# New York Child Poverty Modeling: Benefit Programs and Child Poverty at the "Baseline"

A Technical Deliverable for the Use of the Office of Temporary and Disability Assistance and the Child Poverty Reduction Advisory Council<sup>1</sup>

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The New York State Office of Temporary and Disability Assistance (OTDA) and the New York State Child Poverty Reduction Advisory Council (CPRAC) are considering numerous policy changes that could improve the economic well-being of individuals with low incomes in New York, and in particular that could reduce the portion of children in New York whose families have resources below the poverty level. Under contract with OTDA, the Urban Institute will be applying an analytical tool called microsimulation to estimate the impacts of each potential policy change. Metrics considered will include reductions in overall poverty rates, reductions for various subgroups of children and families, and changes in program costs and caseloads.

The impacts of the potential policy changes will be assessed by comparing the estimated poverty and program data under those potential policies to the poverty and program data *before* any policy changes—referred to here as the "baseline." This document describes the methods for developing the baseline data using the Urban Institute's Analysis of Transfers, Taxes, and Income Security (ATTIS) microsimulation model, and it describes the results of the results of the baseline procedures. As with other models of this type, the baseline data are a combination of information reported in a survey data file—in this case, the American Community Survey—and information developed (or "simulated") by the microsimulation model. In order for models of this type to return accurate estimates when assessing the impact of *alternative* safety-net policies, the model's *baseline* representation of safety-net benefits must come as close as possible to actual costs and caseloads, and all of the benefit and tax data for each family must be internally consistent. As described in this document, the baseline data reflect the income

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<sup>&</sup>lt;sup>2</sup> Sarah Minton and Linda Giannarelli co-directed this work. Senior leads for the modeling of individual benefit and tax programs were: Elaine Maag (Supplemental Security Income), Linda Giannarelli (Temporary Assistance and Safety Net Assistance, Home Energy Assistance Program, and Special Supplemental Nutrition Program for Women, Infants, and Children), Sarah Minton (child care subsidies), Katie Shantz (state income taxes), and Laura Wheaton (public and subsidized housing, Supplemental Nutrition Assistance Program, payroll taxes and federal income taxes). Sarah Knowles provided overall coordination and contributions to modeling several programs; Kevin Werner was the key analyst for federal tax modeling.

and major benefit use status of all New Yorkers in 2019, to the extent possible given available data sources and in the timeframe and budget for establishing this baseline for the CPRAC.

The main data source for the ATTIS model for this analysis is the 2019 American Community Survey (ACS). The Urban Institute modeling team uses previous research and established methodologies to augment how the ACS represents parental status of unmarried partners, non-citizen legal status, child care expenses, and income; and administrative data from federal, state and local sources on participation and benefit levels in major benefit programs to guide the selection of units for benefit receipt for benefits not included in the ACS questionnaire or benefits that appear to be underreported. The augmented ACS data can then be used to compute the incidence and depth of poverty in New York State. The poverty definition we use is the Supplemental Poverty Measure (SPM), which is able to capture the impact of a broad ranges of resources—including in-kind benefits and tax credits as well as cash benefits—on families' economic well-being.

In subsequent reports, we will use the baseline data file and the associated relationships of household composition, income, work and benefit status reflected in the baseline data, to estimate the impacts of the potential policy changes by comparing the estimated poverty and program data at baseline, *without* any policy changes, to estimated poverty and program data after the policy changes are simulated. The model also allows for multiple policy changes to be simulated together.

The incidence of poverty indicated by the baseline data differs from the incidence of poverty according to poverty estimates published by the Census Bureau for New York. However, the purpose of the analysis is not to create a competing measure of baseline poverty but to create a starting point for estimating the poverty reduction impacts of policy proposals, taking into account the size and characteristics of the population, their earned income and other non-means-tested incomes, their participation in cash safety net programs, their receipt of in-kind benefits, their tax payments, and their receipt of tax credits. As such, these data are best used to estimate *changes* rather than to produce point estimates. We provide point estimates in this document to document how close the simulated data come to external administrative data sources and to show where there are gaps and overages and why. When we perform the simulations, we will use the gaps and overages reported in this document to provide guidance on whether and how those differences may be affecting the simulated poverty impacts.

It's also important to note that all data on poverty are estimates and vary depending on nuances of the data that are used. For example, when using the same poverty definition, the Census Bureau obtains different estimates of poverty for the U.S. as a whole depending on whether the source of the household data is the ACS or a different survey, the Current Population Survey Annual Social and Economic Supplement, due in part to variations in how those surveys ask people about their income. There is also general recognition that many types of income are underreported in surveys; if a family does not report some of their income, they could be assessed as having below-poverty income when their full income might exceed the poverty threshold. Surveys also face challenges in how to "weight" respondents to represent the full population, particularly since non-response is not random, and because even the most-reliable source of data used to guide the weighting—the decennial census—may

omit some individuals. For example, the Census Bureau has documented a long-standing "undercount" of young children in both the decennial census and household surveys.<sup>3</sup> Nevertheless, the ACS is an extremely high-quality survey that creates a very strong foundation for estimating the antipoverty impacts of CPRAC policy options, especially following the augmentations to the data performed by the ATTIS modeling.

The first section of this document briefly describes ATTIS, the ACS data, and key adjustments made to the data. Next, we provide an overview of the results of the baseline process—including the high-level results for each of the dozen tax and benefit programs included in the model, and the estimated SPM poverty rates for New York's children and families, including the impacts of all those benefits and taxes. The following sections provide more details about the simulation of each benefit and tax program, and about the poverty results.

<sup>&</sup>lt;sup>3</sup> See the Census Bureau webpage, "The Undercount of Young Children," <a href="https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/undercount-of-young-children.html">https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/undercount-of-young-children.html</a>.

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## **ATTIS Microsimulation Model and Data Preparation**

## Microsimulation Modeling and the ATTIS Model

Microsimulation is an analytical tool that can mimic, or "simulate", the operation of various processes or programs—either using their actual rules or proposed or hypothetical rules. The Urban Institute's Analysis of Transfers, Taxes, and Income Security (ATTIS) model is a comprehensive model that covers the key benefit and tax programs directly affecting the financial resources of households and individuals. For this project, we used ATTIS to model all of the following:

- Cash benefits:
  - Unemployment compensation benefits
  - Supplemental Security Income (SSI)
  - Temporary Assistance for Needy Families and Safety Net Assistance (TANF / SNA)
    - For families
    - For childless individuals
- Nutrition programs:
  - Supplemental Nutrition Assistance Program (SNAP)
  - o Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- Other in-kind benefits:
  - Child care subsidies through the Child Care and Development Fund (CCDF) and related funding
  - Public and subsidized housing through funding from the Department of Housing and Urban Development (HUD)
  - Home Energy Assistance Program (HEAP)
- Taxes:
  - Payroll taxes
  - o Federal income taxes and credits
  - State income taxes and credits

#### Important features of how ATTIS models these programs include:

- Detailed modeling: The simulations capture the rules of each program in as much detail as possible. For example, in simulating a benefit program, the simulations apply all of the same steps in determining a family's eligibility as a caseworker would apply, to the greatest extent feasible given what is available in the survey data. The simulations include both federal rules and state-level rules, and, when applicable for the program, can also include substate rules.
- Monthly modeling: Most benefit programs operate on a monthly rather than annual basis. For example, a family may become eligible for TANF in the middle of the calendar year, after a job loss. As another example, a family's SNAP benefit may increase partway through the year due to a decline in income. The benefit-program simulations generally operate on a monthly basis, capturing these nuances.

Interactions: Importantly, the simulations reflect the interactions across programs. For example, a family's level of cash benefits affects the rental payment required from a family living in subsidized housing, because cash benefits are included as income in determining the rental payments. As another example, the simulation of the TANF program captures the fact that if a family with child support receives TANF, only a portion of the child support will be transferred to the family.

Another key feature of ATTIS is its ability to model the Supplemental Poverty Measure (SPM). The SPM is a much more comprehensive measure of families' economic well-being than the official poverty measure, taking into account not only cash income but also in-kind resources and the impact of several types of required expenses, such as medical out-of-pocket expenses, child care expenses, and taxes. The poverty thresholds for the SPM are also more complex than the official poverty thresholds, with the SPM thresholds varying across substate geographic areas as well as by whether a family owns their home with a mortgage, owns without a mortgage, or rents. ATTIS includes programming to compute each family's SPM poverty percentage, taking into account all of the modeled benefits, taxes, and tax credits, either in the baseline case or following a policy change.

## **Data Preparation**

ATTIS operates on data from the American Community Survey (ACS). The ACS has very large samples that allow analysis of key population subgroups, and it includes most of the information on families' income and employment that is needed to simulate the benefit and tax programs. Some additional information needed for the simulations is added to the data during preparatory steps. This section describes the ACS data and the initial data preparation steps. (The "baseline" simulations are discussed in the following section.)

#### American Community Survey Data

For this project, we are using the ACS data for New York State households collected in 2019.<sup>4</sup> The ACS is conducted on a continuous basis by the U.S. Census Bureau, and data files are released annually. The 2019 New York ACS data include information on 76,481 households who are statistically "weighted" to represent the state's 7.45 million households in 2019.<sup>5</sup> (While the ACS also surveys people in institutions and in non-institutional group quarters, our modeling does not include those individuals due to data limitations.)

<sup>&</sup>lt;sup>4</sup> We obtained the 2019 ACS data from the IPUMS USA Database. Steven Ruggles, Sarah Flood, Matthew Sobek, Danika Brockman, Grace Cooper, Stephanie Richards, and Megan Schouweiler. IPUMS USA: Version 13.0 [dataset]. Minneapolis, MN: IPUMS, 2023. https://doi.org/10.18128/D010.V13.0

<sup>&</sup>lt;sup>5</sup> In addition to releasing annual files, the Census Bureau also releases files that combine five years of data. These five-year files can support even finer-grained analyses than the one-year files. However, for this project, the one-year file provides sufficient sample, and allows a cleaner focus on circumstances just before the COVID-19 pandemic than a data file collected over a five-year period.

The ACS surveys different households in each month, with about one-twelfth of a year's total sample coming from each month's data collection. Surveyed households are asked about numerous topics including the demographic characteristics of each household member, whether each adult is working and how many weeks the adult worked in the 12 months prior to the interview, and the amount of income received by each adult from each of several different sources in the prior year. Regarding means-tested benefit programs, the ACS asks about receipt of SSI, SNAP, and cash aid, but reported recipiency often falls short of actual caseload levels; the survey does not include any information on the receipt of benefits from WIC, child care subsidies, public or subsidized housing, or HEAP. Further, the survey does not ask about tax payments or credits. There is no specific question about unemployment benefits, although some recipients may report unemployment benefits as part of a "catch all" income question.

The ACS has become the most commonly-used source of information on the detailed circumstances of U.S. families when state-level or substate-level information is required. While a different Census Bureau survey, the Current Population Survey's Annual Social and Economic Supplement (CPS ASEC), provides the national-level poverty statistics released annually by the Census Bureau, the ACS is the most common source of data for single-year state-level poverty statistics. (ACS-based and CPS-based poverty statistics vary somewhat, with ACS-based poverty estimates typically being higher.)

#### <u>Imputation of Information not Included in the ACS</u>

Although the ACS includes extensive information on demographic characteristics and incomes, some information needed for detailed simulation of government programs is not included. We imputed that information to the data using methods developed in earlier work, as follows:

Parental status of unmarried partners: In families that include an unmarried parent, the parent's child(ren), and the parent's unmarried partner, it is important for the modeling of some benefit programs to know if the partner is also the parent of the children. This information is not available in the ACS data. We imputed it using econometric equations previously estimated from CPS ASEC data (which explicitly asks about parent-child relationships). We imputed 57 percent of the unmarried partners of parents as being the second parent of at least one of the children; that figure matches the results from recent CPS ASEC data.

<u>Immigrant legal status</u>: Individuals who report in the survey that they are not citizens are imputed to have one of four legal statuses: legal permanent resident (LPR), refugee/asylee, unauthorized immigrant, or temporary resident (holder of a work or student visa, or the dependent of such a person).

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<sup>&</sup>lt;sup>6</sup> Because the survey asks about income in the 12 months prior to the interview, households interviewed early in the year are providing an amount closer to their 2018 income than their 2019 income. We use an adjustment factor provided by the Census Bureau to approximately adjust all income amounts to better represent the calendar year in the aggregate.

This step is important since legal status is key to determining noncitizens' eligibility for benefit programs.

The imputation uses a combination of methods for the different statuses. First, refugees/asylees are identified based on their country of origin and year of entry. (For example, according to government data on immigrant arrivals, two-thirds of individuals arriving from Iraq in 2016 arrived as refugees/asylees rather than as LPRs.) Second, temporary residents are assigned based on their reported work and school characteristics. Among non-citizens not identified as having either of those statuses, a substantial portion are automatically assigned as LPRs based on their occupation (for example, lawyers or police officers must be here legally) or their receipt of benefits (for example, a noncitizen recipient of SSI must be legally-present). The remaining non-citizens—not identified as a refugee/asylee or a temporary resident, and not assigned as an LPR based on occupation or benefit receipt—are probabilistically assigned as either LPRs or unauthorized, in such a way as to reach estimates developed by demographers regarding the number and characteristics of unauthorized individuals in New York State. A final step in the process ensures logical consistency across the statuses assigned to non-citizens within a family. For example, if two relatives arrived from the same place in the same year, we assume they arrived together and they are assigned the same status. However, the methods do still produce cases of different non-citizen statuses within the same family.

For this project, our overall "target" for unauthorized individuals in New York was 598,000 people. This is based on state-level estimates of unauthorized people in New York from two sources: an estimate from Pew Research Center of 650,000 unauthorized people in New York in 2017 and an estimate from Center for Migration Statistics (CMS) of 642,000 unauthorized people in New York in 2019.8 We reduced the mean of these published estimates to account for some people being missed by surveys and to exclude unauthorized individuals in group quarters or institutions (since they are not included in the data for our analysis). Estimates of the key demographic characteristics of New York's unauthorized residents in 2019 was obtained from the CMS State and National Data Tool (<a href="http://data.cmsny.org/">http://data.cmsny.org/</a>). We also relied on CMS data for an estimate of the portion of the state's unauthorized residents living in New York City, which produced an adjusted estimate of 420,000.

Our assignments produced total numbers of unauthorized people that almost exactly matched our targeted figures: 420,000 in New York City and 178,000 in the balance of the state, for a total of 598,000 statewide. The assignments also came reasonably close to the CMS estimates of the distribution of the

<sup>&</sup>lt;sup>7</sup> The methods follow general approaches originally developed by Dr. Jeffrey Passel and Dr. Rebecca Clark, and further developed by Dr. Passel and other colleagues. For more information, see Jeffrey Passel and D'Vera Cohn's description of their methodology, available from the Pew Research Center at

https://www.pewresearch.org/hispanic/2018/11/27/unauthorized-immigration-estimate-methodology/.

8 See "Unauthorized Immigrant Population Trends for States, Birth Countries and Regions" available from the Pew Research Center at <a href="https://www.pewresearch.org/hispanic/interactives/unauthorized-trends/">https://www.pewresearch.org/hispanic/interactives/unauthorized-trends/</a>, and "Estimates of Undocumented and Eligible-to-Naturalize Populations by State" available from the Center for Migration Statistics at <a href="http://data.cmsny.org/">http://data.cmsny.org/</a>.

unauthorized population by key characteristics, including country of origin, work status, and the split by men vs. women.

Child care expenses: Child care expense amounts are needed for SPM poverty calculation and are also relevant to the computation of certain tax credits and the computation of income deductions in some benefit programs. However, child care expenses are not reported in the ACS data. For families simulated to receive child care subsidies, the child care expense amount equals the subsidy program's required copayment. However, for other families, we use previously-developed econometric equations to estimate whether a family with children in which the parents are working or in school has any expenses for child care and if so, the level of expense. The results of the imputations are adjusted to come very close to the incidence and average amounts of child care expenses reported by New York families in the CPS ASEC (the Current Population Survey's Annual Social and Economic Supplement).

The imputed child care expense data came very close to the targets from the CPS ASEC data. Among New York families with children age 12 or younger, we impute that about one-third paid out-of-pocket for child care, with the incidence rising from below one-quarter of families with less than \$15,000 in annual earnings to approximately 40 percent for those with more than \$100,000 in annual earnings. Among those paying for care, the average monthly expenses ranged from less than \$200 per month for families with the lowest incomes to over \$1,000 for families with the highest incomes.

Identification of survey-reported unemployment compensation and child support income: The ACS asks separate questions about annual income received from seven sources—wage and salary income; self-employment income; income from interest, dividends, and rent; Social Security; SSI; "public assistance or welfare" income; and retirement, pension, survivor's or disability income—and asks a final income question regarding "any other sources of income received regularly." The final "catch all" question presumably collects information on income from child support, unemployment compensation, workers compensation, veterans benefits, and any other source not collected separately. However, for purposes of modeling, we require separate information on two of those types of income—child support income and unemployment compensation. Child support income is treated differently than other incomes for purposes of TANF, and unemployment compensation must be separately identified in preparation for policy simulations that alter employment status.

To obtain the information needed for modeling, we apply an imputation equation previously developed from CPS ASEC data to allocate the reported "other" income across three types: child support, unemployment compensation, and all other income not separately identified. Of the \$7.1 billion in income reported in the catch-all income question, \$768 million is identified as likely being child support and \$477 million is identified as likely being unemployment benefits, based on the characteristics of the individuals reporting the income, with the remaining \$5.8 billion left unspecified.

