

# An Economic Profile of Immigrants in New York City

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First Results from  
NYC Opportunity  
Experimental  
Population Estimate



Mayor's Office for  
Economic Opportunity

# Introduction

In 2008, the Mayor’s Office for Economic Opportunity (then the Center for Economic Opportunity) began producing an alternative poverty measure for New York City. Similar to the Census Bureau’s Supplemental Poverty Measure (SPM) which was developed several years later, this measure provides a more realistic picture of poverty by accounting for social safety net benefits that are not reflected in the federal official poverty measure. This alternative measure for New York City, the NYC Government Poverty Measure (NYCgov poverty measure), has significantly informed our knowledge about poverty in the city and the local effect of large-scale anti-poverty policies.<sup>1</sup>

The NYCgov measure enables us to better understand poverty between and within the subgroups of the city’s population. The foreign-born population is one such subgroup of interest. Noncitizens, who account for about one-half of the foreign-born, have been shown to have poverty rates higher than rates for other groups long associated with entrenched poverty.<sup>2</sup> However, information on legal status of noncitizens, an important factor affecting poverty status, is not collected in the American Community Survey (ACS), the principal data source used for the analysis in this brief.<sup>3</sup> The Mayor’s Office for Economic Opportunity, or NYC Opportunity for short, has remedied this challenge by creating an experimental methodology to assign legal status to noncitizens in the ACS. This is a novel attempt that integrates an alternative poverty measure with the legal status indicator of immigrants. Using this methodology, NYC Opportunity has begun to be able to estimate and analyze poverty rates by legal status, an exercise that enables us to identify potential reasons of poverty among different groups of immigrants.<sup>4</sup> (See definitions on Page 15)

This Brief describes NYC Opportunity’s method for estimating the immigration status of noncitizens and presents key economic indicators by immigration status. These results will be presented followed by policy implications and future research.

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1 New York City Government Poverty Measure 2005-2016 published in April 2018. Available at: <https://www1.nyc.gov/site/opportunity/poverty-in-nyc/poverty-measure.page>

2 Noncitizen poverty rates have been consistently among the highest of all the demographic groups reported using the NYCgov poverty measure. In the most recent report, the poverty rate for noncitizens was 26.5 in 2016 compared to poverty rates for white, nonhispanic (13.4), black, nonhispanic (19.2), Asian, nonhispanic (24.1), and Hispanic (23.9).

3 The ACS is the largest household survey covering approximately one percent of the total U.S. population or about 3 million households. The survey gathers detailed social and economic information on a representative sample of population for all states, cities, counties, metropolitan areas, and for groups of 100,000 people or more. NYC Opportunity’s methodology to assign legal status uses the ACS microdata as its primary database. The Census Bureau is required by law to ensure that no individual person or household can be identified in these survey data.

4 All data presented in this brief come from the 1-year 2016 American Community Survey public use micro data as augmented by NYC Opportunity.

## Methodology used to Estimate the Immigration Status of Noncitizens

Over the past decade, statisticians have developed increasingly accurate ways to make estimates of the undocumented population.<sup>5</sup> NYC Opportunity has synthesized these new approaches with our own poverty-focused model. Because New York City’s immigrant population is much more diverse than other places, certain assumptions applicable in many of the national models are not appropriate when developing a methodology to estimate the City’s various immigrant groups, including the undocumented population. To address some of these issues, NYC Opportunity, in conjunction with the Center for Migration Studies (CMS), created a method that places more emphasis on country of birth in determining legal status. This results in an undocumented population that reflects the diversity that is known to exist in the larger NYC foreign-born population.

Beginning with the noncitizen population, the methodology is divided into three steps and is summarized below.

**Step 1.** NYC Opportunity made a series of assumptions (or “logical edits”) based on characteristics of noncitizens in the ACS. During this process, legal status was inferred based on responses in an augmented ACS data file that NYC Opportunity has created to produce the City’s alternative poverty model.<sup>6</sup> For example, noncitizens reporting the receipt of Supplemental Security Income (SSI) are assumed to have lawful immigration status. Immigrants with temporary visas such as foreign students or diplomats are also assigned lawful immigration status based on their characteristics, such as date of entry and on certain educational and occupational characteristics. This step produced a noncitizen population that was assumed to have lawful immigration status. The remaining noncitizens are most likely to be undocumented immigrants.

