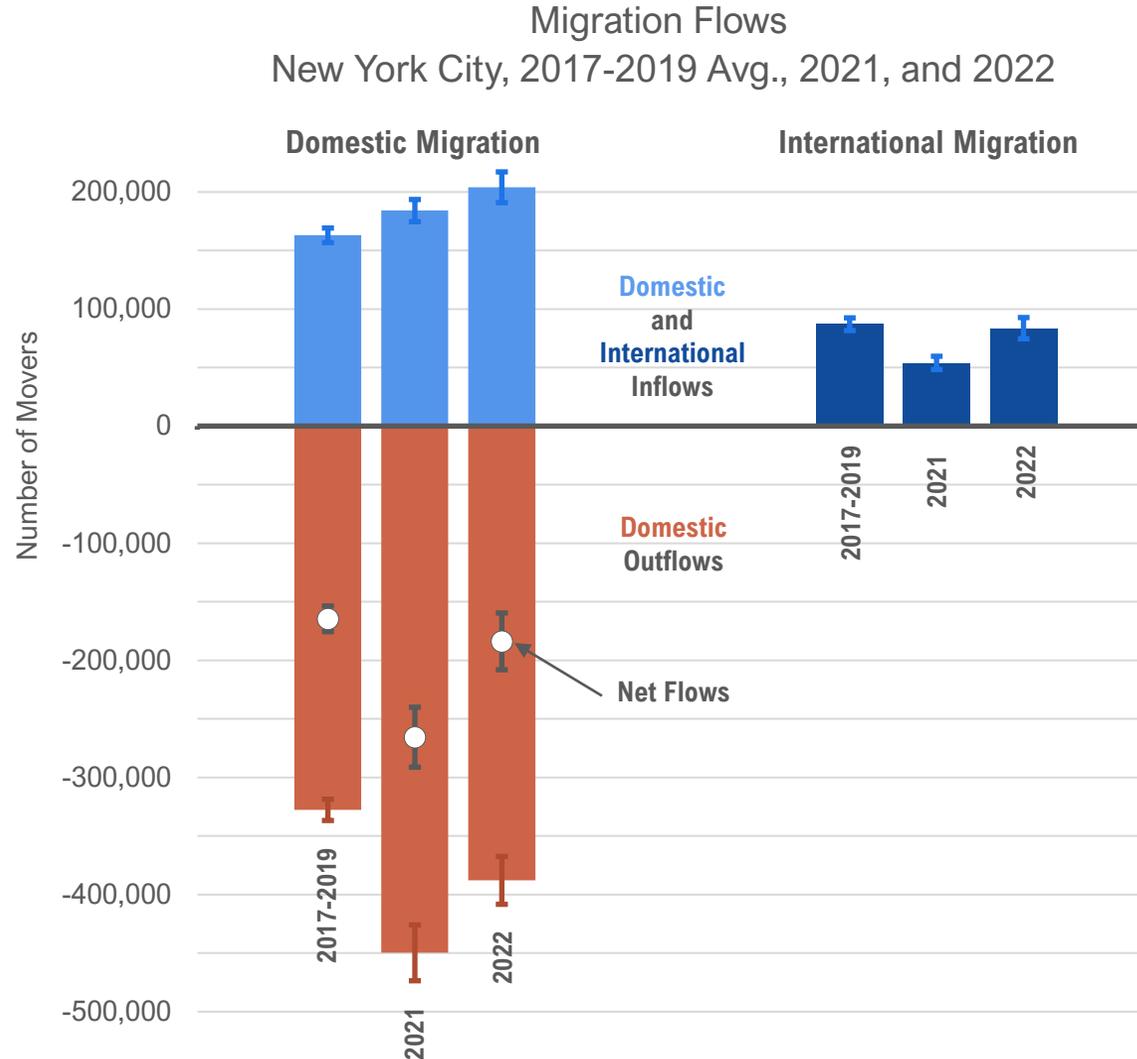
* USPS does not provide data on number of permanent and temporary changes-of-address by individual/family/business filing. The proportion of total permanent/temporary filings by ZIP code and month are applied to estimate permanent and temporary residential CoAs.