Monthly income amounts: Because most benefit programs require information about monthly income—not just annual income—another set of imputations allocate annual income amounts across the months of the year. Different types of income are allocated in different ways. Most importantly, earnings are allocated across weeks of work. For example, if a person reports having worked for 26

weeks (half the year), the model randomly identifies a six-month period and places all the earnings in those months, assuming the same weekly earnings in each week of work. Child support income is allocated based on patterns previously identified in CPS data. Several other types of unearned income—Social Security, retirement income, asset-based incomes, and unidentified "other" incomes—are all allocated evenly across the year. (Monthly amounts of unemployment compensation, SSI, and other cash assistance are developed by the simulations, discussed later in this report.)

## **Summary Results of the Baseline Simulation Process**

The purpose of the baseline simulations of benefit and tax programs is to create the starting point for the modeling of alternative policies. That starting point should reflect, as closely as feasible, the actual caseloads and benefit amounts for each program included in the analysis, prior to policy changes. Without the baseline simulations, the ACS has information about only a small number of safety net programs—SSI, cash assistance, and SNAP. SSI and SNAP benefits appear to be under-reported—meaning that the totals in the survey fall short of administrative data—and the cash assistance amount appears to include benefits other than the types of cash aid that are the focus of this analysis. The ACS asks no questions about other benefits (WIC, energy assistance, child care subsidies, or housing subsidies), captures unemployment benefits only as part of a broader catch-all income question, and does not ask any questions about income tax liabilities or tax credits.

Therefore, the baseline simulations are an essential first step for the policy modeling process. For each benefit program, the baseline simulation creates a caseload that comes as close as possible to the number and key characteristics of the actual program participants. The specific characteristics vary by program, but may include factors such as age groups, race and ethnicity, family structure, income or benefit levels, and others. For taxes, the baseline simulations apply real-world rules to the reported data as closely as possible. Following all of the baselines, the augmented data provide a more complete picture of families' economic well-being.

In this section, we summarize the success of the baseline simulations in mimicking the administrative data and also present the SPM poverty estimates developed for CPRAC based on the ACS data combined with the simulated benefit and tax data.

#### Overview of the Baseline Benefit and Tax Simulations

The baseline simulations included nine types of benefits—unemployment benefits, SSI, cash aid to families with children, cash aid to childless adults, child care subsidies, public and subsidized housing operated through programs associated with the federal Department of Housing and Urban Development (HUD), SNAP, WIC, and energy assistance benefits—in addition to payroll taxes, federal income taxes and credits, and state and city income taxes and credits. These are the programs most likely to be affected by the policy proposals that the CPRAC will consider. The simulations do not include some other cash and in-kind support provided by New York State and New York City in 2019, including Emergency Assistance to adults with and without children, Refugee Cash Assistance, supportive housing,

and additional housing subsidies beyond the HUD programs. (In particular, in 2019, New York City's CityFHEPS program provided \$16 million in rent supplements to more than 16,000 households in New York City who had incomes below 200 percent of poverty and met other eligibility criteria.)

Overall, our baseline results come very close to administrative data targets. Across the benefit programs, the baseline simulations came very close to target for the numbers of individuals or assistance units receiving benefits (table 1). The simulated caseloads are within one percent of target for the average monthly number of people receiving unemployment insurance benefits, the average monthly number of adults receiving SSI, the average monthly number of families receiving TANF and SNA, the average monthly number of assistance units receiving SNA for childless adults and couples, the average monthly number of households receiving public and subsidized housing through federal programs, the average monthly number of assistance units receiving SNAP, the average monthly number of infants and children receiving WIC benefits, and the number of households receiving HEAP assistance. The baseline data are 2 percent above target for the average monthly number of children receiving child care subsidies.

For the tax portions of the baseline process, we assume that all tax units pay the taxes they owe; we also assume that all tax units that appear eligible for the Earned Income Tax Credit and Child Tax Credit receive those benefits. In order to support the alternative simulation process, it is important that the simulated tax and credit amounts are completely consistent with the family circumstances and incomes according to the survey data; therefore, we made no additional adjustments to the computed tax amounts, even when the simulated data do not fully reflect the aggregate amounts of taxes or credits according to the administrative data (targets). In the case of payroll taxes, the simulated baseline amount of Old-Age, Survivors, and Disability Insurance taxes paid by New York workers is within 1 percent of the actual figure. The simulation of federal income taxes comes very close to actual data for New York tax units with adjusted gross income (AGI) below \$50,000 per year—the portion of the population most relevant for this analysis; however, the aggregate amount of AGI across all tax units is 10 percent below the actual. The aggregate simulated amounts of state AGI and state income taxes are also below the actual figures. The shortfalls in simulated income tax liability are due in part to the fact that very high-income taxpayers are likely underrepresented in the data and may not report their total incomes to the survey.

Although the model's results deviate from real-world tax or benefit data in some cases due to data constraints (discussed further in the sections on the individual tax and benefit programs), as a whole the combination of the ACS and the simulated ATTIS data provides a much more complete picture of the resources available to New York families than would be provided by the ACS data alone. For example, although the aggregate amount of unemployment benefits in the simulated data falls short of the aggregate amount in program administrative data, the simulated amount is still well above what appears to be captured in the survey data. The largest shortfall—in the simulated aggregate amount of state income tax liability—is likely due primarily to underrepresentation of high-income taxpayers who are not the focus of this analysis.

To the extent that any deviations between simulated and actual amounts are due to underestimation of benefits or overestimation of taxes for a particular group of people in the survey data, this could contribute to an overestimate of the number and share of people in poverty. However, as noted earlier, what is most important for these analyses is the ability to assess the relative impacts on poverty of different policy options. As specific policy options are assessed, we will consider the extent to which any limitations of the baseline picture of a particular program might affect the estimated impacts of the policy change.

TABLE 1
Summary of Benefit Programs Modeled at the Baseline
Numbers of units are in thousands

		Target	
		(Administrative	Simulated as
	Simulated Data	Data)¹	Percent of Target
Unemployment Insurance Benefits			
Number of people receiving benefits	377	375	100.5%
(thousands)			
Aggregate annual benefits (millions)	\$1,905	\$2,123	89.7%
Supplemental Security Income (SSI)			
Average monthly adults receiving benefits	525	530	99.1%
(thousands)			
Annual benefits to adults (millions)	\$3,525	\$3,613	97.6%
Cash Aid to Families Temporary Assistance for			
Needy Families (TANF) and Safety Net Assistance			
(SNA)			
Average monthly families with benefits	121	121	99.9%
(thousands)			
Aggregate annual benefits for TANF funded	\$816	\$890	91.7%
families (millions)			
Cash Aid to Childless Adults and Couples (SNA)			
Average monthly number of units receiving	108	108	99.9%
benefits (thousands)			
Aggregate annual benefits (millions)	\$515	2	
Child Care Subsidies			
Average monthly number of children receiving	106	104	102.1%
benefits (thousands)			
Aggregate subsidy value (millions) <sup>3</sup>	\$601	\$703	100.2%
Public and Subsidized Housing through Federal			
Programs			
Number of households receiving subsidy	547	546	100.1%
(thousands)			
Aggregate annual benefits (millions) <sup>4</sup>	\$7,287	4	
Supplemental Nutrition Assistance Program (SNAP)			
Average monthly number of units receiving	1,427	1,425	100.1%
benefits (thousands)			
Aggregate annual benefits (millions)	\$3,748	\$4,223	88.7%

		Target	
		(Administrative	Simulated as
	Simulated Data	Data)¹	Percent of Target
Special Supplemental Nutrition Assistance Program			
for Women, Infants, and Children (WIC)			
Average monthly infants and children with benefits (thousands)	286	284	100.6%
Aggregate annual food benefits, all recipients (millions)	\$352	\$378	93.0%
Home Energy Assistance Program (HEAP)			
Households receiving benefits (thousands)	1,470	1,477	99.5%
Aggregate annual benefits <sup>5</sup> (millions)	\$227	\$226	100.3%
Payroll Taxes			
Number of workers subject to OASDI tax (thousands)	9,677	10,234	94.6%
OASDI taxes paid (millions)	\$63,163	\$62,518	101.0%
Federal Income Taxes			
Tax units with AGI below \$50,000			
Number of positive-tax returns	2,535	2,539	99.8%
(thousands)			
Total tax liability, positive-tax returns	\$4,419	\$4,245	104.1%
(millions)			
Total AGI (all income levels, millions)	\$770,580	\$855,064	90.1%
State Income Taxes			
Total tax liability (millions)			
All tax units	\$35,898	\$42,121	85.2%
AGI < \$30,000	\$83	6	
AGI from \$30,000 to < \$50,000	\$1,917	\$1,721	111.4%
Total AGI (all income levels, millions)	\$746,171	\$818,683	91.1%

Source: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) See detailed tables for each individual program for sources of administrative data. (2) We did not obtain a dollar target for the portion of SNA benefits paid to childless adults living in the community. (3) The aggregate subsidy value target represents the expenditures on direct services in 2019 from all expenditure years, as reported in the published Office of Child Care tables. (4) The simulated value equals the fair market rent of the unit minus the household's required payment. We did not obtain a dollar target for the value of all federally-supported public and subsidized housing in New York. (5) HEAP benefits do not include weatherization or equipment payments. (6) Aggregate net tax liability for this group is negative (credits exceed payments).

## Overview of SPM Poverty Prior to Policy Changes

After modeling the program baselines, we used the augmented data to calculate poverty status for individuals and families in New York, using the SPM concepts and thresholds, but using the data on benefits, taxes, and tax credits simulated by ATTIS in adding up families' resources. Because we are using a combination of ACS data and ATTIS data, our estimated poverty rates differ somewhat from the rates computed by the Census Bureau from the 2019 ACS data. Therefore, we refer to poverty rates resulting from these procedures as the "CPRAC SPM" estimates.

The baseline results show that 13.5 percent of people in New York were in poverty in 2019 using the CPRAC SPM measure, meaning they had family resources below 100 percent of the SPM poverty threshold (table 2). The child poverty rate was 13.9 percent, with a higher rate (15.2 percent) for young

children ages 0 through 4. The adult poverty rate was 13.4 percent. New York City had a much higher poverty rate than the balance of the state, with 18.7 percent of people in poverty in New York City compared to 9.7 percent in poverty in the remainder of the state.

Among different racial and ethnic groups, poverty was highest for people who are non-Hispanic Asian American and Pacific Islander (AAPI), at 21.2 percent. People who are Hispanic had the next highest poverty rate (19.8 percent) followed by people who are Black, non-Hispanic (17.0 percent), and white, non-Hispanic (9.1 percent).

TABLE 2
New York Population and the CPRAC SPM Poverty Rate, by Demographic Characteristics, 2019

	Baseline	
Total population (poor and non-poor, thousands) <sup>1</sup>	18,880	
Children (< age 18)	3,994	
Ages 0 through 4	1,108	
Ages 5 through 17	2,886	
Adults (ages 18 and older)	14,886	
Poverty rates (rate of poverty within each group of people, CPRAC SPM)		
All people in New York	13.5%	
By age		
Children (< age 18)	13.9%	
Ages 0 through 4	15.2%	
Ages 5 through 17	13.4%	
Adults (ages 18 and older)	13.4%	
By race and ethnicity <sup>2</sup>		
AAPI, non-Hispanic	21.2%	
Black, non-Hispanic	17.0%	
Hispanic	19.8%	
White, non-Hispanic	9.1%	
Multiple and other races, non-Hispanic	16.9%	
By location		
New York City	18.7%	
Balance of state	9.7%	

**Source**: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) The population counts do not include those who live in group quarters and institutions. (2) AAPI = Asian American and Pacific Islander. We use the term "Hispanic," as this is the primary terminology used by the US Census Bureau in the American Community Survey, which is the source of household data for this analysis. Survey respondents are asked to report race and ethnicity, including whether or not they identify as being of "Hispanic, Latino, or Spanish origin."

More detailed descriptions of the baseline methods, program results, and poverty results are provided in the remaining sections of this document.

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<sup>&</sup>lt;sup>9</sup> We use the term Hispanic because it is the primary term used in the ACS survey questionnaire when asking about this group. (The full question asks people to indicate if they are "of Hispanic, Latino, or Spanish origin.")

## **Individual Baseline Results**

The development of the baseline data for this project involved simulating each of the dozen benefit and tax programs, mimicking as closely as possible the actual rules in place for that program in New York in 2019. Even though some rules may have changed since 2019, the intent of the baseline simulations is to apply the rules that were in place in the year of the data that we are using for the project. (In the next stage of the project, we will be modeling some of the key policy changes that have occurred since 2019.)

The programs are simulated in the order in which they are presented in this section so that cross-program interactions can be captured. For example, all the cash programs are simulated first, because cash benefits are generally counted as income in the determination of eligibility for non-cash aid such as SNAP.

The simulations of benefit programs all include some key elements: the identification of those eligible for the program (based on ACS-reported data with the imputations described above), the computation of a potential benefit, and the selection of a simulated caseload. The caseloads are selected to come close to the actual 2019 caseload in New York in terms of size and key characteristics. In the cases when the data already include information on receipt of the benefit (which is true for SSI, cash assistance, and SNAP), the eligible individuals or families who reported the benefit are automatically included in the caseload, and a portion of the eligible people or families who did not report the benefit are also simulated to be recipients in order to reach the targeted size and characteristics of the caseload. When the survey does not include any information about the receipt of a particular benefit, the caseload is entirely identified by the simulation, guided by the administrative data.

All of the simulations of benefit programs make use of separate targets for New York City and the balance of the state, as well as using targets for other key characteristics. The specific characteristics vary depending on what is most relevant for a particular program and the data available for that program. In practice, it is usually not possible to precisely reach all the targets; however, the simulations performed for this project come very close to each program's overall targets and very close to the targets for most key recipient characteristics.

In the case of income taxes, people are generally assumed to pay the taxes that they owe and receive the tax credits for which they are eligible. Results are compared against actual tax data for New Yorkers, but no modifications are made to the results of the calculations, due to the need to maintain consistency between the simulated tax data and the survey-reported data on the composition and income of each family.

Here, we describe the key methods used for each program, and present the simulated results compared with the actual data.

## **Unemployment Insurance Benefits**

Unemployment benefits are paid to individuals who are looking for work and who have sufficient connection to the labor force in the period before they apply for benefits to be considered eligible. Benefits do not cover people who are self-employed or people not authorized to be working in the United States. Benefits are available for a maximum of 26 weeks for each spell of benefit receipt. Individuals receiving unemployment benefits in New York in 2019 received amounts ranging from \$100 to \$450 per week, with the amount based on a person's earnings in the year before they became unemployed. (During the COVID-19 pandemic, numerous special rules applied; however, we are modeling the rules that were in place during 2019.)

#### **Methods and Targets**

Although some unemployment benefits are likely reported as part of the "catch all" income question in the ACS, the amount that appears to have been reported (about \$477 million) falls far short of the actual amount of unemployment benefits received in New York in 2019 (about \$2.1 billion). The large shortfall is likely due to the fact that, when people are not prompted for specific types of income, they are less likely to remember to report that income, especially for a type of income like unemployment benefits that may have been received for only a short period of time that could have ended many months prior to the point of the interview.

We used ATTIS to assign unemployment benefits to additional individuals who appeared to have been looking for work during 2019, in order to come close to the actual incidence of benefits as well as the demographic characteristics of recipients. The primary state-level information was obtained from federal Department of Labor data; we relied on New York State data to obtain the portion of the state's unemployment benefits paid to individuals in New York City.<sup>10</sup>

#### **Baseline Results**

The simulation of unemployment benefits came very close to the targeted data in terms of aggregate weeks of benefits (within 0.2 percent of the target), number of annual recipients (within 0.5 percent of target), and the portion of dollars paid to New York City residents (40 percent) (tables 3A and

<sup>&</sup>lt;sup>10</sup> Our primary state-level data source was the database of state-level unemployment benefits data made available by the Department of Labor (DOL), at this website: <a href="https://oui.doleta.gov/unemploy/claimssum.asp">https://oui.doleta.gov/unemploy/claimssum.asp</a>. The available information includes the number of weeks of benefits that are paid (a concept termed "weeks compensated"), the number of "first payments" (people receiving their first benefit, which can be used to develop an approximation of unduplicated recipients during a year), and aggregate benefit payments. These data showed that in 2019, \$2.1 billion in unemployment benefits were paid to New York residents across 6.1 million weeks of benefits, with a sum of 375,000 "first payments." We also relied on U.S. DOL data for the characteristics of claimants; specifically, we used data for New York for July 2019, available from this webpage: <a href="https://oui.doleta.gov/unemploy/chariu.asp">https://oui.doleta.gov/unemploy/chariu.asp</a>. New York State Department of Labor data, available at this webpage <a href="https://dol.ny.gov/unemployment-insurance-data">https://dol.ny.gov/unemployment-insurance-data</a> showed that 40 percent of aggregate unemployment benefits in the state in 2019 were paid to people in New York City.

3B). In terms of aggregate benefits, the simulation produced \$1.9 billion in total benefits, which is about 10 percent short of the actual figure of \$2.1 billion. The shortfall may be due to not capturing sufficient recipients eligible for the highest benefit levels. Considering the demographic characteristics of the recipients, the simulation comes very close to the targeted distributions by gender, age group, race and ethnicity, and industry. The lower dollar value of simulated average annual benefits (relative to the actual value of benefits in the administrative data) could work in the direction of some overestimation of poverty. However, because we expect that the shortfall is primarily due to higher earners, the impact on the simulated poverty rate is likely low.