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<sup>5</sup> See Passel, Van Hook, and Bean (2004) for a detailed description of the various methods to estimate undocumented immigrants that evolved beginning in the mid-1980s.

<sup>6</sup> Data on the receipt of public benefits are collected in the ACS for only four public benefits: Supplemental Security Income, Medicaid, SNAP, and public assistance and other cash benefits. The methodology used to create the NYCgov alternative poverty rate involves the imputation of other benefits such as WIC, and HEAP. A tax model inferred refundable tax credits such as the EITC.

**Step 2.** To further refine the analysis, independent estimates of undocumented immigrants are needed. NYC Opportunity used country-specific ratios that were created by the Center for Migration Studies (CMS).<sup>7</sup> The CMS ratios, derived using administrative and other data, were then multiplied by the number of potentially undocumented immigrants from each country of origin as derived in step 1. This produces the final estimate of undocumented immigrants counted in the ACS.<sup>8</sup>

**Step 3.** Under-enumeration or undercount is inevitable in sample surveys, particularly for hard-to-reach groups. Studies have shown that under-enumeration for undocumented immigrants is negatively correlated with length of stay in the United States—the longer an undocumented immigrant has been in the United States, the less likely she is to be missed by a sample survey. NYC Opportunity applied undercount rates that range from about 2 percent for those who arrived in 1982 to 14 percent for those who entered in 2016. These undercount assumptions are consistent with undercount rates measured by the Census Bureau over the last few decades.

Although the estimates are based on the best data and methodology available, they are still subject to both sampling and non-sampling errors. Assumptions used in this methodology to infer legal status are primary contributors to non-sampling error in which inevitably some misclassification of undocumented immigrants is expected. For this reason, numbers have been rounded to avoid a false sense of accuracy.

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<sup>7</sup> See Robert Warren, *Democratizing Data about Undocumented Residents in the United States: Estimates and Public-use Data, 2010 to 2013*, *Journal on Migration and Human Security* 305 (2014), available at <http://jmhs.cmsny.org/index.php/jmhs/article/view/38> (last visited July 9, 2018).

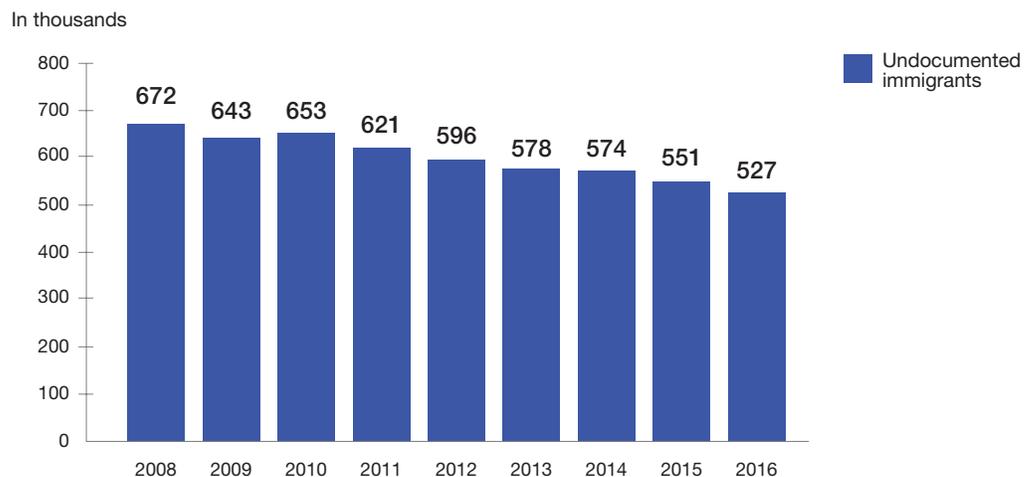
<sup>8</sup> Because ACS is a sample of the total population, weights are needed to produce full population counts. In this step of the methodology, we are assigning ratios on the unweighted data, i.e. those counted in the survey.