** "Residential" includes individual and family changes-of-address. Figures include an adjustment to estimate number of people captured by family CoAs. CoAs do not capture all relocations, and some relocations are counted multiple times. Figures are an estimate of those captured by CoAs.

Overall Migration Patterns Largely Returned to Pre-pandemic Averages

Movement Into and Out of NYC

- Movers can be separated into those moving to and from the rest of the U.S. (**domestic**) and those moving to and from other countries (**international**).
- The difference between the number of people moving in and out is the **net flow**, indicating the balance of movement into and out of NYC.
- More people move out of NYC than in, on average, each year. This pattern has been ongoing for decades, including in periods of population growth and population decrease. In NYC more births than deaths each year offsets net migration losses.

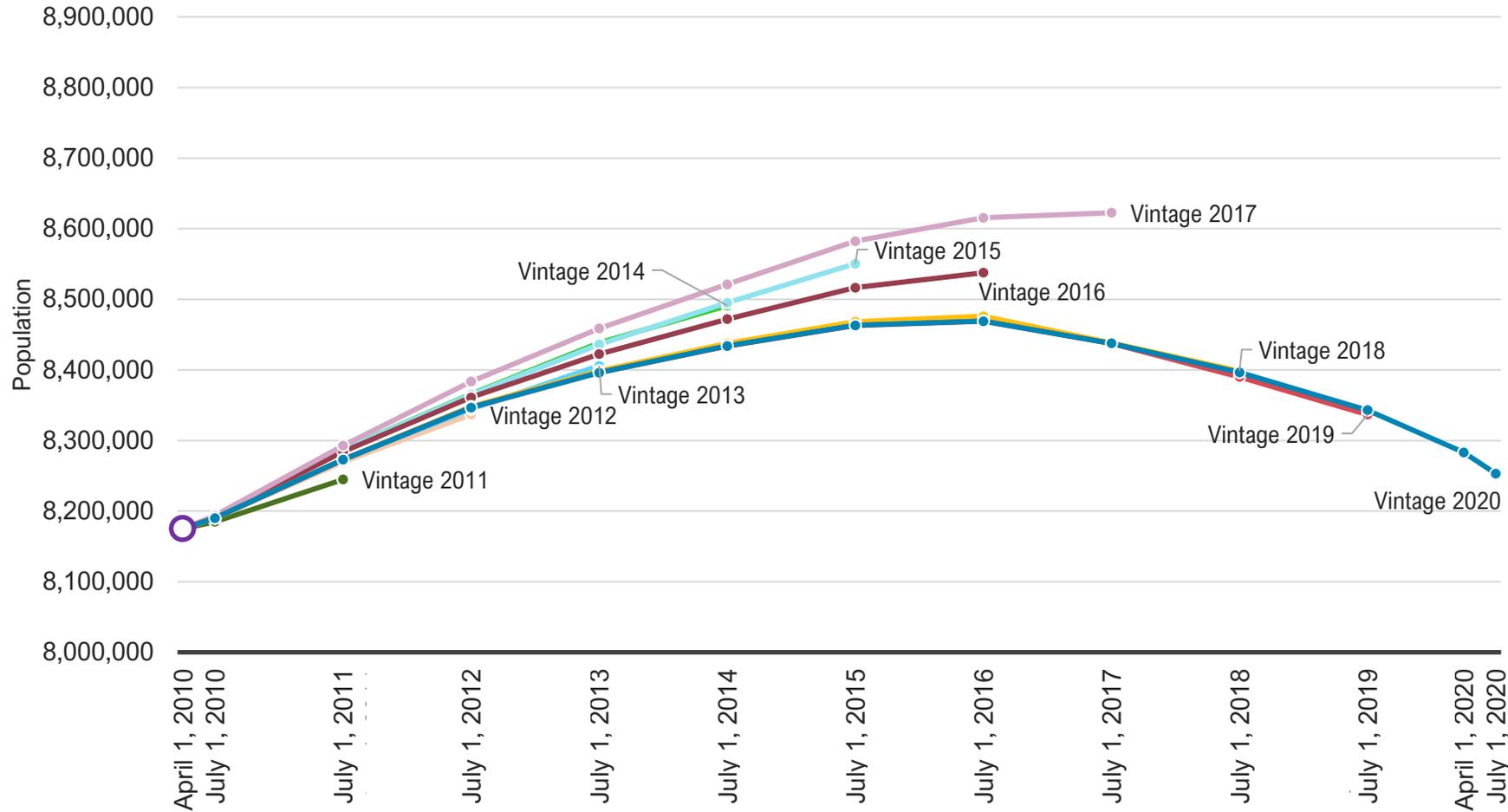


- According to American Community Survey data, net domestic outflows returned to pre-pandemic levels in 2022, after increasing during the beginning of the pandemic.
- Net flows are the balance of inflows and outflows. The rebound in net domestic outflows was the result of both larger inflows and larger outflows in 2022 than in the years leading up to the pandemic.
- International inflows also rebounded to pre-pandemic levels in 2022, after a drop in 2021. (International outflows and net international flows are unavailable from the ACS.)

Uncertainty in the Census Bureau's Population Estimates for NYC

Each Estimates Release Includes Revisions for All Earlier Time Points in the Decade

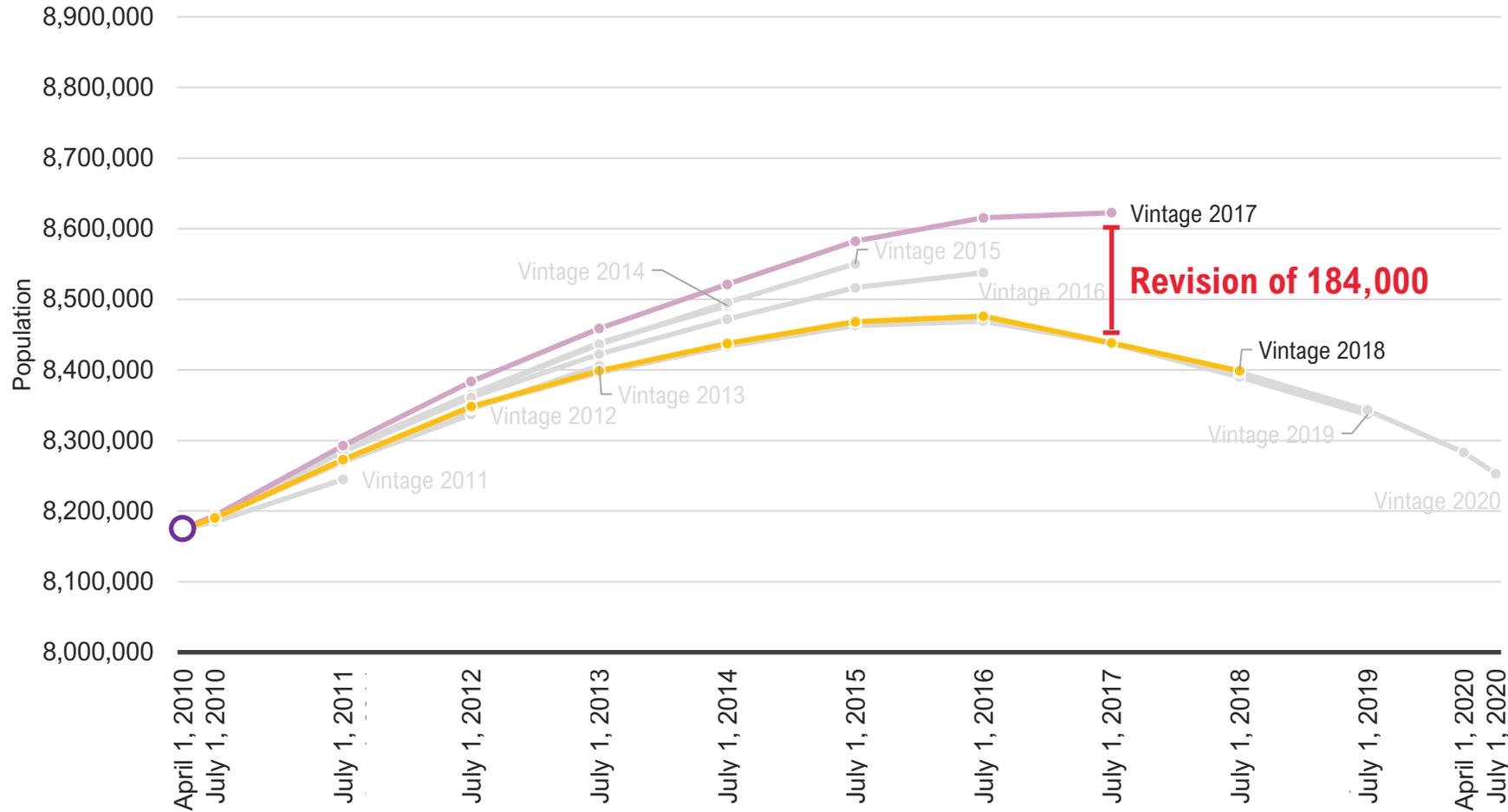
Census Bureau's Population Estimates Program Estimates for New York City
Vintages 2011 through 2020