TABLE 3A
Simulated Unemployment Benefits in New York vs. Targets, 2019

	Target		
		(Administrative	Simulated as
	Simulated	Data)¹	Percent of Target
Aggregate weeks of benefits paid during the year (millions)	6.131	6.141	99.8%
Number of annual recipients (thousands)	377	375	100.5%
Aggregate annual benefit amount (billions)	\$1.905	\$2.123	89.7%
New York City	\$0.762	\$0.840	90.7%
Balance of state	\$1.143	\$1.283	89.1%

**Source for simulated results**: Urban Institute tabulations of data from the ATTIS model. **Notes**: (1) Overall state data are from the U.S. Department of Labor (DOL) at this website: <a href="https://oui.doleta.gov/unemploy/claimssum.asp">https://oui.doleta.gov/unemploy/claimssum.asp</a>. The distribution of spending between New York City and the balance of the state is from the New York Department of Labor, at this website: <a href="https://dol.ny.gov/unemployment-insurance-data">https://dol.ny.gov/unemployment-insurance-data</a>.

TABLE 3B
Simulated Unemployment Benefits in New York vs. Targets, 2019 (continued)

		Target (Administrative	Percentage Point Difference, Simulated Minus
	Simulated	Data) <sup>1</sup>	Target
Statewide, percentage distribution of			
recipients of unemployment benefits			
By gender			
Men	53%	49%	4
Women	47%	51%	-4
By age group			
Younger than 22	4%	2%	2
22-24	6%	4%	2
25-34	25%	24%	1
35-44	21%	21%	0
45-54	20%	21%	-1
55-65	18%	20%	-1
65 and older	6%	8%	-2
By race and ethnicity (percent of caseload) <sup>2</sup>			
Asian, non-Hispanic	6%	5%	1
Black, non-Hispanic	17%	21%	-4
Hispanic	22%	23%	-1
White, non-Hispanic	52%	48%	4
Other or multiple races, non-	3%	2%	1
Hispanic			
By industry			
Construction	9%	9%	0
Manufacturing	6%	5%	1
Wholesale and retail trade	11%	12%	-1
Professional, scientific, management	16%	19%	-3
Educational, health, and social	18%	16%	2
services			
Accommodations, food services, recreation	12%	13%	-1
Transportation, utilities, financial, insurance, real estate, public administration, and services	27%	27%	0

Source for simulated results: Urban institute tabulations of data from the ATTIS model.

**Notes**: (1) The characteristics of New York recipients are from U.S. DOL data, available at this webpage: <a href="https://oui.doleta.gov/unemploy/chariu.asp">https://oui.doleta.gov/unemploy/chariu.asp</a>. (2) The administrative data provide information on recipients by race and ethnicity separately; the targets shown for non-Hispanic recipients by race are based in part on assumptions regarding the proportion of Hispanics among people of different races.

## Supplemental Security Income (SSI)

Supplemental Security Income (SSI) provides monthly payments to adults who are age 65 or older and to younger adults and children who are blind or disabled, who have income and resources below specific financial limits. Most SSI benefits are delivered as part of a federal entitlement program. In 2019, the maximum individual federal benefit was \$771. If both partners in a married couple qualify for

SSI benefits, the couple could receive a joint federal benefit of up to \$1,157. In New York, the federal government also delivers a state supplement (funded by New York State) of up to \$87 per month to some individuals who qualify for federal benefits. People who qualify for SSI benefits who live in someone else's home can receive a smaller maximum federal benefit and state supplement. In a small number of cases, people may qualify for only a state-level benefit and not a federal benefit if their income and resources are just above the federal limits.

#### Methods and Targets

SSI benefits are reported in the ACS but to a lesser extent than administrative data suggest is correct. A total of 534,000 New Yorkers are reported as having SSI income in the 2019 ACS data, which is well below the 602,000 people who appear to be receiving SSI in New York in the average month of 2019.<sup>11</sup> The primary functions of the SSI baseline simulation are to:

- determine which adults in the ACS are eligible for SSI, based on their reported income, age, and disability status and
- adjust for underreporting of SSI receipt in the ACS data, producing a simulated caseload of both adults and children that is reasonably close to administrative records on the number and characteristics of noninstitutionalized SSI recipients.

In the process of adjusting for underreporting, individuals who reported in the ACS survey that they received SSI and who are determined to be eligible for the benefit are automatically included in the simulated caseload. Additional eligible people (who did not report SSI) are included to reach the administrative targets. <sup>12</sup> The targets for the SSI baseline simulation were obtained from a combination of federal and state sources. <sup>13</sup>

#### **Baseline Results**

We aligned the New York State results as closely as possible to the overall SSI caseload and to targets by unit type, monthly benefit level and citizenship status (table 4). Our aligned caseload is within 1 percent of the target for adults with benefits and within 6 percent of the target for children with SSI. The simulated level of annual benefits being paid to adults is about 2 percent below the target figure;

<sup>&</sup>lt;sup>11</sup> The figure of 534,000 includes people who did not actually report SSI in the survey, but whose information was imputed by the Census Bureau to fill in data when individuals did not answer the question. Individuals with these amounts are more likely than individuals with truly-reported amounts to appear ineligible for SSI based on income. <sup>12</sup> In the case of individuals who truly reported SSI but who appear ineligible for SSI, or who reported amounts higher than the maximum possible SSI benefits, we assume these may be misreports of Social Security, and we reclassify the income as Social Security. However, if the SSI income was "allocated" (imputed) by the Census Bureau to fill in missing data, that report is not automatically retained.

<sup>&</sup>lt;sup>13</sup> The primary sources were the Office of Temporary and Disability Assistance monthly statistics (tables 17, 18, and 19) and the federal government's SSI Annual Statistical Report, 2019, table 10.

the target includes retroactive benefits, which are not included in our modeling. We also come within 6 percent of the target for total adult SSI recipients in New York City.

The simulation also comes reasonably close to targets by type of unit and by benefit level. We simulate delivering federal benefits to 99 percent of our target for aged singles and 95 percent of our target for singles with disabilities; the simulation exceeds the target for couple units by about 30 percent, but because that is a relatively small group (19,000 couples) the absolute deviation is small. Focusing on units eligible only for the state supplement, our simulated caseload stands at 101 percent of the target for aged singles and 92 percent of the target for singles with disabilities. The simulated number of noncitizen adults with SSI is 17 percent below the target; the administrative data may not reflect recent naturalizations. Our simulation for child units is within one percent of the overall target and also very close to targets by the number of parents.

TABLE 4
Simulated Average Monthly Units Receiving SSI in New York vs. Targets, 2019
Numbers of units in thousands

Average monthly adult recipients         525.0         530.0         99.1%           Total annual benefits to adults         \$3,524.6         3,612.9         97.6%           Average monthly child recipients         76.8         81.3         94.4%           Characteristic of Adult Units         525.0         3,612.9         97.6%           Characteristic of Adult Units         525.0         212.9         98.8%           One person age 65+         210.3         212.9         98.8%           One adult 18-64         264.5         278.4         95.0%           Married couple unit         25.0         19.3         129.5%           New York City Adult Recipients by Age         49.65+         160.4         149.0         107.7%           Age 65+         160.4         149.0         107.7%         12.6         101.0%           Age 18-64         151.0         183.0         38.8%         107.7%         12.6         101.0%			Target	
Average monthly adult recipients         525.0         530.0         99.1%           Total annual benefits to adults         \$3,524.6         3,612.9         97.6%           Average monthly child recipients         76.8         81.3         94.4%           Characteristic of Adult Units         76.8         81.3         94.4%           Characteristic of Adult Units         55.0         19.3         212.9         98.8%           One adult 18-64         264.5         278.4         95.0%           Married couple unit         25.0         19.3         129.5%           New York City Adult Recipients by Age         Age 65+         160.4         149.0         107.7%           Age 18-64         151.0         183.0         82.5%           Total NYC Adult Recipients         311.4         332.0         93.8%           Adult Units by Benefit Level         0ne person age 65+         51.2         101.0%           Federal benefit \$100 to <\$200         27.4         28.9         94.6%           Federal benefit \$100 to <\$200         27.4         28.9         94.6%           Federal benefit \$200 to <\$400         33.5         37.2         90.1%           Federal benefit \$771 or more         58.7         58.5         100.3% <th></th> <th></th> <th>(Administrative</th> <th>Simulated as</th>			(Administrative	Simulated as
Total annual benefits to adults		Simulated	Data)¹	Percent of Target
Average monthly child recipients Characteristic of Adult Units  Statewide by Type of Unit  One person age 65+ One adult 18-64 One adult 18-64 Age 65+ Age 65+ Age 18-64  Cone person age 65+ One adult Recipients by Age Age 65+ Age 18-64  Total NYC Adult Recipients  Adult Units by Benefit Level One person age 65+ State supplement only Federal benefit \$100 to < \$200 Federal benefit \$771 or more One person age 18-64 (with disability)  State supplement only Federal benefit \$100 to < \$200 Federal benefit \$771 or more Federal benefit \$100 to < \$200 Federal benefit \$100 to < \$771 Federal benefit \$100 to < \$11.1 Federal benefit \$100 to < \$10.3 Federal benefit \$100 to \$10.3	Average monthly adult recipients	525.0	530.0	99.1%
Characteristic of Adult Units   Statewide by Type of Unit   One person age 65+   210.3   212.9   98.8%   One adult 18-64   264.5   278.4   95.0%   Married couple unit   25.0   19.3   129.5%   New York City Adult Recipients by Age   Age 65+   160.4   149.0   107.7%   Age 18-64   151.0   183.0   82.5%   Total NYC Adult Recipients   311.4   332.0   93.8%   Adult Units by Benefit Level   One person age 65+   12.7   12.6   101.0%   Federal benefit \$100 to \$200   27.4   28.9   94.6%   Federal benefit \$200 to \$400   33.5   37.2   90.1%   Federal benefit \$771 or more   58.7   58.5   100.3%   One person age 18-64 (with disability)   State supplement only   16.9   18.5   91.5%   Federal benefit \$100 to \$200   11.4   16.0   71.3%   Federal benefit \$100 to \$200   11.4   16.0   71.3%   Federal benefit \$200 to \$400   24.1   26.2   92.0%   Federal benefit \$100 to \$200   11.4   16.0   71.3%   Federal benefit \$200 to \$400   24.1   26.2   92.0%   Federal benefit \$771 or more   140.8   160.0   88.0%   Adult Noncitizen Recipients   Age 65+   32.7   38.7   38.7   84.3%   Age 18-64   11.9   15.2   78.0%   Child recipients by number of parents   0 parent   9.5   9.5   9.5   9.2%   Child recipients by number of parents   0 parent   9.5   9.5   9.5   9.2%   100.4%   100.	Total annual benefits to adults	\$3,524.6	3,612.9	97.6%
Statewide by Type of Unit One person age 65+ 210.3 212.9 98.8% One adult 18-64 264.5 278.4 95.0% Married couple unit 25.0 19.3 129.5%  New York City Adult Recipients by Age Age 65+ 160.4 149.0 107.7% Age 18-64 151.0 183.0 82.5% Total NYC Adult Recipients 311.4 332.0 93.8%  Adult Units by Benefit Level One person age 65+ State supplement only 12.7 12.6 101.0% Federal benefit < \$100 24.0 24.6 97.6% Federal benefit \$100 to < \$200 27.4 28.9 94.6% Federal benefit \$400 to < \$771 54.0 51.1 105.7% Federal benefit \$710 r more 58.7 58.5 100.3%  One person age 18-64 (with disability)  State supplement only 16.9 18.5 91.5% Federal benefit \$100 to < \$200 11.4 16.0 71.3% Federal benefit \$100 to < \$200 11.4 16.0 71.3% Federal benefit \$100 to < \$200 11.4 16.0 71.3% Federal benefit \$100 to < \$400 24.1 26.2 92.0% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$400 to < \$771 56.0 39.9 140.2% Federal benefit \$771 or more 140.8 160.0 88.0%  Adult Noncitizen Recipients Age 65+ 32.7 38.7 84.3% Age 18-64 11.9 15.2 78.0%  Child recipients by number of parents O parent 9.5 9.5 9.5 99.2% I parent 52.0 51.8 100.4%	Average monthly child recipients	76.8	81.3	94.4%
One person age 65+ One adult 18-64 One adult 18-64 One adult 18-64 One adult 18-64  Married couple unit  25.0  19.3  129.5%  New York City Adult Recipients by Age  Age 65+ Age 65+  160.4  149.0  107.7% Age 18-64  Total NYC Adult Recipients  311.4  332.0  93.8%  Adult Units by Benefit Level One person age 65+  State supplement only Federal benefit \$100 to \$200  Federal benefit \$100 to \$400  Federal benefit \$400 to \$771  Federal benefit \$771 or more One person age 18-64 (with disability)  State supplement only Federal benefit \$100 to \$200  11.4 Federal benefit \$100 to \$200  State supplement only Federal benefit \$500  Alian Federal benefit \$500  Alian Federal benefit \$500  Alian Federal benefit \$771 or more Federal benefit \$600  Alian Federal benefit \$100  Adult Noncitizen Recipients Age 65+ Age 18-64  Age 18-64  Age 18-65  Age 18-64  Age 18-65  Age 18-66  Alian Federal benefit \$00  Adult Noncitizen Recipients  Age 65- Age 18-66  Age 18-66  Child recipients by number of parents  O parent  9.5 9.5 9.5 9.2%  1 parent	Characteristic of Adult Units			
One adult 18-64 264.5 278.4 95.0% Married couple unit 25.0 19.3 129.5% New York City Adult Recipients by Age  Age 65+ 160.4 149.0 107.7% Age 18-64 151.0 183.0 82.5% Total NYC Adult Recipients 311.4 332.0 93.8% Adult Units by Benefit Level One person age 65+  State supplement only 12.7 12.6 101.0% Federal benefit \$100 to \$200 27.4 28.9 94.6% Federal benefit \$200 to \$711 54.0 51.1 105.7% Federal benefit \$400 to \$771 54.0 51.1 105.7% Federal benefit \$710 or more 58.7 58.5 100.3% One person age 18-64 (with disability)  State supplement only 16.9 18.5 91.5% Federal benefit \$100 to \$200 11.4 16.0 71.3% Federal benefit \$400 to \$771 56.0 39.9 140.2% Federal benefit \$771 or more 140.8 160.0 88.0% Adult Noncitizen Recipients Age 65+ 32.7 38.7 84.3% Age 18-64 11.9 15.2 78.0% Child recipients by number of parents 0 parent 9.5 9.5 9.5 99.2% 1 parent 52.0 51.8 100.4%	Statewide by Type of Unit			
Married couple unit       25.0       19.3       129.5%         New York City Adult Recipients by Age       160.4       149.0       107.7%         Age 65+       160.4       149.0       107.7%         Age 18-64       151.0       183.0       82.5%         Total NYC Adult Recipients       311.4       332.0       93.8%         Adult Units by Benefit Level       97.6%       100.0%       <	One person age 65+	210.3	212.9	98.8%
New York City Adult Recipients by Age   Age 65+   160.4   149.0   107.7%   Age 18-64   151.0   183.0   82.5%   Total NYC Adult Recipients   311.4   332.0   93.8%   Adult Units by Benefit Level   One person age 65+   State supplement only   12.7   12.6   101.0%   Federal benefit \$100 to \$200   27.4   28.9   94.6%   Federal benefit \$100 to \$200   27.4   28.9   94.6%   Federal benefit \$400 to \$771   54.0   51.1   105.7%   Federal benefit \$771 or more   58.7   58.5   100.3%   One person age 18-64 (with disability)   State supplement only   16.9   18.5   91.5%   Federal benefit \$100 to \$200   11.4   16.0   71.3%   Federal benefit \$200 to \$400   24.1   26.2   92.0%   Federal benefit \$200 to \$400   24.1   26.2   92.0%   Federal benefit \$400 to \$771   56.0   39.9   140.2%   Federal benefit \$771 or more   140.8   160.0   88.0%   Adult Noncitizen Recipients   Age 65+   32.7   38.7   84.3%   Age 18-64   11.9   15.2   78.0%   Child recipients by number of parents   0 parent   9.5   9.5   99.2%   1 parent   52.0   51.8   100.4%	One adult 18-64	264.5	278.4	95.0%
Age 65+       160.4       149.0       107.7%         Age 18-64       151.0       183.0       82.5%         Total NYC Adult Recipients       311.4       332.0       93.8%         Adult Units by Benefit Level       One person age 65+       State supplement only       12.7       12.6       101.0%         Federal benefit < \$100	Married couple unit	25.0	19.3	129.5%
Age 18-64 Total NYC Adult Recipients 311.4 332.0 93.8%  Adult Units by Benefit Level One person age 65+  State supplement only Federal benefit \$100 to < \$200 Federal benefit \$400 to < \$771 Federal benefit \$771 or more  State supplement only 16.9 State supplement only Federal benefit \$100 to < \$200 17.4 Federal benefit \$400 to < \$400 18.5 Federal benefit \$400 to < \$771 19.6 Federal benefit \$771 or more 19.7 Federal benefit \$771 or more 19.7 State supplement only State supplement only Federal benefit \$100 to < \$200 11.4 Federal benefit \$100 to < \$200 11.4 Federal benefit \$100 to < \$200 11.4 Federal benefit \$200 to < \$400 15.3 Federal benefit \$100 to < \$200 11.4 Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$400 to < \$771 56.0 39.9 140.2% Federal benefit \$771 or more 140.8 Adult Noncitizen Recipients Age 65+ 32.7 38.7 Age 18-64 11.9 15.2 Child recipients by number of parents O parent 9.5 9.5 99.2% Child recipients by number of parents O parent 1 parent	New York City Adult Recipients by Age			
Total NYC Adult Recipients       311.4       332.0       93.8%         Adult Units by Benefit Level       90.00       24.0       12.6       101.0%         Federal benefit < \$100	Age 65+	160.4	149.0	107.7%
Adult Units by Benefit Level One person age 65+  State supplement only 12.7 12.6 101.0% Federal benefit < \$100 24.0 24.6 97.6% Federal benefit \$100 to < \$200 27.4 28.9 94.6% Federal benefit \$200 to < \$400 33.5 37.2 90.1% Federal benefit \$400 to < \$771 54.0 51.1 105.7% Federal benefit \$771 or more 58.7 58.5 100.3% One person age 18-64 (with disability)  State supplement only 16.9 18.5 91.5% Federal benefit \$100 to < \$200 11.4 16.0 71.3% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$400 to < \$771 56.0 39.9 140.2% Federal benefit \$771 or more 140.8 160.0 88.0%  Adult Noncitizen Recipients  Age 65+ 32.7 38.7 84.3% Age 18-64 11.9 15.2 78.0%  Child recipients by number of parents O parent 9.5 9.5 9.5 99.2% Child recipients by number of parents O parent 9.5 9.5 9.5 99.2%	Age 18-64	151.0	183.0	82.5%
One person age 65+         State supplement only       12.7       12.6       101.0%         Federal benefit < \$100	Total NYC Adult Recipients	311.4	332.0	93.8%
State supplement only       12.7       12.6       101.0%         Federal benefit < \$100	Adult Units by Benefit Level			
Federal benefit < \$100	One person age 65+			
Federal benefit \$100 to < \$200	State supplement only	12.7	12.6	101.0%
Federal benefit \$200 to < \$400	Federal benefit < \$100	24.0	24.6	97.6%
Federal benefit \$400 to < \$771	Federal benefit \$100 to < \$200	27.4	28.9	94.6%
Federal benefit \$771 or more 58.7 58.5 100.3%  One person age 18-64 (with disability)  State supplement only 16.9 18.5 91.5% Federal benefit \$100 15.3 17.8 85.9% Federal benefit \$100 to < \$200 11.4 16.0 71.3% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$400 to < \$771 56.0 39.9 140.2% Federal benefit \$771 or more 140.8 160.0 88.0%  Adult Noncitizen Recipients  Age 65+ 32.7 38.7 84.3% Age 18-64 11.9 15.2 78.0%  Child recipients by number of parents  0 parent 9.5 9.5 9.5 99.2% 1 parent 52.0 51.8 100.4%	Federal benefit \$200 to < \$400	33.5	37.2	90.1%
One person age 18-64 (with disability)  State supplement only 16.9 18.5 91.5% Federal benefit < \$100 15.3 17.8 85.9% Federal benefit \$100 to < \$200 11.4 16.0 71.3% Federal benefit \$200 to < \$400 24.1 26.2 92.0% Federal benefit \$400 to < \$771 56.0 39.9 140.2% Federal benefit \$771 or more 140.8 160.0 88.0%  Adult Noncitizen Recipients  Age 65+ 32.7 38.7 84.3% Age 18-64 11.9 15.2 78.0%  Child recipients by number of parents 0 parent 9.5 9.5 99.2% 1 parent 52.0 51.8 100.4%	Federal benefit \$400 to < \$771	54.0	51.1	105.7%
disability)       16.9       18.5       91.5%         Federal benefit < \$100	Federal benefit \$771 or more	58.7	58.5	100.3%
State supplement only       16.9       18.5       91.5%         Federal benefit < \$100	One person age 18-64 (with			
Federal benefit < \$100	disability)			
Federal benefit \$100 to < \$200	State supplement only	16.9	18.5	91.5%
Federal benefit \$200 to < \$400	Federal benefit < \$100	15.3	17.8	85.9%
Federal benefit \$400 to < \$771	Federal benefit \$100 to < \$200	11.4	16.0	71.3%
Federal benefit \$771 or more       140.8       160.0       88.0%         Adult Noncitizen Recipients       32.7       38.7       84.3%         Age 65+       32.7       38.7       84.3%         Age 18-64       11.9       15.2       78.0%         Child recipients by number of parents         0 parent       9.5       9.5       99.2%         1 parent       52.0       51.8       100.4%	Federal benefit \$200 to < \$400	24.1	26.2	92.0%
Adult Noncitizen Recipients       32.7       38.7       84.3%         Age 65+       32.7       38.7       84.3%         Age 18-64       11.9       15.2       78.0%         Child recipients by number of parents         0 parent       9.5       9.5       99.2%         1 parent       52.0       51.8       100.4%	Federal benefit \$400 to < \$771	56.0	39.9	140.2%
Age 65+       32.7       38.7       84.3%         Age 18-64       11.9       15.2       78.0%         Child recipients by number of parents       0 parent       9.5       9.5       99.2%         1 parent       52.0       51.8       100.4%	Federal benefit \$771 or more	140.8	160.0	88.0%
Age 18-64       11.9       15.2       78.0%         Child recipients by number of parents         0 parent       9.5       9.5       99.2%         1 parent       52.0       51.8       100.4%	Adult Noncitizen Recipients			
Child recipients by number of parents         0 parent       9.5       9.5       99.2%         1 parent       52.0       51.8       100.4%	Age 65+	32.7	38.7	84.3%
0 parent       9.5       9.5       99.2%         1 parent       52.0       51.8       100.4%	Age 18-64	11.9	15.2	78.0%
1 parent 52.0 51.8 100.4%	Child recipients by number of parents			
	0 parent	9.5	9.5	99.2%
2 parents 45.2 44.9 402.30/	1 parent	52.0	51.8	100.4%
2 parents	2 parents	15.3	14.8	103.2%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: Targets are from multiple sources. The primary sources were the Office of Temporary and Disability Assistance monthly statistics (tables 17, 18, and 19) and the federal government's SSI Annual Statistical Report, 2019, table 10. Adjustments are made to subtract out the estimated portion of the caseload that is institutionalized and the benefits paid to those individuals. Benefit amounts include both federal payments and state supplements.