# Results

## Immigration Status and Mixed-Status Households

While the number of immigrants in New York City (3.2 million in 2016) is at an all-time high, the undocumented population has been declining. The estimated number of undocumented immigrants was 672,000 in 2008, the first year for which our estimates can be made (Figure 1).<sup>9</sup> By 2016, that number had declined by 21.6 percent to 527,000.<sup>10</sup>

Figure 1  
**Undocumented Immigrants, 2008 to 2016**

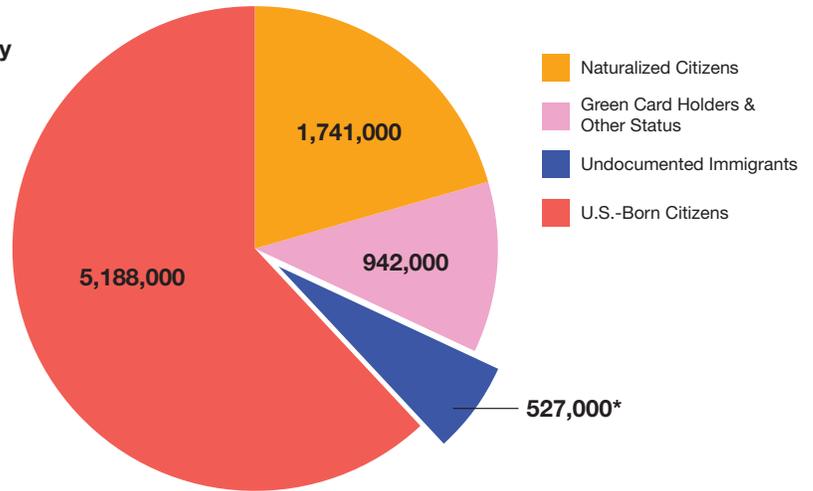


<sup>9</sup> Prior to 2008, data needed to infer legal status in the ACS were not available.

<sup>10</sup> The estimate of the undocumented population presented in this brief differs from what was published in the 2018 Annual Report from Mayor's Office of Immigrant Affairs (MOIA) due to differing time periods. The 560,000 estimate published in the MOIA report uses 2012-2016 ACS data and reflects an average over that 5-year period while the 527,000 estimate in this brief uses 1-year 2016 ACS data. [https://www1.nyc.gov/assets/immigrants/downloads/pdf/moia\\_annual\\_report\\_2018\\_final.pdf](https://www1.nyc.gov/assets/immigrants/downloads/pdf/moia_annual_report_2018_final.pdf)

In New York City, the number of immigrants who have attained citizenship through the naturalization process has steadily increased. In 2016, there were 1,741,000 naturalized citizens, an increase from 1,549,000 in 2010 and they now account for over half (55 percent) of the total immigrant population. Green card holders and other status, including Legal Permanent Residents (LPRs), refugees, asylees, and immigrants with temporary visas, are estimated to be about 942,000 in 2016 (Figure 2).

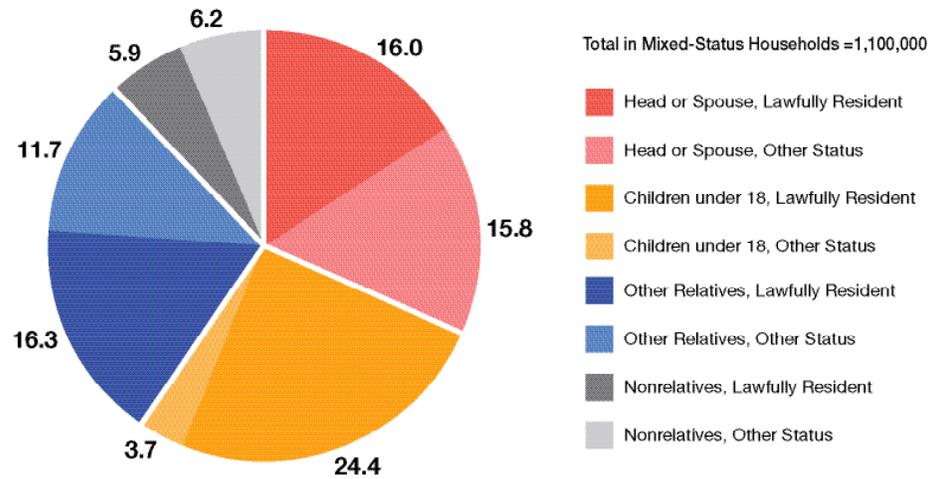
Figure 2  
**Persons by Nativity and Immigration Status, 2016**