- With each annual release of estimates, or vintage, the Census Bureau revises all previous estimates back to the most recent decennial census.
- These revisions reflect updated data as well as methodological changes.

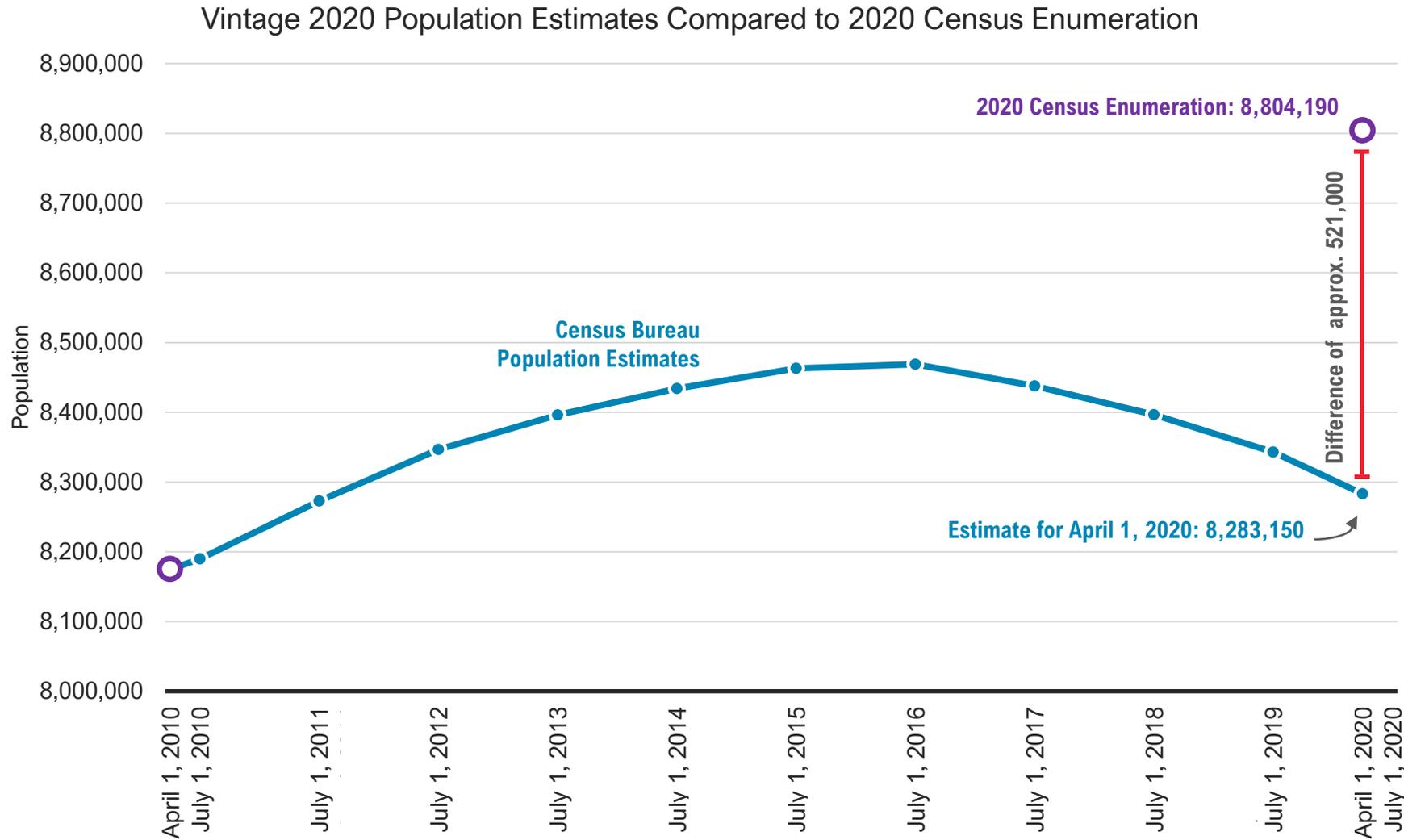
Estimates for the Same Time Point Can Vary Widely across Vintages