## Cash Aid to Families Under Temporary Assistance to Needy Families (TANF) and Safety Net Assistance (SNA)

In New York, cash aid to families with low incomes with children is provided under the TANF block-grant program and also through state-funded "Safety Net Assistance" benefits. All the eligibility policies, including benefit levels, are established by the state, although there are some restrictions on the benefits that can be paid with federal TANF funds. In particular, benefits can be paid to families with adults for a maximum of 60 months, after which New York may transition families to Safety Net Assistance (SNA). Two-parent families with parents without disabilities are also served by SNA instead of TANF.

#### Methods and Targets

The ATTIS simulation of TANF and SNA identifies families with children who appear eligible for cash aid, computes their potential benefits based on their need standard and net income, and identifies a subset of the eligible families as receiving the benefits. Although the ACS does ask people to report whether they receive "any public assistance or welfare payments from the state or local welfare office," it appears that many of the benefits captured in this question are something other than TANF and SNA. Considering both parents and childless adults, a total of 290,000 New York adults are shown as having "public assistance and welfare payments" in the ACS survey, which exceeds the approximately 248,000 adults receiving TANF or SNA in the average month of 2019. Further, a portion of these reports are imputed by the Census Bureau to fill in missing data; and many individuals with these benefits in the survey data have income levels that make them seem ineligible for TANF or SNA. Focusing on families with children, only 45,000 families who reported cash aid in the survey appear eligible for TANF or SNA benefits—much lower than the 121,000 who received benefits in the average month of 2019. For these reasons, the reported data cannot be used as a foundation for the alternative policy modeling. Instead, the baseline simulation of cash assistance creates a caseload of recipients coming close to administrative targets and consisting entirely of people who appear eligible for the benefits.

The simulation takes a very detailed approach to determining TANF/SNA eligibility and benefit levels, capturing elements such as rules for non-citizens, the treatment of specific types of individuals such as stepparents, and the computation of earned income disregards, among other policies. The need standards used in the modeling reflect the combination of the basic grant, shelter allowance, home energy allowance and supplemental home energy allowance applicable to a family's size and county. Two caveats are important to note. First, county of residence is not identified for a portion of the households in the ACS data; for households living in areas of the state where the specific county is not identified, the need standard that is applied is a weighted average of the amounts applicable to all the unidentified counties. Second, the modeling does not incorporate the special needs amounts that, in the

<sup>&</sup>lt;sup>14</sup> The estimate of 248,000 counts each adult in a TANF/SNA assistance unit, counts the caretaker of a child-only unit, and counts childless adults with SNA.

actual program, may increase the needs standards (e.g. for establishment of a home, replacement of furniture or clothing, camp fees, and so on).

After modeling eligibility and potential benefits, the simulation then identifies a caseload of recipients from among the eligible families in a way that comes very close to the actual number and characteristics of recipients. Families who reported in the ACS survey that they received cash aid and who are determined to be eligible for TANF/SNA based on their family composition and income are automatically included in the simulated caseload. Additional eligible families (who did not report cash aid) are included to reach the targets.<sup>15</sup>

The administrative targets for the simulation come from multiple sources. The average monthly number of families who are included in the federal government's TANF statistics is obtained from OTDA's monthly statistics as of the middle of 2019. The number of families with children with SNA-funded benefits is obtained from a set of detailed tabulations provided by OTDA. These sources also provided the breakdown of each group of families (TANF and SNA) by residence in New York City compared with the balance of the state. Information on various key characteristics of the TANF portion of the caseload—by number of parents, race and ethnicity, age of youngest child, and so on—was obtained from the TANF administrative data available from the federal government (based on case-level data submitted by each state). That source also provided an estimate of aggregate spending on TANF benefits for New York families in 2019.<sup>16</sup>

#### **Baseline Results**

The simulated caseload of families receiving cash aid almost exactly matches the targeted caseload in overall size, by type of funding (TANF or SNA), and by the two primary areas of the state (table 5). The simulated caseload is also very similar to the targeted caseload along all of the following dimensions: number of parents; race/ethnicity of the family head; age of youngest child; number of children; presence of non-citizens in the assistance unit; and reason for child-only status. For the portion of families who are administratively considered TANF, the simulation falls somewhat short of the actual aggregate benefits during 2019; this could be due in part to inaccuracies in the need standards assigned to households whose county of residence is not recorded in the ACS data. A larger portion of the shortfall is likely due to the fact that the simulation does not capture the various "special needs" benefits that may augment the need standards.

<sup>&</sup>lt;sup>15</sup> In the case of individuals who truly reported cash aid but who appear ineligible for TANF or SNA, we reclassify the amounts so that they are still counted as income to the family, but not treated as TANF/SNA. However, if the survey-reported cash aid was "allocated" (imputed) by the Census Bureau to fill in missing data, that report is not automatically retained.

<sup>&</sup>lt;sup>16</sup> OTDA's monthly statistics for July 2019 were obtained from this webpage: <a href="https://otda.ny.gov/resources/caseload/">https://otda.ny.gov/resources/caseload/</a>. The detailed New York caseload data for families were provided by OTDA staff in a document titled "Local District Characteristics Supplement Data," and reflected March 2019. Federal TANF administrative data are made available by the federal Administration for Children and Families.

TABLE 5
Simulated Average Monthly Families with Children Receiving TANF and Safety Net Assistance in New York vs. Targets, 2019
Numbers of units in thousands unless otherwise specified

	Simulated Data	Target (Administrative	Simulated as Percent of
Average monthly families with TANE or CNA total	Simulated Data 121	Data) <sup>1</sup>	Target
Average monthly families with TANF or SNA, total	121	121	99.9%
By type of funding TANF	112	112	00.00/
	112	112	99.9%
SNA (families only)	9	9	99.6%
By substate area	77	77	400 50/
New York City	77	77	100.5%
Balance of the state	44	44	98.9%
Additional detail, TANF-funded families only	40.00	4000	
Aggregate benefits (millions) <sup>2</sup>	\$816.2	\$889.6	91.7%
Average monthly caseload by characteristics			
By type of unit			
Child only units	37	37	99.3%
Two parents in the unit	9	9	100.4%
One adult, with earnings	16	16	102.1%
One adult, without earnings	51	51	99.7%
By race/ethnicity of unit head			
Black non-Hispanic	44	44	99.9%
Hispanic	38	39	99.3%
White non-Hispanic	20	20	102.4%
Other or multiple races, non-	9	10	97.6%
Hispanic			
By age of youngest child in the unit			
0-2	30	30	100.2%
3-5	25	23	107.0%
6-11	34	34	99.9%
12-15	16	17	94.3%
16+	8	9	91.2%
By number of children			
1 child	50	49	102.2%
2 children	32	31	102.5%
3 or more children	26	27	97.7%
By presence of any non-citizens in the			
unit			
Yes	9	9	97.2%
No	103	103	100.2%
By reason for child-only status, among		· -	-
child-only units			
Non-parent caretaker	16	16	98.3%
Parent receives SSI	10	10	106.7%
Parent is ineligible non-citizen	10	10	98.6%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) Targets are from multiple sources. Counts of families with TANF-funded benefits, by area of the state, were obtained from OTDA's monthly statistics for July 2019, available from this webpage: <a href="https://otda.ny.gov/resources/caseload/">https://otda.ny.gov/resources/caseload/</a>. The number of families with SNA-funded benefits was developed from a

document provided by OTDA titled "Local District Characteristics Supplement Data," which reflected March 2019. Demographic characteristics of the TANF-funded families and the aggregate amount of TANF benefits was obtained from federal TANF administrative data made available by the federal Administration for Children and Families. (2) The simulation reflects benefits based on need standards without any special needs amounts. The target figure includes special needs additions to the need standards.

#### Public Assistance for Childless Adults and Couples

New York's "Safety Net Assistance" (SNA) program provides benefits to childless individuals and couples with very low incomes. (It also provides benefits to families with children who are not being served by TANF-funded assistance. That portion of the program is modeled in combination with our modeling of the TANF program, as described above.) The overall structure of SNA benefits for childless individuals and couples is the same as for cash aid for families; however, there are some differences. One specific demographic requirement for the childless benefits is that individuals eligible for SSI must apply for that benefit (although they can receive SNA while they are waiting to be approved for SSI). There are also restrictions on the eligibility of minors. Regarding financial aspects of the program, individuals and couples with earnings who are applying for SNA are allowed to take the work expense disregard but not the earned income disregard. Also, for a unit of a particular size, the shelter portion of the need standard is lower for a childless unit than for a unit with children.

#### Methods and Targets

For this project, we augmented the ATTIS model's capabilities to simulate New York's SNA benefits for childless individuals and adults. As discussed in the section describing the modeling of cash aid for families, the ACS does include a question asking about cash assistance, but it appears that the question captures types of benefits in addition to TANF and SNA, and many people reporting cash aid do not appear eligible for SNA based on their income; also, much of the cash assistance in the survey data is imputed by the Census Bureau rather than having been truly-reported. Among childless adults and couples who truly reported cash aid, there are 41,000 who appear eligible for SNA benefits—much lower than the 108,000 who received benefits in the average month of 2019. The baseline simulation is performed to identify a caseload of childless adults receiving SNA that comes close to administrative targets and that consists entirely of people eligible for the benefit.

As with the modeling of cash benefits for families, the simulation of childless SNA benefits identifies people and couples who appear eligible for cash aid and computes their potential benefits based on their need standard and net income. The need standards used in the modeling reflect the combination of the basic grant, shelter allowance, home energy allowance, and supplemental home energy allowance applicable to a family's size and county. (As noted in the discussion of TANF, county of residence is not identified for a portion of the households in the ACS data; for those living in areas of the state for which county is not identified, the need standard that is applied is a weighted average of the amounts applicable to all the unidentified counties.)

The simulation then identifies a caseload of recipients from among the eligible units in a way that comes very close to the actual number and characteristics of recipients. Childless individuals and

couples who reported in the ACS survey that they received cash aid and who are determined to be eligible for SNA based on their family composition and income are automatically included in the simulated caseload. Additional eligible individuals and couples (who did not report cash aid) are included to reach the targets.<sup>17</sup>

The administrative targets for the numbers of childless SNA cases—in total and by the two main areas of the state—were obtained from state data sources, with adjustment to remove the estimated portion of recipients living in homeless shelters or congregate care settings or who are unhoused (since those individuals are not included in the data being used for modeling). One of the state data sources—provided by OTDA—was a detailed tabulation of childless recipients by numerous characteristics; this source provided caseload targets by age group, gender, disability status, and educational attainment.<sup>18</sup>

#### **Baseline Results**

The simulated number of childless units receiving SNA almost exactly matches the targeted caseload in overall size and by the two primary areas of the state (table 6). The simulated caseload is also very similar to the targeted caseload along all of the following dimensions: individual units vs. couple units; men vs. women; age group; educational attainment; and citizenship status. We cannot assess the aggregate simulated benefits because we did not obtain a target appropriate for the portion of the program that we are modeling (the benefits only for childless individuals in households, not counting those who are unhoused, in institutions, or in other group quarters).

<sup>&</sup>lt;sup>17</sup> Childless individuals who reported cash aid in the survey but who do not appear to be eligible for SNA are assumed to be reporting some other type of income; we reclassify these amounts so they are still counted as income but not considered to be SNA. If the survey-reported cash aid was "allocated" (imputed) by the Census Bureau to fill in missing data, that report is not retained.

<sup>&</sup>lt;sup>18</sup> The detailed New York caseload data for childless individuals and couples were provided by OTDA staff in a document titled "Local District Characteristics Supplement Data," and reflected March 2019. We also obtained overall caseload statistics, as of July 2019, from this state government webpage: <a href="https://otda.ny.gov/resources/caseload/">https://otda.ny.gov/resources/caseload/</a>. We adjusted the March caseloads of childless adults slightly for consistency with the July 2019 caseload data.