\*The number of undocumented immigrants presented in this pie chart have been adjusted for undercount whereas the other subgroups have not. As a result, the additions of these categories will add to a sum greater than the total.

While over a half million undocumented immigrants is a sizable number, this represents a mere 5.9 percent of the City’s population. This relatively small share of the population is closely integrated into the rest of the city. There were 1.1 million New Yorkers living in mixed-status households, defined here as a household with at least one undocumented immigrant. Figure 3 presents relationships within mixed-status families: householder heads and spouses comprise 31.8 percent of all mixed-status households and children under 18 account for 28.1 percent. Other relatives (such as grandparents and cousins) and nonrelatives (roomers and housemates) account for 28.0 percent and 12.1 percent respectively. Within each relationship category, the split between those who are lawfully resident New Yorkers and those who are not is fairly even with the exception of children. Of the 296,000 children in mixed-status households, an overwhelming majority 86.7 percent are lawfully resident New Yorkers (Figure 3).

Figure 3  
**Persons in Mixed Households by Relationship to Householder,\* 2016**



\* Mixed-Status Household is defined as having at least one undocumented immigrant in the household.

### Labor Force Participation and Earnings

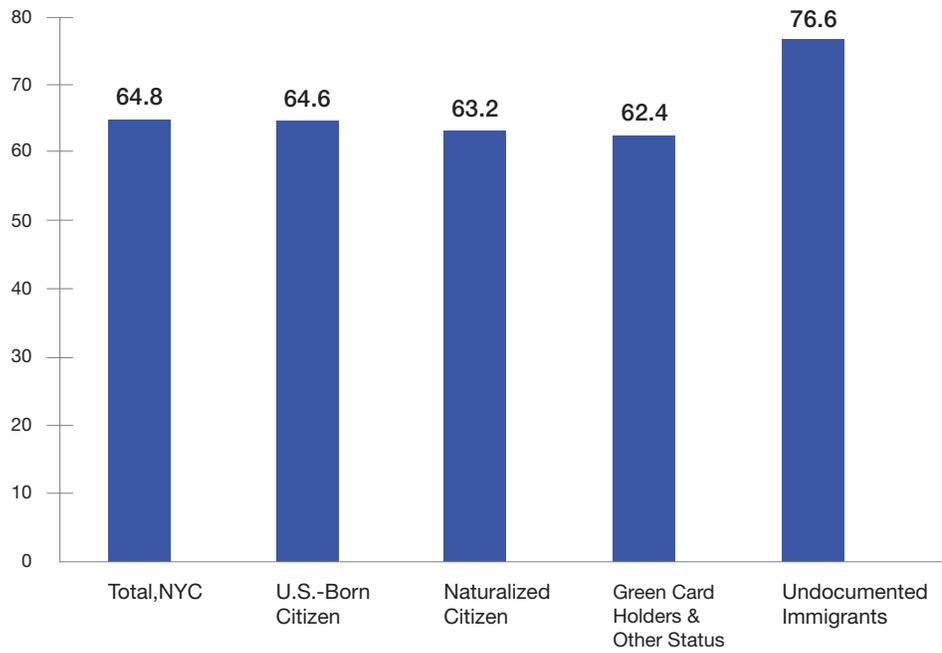
Immigrants comprise 38.0 percent of the city’s population but almost half (45.2 percent) of the labor force.<sup>11</sup> Undocumented immigrants in particular have higher than average labor force participation rates. Over three-quarters (76.6 percent) of the working age undocumented population is in the labor force, 12.0 percentage points higher than the U.S. born population (64.6 percent) (Figure 4). Despite higher labor force participation median annual earnings for this group (\$24,200) is significantly lower than the earnings for U.S.-born citizens (\$45,300) as seen in Figure 5.