Census Bureau's Population Estimates Program Estimates for New York City
Vintages 2011 through 2020



- The 2018 vintage revised the 2017 population down by a substantial 184,000.
- As a result of this revision, modest estimated growth between 2016 and 2017 changed to population decline, highlighting uncertainty in the estimates.

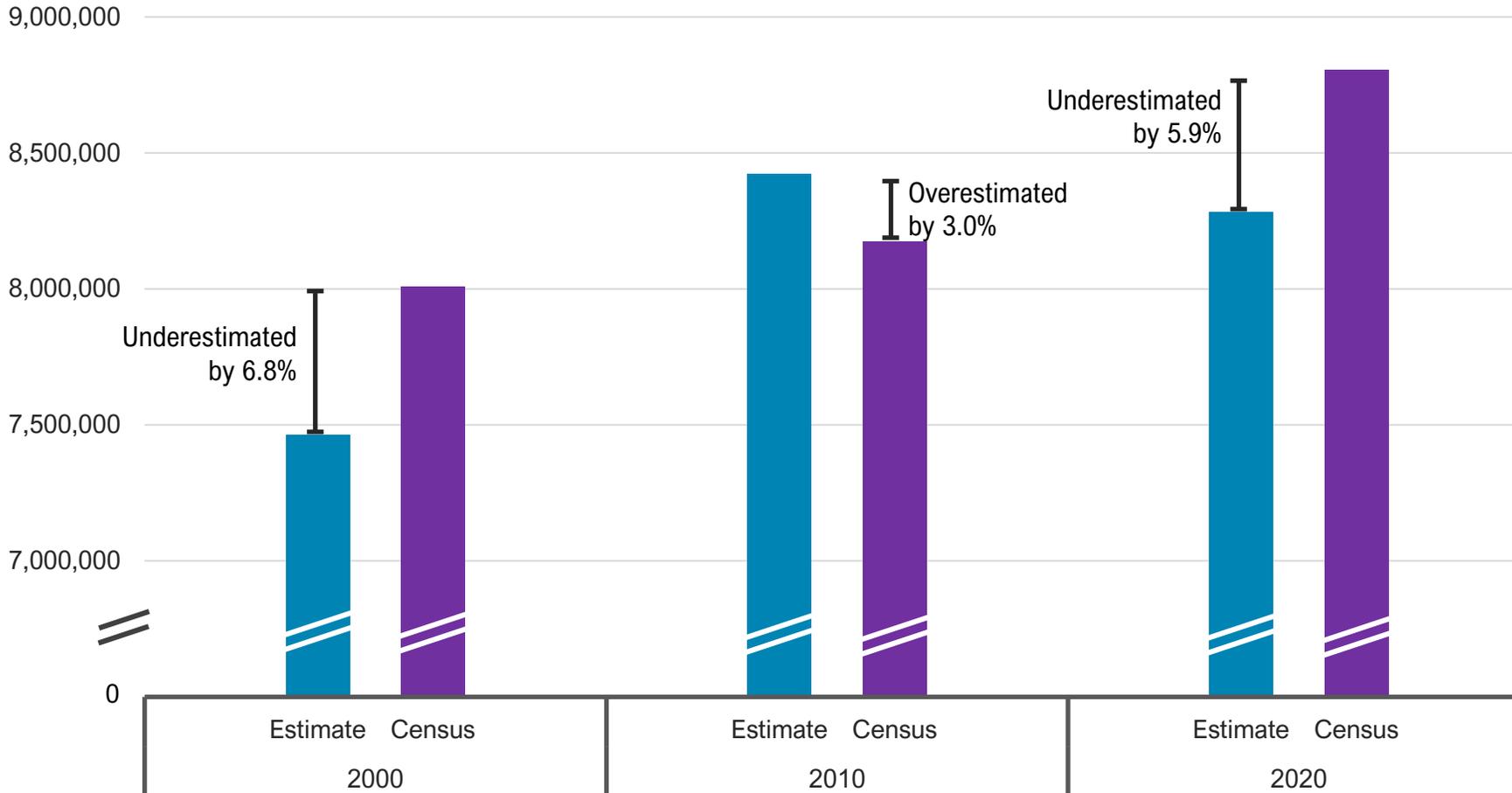
The Census Bureau's 2020 Estimate was Off by Over One-half Million People