TABLE 6
Simulated Average Monthly Childless Individuals and Couples Receiving Safety Net Assistance in New York vs. Targets, 2019

Numbers of units in thousands unless otherwise specified

		Target	
		(Administrative	Simulated as
	Simulated Data	Data)¹	Percent of Target
Average monthly childless units with SNA	108	108	99.9%
By substate area			
New York City	81	81	100.0%
Balance of the state	27	27	99.6%
By type of unit			
Individual	99	98	100.2%
Couple	9	10	96.9%
Aggregate annual benefits (millions)	\$515.0	2	
Average monthly individual recipients (not			
units) by characteristics			
By sex of recipient			
Men	63	65	96.0%
Women	54	53	103.2%
By age group			
<= 29	17	17	101.1%
30-49	37	38	97.1%
50-64	44	42	102.7%
65+	20	21	94.3%
By highest educational degree			
Less than high school	51	53	95.7%
High school diploma only	54	55	99.0%
Associate degree	5	3	134.7%
College degree or higher	7	7	109.0%
By citizenship status			
Noncitizen	28	28	101.6%
Citizen	89	91	98.9%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) The number of families with SNA-funded benefits was developed from a document provided by OTDA titled "Local District Characteristics Supplement Data," which reflected the SNA caseload in March 2019. The aggregate numbers were adjusted slightly to correspond to July 2019 caseloads as reported in OTDA's monthly statistics (for consistency with the targets for families with children). The targets were further adjusted to represent only those recipients living in households. (2) We did not locate a dollar target for the portion of SNA benefits paid to childless adults living in the community (excluding those living in institutions, living in congregate care settings and other group quarters, and unhoused).

#### **Child Care Subsidies**

The Child Care and Development Fund (CCDF) provides child care subsidies for families with low incomes and with children through age 12 or with special needs. Under this block grant program funded by federal and state resources, states operate within federal guidelines but set many of their own policies for who receives assistance and the benefit amounts. In New York, policy decisions may also vary at the local level, with districts having leeway in setting certain policies, such as benefit amounts.

#### **Methods and Targets**

Receipt of child care subsidies is not reported in the ACS. Therefore, in modeling subsidy eligibility and receipt, we must simulate a caseload that reflects the number and characteristics shown in the program administrative data. The baseline process includes the following steps:

- Determine which families and children are eligible for child care subsidies, based on detailed program rules
- Select children and families to receive subsidies based on characteristics of the actual caseload as reported in administrative data
- For families simulated to receive a subsidy, calculate a benefit amount based on the program rules and the family's size and income

We obtained the administrative data targets for the baseline alignment from communication with the state and published caseload data. 19

We aligned to New York State caseload targets for the average monthly number of families and children served; children by ages, race and ethnicity, and family type; and families by TANF receipt, employment status, and copayment (\$0 or positive). We were able to obtain additional detail specific to New York City for selected targets, and further aligned New York City's simulated caseload to reach targets for the average monthly number of families and children served and child race and ethnicity.

#### **Baseline Results**

We came close to target (within three percent) for New York State and New York City for the average monthly number of families and children served (table 7). We were also close to target for most of the age groups of children. We were further from target for children ages 13 and older. However, this is a very small target (only 400 children), meaning the simulated caseload for this age group is not very far off of target in real numbers (with a difference of fewer than 300 children). We also came close to

<sup>&</sup>lt;sup>19</sup> OTDA communicated with the New York State Office of Children and Family Services to obtain targets for race and ethnicity and ages of children for both New York State and New York City. The average child caseload target was calculated using the number of children reported in table 17 in the FY 2019 and FY 2020 "Statistical Report on the Operations of New York State Public Assistance Programs" available from <a href="https://otda.ny.gov/resources/legislative-report/2019-Legislative-Report.pdf">https://otda.ny.gov/resources/legislative-report/2019-Legislative-Report.pdf</a> and https://otda.ny.gov/resources/legislative-report/2020-Legislative-Report.pdf. Additional targets were obtained from the 2019 CCDF statistics from the US Department of Health and Human Services, Administration for Children and Families, Office of Child Care (OCC) available here: <a href="https://www.acf.hhs.gov/occ/data/fy-2019-ccdf-data-tables-final">https://www.acf.hhs.gov/occ/data/fy-2019-ccdf-data-tables-final</a>, 2019 expenditure data from OCC available here <a href="https://www.acf.hhs.gov/occ/data/fy-2019-ccdf-state-expenditure-data">https://www.acf.hhs.gov/occ/data/fy-2019-ccdf-data-tables-final</a>, and microdata from OCC available here (2018 data were the latest available at the time the baseline was completed): <a href="https://www.childandfamilydataarchive.org/cfda/archives/cfda/studies/38203">https://www.childandfamilydataarchive.org/cfda/archives/cfda/studies/38203</a>. The TANF target was obtained from the TANF-SSP administrative data (data provided by each state to the federal government); FY 2019 annual tabulations are available here: <a href="https://www.acf.hhs.gov/ofa/data/characteristics-and-financial-circumstances-tanf-recipients-fiscal-year-2019">https://www.acf.hhs.gov/ofa/data/characteristics-and-financial-circumstances-tanf-recipients-fiscal-year-2019</a>.

target on family type (single or two parents), the employment status of parents and guardians, and \$0 vs. positive copayments, with our simulated caseload within three percent of target on each of these.

One target that was not fully reached was the number of subsidized families who also have TANF income; the simulated number equals 79 percent of the targeted figure. However, this particular target is subject to some uncertainty.<sup>20</sup> To the extent that the simulated CCDF caseload includes somewhat too few current TANF recipients, our modeling of alternative CCDF policies could mis-estimate the impacts on TANF families.

In aligning the simulated caseload to targets by race and ethnicity, we encountered limitations in the administrative data. Overall, 15 percent of the caseload at the state level and 19 percent of the caseload for New York City could not be classified into the racial and ethnic groups used for the alignment, either due to missing data or reporting multiple races or additional races. Therefore, we based the alignment on the available data (known for 85 percent of the state caseload and 81 percent of the city caseload), with the available data serving as a minimum target in the alignment process since we did not have information about how the unclassified portion of the caseload would be distributed among the racial and ethnic groups used for the alignment. For all groups, in both New York State and New York City, we were within one percent of reaching the minimum targets for race and ethnicity, any in most cases exceeded the minimum target.

Finally, due to complications with the available data on subsidy value (amount of the subsidy paid to providers minus the family's copayment), we did not align to targets for this factor. The target amount shown in the table reflects the CCDF expenditures on direct services in 2019 from all expenditure years, as reported in the published Office of Child Care tables.<sup>21</sup> We show an overall subsidy value that is 85 percent of the target. Given the available information, we determined that no additional alignment could be made to the subsidy value without coming out of alignment on other factors.

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<sup>&</sup>lt;sup>20</sup> The size of the overlap between TANF and CCDF according to the TANF administrative data is somewhat different than the size according to the CCDF administrative data. Further, it is unclear if all families identified as TANF recipients in the CCDF administrative data are current recipients.

<sup>&</sup>lt;sup>21</sup> In order to come closer to this target, we would have had to select many more families with no copayments or increase the simulated payment rates to providers. Based on the available data, we did not believe more families should be selected to pay no copayment, and the provider payment rates used in the model reflect the published CCDF payment rates used in each district.

TABLE 7
Simulated Average Monthly Families and Children Receiving CCDF in New York vs. Targets, 2019
Numbers in thousands unless otherwise specified

		Target (Administrative	Simulated as Percent of
	Simulated	` Data)¹	Target
Average monthly number of families, statewide	60.4	61.6	98.1%
Average monthly number of children, statewide	105.8	103.7	102.1%
Aggregate subsidy value (mill \$), statewide <sup>2</sup>	600.5	702.7	85.5%
Statewide average monthly number of children			
By age of child			
0-2	28.3	28.4	99.5%
3-5	35.0	35.3	99.1%
6-12	41.9	39.6	105.8%
13+	0.7	0.4	170.2%
By race and ethnicity (minimum percent of caseload) <sup>3</sup>	0.7	0.4	170.2%
Black, non-Hispanic	40.5%	>= 33.6%	meets minimum <sup>3</sup>
Hispanic	31.1%	>= 28.7%	meets minimum <sup>3</sup>
White, non-Hispanic	28.4%	>= 22.6%	meets minimum <sup>3</sup>
By family type			
Single parent	88.2	85.6	103.1%
Two parents	17.6	18.1	97.3%
Statewide, average monthly number of			
families			
Receiving TANF	14.3	18.1	79.0%
Employed parent or guardian	51.7	55.6	92.9%
By copayment			
Percent with no copayment	39.3%	39.7%	96.9%
Percent with positive	60.7%	60.3%	98.9%
copayment			
New York City			
Average monthly number of families	39.3	40.3	97.3%
Average monthly number of children	69.5	67.2	103.4%
Average month number of children by			
race and ethnicity (minimum percent			
of caseload) <sup>3</sup>			
Black, non-Hispanic	49.3%	>= 33.9%	meets
	22.70/	20.50/	minimum³
Hispanic	32.7%	>= 28.6%	meets minimum <sup>3</sup>
White, non-Hispanic	17.9%	>= 18.1%	within 1% of
			minimum <sup>3</sup>

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) Targets for the average monthly number of children and families, race and ethnicity, and ages of children were provided by New York. All other targets are derived from published tables and 801 administrative data from the US Department of Health and Human Serves, Administration for Children in Families, Office of Child Care. (2) The aggregate subsidy value target represents the expenditures on direct services in 2019 from all expenditure years, as reported in the published Office of Child Care tables. (3) The race and ethnicity targets were

provided by OTDA. With a large number of children not classified under a specific racial and ethnic group, we used the reported percentages as a minimum target for each group.

## Public and Subsidized Housing Through Federal Programs

The ATTIS public and subsidized housing simulation captures programs funded by the Department of Housing and Urban Development (HUD).<sup>22</sup> The estimates do not capture non-HUD assistance programs, including New York City rent subsidy programs. Renter households must meet income eligibility limits and have a required rental contribution less than the HUD Fair Market Rent (FMR) to be counted as eligible for assistance.

#### Methods and Targets

The ACS does not ask whether a household lives in public or subsidized housing. The primary functions of the public or subsidized housing baseline simulation are to:

- determine which households in the ACS are eligible for public or subsidized housing
- calculate the required rental contribution and subsidy
- assign participation to a subset of eligible households, producing a simulated caseload that is reasonably close to administrative records on the number and characteristics of HUD public and subsidized housing recipients

Households selected to participate in public or subsidized housing are assigned a subsidy equal to the difference between their required rental contribution and the FMR.

Baseline targets, for New York City and the rest of New York, were obtained from the HUD Picture of Subsidized Households data.<sup>23</sup>

Note that we are describing here the methods for modeling HUD public and subsidized housing programs, rather than describing survey-reported data on rent payments or rent burden. Because the ACS asks for information on rent paid, rent burden can be readily computed, and that information will be examined as part of considering possible policy changes related to rent burden. (Those computations will use the survey-reported rent payments; there will be no alignment involved because there are no administrative targets for the portion of the state population that is rent-burdened.) However, none of the households identified by the baseline simulation as being in public or subsidized housing will be classified as rent-burdened. Under the rules of HUD public and subsidized housing programs, households are required to pay the greater of 10 percent of gross income or 30 percent of income after

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<sup>&</sup>lt;sup>22</sup> These programs include the Housing Choice Voucher program, Section 8 project-based assistance, public housing, and smaller HUD programs including the section 236 rental housing assistance program, section 202 housing for the elderly, and section 811 housing for the disabled.

<sup>&</sup>lt;sup>23</sup> For more information, see the "Picture of Subsidized Households" from the US Department of Housing and Urban Development (HUD), available here: <a href="https://www.huduser.gov/portal/datasets/assthsg.html">https://www.huduser.gov/portal/datasets/assthsg.html</a>

certain deductions on rent. By this definition, they pay less than 30 percent of total income on rent and are not considered rent burdened.

#### **Baseline Results**

ATTIS meets the target for assisted households overall for the state and separately for New York City and the balance of the state (table 8A). The simulation somewhat exceeds the targets for the rents paid by the assisted households and for their average income. The average simulated required rental payment is 7.5 percent above the administrative target in New York City and 3.8 percent above the administrative target in the balance of the state. The average annual income of assisted households is 9.5 percent above the administrative target for the state.

We also compute each assisted household's subsidy amount (although we did not obtain a target for average subsidies). Statewide, the average value of the housing subsidy is \$1,111 per month, with a substantially higher average among assisted households in New York City (\$1,322) than among assisted households in the remainder of the state (\$694). These averages can be compared to the average FMR values (which can be computed, for each part of the state, by summing the average rent payment and the average subsidy). It appears that assisted households in New York City, while paying higher average rents, pay a lower portion of the total value of the fair market rent. In New York City, the average rental payment (\$542) is approximately 29 percent of the average of their fair market rents (\$1,864); while in the balance of the state, the average rental payment (\$421) is approximately 38 percent of the average of the fair market rents (\$1,115).

Table 8B shows the percentage distribution of assisted households by characteristic. For example, 75 percent of simulated participants and 75 percent of households according to the administrative target have income below 30 percent of area median income (AMI) in New York City. The baseline is within 1 percentage point of the administrative target in New York City for assisted households by percent of AMI, race and ethnicity of the household head, and household composition and within 2 percentage points of the administrative target for these characteristics in the balance of the state.

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<sup>&</sup>lt;sup>24</sup> Note that these percentages likely differ somewhat from the percentages that would be obtained if we computed each assisted household's required rent as a percentage of their FMR and then averaged those percentages.

TABLE 8A
Simulated Selected Housing Results in New York vs. Targets, 2019
Households in HUD funded Public or Subsidized Housing

		Target	
		(Administrative	Simulated as
	Simulated	Data)¹	Percent of Target
Total households with Subsidy (thousands)	547	546	100.1%
New York City total households	363	363	100.0%
(thousands)			
Balance of State total households	184	184	100.3%
(thousands)			
Average Rent Per Month	\$501	\$471	106.4%
New York City average rent	\$542	\$504	107.5%
Balance of State average rent	\$421	\$406	103.8%
Average Subsidy Per Month	\$1,111	2	
New York City average subsidy	\$1,322	2	
Balance of State average subsidy	\$694	2	
Average Size of Household	2.1	2.1	98.6%
Average Total Household Income Per Year	\$21,656	\$19,783	109.5%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) Baseline targets, for New York City and the rest of New York, were obtained from the HUD Picture of Subsidized Households data (<a href="https://www.huduser.gov/portal/datasets/assthsg.html">https://www.huduser.gov/portal/datasets/assthsg.html</a>). (2) No targets are available for average subsidy amounts.

TABLE 8B

Simulated Selected Housing Results in New York vs. Targets, 2019 (continued)

Percent distribution of households in HUD funded public or subsidized housing by selected characteristics

		Target (Administrative	Percentage Point
	Simulated	Data)	Difference
Percent distribution of assisted households			
in New York State			
Percent of Area Median Income			
Less than 30%	74%	74%	<1
30% to less than 50%	18%	18%	<1
50% and above	8%	8%	<1
By race/ethnicity of unit head			
White non-Hispanic	26%	25%	1
Black non-Hispanic	34%	35%	-1
Hispanic	35%	35%	<1
Multiple and other races, non-	5%	5%	<1
Hispanic			
Household Composition (Overlapping			
Categories)			
Elderly Head or Spouse	42%	42%	<1
Disabled Non-Elderly Head or	21%	20%	1
Spouse			
Household Contains Children	30%	30%	<1
Female Head with Children	25%	26%	-1

		Target	Percentage Point Difference
	Simulated	(Administrative Data)	
Percent distribution of assisted households			
in New York City			
Percent of Area Median Income			
Less than 30%	75%	75%	<1
30% to less than 50%	15%	16%	-1
50% and above	9%	9%	<1
By race/ethnicity of unit head			
White non-Hispanic	13%	13%	<1
Black non-Hispanic	35%	36%	-1
Hispanic	46%	45%	1
Multiple and other races, non-	6%	6%	<1
Hispanic			
Household Composition (Overlapping			
Categories)			
Elderly Head or Spouse	44%	44%	<1
Disabled Non-Elderly Head or	18%	17%	<1
Spouse			
Household Contains Children	30%	30%	<1
Female Head with Children	25%	25%	<1
Percent distribution of assisted households			
in the balance of the State			
Percent of Area Median Income			
Less than 30%	70%	72%	-2
30% to less than 50%	23%	22%	1
50% and above	7%	6%	1
By race/ethnicity of unit head	,,,	<b>3</b> ,,	_
White non-Hispanic	51%	49%	2
Black non-Hispanic	31%	33%	-2
Hispanic	15%	15%	<1
Multiple and other races, non-	3%	3%	<1
Hispanic	370	3/0	<b>\1</b>
Household Composition (Overlapping			
Categories)			
	200/	200/	-1
Elderly Head or Spouse	38%	38%	<1
Disabled Non-Elderly Head or	26%	26%	<1
Spouse	200/	200/	.4
Household Contains Children	30%	30%	<1
Female Head with Children	27%	28%	1

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: Baseline targets, for New York City and the rest of New York, were obtained from the HUD Picture of Subsidized Households data (<a href="https://www.huduser.gov/portal/datasets/assthsg.html">https://www.huduser.gov/portal/datasets/assthsg.html</a>).

## Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP) provides monthly benefits to families through an electronic benefits transfer card for use in purchasing food. SNAP is a federal benefit administered by the states. Benefits are available to families who have income below specific financial limits. People aged 18 to 49 who live in a household without a dependent child can only receive three

months of SNAP benefits unless they meet work requirements, have a disability, or live in an area in which the time limit is waived due to high unemployment. The maximum monthly SNAP benefit increases with family size. The maximum benefit in fiscal year 2019 was \$193 for a single individual and \$506 for a three-person family. SNAP benefits phase out as income rises.

#### Methods and Targets

The ACS asks whether a household receives SNAP but does not ask the value of the benefit. Fewer households report receipt of benefits than administrative data suggest is correct. In addition, some people who appear ineligible for SNAP report SNAP benefits in the ACS. The primary functions of the SNAP baseline simulation are to:

- determine which individuals and families in the ACS are eligible for SNAP
- calculate the SNAP benefit based on income and other characteristics
- adjust for underreporting of SNAP receipt in the ACS data, producing a simulated caseload that is reasonably close to administrative records on the number and characteristics of SNAP recipients

Although the ACS survey asks respondents if they received SNAP benefits, the information is underreported. A total of 1,043,000 New York households in the ACS report receiving SNAP at some point in the prior 12 months covered by the survey. However, according to the administrative targets used for this analysis, 1,425,000 households received SNAP in New York in the average month of 2019. The baseline simulation of SNAP compensates for that underreporting and also simulates benefit amounts (which are not reported in the ACS data).