Undocumented immigrants are heavily concentrated in the service and construction occupations: they comprise 24.3 percent of all construction workers and 20.3 percent of all food preparation workers.<sup>12</sup>

<sup>11</sup> Persons in the labor force are defined as 16 years and older who are either employed or seeking employment.

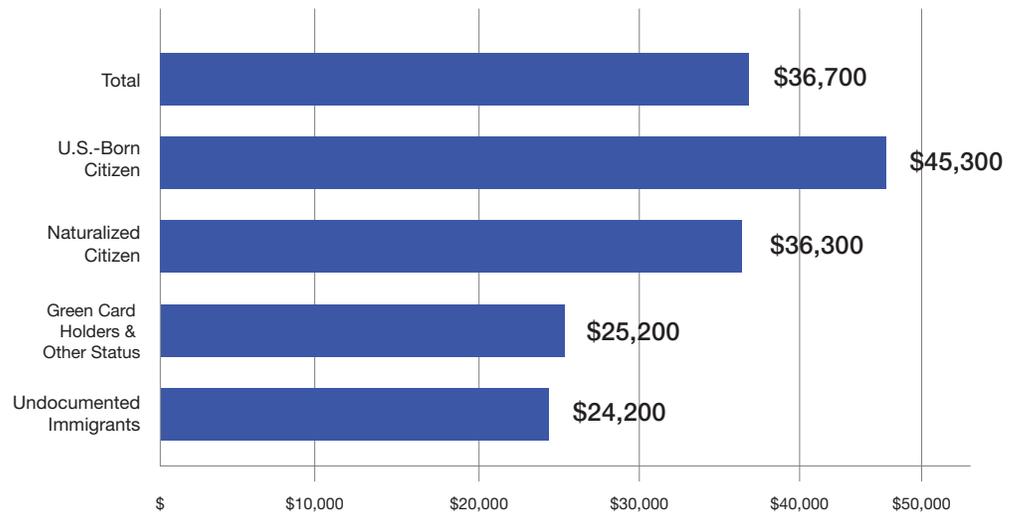
<sup>12</sup> As noted in the methodology section, certain occupations are used to assume lawful status. However these are occupations, such as medical doctors, and firefighters, that require either certification or legal status documentation and would not affect the numbers estimated to be working in the service and construction occupations.

Figure 4  
**Labor Force Participation Rate\* by Immigration Status, 2016**



\*Persons 16 and older who are employed or unemployed

Figure 5  
**Median Annual Earnings\* by Immigration Status, 2016**



\*Persons 16 and over with positive earnings

## Poverty Rates by Immigration Status

As reported in NYC Opportunity’s annual poverty report, the city’s 2016 poverty rate, without accounting for the legal status of noncitizens, was 19.5 (Figure 6).<sup>13</sup> Using the methodology described above to assign immigration status to respondents in the ACS sample, NYC Opportunity is able to estimate a poverty rate for the city that reflects the differing eligibility requirements for specific benefits vis-a-vis citizens and non-citizens. Using an immigrant’s inferred legal status, we are able to assign benefits more accurately to those who are eligible. A primary example is the Earned Income Tax Credit (EITC); because undocumented immigrants are ineligible, we do not impute these tax credits to any ACS respondents who we infer are not legally entitled to claim them. See Technical Note 1 for a more detailed explanation.

Accounting for the legal status of noncitizens in the NYCgov measure, the 2016 citywide NYCgov Immigrant Poverty (NYCgov/ImmPov) rate was 20.0—not statistically different from the NYCgov rate of 19.5. The noncitizen poverty rate was 28.4 (8.4 percentage points higher than the citywide poverty rate) compared to NYCgov’s noncitizen poverty rate of 26.5, (7 percentage points higher than the citywide rate). Among the noncitizen population, the NYCgov/ImmPov rate for undocumented immigrants was 30.9 percent, significantly higher than the 27.1 percent for Green card holders and other status using the same measure.