- The 2020 Census provided an opportunity to evaluate the accuracy of population estimates.
- The Census Bureau's Vintage 2020 estimates for NYC were off by 521,000 (5.9%), highlighting the uncertainty associated with population estimates.

Estimates Have Historically Varied Widely from Census Enumerations

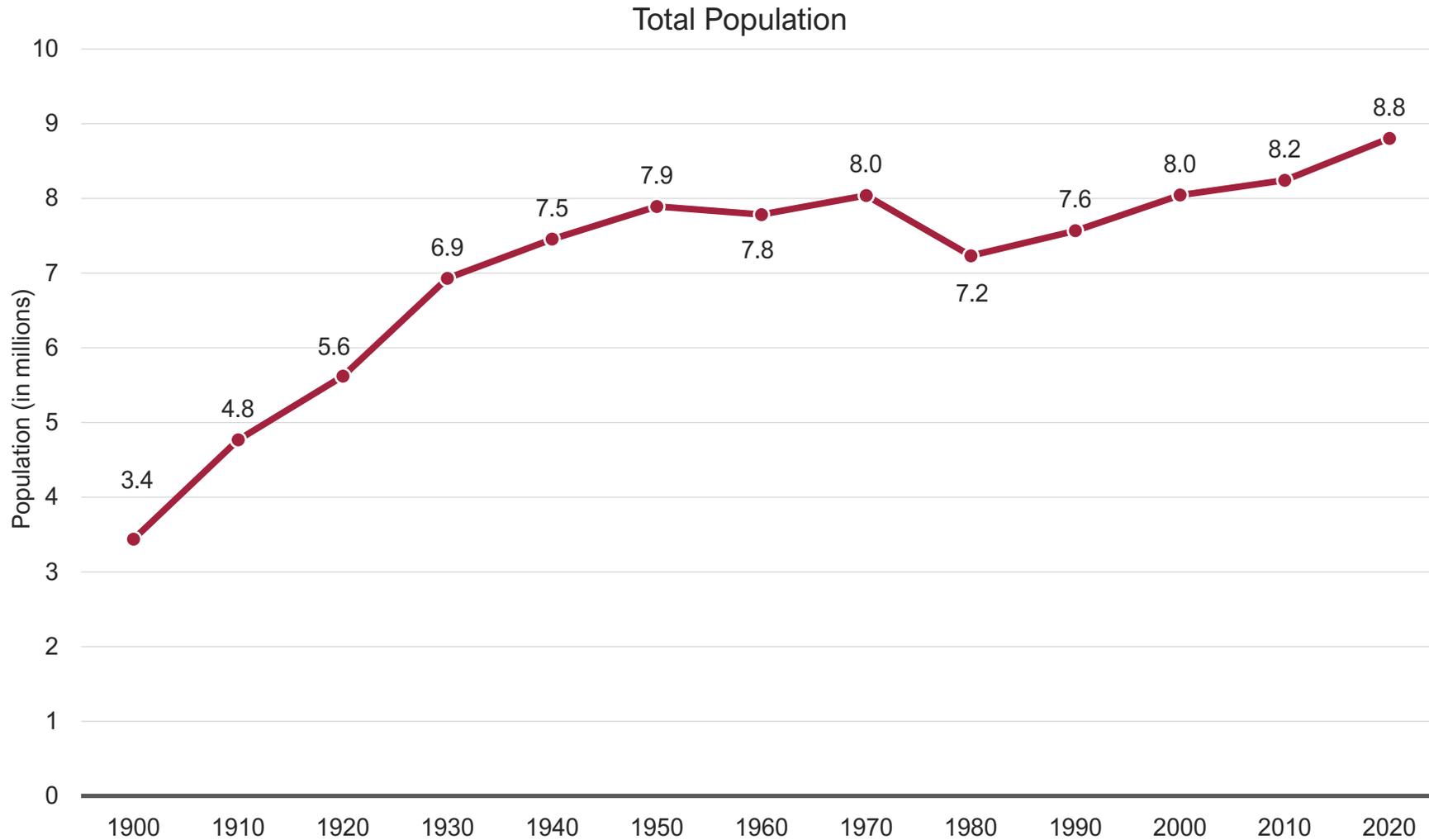
Census Bureau Population Estimates and Enumerations,
2000, 2010, and 2020