Overall targets for these simulations, for New York City and the rest of New York, were obtained from OTDA.<sup>25</sup> We adjusted the targets to remove individuals living in group quarters based on data in the ACS.<sup>26</sup> We aligned to state level targets for the characteristics of participating households from SNAP Quality Control (QC) data.<sup>27</sup>

#### **Baseline Results**

We aligned the results as closely as possible to the administrative targets for the number of participating SNAP units (households) for New York City and the balance of the state. We align to state level targets for unit type, receipt of TANF, receipt of SSI, presence of earnings, immigrant and

<sup>&</sup>lt;sup>25</sup> We calculated the average monthly number of participating households from table 16 of NY OTDA Monthly Caseload Statistics for January through December 2019. For more information, see <a href="https://otda.ny.gov/resources/caseload/">https://otda.ny.gov/resources/caseload/</a>.

<sup>&</sup>lt;sup>26</sup> People living in group quarters are not included in the ATTIS data and so we remove them from the targets. This adjustment reduced the target number of participating households by 5.4 percent in New York City and by 4.4 percent in the rest of New York.

<sup>&</sup>lt;sup>27</sup> The SNAP QC data are available on the USDA Food and Nutrition Service website at: https://www.fns.usda.gov/resource/snap-quality-control-data.

citizenship status of the household head, and race and ethnicity of the household head. Our aligned caseload is within 2 percent of the number of units and people receiving SNAP in New York City and the balance of New York (table 9). Annual benefits are close to target for the balance of New York but 18 percent below target for New York City. This shortfall in annual benefits in New York City could arise if we have underestimated the extent to which benefits are distributed to people living in group quarters (and so should be removed from our administrative target) or because simulated participants are eligible for somewhat lower benefits than actual participants according to administrative data. If the shortfall is due to underestimation of benefits for people in the survey data, this could contribute to an over-estimate of the number and share of people in poverty. However, whether poverty is underestimated or overestimated overall depends on many factors—including the accuracy of data reported in the survey and the extent to which simulated benefits match administrative totals across a variety of programs.

Considering key demographic characteristics, the simulated caseload is 8 percent below the administrative target for units with a member with a disability and for units with SSI (and not TANF). The simulation comes within 1 percent of the administrative target for units with an elderly member and units with children. We are 10 percent above target for units with earnings and 3 percent below target for units without earnings. The baseline simulation exceeds the target for units headed by a naturalized person by 5 percent and are about 2 percent below the administrative target for units headed by a native-born person. We are within 1 percent of the target for units headed by a noncitizen. We are also within 1 percent of target for the number of units by the race and ethnicity of the head of the unit.

TABLE 9
Simulated Selected SNAP Results in New York vs. Targets, 2019<sup>1</sup>
Numbers in thousands

	Target		
	(Administrative Simula		
	Simulated	Data)²	Percent of Target
New York (Total)			
Units (avg month)	1,427	1,425	100.1%
Persons (avg month)	2,571	2,553	100.7%
Annual Benefits	3,748	4,223	88.7%
New York City			
Units (avg month)	842	841	100.1%
Persons (avg month)	1,477	1,478	99.9%
Annual Benefits	2,125	2,593	81.9%
Balance of New York			
Units (avg month)	585	584	100.2%
Persons (avg month)	1,094	1,074	101.8%
Annual Benefits	1,623	1,630	99.6%
New York (Total State)			
Units with Elderly Member	599	591	101.2%
Units with Disabled Person	272	296	92.0%
Units with Children	440	436	100.9%
Units Receiving TANF <sup>3</sup>	111	112	99.6%
Units with SSI (and no TANF)	426	462	92.1%
Units with Earnings	373	338	110.4%
Units Without Earnings	1,053	1,087	96.9%
Household Head is			
Unauthorized Immigrant	31	31	100.7%
Legal Permanent	177	176	100.5%
Resident/Refugee			
Naturalized	305	290	105.2%
Native	913	928	98.5%
Household Head is <sup>4</sup>			
White, Non-Hispanic	498	495	100.6%
Black, Non-Hispanic	368	369	99.6%
Hispanic	424	425	99.7%
Other, Non-Hispanic	137	135	101.4%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) Characteristics other than immigrant status and race and ethnicity are overlapping categories. (2) Overall targets for these simulations, for New York City and the rest of New York, were obtained from the Office of Temporary and Disability Assistance, and adjusted to remove individuals living in group quarters based on data in the ACS. We aligned to state level targets for the characteristics of participating households from SNAP Quality Control (QC) data. (3) We assume that families with children classified as having other public assistance in the SNAP QC data have TANF. (4) We assume that households with missing race/ethnicity in the SNAP QC data are distributed the same across race and ethnicity as households with reported characteristics.

# Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides resources for the purchase of specific food items, as well as nutrition counseling and connections to other services. The recipients include infants, children ages 1 through 4 (prior to their 5<sup>th</sup> birthday),

postpartum women (in their first year after giving birth), and pregnant women. WIC eligibility rules are determined primarily at the federal level, with some state flexibility in certification periods.

## **Methods and Targets**

The simulation of the WIC program in ATTIS captures the key aspects of eligibility, including eligibility based on family income and "adjunctive eligibility" based on receipt of certain other benefits. The model also assigns a portion of postpartum women as non-breastfeeding, which results in their being eligible for only half of the year, while the remainder are treated as breastfeeding and therefore eligible for the entire postpartum year. However, because the ACS does not identify pregnancy, the model cannot identify that component of the caseload; therefore, the simulated WIC caseload includes only infants, young children, and postpartum women.

The ACS does not ask any questions about WIC enrollment; therefore, the entire simulated caseload is selected from among the people identified as being eligible, in such a way as to come close to the actual data on the size and characteristics of the recipients. Statewide targets for this simulation were obtained from the US Department of Agriculture, Food and Nutrition Service, and New York City caseload targets were obtained from publicly available data from New York City.<sup>28</sup>

Simulated participants are assigned a per-person benefit based on the actual average WIC benefits paid in New York in 2019, with variation by type of person—infants, children, and women. In the case of infants—whose food benefit consists of infant formula—the benefit that is assigned is the full value of the formula, rather than the lower amount that is paid by the government following rebates.

#### **Baseline Results**

The ATTIS simulation of WIC comes very close to targets for infants and children receiving WIC in New York State. Overall, the simulated caseload is within 2 percent of the actual number of infants in New York who receive WIC and within 1 percent of the number of children who receive WIC (table 10). The simulation also comes very close to targets for children with WIC by each age from 1 to 4, and to targets for the combined group of infants and children by race and ethnicity. Further, the simulated caseload almost exactly reaches the targeted breakdown of the infants and children with WIC between New York City and the balance of the state.

Regarding the women who receive WIC, as explained above, we are not able to capture the portion of the caseload that consists of pregnant women. The average monthly number of postpartum women who are identified as WIC recipients (who are all mothers of WIC-enrolled infants) make up about 44 percent of the total. (Note that the average monthly number of postpartum women in the simulated

<sup>&</sup>lt;sup>28</sup> For data used for the statewide targets, see the "WIC Data tables" published September 2019 available here: <a href="https://www.fns.usda.gov/pd/wic-program">https://www.fns.usda.gov/pd/wic-program</a>. For data used for the New York City targets, see "Fact Sheet: WIC Enrollment Trends in New York City" available here <a href="https://www.nyc.gov/assets/immigrants/downloads/pdf/fact-sheet-wic-enrollment-trends-february-2020.pdf">https://www.nyc.gov/assets/immigrants/downloads/pdf/fact-sheet-wic-enrollment-trends-february-2020.pdf</a>.

caseload is below the average monthly number of infants because non-breastfeeding mothers are eligible for only the first 6 months, and because not all infants live with their mothers.) However, because the simulation is not able to capture the portion of the program that assists pregnant women, we somewhat understate the total financial benefit provided by WIC to New York families with low incomes.

TABLE 10
Simulated Units Receiving WIC in New York vs. Targets, 2019
Numbers in thousands

		Target	
		(Administrative	Simulated as
	Simulated	Data)¹	Percent of Target
Average monthly recipients, by type			
Infants	90	88	102.0%
Children	196	197	99.5%
Women	38	86	44.1%
Annual food expenditures (pre-rebate; millions)	\$352.0	\$378.3	93.0%
Statewide, infants and children			
Child recipients by age			
Age 1	68	68	101.0%
Age 2	53	53	98.9%
Age 3	46	47	97.3%
Age 4	29	29	100.8%
By Race/Ethnicity			
White non-Hispanic	85	85	100.1%
Black non-Hispanic	55	55	100.5%
Hispanic	104	103	100.4%
Multiple and other races, non-	42	42	100.0%
Hispanic			
Infants and children by area of the state			
New York City	158	158	100.0%
Balance of the state	128	127	100.7%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

Notes: Statewide targets for each type of recipients are from Food and Nutrition Service (FNS) administrative data. The target for the New York City caseload is from a New York City government document: <a href="https://www.nyc.gov/assets/immigrants/downloads/pdf/fact-sheet-wic-enrollment-trends-february-2020.pdf">https://www.nyc.gov/assets/immigrants/downloads/pdf/fact-sheet-wic-enrollment-trends-february-2020.pdf</a>. The target for aggregate food spending is obtained by multiplying per-person food costs by the size of the actual caseload, using the pre-rebate value of infant formula. Following the infant formula rebate, the aggregate spending on WIC food in fiscal year 2019 was \$237.9 million, according to FNS (<a href="https://fns-prod.azureedge.us/sites/default/files/resource-files/24wicfood\$-3.pdf">https://fns-prod.azureedge.us/sites/default/files/resource-files/24wicfood\$-3.pdf</a>).

# Home Energy Assistance Program (HEAP)

New York's Home Energy Assistance Program (HEAP), funded through the federal Low Income Home Energy Assistance Program (LIHEAP) block grant, provides families with income within the eligibility guidelines with funds to offset home energy costs. Most of the benefits are for heating, and households receive a single amount for the heating season. A large portion of New York's HEAP recipients are

households that also receive Temporary Assistance or SNAP, who are identified through an "autopay" process and automatically provided with the benefit. Other households may apply for the benefit. The value of the benefit is relatively small for households who rent their homes and whose rent includes their utility costs; in 2019, a renter household without a housing subsidy, with utilities included in the rent, and with income below 130 percent of the poverty guidelines was eligible for a HEAP benefit of \$35. For households that pay for their own heating, the base benefit ranges from \$350 to \$675 depending on the type of heating they use, and that amount can be further incremented for lower income households and those with a member who is either under age 6, age 60 or older, or with a permanent disability.

## Methods and Targets

ATTIS identifies households that appear eligible for HEAP and computes a benefit for each household. The simulated benefits incorporated survey-reported information on renter status and survey-reported information on the primary type of fuel for heating. Most renter households were treated as not paying separately for rent; a portion of home-owners were assumed to pay separately. The simulation then selects a caseload of recipients that comes close to the size and key characteristics of the actual caseload. Because there is no information on HEAP benefits in the ACS survey, the modeled caseload is entirely simulated.

The targeted caseload—in total and within each of the two primary areas of the state—was obtained from the OTDA monthly statistics document capturing a full fiscal year of benefits. Key characteristics of the caseload—by presence of different types of vulnerable members in the household and by income level relative to the poverty guidelines—were obtained from a federal government database.<sup>29</sup>

#### **Baseline Results**

The ATTIS simulation of HEAP almost exactly matches the total number of households with HEAP, the distribution of the households by whether or not they live in New York City, and the aggregate annual benefits (table 11). The simulated caseload has somewhat too many households including a person age 60 or older, but is very close to target for the portion of the caseload including a person with a disability or a person under age 6. The simulated caseload is reasonably close to targets by income level, but includes somewhat too many households with incomes over 150 percent of the poverty guidelines.

<sup>&</sup>lt;sup>29</sup> The aggregate HEAP caseload was obtained from OTDA's monthly statistics document for September 2019 (<a href="https://otda.ny.gov/resources/caseload/2019/2019-09-stats.pdf">https://otda.ny.gov/resources/caseload/2019/2019-09-stats.pdf</a>) which captured HEAP caseload and benefits as of the end of the fiscal year. (Data for the end of FY 2020 were very similar.) The key demographic characteristics of New York's HEAP caseload were obtained from the federal government's LIHEAP Data Warehouse, available here <a href="https://liheappm.acf.hhs.gov/datawarehouse/custom\_reports">https://liheappm.acf.hhs.gov/datawarehouse/custom\_reports</a>.

TABLE 11
Simulated Average Monthly Households Receiving HEAP in New York vs. Targets, 2019
Numbers of households in thousands unless otherwise specified

	Target		
		(Administrative	Simulated as
	Simulated Data	Data)¹	Percent of Target
Households receiving HEAP	1,470	1,477	99.5%
By substate area			
New York City	820	824	99.5%
Balance of the state	650	652	99.6%
Aggregate annual benefits (millions)	\$227.0	\$226.4	100.3%
Households by key characteristics			
By presence of vulnerable members			
(overlapping)			
Person age 60 or older	621	596	104.2%
Person with a disability	576	573	100.5%
Child under age 6	255	255	100.1%
By income relative to poverty			
guidelines			
Less than 75%	474	468	101.2%
75% to less than 100%	370	383	96.5%
100% to less than 125%	228	240	94.9%
125% to less than 150%	204	207	98.6%
150% or more	194	178	109.1%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) The aggregate HEAP caseload was obtained from OTDA's monthly statistics document for September 2019 (<a href="https://otda.ny.gov/resources/caseload/2019/2019-09-stats.pdf">https://otda.ny.gov/resources/caseload/2019/2019-09-stats.pdf</a>) which captured HEAP caseload and benefits as of the end of the fiscal year. (Data for the end of FY 2020 were very similar.) The key demographic characteristics of New York's HEAP caseload were obtained from the federal government's LIHEAP Data Warehouse, available here <a href="https://liheappm.acf.hhs.gov/datawarehouse/custom\_reports">https://liheappm.acf.hhs.gov/datawarehouse/custom\_reports</a>.

# **Payroll Taxes**

Payroll tax is a collective term for taxes paid by workers and employers that represent a flat percentage of the worker's earnings. In 2019, earnings under \$132,900 were subject to a 6.2 percent Old-Age, Survivors, and Disability Insurance (OASDI) tax for both the worker and employer. Employers and workers also had to pay a 1.45 percent Medicare tax on all earnings. Individuals who are self-employed pay both the worker and employer payroll tax rates.

## **Methods and Targets**

Payroll tax information is not reported in the ACS. Instead, ATTIS simulates the amount of payroll taxes a worker pays using information on the worker's earnings. ATTIS does not simulate taxes paid by employers, but it does capture that self-employed workers pay both the employee and employer tax.

Baseline targets for payroll taxes come from the Social Security Administration's Statistical Supplement for 2021, which includes information at the state level for 2019.<sup>30</sup> We present targets on the number of wage and salary workers (not including self-employed workers) subject to OASDI taxes, the amount of earnings subject to those taxes, and the total amount of OASDI taxes paid. We do not include information on the Medicare tax.

#### **Baseline Results**

The baseline captures 95 percent of the number of workers subject to OASDI taxes (table 12). We slightly overshoot the target for total earnings subject to OASDI taxes, at 101 percent of target. We also simulate 101 percent of the target for total OASDI taxes paid by employers and employees.

TABLE 12
Simulated Selected Payroll Tax Results in New York vs. Targets, 2019

	Simulated	Target	Simulated as Percent of Target
OASDI taxes on private sector wage/salary			
income, excluding railroad			
Workers subject to OASDI tax (thou)	9,677	10,234	94.6%
Earnings subject to OASDI tax (mill.)	509,380	504,180	101.0%
OASDI taxes paid (mill.)	63,163	62,518	101.0%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: Baseline targets for payroll taxes come from the Social Security Administration's Statistical Supplement for 2021, which includes information at the state level for 2019

(https://www.ssa.gov/policy/docs/statcomps/supplement/2021/index.html).

## Federal Income Taxes and Credits

ATTIS models federal income taxes, including the standard deduction, marginal tax rates, and other nuances in tax law that affect income taxes. ATTIS also models the major tax credits, which may reduce a tax filer's burden, or even turn the burden negative, resulting in a refund from the government. These credits include the earned income tax credit, the child tax credit, and the child and dependent care credit.

#### Methods and Targets

As with payroll taxes, federal tax liability is not reported on the ACS. ATTIS uses the information on family composition and income that is provided in the ACS to simulate the amount of federal taxes that a filer owes (or the refund they are entitled to receive). ATTIS simulates taxes using the same process a family would go through when filing taxes, using information such as marital status, amount and type of income, number and age of dependents, and other factors to calculate the final tax liability.

<sup>&</sup>lt;sup>30</sup> See table 4.B10 here: <a href="https://www.ssa.gov/policy/docs/statcomps/supplement/2021/index.html">https://www.ssa.gov/policy/docs/statcomps/supplement/2021/index.html</a>.

However, some information that factors into federal taxes is not included in the ACS. For instance, the ACS does not ask respondents about capital gains income or contributions to retirement accounts, both of which are included in taxable income. The ACS also does not ask respondents about expenses that may allow them to itemize deductions on their taxes, such as the amount of mortgage interest paid. For this work, we have not included these income components and expenses that are not available through the ACS. We assume that everyone takes the standard deduction and that no one itemizes. While there are some itemizers in reality, the vast majority of people with low and medium incomes take the standard deduction. In 2019, only 6 percent of filers in New York with adjusted gross income under \$100,000 itemized their deductions.