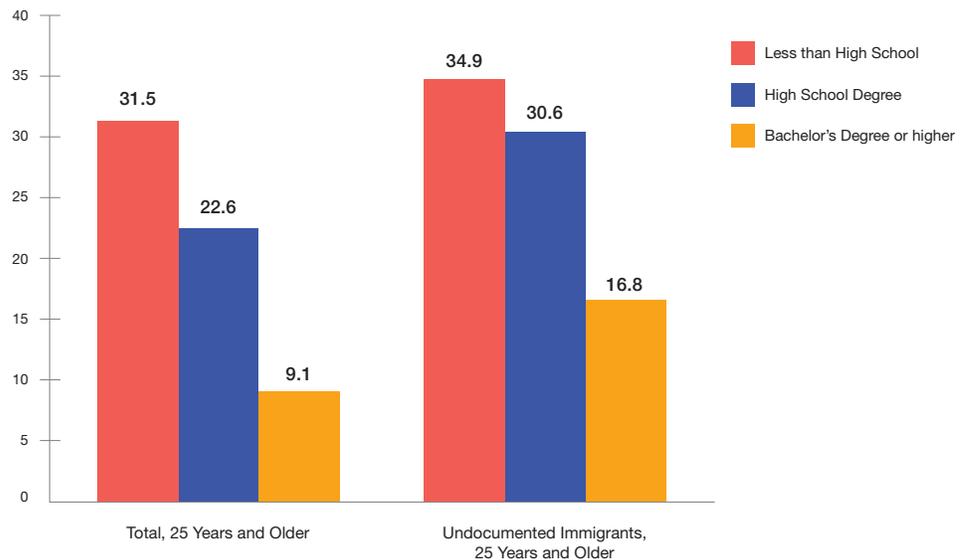
Figure 6  
**Poverty Rates Before and After Adjusting for Legal Status of Immigrants, 2016**

	NYCgov/ImmPov Rate	NYCgov Rate
Total	20.0	19.5
U.S.-born	17.9	17.6
Foreign-born	23.3	22.4
Naturalized Citizens	19.1	19.1
NonCitizens	28.4	26.5
Green Card Holders & Other Status	27.1	N/A
Undocumented Immigrants	30.9	N/A

13 New York City Government Poverty Measure 2005-2016 published in April 2018. Available at: <https://www1.nyc.gov/site/opportunity/poverty-in-nyc/poverty-measure.page>

There are many reasons for the observed higher poverty rates among undocumented immigrants. Disparities in incomes, combined with an over-representation of undocumented immigrant workers in predominantly low-paying sectors hint at possible forces driving this population into poverty at a higher rate. Having access to public benefits, an important mitigating factor in reducing poverty, plays a crucial role here as undocumented immigrants are not eligible to receive most public benefits. In addition, differences in educational attainment do not entirely explain the higher undocumented immigrant poverty rate: among all New Yorkers 25 years and older, the NYCgov/ImmPov rate was 31.5 percent for those who did not complete high school, but fell to 9.1 percent for those with a Bachelor’s degree or higher—a drop of 22.4 percentage points (Figure 7).<sup>14</sup> For undocumented immigrants the role of education in keeping individuals out of poverty is weaker. Undocumented immigrants lacking a high school degree had a poverty rate of 34.9 percent but a college degree reduced the rate to only 16.8, a relatively smaller decline of 18.1 percentage points.

Figure 7  
**NYCgov Immigrant Poverty Rates by Educational Attainment,\* 2016**



\*Persons 25 years and older

14 Using the NYCgov measure, the poverty rates among New Yorkers 25 years and older who did not complete high school and those with a Bachelor's degree or higher were 30.5 and 9.1, respectively.