- Each decade, the census provides a benchmark to evaluate the population estimates.
- The population estimates for New York City are typically substantially above or below the census.
- Estimates are inherently uncertain. Their best use is for general trends, not point estimates of the population or year-to-year change.

**A Broader Perspective:
New York City's Long-term Population Trajectory**

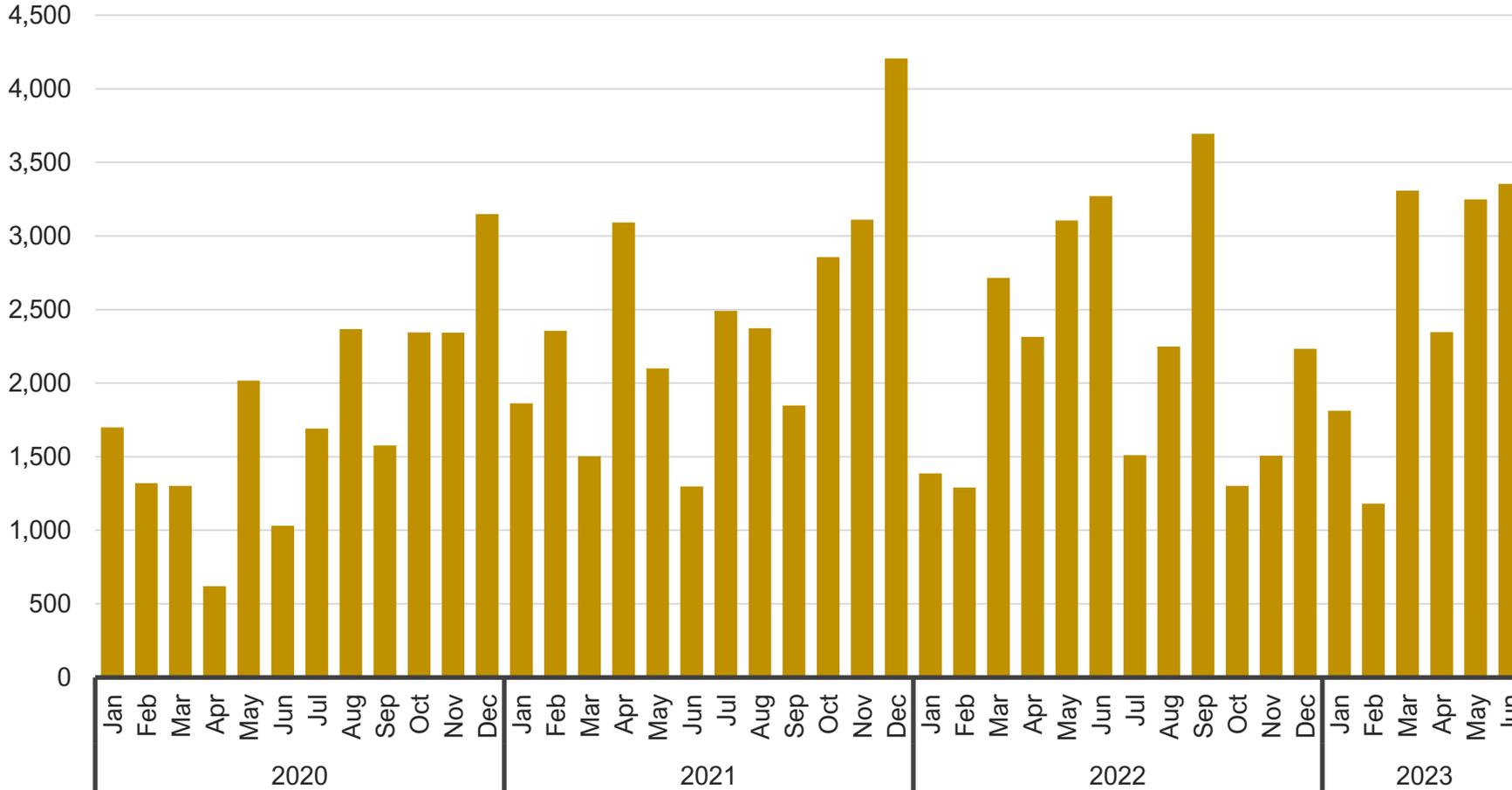
New York City's Long-term Trajectory of Population Growth