Once we have computed a tax unit's taxes and credits according to the rules and their income and characteristics, we do not make further adjustments. We also generally assume that all tax units pay the federal income taxes they owe and receive the federal income tax credits for which they are eligible—in particular, the Earned Income Tax Credit and the Child Tax Credit. We assign 100 percent receipt of the Earned Income Tax Credit among units eligible for that credit, despite research evidence showing that not all eligible tax units file taxes and receive the credits, because even when we assign 100 percent participation, our estimates are below real-world receipt according to administrative data. Nichols and Rothstein (2015) 31 provide a review of the prior literature on take up rates. 32

Although we do not adjust the individual tax or credit amounts (in order to preserve consistency between those amounts, the tax rules, and each tax unit's income data) we do compare our simulated figures against administrative data. Our comparison data come from the Internal Revenue Service's Statistics of Income publication.<sup>33</sup> We compare simulated with actual data for total adjusted gross income, number of tax returns with positive liability, and amount of positive tax liability. We also examine the number of returns receiving major tax credits and the amount of those tax credits paid out.

# **Baseline Results**

The baseline captures 90 percent of total adjusted gross income (AGI) reported by the IRS (table 13). We are on target for the number of tax returns with AGI under \$50,000 with positive tax liability and close to target for the amount of tax liability on those returns (104 percent). The baseline exceeds target for the number of returns with positive tax liability for filers with AGI above \$50,000. The baseline also exceeds target for the amount of positive liability for returns with AGI between \$50,000 and \$100,000. We fall substantially short of target for tax liability for returns with over \$100,000 in AGI, capturing 71

<sup>&</sup>lt;sup>31</sup> Austin Nichols and Jesse Rothstein, May 2015, "The Earned Income Tax Credit (EITC)," Working paper 21211 National Bureau of Economic Research. https://www.nber.org/system/files/working\_papers/w21211/w21211.pdf <sup>32</sup> The one exception to our assumption of 100 percent take-up of federal tax credits is that some families who appear potentially eligible for the child and dependent care tax credit are not simulated to take it, in part because they may be using a flex account instead.

<sup>&</sup>lt;sup>33</sup> See Historical Table 2, available at <a href="https://www.irs.gov/statistics/soi-tax-stats-historic-table-2-2015-2019">https://www.irs.gov/statistics/soi-tax-stats-historic-table-2-2015-2019</a>. Additionally, the adjusted gross income target for New York City was obtained from the New York City Independent Budget Office, available here: <a href="https://ibo.nyc.ny.us/RevenueSpending/2021-pit-tables-overview.pdf">https://ibo.nyc.ny.us/RevenueSpending/2021-pit-tables-overview.pdf</a>.

percent of the total tax liability for this group. This shortfall is because survey data do not identify as many tax units at the highest income levels as actually exist.<sup>34</sup>

The baseline falls short of the amount of returns with the earned income tax credit (the simulated number is 67 percent of the target) and the total amount of the credit (57 percent of target). This shortfall is in line with other estimates of the EITC and is due partly to noncompliance and the inability of the model to completely capture complex households. For example, the TRIM3 model estimates used in the National Academy of Science "A Roadmap to Reducing Child Poverty" captured 61 percent of total baseline EITC benefits according to administrative data. Wheaton and Shantz (2016) find that four models—TRIM3, TAXSIM, the Bakija tax model, and the Census Bureau tax model—when applied to Current Population Survey data, consistently understate EITC benefits relative to administrative data. Nichols and Rothstein (2015) show that the Census Bureau tax model's EITC assignment to families in the CPS captures only about three quarters of recipient families according to administrative data and two thirds of EITC benefits.

ATTIS, like other tax models applied to survey data, assumes perfect compliance with tax rules. But real-world EITC noncompliance is substantial. The NAS report cites an internal IRS study of audited tax returns from 2006 to 2008 that finds between 43 and 50 percent of EITC claims and 28 and 39 of EITC payments were overclaims. Mis-claiming of children is the largest source of erroneous dollar amounts, followed by misreporting of income (especially overreporting of self-employment income). Nichols and Rothstein (2015) document earlier studies of EITC noncompliance and describe mis-claiming of filing status (for example, filing as head of household when the taxpayer should have filed as married filing separately) as an additional source of noncompliance.

The baseline is close to target for the nonrefundable portion of the child tax credit, simulating 91 percent of returns and 106 percent of benefits. For the refundable (additional) child tax credit, the baseline is below target, capturing 64 percent of returns and 68 percent of the amount of the credit. This shortfall occurs for the same reason as the shortfall for the EITC. We model 94 percent of the target for returns with the child and dependent care credit and 100 percent of the amount of that credit.

Whether the lower dollar value of refundable credits relative to administrative data contributes to an over-statement of the number and percent of children in poverty at baseline depends on the reason for the shortfall and cannot be entirely known. For example, to the extent that the dollar shortfall comes from people claiming the EITC for children who do not appear in their household in the ACS survey data, the shortfall does not affect child poverty. If a married couple erroneously files two head of household returns, they may receive an EITC higher than that for which they are eligible according to the IRS rules

<sup>&</sup>lt;sup>34</sup> This could occur if very-high-income households are less likely to participate in the survey or if they do not report all of the same income that they would report for tax purposes.

<sup>&</sup>lt;sup>35</sup> National Academies of Sciences, Engineering, and Medicine 2019. A Roadmap to Reducing Child Poverty. Washington, DC: The National Academies Press. https://doi.org/10.17226/25246.

<sup>&</sup>lt;sup>36</sup> "The Effects of Different Tax Calculators on the SPM," by Laura Wheaton and Kathryn Stevens (2016). http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000774-The-Effect-of-Different-Tax-Calculators-on-the-Supplemental-Poverty-Measure.pdf.

simulated in ATTIS. If so, the model indeed understates the EITC benefits flowing to this household in the baseline and might cause the household to be inaccurately classified as having income below poverty. However, the assumption that all eligible households receive EITC benefits could work in the opposite direction—causing some people to be classified as above poverty based on simulated EITC receipt, who are actually below poverty because they did not file and claim the EITC. For these reasons, the effect of the shortfall in total refundable credits on baseline poverty estimates is unclear. What *can* be known is the effect of policy expansions on households' poverty status when their baseline benefits are simulated according to program rules.

Finally, the simulation of federal income taxes for New York City residents finds an aggregate amount of federal adjusted gross income (AGI) that is equal to 89 percent of the actual figure according to the administrative data we obtained. (Table 13 also shows several other key items of simulated information for federal income taxes in New York City and in the balance of the state, but does not compare them to targets, because we were unable to obtain targets for those items.) As mentioned earlier, the shortfall in AGI is primarily due to the fact that survey data do not identify as many tax units with very high incomes as actually exist.

TABLE 13
Simulated Selected Federal Tax Results in New York vs. Targets, 2019

			Simulated as
	Simulated	Target <sup>1</sup>	Percent of Target
Federal Income Taxes, Returns and Liability			
Total AGI (mill.)	770,580	855,064	90.1%
Number of positive-tax returns (thou.)			
With AGI <\$50,000	2,535	2,539	99.8%
With AGI \$50,000 - < \$100,000	2,303	2,167	106.3%
With AGI >= \$100,000	2,276	2,046	111.2%
Total tax liability, positive-tax returns (mill.)			
With AGI <\$50,000	4,419	4,245	104.1%
With AGI \$50,000 - < \$100,000	14,983	13,776	108.8%
With AGI >= \$100,000	90,901	127,885	71.1%
Number of zero-tax returns (thou.)	3,885	2	
Number of negative-tax returns (thou.)	1,178	2	
Federal Income Tax Credits  Earned income tax credit	,		
Returns with credit (thou.)	1,096	1,640	66.8%
Total credit (mill.)	2,160	3,757	57.5%
Child tax credit (nonrefundable portion)	2,100	3,737	37.3%
Returns with credit (thou.)	2,054	2,261	90.8%
Total credit (mill.)	4,715	2,261 4,437	106.3%
Child tax credit (refundable portion)	4,715	4,437	100.5%
Returns with credit (thou.)	702	1,093	64.20/
	1,306	·	64.2%
Total credit (mill.)	•	1,920	68.0%
Total Child tax credit, amount (mill.)	6,021	6,357	94.7%
Child and dependent care tax credit	200	44.5	02.00/
Returns with credit (thou.)	390	415	93.9%
Total credit (mill.) New York City	256	256	100.1%
Total AGI (mill.)	339,277	380,486	89.2%
Returns with positive tax liability (thou.)	3,076	2	
Positive tax liability (mill.)	51,899	2	
Returns with negative tax liability (thou.)	571	2	
Total negative tax liability (mill.)	-1,690	2	
Balance of State			
Total AGI (mill.)	431,304	2	
Returns with positive tax liability (thou.)	4,037	2	
Positive tax liability (mill.)	58,404	2	
Returns with negative tax liability (thou.)	607	2	
Total negative tax liability (mill.)	-1,738	2	

**Source for simulated results**: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) Targets come from the IRS's Statistics of Income publication ( <a href="https://www.irs.gov/statistics/soi-tax-stats-historic-table-2-2015-2019">https://www.irs.gov/statistics/soi-tax-stats-historic-table-2-2015-2019</a>). The adjusted gross income target for New York City was obtained from the New York City Independent Budget Office (<a href="https://ibo.nyc.ny.us/RevenueSpending/2021-pit-tables-overview.pdf">https://ibo.nyc.ny.us/RevenueSpending/2021-pit-tables-overview.pdf</a>). (2) Target not available.

## State Income Taxes and Credits

State income tax refers to taxes on income collected by the state governments. ATTIS models most aspects of state personal income tax systems, including the state-by-state variation in allowable filing statuses, the definition of taxable income, deductions, exemptions, tax rates and brackets, and tax credits. For New York, ATTIS models state tax rates and brackets, as well as New York City and Yonkers tax rates and brackets. ATTIS also models the major tax credits, which may reduce a tax filer's burden, or even turn the burden negative, resulting in a refund from the state. These credits include the New York State and New York City earned income tax credit (EITC), the Empire State child credit, the New York State and New York City household credit, and the New York State and New York City child and dependent care credit.

#### Methods and Targets

As with federal and payroll taxes, state tax liability is not reported on the ACS. ATTIS uses information that is provided by the ACS to simulate the amount of state taxes that a filer owes or the refund they are entitled to receive. Taking advantage of the connection between state tax systems and the federal tax system, ATTIS borrows variables from the federal tax simulation as appropriate. These include the identification of each tax unit (including filing status and dependents) and the results of calculations performed to calculate federal tax liability (e.g. federal adjusted gross income and federal EITC).

The simulation of state income taxes, like the simulation of federal income taxes, assumes that all tax units pay the taxes they owe and receive the credits for which they are eligible, including New York State's state-level EITC and other credits. For the same reasons as discussed earlier in the context of the federal income tax modeling, each tax unit's taxes and credits are based solely on that unit's characteristics and income and the tax rules; there are no adjustments applied. However, we do compare the simulated data to administrative data to assess the results.

Our comparison data for state income taxes come from the New York's Open NY data and the New York City Independent Budget Office's Tables on New York City Residents' Income and Tax Liability.<sup>37</sup> We include targets on total adjusted gross income, the number of tax returns, total amount of tax liability, the number of returns receiving both the state EITC and child and dependent care tax credit, and the amount of the state EITC and child and dependent care credit for New York State. We also consider the same data for New York City (other than the number of tax returns which was not available). Finally, we examine total city tax liability for Yonkers.

<sup>&</sup>lt;sup>37</sup> See the following tables and datasets from the Department of Taxation and Finance on Open NY (<a href="https://data.ny.gov/">https://data.ny.gov/</a>): Personal Income Tax Filers Summary (Dataset 4), New York State EITC Claims by Place of Residence (table 3), New York City EITC Claims by Place of Residence (table 5), and Child and Dependent Care Credit by Place of Residence. See the 2019 Tables on New York City Residents' Income and Tax Liability from the New York City Independent Budget Office: <a href="https://ibo.nyc.ny.us/RevenueSpending/fiscal-history-pit-tables-overview.html">https://ibo.nyc.ny.us/RevenueSpending/fiscal-history-pit-tables-overview.html</a>.

## **Baseline Results**

The baseline simulation of New York State income taxes captures 91 percent of total AGI reported by tax units across the state and 87 percent of total AGI reported by tax units in New York City (table 14). The shortfalls are likely due to the fact that tax units with the highest incomes may not be included in the data and, if they are included, may not report all of their income. Because of the shortfall in AGI, the simulated state income tax liability also falls short of the actual data. Overall, we show an amount of state income tax liability (net of credits) that equals 85 percent of the actual figure. Considering results by level of AGI, the simulated tax liability is 11 percent above the target for tax units with AGI from \$30,000 to \$50,000, with somewhat larger deviations for higher-income tax units. Considering city-level taxes, simulated New York City income tax liability stands at 87 percent of the actual amount, and simulated Yonkers tax liability is at 92 percent of target.

Similar to the situation with the federal earned income tax credit, and with similar implications, the baseline falls short of the number of returns with the New York State EITC (the simulated number is 68 percent of the actual) and the total amount of the credit (64 percent). The baseline also falls short of the number of returns using the New York City EITC (the simulated number equals 63 percent of the target) and the total amount of the credit (59 percent). As mentioned above for federal tax, this shortfall is in line with other estimates of the EITC, and is due partly to noncompliance, as well the inability of survey-based models to completely capture complex households. (See the above discussion of the federal EITC results for references to relevant studies regarding the EITC.)

The model is close to target for the number of returns claiming the state child and dependent care credit (94 percent) and exceeds target for the total amount of the credit claimed (131 percent). In the case of New York City's child and dependent care credit, the baseline exceeds target for both the number of returns (162 percent) and total credit amount (125 percent). Exceeding target for the amount of child and dependent care credit is unlikely to have a large impact on poverty since a relatively small share of low-income families have expenses that qualify for the credit. (According to CPS ASEC data, only about one-fifth of New York families with employed parents, children age 14 or younger, and annual incomes of \$30,000 or less had any child care expenses.)

Considering the state income tax results by adjusted gross income (AGI) level, the results are quite different for different income levels. For the lowest-income category of tax units in New York (AGI below \$30,000) we show a total of \$83 million in tax liability, while the actual total is a net negative amount (that is, this group in the aggregate receives more in tax credits than they owe in tax); this could be due in part to the fact that the simulation does not capture all of the units with the EITC. However, in the case of tax units with AGI between \$30,000 and \$100,000, the aggregate simulated tax liability comes quite close to the actual data. For tax units with AGI over \$100,000, the simulated tax liability falls far short of the actual figure.

TABLE 14
Simulated Selected New York State and City Tax Results vs. Targets, 2019

		Target	
		(Administrative	Simulated as
	Simulated	Data)¹	Percent of Target
State Income Taxes, Returns and Liability			
Total AGI (mill.)	\$746,171	\$818,683	91.1%
Total tax liability (mill.)	\$35,898	\$42,121	85.2%
State Income Tax Liability by AGI Group (mill.)			
< \$30,000	\$83	(net negative)	
\$30,000 to < \$50,000	\$1,917	\$1,721	111.4%
\$50,000 to < \$100,000	\$7,042	\$5,815	121.1%
\$100,000 or more	\$26,856	\$35,020	76.7%
State Income Tax Credits			
Earned income tax credit			
Returns with credit (thou.)	1,009	1,483	68.0%
Total credit (mill.)	\$624	\$974	64.1%
Child and dependent care tax credit			
Returns with credit (thou.)	448	476	94.1%
Total credit (mill.)	\$222	\$169	131.3%
New York City			
Total AGI (mill.)	\$331,804	\$380,486	87.2%
Total tax liability (mill.)	\$10,720	\$12,337	86.9%
Earned income tax credit			
Returns with credit (thou.)	530	835	63.4%
Total credit (mill.)	\$54	\$91	59.2%
Child and dependent care tax credit			
Returns with credit (thou.)	15	9	162.2%
Total credit (mill.)	\$4	\$3	125.1%
Yonkers			
Total returns (thou.)	166	1	
Total tax liability (mill.)	\$51	\$55	92.3%

Source for simulated results: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) Targets for state income taxes were obtained primarily from data made publicly available by the New York Department of Taxation and Finance (<a href="https://www.tax.ny.gov/research/stats/statistics/pit-filers-summary-datasets-beginning-tax-year-2015.htm">https://www.tax.ny.gov/research/stats/statistics/pit-filers-summary-datasets-beginning-tax-year-2015.htm</a>). Data on AGI and tax liability are adjusted to exclude taxpayers who are full-year non-residents. Additional data, particularly on tax credits, were obtained from a separate state publication (<a href="https://www.tax.ny.gov/research/stats/statistics/personal income tax statistical reports.htm">https://www.tax.ny.gov/research/stats/statistics/personal income tax statistical reports.htm</a>). Data on New York City taxes were obtained from the city's Independent Budget Office (<a href="https://ibo.nyc.ny.us/RevenueSpending/fiscal-history-pit-tables-overview.html">https://ibo.nyc.ny.us/RevenueSpending/fiscal-history-pit-tables-overview.html</a>).

# **Poverty Results**

The assessment of the potential anti-poverty impacts of policy proposals considered by the CPRAC will be made by comparing estimated data on poverty following each potential policy change with the estimated poverty data at the baseline—that is, prior to policy changes. In this section, we describe the methods we are using to compute poverty for these analyses, and then present the results of the baseline poverty calculations.