## Policy Implications

The de Blasio Administration has played a critical role in promoting immigrant equity and facilitating immigrant inclusion. Recognizing the opportunities that attach to legal status, the City has invested an unprecedented amount of public dollars—more than \$30 million in fiscal year 2018—to provide free immigration legal services to immigrant New Yorkers through ActionNYC and other programs. These programs place legal services at community-based organizations, schools, and hospitals. Data show that attaining citizenship is a powerful tool for fighting poverty. This administration has recognized this by investing in NYCitizenship, a program that provides free citizenship application assistance, including screenings and full legal representation, as well as financial empowerment services to those becoming citizens. IDNYC, the largest municipal ID program in the U.S., was developed to ensure that all New Yorkers, regardless of immigration status, can have a government-issued form of identification that can facilitate access to City services and amenities. These are just a few examples of many ways the City creates and promotes New York City as a safe, inclusive and welcoming city.<sup>15</sup>

Immigration status nevertheless presents challenges to poverty responses, the most daunting of which are structural. For example, undocumented immigrants are not eligible for the majority of federally funded public benefits. A differentiated approach is therefore required to address poverty among the various immigrant groups according to legal status. The ability to disaggregate and thus analyze the foreign-born population by immigration legal status offers us an opportunity to create policy more effectively tailored to the different needs of these populations.

## Future Research

This first iteration of the NYCgov/ImmPov is a useful tool in analyzing a specific population. We will continue to refine this measure going forward and use it in developing and evaluating future policy. Further analysis is needed before it can be fully implemented into the current NYCgov measure, but we are committed to publishing results from this ongoing research annually (See Technical Note 2).<sup>16</sup> These data generated by NYC Opportunity inform the City's commitment to identifying and addressing the needs of all New Yorkers irrespective of immigration status.

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<sup>15</sup> More information on the City's immigrant equity initiatives is found at Mayor's Office of Immigrant Affairs "The State of Our Immigrant City," Annual Report, March 2018.  
[https://www1.nyc.gov/assets/immigrants/downloads/pdf/moia\\_annual\\_report\\_2018\\_final.pdf](https://www1.nyc.gov/assets/immigrants/downloads/pdf/moia_annual_report_2018_final.pdf)

<sup>16</sup> Additional data on the foreign-born can be found in the Annual Report from the Mayor's Office of Immigrant Affairs.

# Definitions + Technical Notes

## Definitions

**U.S.-born citizens:** Persons born in the 50 states, Puerto Rico and other U.S. territories. Also included are children born abroad to U.S. citizen parents.

**Foreign-born:** Persons born outside of the U.S. or its territories. Immigrants and foreign-born are used interchangeably in this report.

**Naturalized citizens:** Immigrants who were admitted as Lawful Permanent Residents (LPRs) and have become U.S. citizens through the naturalization process.

**Green card holders and other status:** LPRs, refugees, immigrants granted asylum, and nonimmigrants or temporary immigrants admitted on temporary visas such as students and workers admitted with H1B visas and their spouses and children.

**Undocumented immigrants:** Persons who either entered the country across a U.S. border without inspection or had status but subsequently lost it.

**Mixed-Status Households:** A household that has at least one resident undocumented immigrant.

## Technical Note 1

### The NYCgov Poverty Rate Incorporating Legal Status

The NYCgov Poverty Measure differs from the official U.S. poverty measure in several ways, including the inclusion of post-tax income in the income measure. The EITC plays an important role in lowering the poverty rate when included as a resource. The established model assigns EITC without regard to the legal status of immigrants. However, the EITC can only be claimed by legally resident tax filers with Social Security Numbers. The legal status model assumes immigrants file tax returns as a show of good faith on their path to citizenship. The penalties for invalid EITC claims are severe and obviate a filing in good faith. We assume the EITC is not claimed unless a parent and child has citizenship status and consequently both have social security numbers.

## Technical Note 2

Testing and refinement of this experimental immigration model will continue and will be used to generate population estimates as well as the corresponding NYCgov/ImmPov rates annually. The NYCgov poverty measure will continue to be the standard for New York City's local rate. We have historically compared the NYCgov measure to the federal Supplemental Poverty Measure (SPM). It is a comparable national measure that allows us to assess poverty in NYC compared to the country as a whole. The SPM does not include immigration status. Immigration status is also not captured in the official federal poverty measure, another basis of comparison. Our standard model will allow us to maintain this comparability. (See <https://www.census.gov/topics/income-poverty/supplemental-poverty-measure.html> for more on the SPM.)



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