- Since the turn of the last century (1900), the city has experienced steady growth in most decades, with the exception of the 1950s and 1970s.
- New York City's population increased by 6.8 percent, or 562,000 between 2010 and 2020, reaching a record population of 8,804,190.
- Covid-related population decline is likely a short-term anomaly in the long-term trajectory of population growth.

Strong Housing Demand and Production Since 2020 Suggest a Rebounding Population

Net Housing Unit Completions
New York City, January 2020 through June 2023



- Since the 2020 Census, housing production in New York City has remained strong, with over 88,000 units completed on net between April 2020 and June 2023.
- Meanwhile, occupancy rates have increased substantially between 2021 and 2023, according to the [NYC Housing and Vacancy Survey](#).
- Increases in occupancy rates and total housing suggest that the population is rebounding – despite the likelihood that there are fewer people in each housing unit on average.

Appendix

Caveats Using USPS Change-of-Address Data

- USPS change of address (CoA) data are a useful indicator of trends in domestic population movement, but should not be conflated with migration, and cannot provide a total number of movers or migration events.
 - CoAs do not have a 1:1 match with migration events, and do not align closely with official estimates of domestic migration.
 - Not all movers file a CoA, and some movers file more than one CoA.
 - The timing of CoA filings may not coincide with the timing of a corresponding move (e.g., forwarding mail before or after a move, renewing a CoA, rerouting a previous CoA).
- USPS reports the number of CoAs filed, not number of people captured by filings.
 - Family CoAs forward mail for at least two people, but USPS does not report how many.
 - Those who file more than once are counted multiple times (e.g., consolidating multiple addresses, CoA renewals).
- The number of filings in/out by ZIP code is reported, but without origin-destination pairs, which limits the ability to analyze borough-, neighborhood-, and ZIP code-level net CoAs, as well as inflows and outflows separately.
 - Within-NYC changes-of-address net out at the city-level.
 - Within-NYC net CoAs cannot be separated out from movement to/from the rest of the country at the borough-, neighborhood-, and ZIP code-levels.
 - It is not possible to isolate inflows and outflows to/from NYC from non-NYC ZIP codes.
- While it is possible to forward mail internationally, this is likely only a small fraction of CoAs. USPS does not report mail forwarded to the US from international origins.
- USPS uses data suppression for ZIP codes/filing types with few changes-of-address.

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