## Methods

To calculate baseline poverty status for the CPRAC analysis, we use the Supplemental Poverty Measure (SPM). The SPM is an expanded poverty measure that the Census Bureau has computed annually since 2011, in addition to computing the official poverty measure (OPM). One of the key differences between the SPM and the OPM is that the SPM uses a much broader definition of resources—including not only a family's cash income but also their tax payments, child care expenses, other work-related expenses, medical out-of-pocket expenses, tax credits, and the value of in-kind benefits such as housing subsidies and nutrition help. This definition of resources allows the SPM to capture the impact of all the different types of policies that the CPRAC may consider—including policies that affect in-kind benefits or tax credits as well as policies affecting cash income. The SPM also differs from the OPM in that its poverty "thresholds"—the amounts against which resources are compared to determine if a family is considered to be living in poverty—vary based on the levels of housing costs in different geographic areas.

## Computing the SPM resource definition

Computing the SPM definition of resources for a particular family requires data or estimates for many different items of information about that family—not only their level of cash income but also how much help they receive from different types of non-cash benefits, how much they receive in tax credits, how much they pay in payroll and income taxes, and how much they pay for child care, other work expenses, and out-of-pocket medical expenses. The Census Bureau's SPM methodology was originally developed for use with the Current Population Survey's Annual Social and Economic Supplement, which asks about most of the pieces of information needed to compute the SPM. <sup>38</sup> In contrast, the ACS includes fewer of the data elements needed for the SPM (e.g., SNAP benefits and child care expenses). The Census Bureau has experimented with imputing the unavailable values to ACS data for use in ACS SPM estimates. <sup>39</sup> We apply the Census Bureau's approach to estimating the SPM with ACS data, but use the ATTIS model's simulated values for most benefit programs, child care expenses, taxes, and tax credits. <sup>40</sup> As described above, the ATTIS estimates also correct for underreporting of unemployment compensation, SSI, and TANF benefits and underreported receipt of SNAP. The SPM estimate for this project also include the impact of income tax policies specific to New York City and Yonkers, which are not included in any Census Bureau SPM estimates for New York.

<sup>&</sup>lt;sup>38</sup> Fox, Liana. 2020. The Supplemental Poverty Measure: 2019. Current Population Reports P60–272. Washington, DC: US Census Bureau. <a href="https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-272.pdf">https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-272.pdf</a>

<sup>&</sup>lt;sup>39</sup> Fox, Liana, Brian Glassman, and José Pacas. 2020. "<u>The Supplemental Poverty Measure Using the American Community Survey</u>." SEHSD Working Paper 2020-09. Washington, DC: US Census Bureau, Social, Economic, and Housing Statistics Division.

<sup>&</sup>lt;sup>40</sup> We apply the standard SPM thresholds used in the Census Bureau SPM estimates and also use the Census Bureau's geographic adjustments, imputed medical out of pocket expenses, imputed school lunch value, and imputed work related expenses (other than child care).

#### The SPM Poverty Thresholds

A family is counted as living in poverty if their resources are below the applicable SPM poverty threshold. Those thresholds vary by family size; number of children; geographic location; and whether the family rents, owns their home with a mortgage, or owns their home without a mortgage. The fact that SPM poverty thresholds vary by geography is one of the key differences between the SPM and the OPM. The geographic variations in the thresholds are based on rental costs, with higher thresholds in areas with higher costs. The SPM methods define twelve different geographic sub-areas in the ACS survey data for New York; the thresholds are substantially higher in the areas of New York with the highest rental costs than in the areas of New York with the lowest rental costs. For example, for a single-parent family in New York with two children, renting their home, the 2019 SPM poverty thresholds ranged from \$21,012 in the areas of the state with the lowest rental costs to \$29,216 in the areas with the highest rental costs.

# SPM Baseline Poverty Results for the CPRAC Analysis

For purposes of this report, we refer to the SPM poverty estimates produced by the ATTIS model for purposes of the CPRAC analysis as the "CPRAC-SPM" estimates. These estimates will differ from SPM estimates released by the Census Bureau for New York because we are using different dollar amounts for many of the elements that go into defining resources for the SPM. Specifically, the ATTIS computations use all of the "baseline" values of benefits and taxes discussed in the earlier portions of this report instead of using the tax and benefit amounts that are either reported in the survey or imputed by Census Bureau methods. In our view, the use of the ATTIS baseline values creates a more complete picture of the impact of the existing safety net on New York families' economic well-being.

Overall, the CPRAC-SPM estimates created by the ATTIS modeling show that 13.5 percent of people in New York had resources below the SPM poverty threshold in 2019 (table 15), and 13.9 percent of children in New York were in families with resources below the SPM poverty threshold. Both of these estimates are lower than the Census Bureau's 2019 SPM poverty estimates for New York, also computed from the ACS data, which found an overall SPM poverty rate of 15.9 percent for New Yorkers and a rate of 18.6 percent for children.<sup>41</sup> The 13.9 percent CPRAC-SPM child poverty rate is 4.7 percentage points and 25 percent lower than the Census Bureau's 2019 SPM child poverty estimate for New York.

The primary reason that the CPRAC-SPM estimates are lower than the Census Bureau's SPM estimates—despite both being based on the same 2019 ACS household data for New York—is that the ATTIS baseline simulations of benefit programs come closer to actual benefit totals, which results in

<sup>&</sup>lt;sup>41</sup> For more information, see the poverty tables available from the US Census Bureau on the webpage titled "The Supplemental Poverty Measure Using the American Community Survey,", here <a href="https://www.census.gov/library/working-papers/2020/demo/SEHSD-WP2020-09.html">https://www.census.gov/library/working-papers/2020/demo/SEHSD-WP2020-09.html</a>.

The poverty rates by state for all people are available in tables titled "State ACS SPM Rates: 2009 – 2019". The poverty rates by state for children are available in tables titled "State by Age ACS SPM Rates: 2009 – 2019".

some families being assigned as having more resources than if we were not correcting for underreporting.<sup>42</sup> In contrast, the Census Bureau's procedures to develop the information needed for SPM estimation in the ACS data do not attempt to correct for underreporting but rather reflect the level benefits reported in the CPS ASEC data As a result, our simulation captures more people as receiving government support than are identified in the data used for the Census Bureau's calculations. Differences in the ATTIS and Census Bureau imputation of child care expenses and assignment of housing subsidies, taxes, and tax credits may also contribute to differences in the SPM poverty estimates. Two examples of corrections for underreporting in the ACS that would affect, and ultimately reduce, the estimate of the SPM poverty rate in New York include:

- SNAP: A total of 1,043,000 New York households in the ACS report receiving SNAP at some
  point in the prior 12 months covered by the survey. However, according to the
  administrative targets used for this analysis, 1,425,000 households received SNAP in New
  York in the average month of 2019. The baseline simulation of SNAP compensates for that
  underreporting.
- Unemployment benefits: Although some unemployment benefits are likely reported as part of the "catch all" income question in the ACS, the amount that appears to have been reported (about \$477 million) falls far short of the actual amount of unemployment benefits received in New York in 2019 (about \$2.1 billion). The baseline simulation produces a total of \$1.9 billion in unemployment benefits—much closer to the actual total.

It can also be important to consider categories other than simply below or above the poverty threshold. We estimate 3.5 percent of the population was in deep poverty, with family resources below 50 percent of the SPM poverty threshold (table 15). We further find that almost a third of New York residents (30.8 percent) were in or near poverty in 2019, with family resources below 150 percent of the SPM poverty threshold.

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<sup>&</sup>lt;sup>42</sup> Correction for underreporting of unemployment compensation, SSI, TANF, general assistance, and SNAP contribute to the lower poverty rate estimated for ATTIS. ATTIS also assigns WIC and LIHEAP benefits that are consistent with real world totals according to administrative data, whereas the Census Bureau's ACS imputations are based on CPS ASEC data which underreport receipt of these benefits.

TABLE 15
New York Individuals by CPRAC-SPM Poverty Status, 2019

Individuals by characteristics and by poverty level		Percent of Each Population Group in
(family resources relative to SPM poverty threshold)	Number (thousands)	Poverty-Level Group
Total individuals	18,880 <sup>1</sup>	
By poverty level <sup>2</sup>	660	2.50/
<50%	668	3.5%
<100%	2,557	13.5%
<150%	5,822	30.8%
<200%	8,272	43.8%
By age and poverty level		
All children ( <age 18)<="" td=""><td>3,994</td><td></td></age>	3,994	
<50%	88	2.2%
<100%	556	13.9%
<150%	1,473	36.9%
<200%	2,096	52.5%
Young children (ages 0 through 4)	1,108	
<50%	26	2.3%
<100%	169	15.2%
<150%	435	39.2%
<200%	606	54.7%
Adults (ages 18 and older)	14,886	
<50%	580	3.9%
<100%	2,001	13.4%
<150%	4,349	29.2%
<200%	6,176	41.5%
By family composition and poverty level		
Adults (age 18 and older) with no children		
in household	10,206	
<50%	493	4.8%
<100%	1,438	14.1%
<150%	2,833	27.8%
<200%	3,936	38.6%
By location and poverty level		
New York City	8,135	
<50%	352	4.3%
<100%	1,518	18.7%
<150%	3,402	41.8%
<200%	4,493	55.2%
All but New York City	10,744	
<50%	316	2.9%
<100%	1,039	9.7%
<150%	2,421	22.5%
<200%	3,779	35.2%

Source: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) The population counts do not include those who live in group quarters and institutions. (2) The poverty-level groups each include all people at or below each poverty level; for example, the group labeled "<150%" includes all people with family incomes below 150 percent of the poverty threshold, including all the people in the "<100%" group.

Among children in New York, the CPRAC-SPM shows 13.9 percent were living in poverty, 2.2 percent of all children were living in deep poverty (with family resources below 50 percent of the threshold), and 36.9 percent of all children were near or in poverty with family resources below 150 percent of the threshold. The poverty rate was higher for young children, with 15.2 percent living in families with resources below 100 percent of poverty.

Among adults, the deep poverty rate was slightly higher than for children (3.9 percent of adults with family resources below 50 percent of the threshold compared to 2.2 percent for children), and the percent living in or near poverty was lower (29.2 percent with family resources below 150 percent of the threshold compared to 36.9 percent for children). Adults with no children in the household had higher poverty and deep poverty rates, with 4.8 percent living in deep poverty and 14.1 percent living in poverty.

The poverty rate in New York City was much higher than for the remainder of the state. Almost 19 percent of individuals in New York City were living in poverty, compared to 9.7 percent of individuals in the balance of the state.

The CPRAC-SPM poverty rates varied for different racial and ethnic groups in the state (table 16). Considering people of all ages combined, people who are non-Hispanic Asian American and Pacific Islander (AAPI) had the highest poverty rate at 21.2 percent with resources below SPM poverty, followed by people who are Hispanic (19.8 percent in poverty), people who are Black, non-Hispanic (17.0 percent), and people who are white, non-Hispanic (9.1 percent). Additionally, people who identify as multiple or additional races had a poverty rate of 16.9 percent, although poverty rates may vary for different racial and ethnic identities within this group. The child poverty rate among the different racial and ethnic groups was highest for children who are Hispanic (20.3 percent in poverty) and lowest for children who are white, non-Hispanic (9.2 percent in poverty).

Note that the relative poverty rates across racial and ethnic groups may vary when measuring poverty with the SPM compared with the OPM. For example, according to the Census Bureau's national-level poverty analysis for 2019, the poverty rate for Black people (of any ethnicity) was 18.8 percent using the OPM but a somewhat-lower level of 18.3 percent using the SPM; while for Asian people, the poverty rate was 7.3 percent with the OPM but a substantially *higher* 11.7 percent with the SPM.<sup>43</sup> The different patterns of relative racial/ethnic poverty rates for the two different measures are due to multiple factors. One factor is geographic location. To the extent that people of a particular group are more likely to live in places with higher rental costs, they will be more likely to be assessed as being in SPM poverty, all else equal. Another factor is the extent to which people receive the safety-net benefits that are counted in the SPM resource measure. Analysis of national-level data shows some evidence that AAPI people who are eligible for certain safety-net benefits are somewhat less likely to receive

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<sup>&</sup>lt;sup>43</sup> See "The Supplemental Poverty Rate: 2019", September 2020, written by Liana Fox, U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-272.pdf.

them than Hispanic people and non-Hispanic black people eligible for those benefits.<sup>44</sup> Thus, the fact that the relative poverty rates differ between OPM results and CPRAC-SPM results is not surprising, although further analysis would be needed to fully explore the differences.

TABLE 16
Race and Ethnicity of New York Individuals by CPRAC-SPM Poverty Status, 2019

dividuals by characteristics and by poverty level (family esources relative to SPM poverty threshold)	Number (thousands)	Percent of Each Population Group in Poverty-Level Group
otal individuals	18,880 <sup>1</sup>	Огоир
By race and ethnicity and poverty level <sup>2</sup>	10,000	
AAPI, non-Hispanic	1,628	
<50%	96	5.9%
<100%	345	21.2%
<150%	663	40.7%
<200%	860	52.9%
Black, non-Hispanic	2,626	
<50%	112	4.3%
<100%	447	17.0%
<150%	1,132	43.1%
<200%	1,540	58.7%
Hispanic	3,646	
<50%	148	4.1%
<100%	721	19.8%
<150%	1,760	48.3%
<200%	2,395	65.7%
White, non-Hispanic	10,431	
<50%	289	2.8%
<100%	952	9.1%
<150%	2,077	19.9%
<200%	3,206	30.7%
Multiple and other races, non-Hispanic	550	
<50%	22	4.0%
<100%	93	16.9%
<150%	191	34.8%
<200%	271	49.3%
By race and ethnicity and child poverty level (children < age 18)		
Total children (< age 18)	3,994	
AAPI, non-Hispanic	303	
<50%	9	3.1%
<100%	56	18.4%
<150%	135	44.5%
<200%	176	58.2%

<sup>&</sup>lt;sup>44</sup> See "Participation in the U.S. Social Safety Net: Coverage of Low-Income Families, 2018", Suzanne Macartney and Robin Ghertner, November 2021,

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https://aspe.hhs.gov/sites/default/files/documents/9e9000cb7b1e4e30c2e616e547ed9bd9/program-eligibility-participation-brief-december-2021.pdf.

Individuals by characteristics and by poverty level (family resources relative to SPM poverty threshold)	Number (thousands)	Percent of Each Population Group in Poverty-Level Group
Black, non-Hispanic	581	_
<50%	17	2.9%
<100%	90	15.5%
<150%	291	50.1%
<200%	400	68.8%
Hispanic	996	
<50%	28	2.8%
<100%	203	20.3%
<150%	531	53.3%
<200%	176	17.7%
White, non-Hispanic	1,911	
<50%	28	1.5%
<100%	177	9.2%
<150%	443	23.2%
<200%	699	36.6%
Multiple and other races, non-Hispanic	204	
<50%	6	2.7%
<100%	31	15.4%
<150%	74	36.3%
<200%	105	51.3%

Source: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) The population counts do not include those who live in group quarters and institutions. (2) AAPI = Asian American and Pacific Islander. We use the term "Hispanic," as this is the primary terminology used by the US Census Bureau in the American Community Survey, which is the source of household data for this analysis. Survey respondents are asked to report race and ethnicity, including whether or not they identify as being of "Hispanic, Latino, or Spanish origin." The poverty-level groups each include all people in the given racial and ethnic group at or below each poverty level; for example, the group labeled "<150%" includes all people with family incomes below 150 percent of the poverty threshold, including all the people in the "<100%" group.

Poverty can also be tabulated counting families by whether or not they are poor (rather than by counting people by the poverty status of their families). Among families in New York, 16.2 percent have resources below the SPM poverty threshold (table 17). More than 5 percent of all families were living in deep poverty, with resources below half of the poverty threshold. Families with children had a poverty rate of 13.4 percent. The poverty rate was higher for families with children headed by an unmarried person (instead of a married couple), with much higher rates for unmarried adults with children and no other adults present; among this group, more than a quarter of families were living in poverty. Families headed by someone age 65 or older had a poverty rate of 16.5 percent, similar to the poverty rate for all families. Families without children and headed by someone under age 64 had a slightly higher poverty rate (17.5 percent).

Similar to the poverty rates for individuals, New York City had a much higher SPM poverty rate for families compared to the rate for the balance of the state. Nearly 21 percent of families in New York City were living in poverty, compared to 12.6 percent of families living in poverty in the balance of the state.

TABLE 17
Characteristics of New York Families by CPRAC-SPM Poverty Status, 2019

Families by characteristics and by poverty level (family resources relative to SPM poverty threshold)	Baseline (thousands)	Percent of Each Population Group in Poverty-Level Group
Total Families	8,068 <sup>1</sup>	-
By poverty level <sup>2</sup>	,	
<50%	442	5.5%
<100%	1,308	16.2%
<150%	2,638	32.7%
<200%	3,570	44.2%
By family composition and poverty level	-,-	
Families with children	2,087	
<50%	49	2.3%
<100%	280	13.4%
<150%	723	34.6%
<200%	1,038	49.7%
Families with elderly heads	2,021	43.770
<50%	77	3.8%
<100%	334	16.5%
<150%	710	35.1%
<200%	916	45.3%
Families without children or elderly heads		45.5%
•	3,959	0.00/
<50%	316	8.0%
<100%	694	17.5%
<150%	1,205	30.4%
<200%	1,617	40.8%
Families with single head with children and other	440	
adults	412	2.00/
<50%	12	2.9%
<100%	74	18.0%
<150%	194	47.1%
<200%	274	66.5%
Families with single head with children, without		
other adults	349	
<50%	21	6.0%
<100%	93	26.6%
<150%	212	60.7%
<200%	270	77.4%
By location and poverty level		
All but New York City	4,487	
<50%	221	4.9%
<100%	565	12.6%
<150%	1,160	25.8%
<200%	1,678	37.4%
New York City	3,580	
<50%	222	6.2%
<100%	744	20.8%
<150%	1,479	41.3%
<200%	1,893	52.9%

Source: Urban Institute tabulations of data from the ATTIS model.

**Notes**: (1) The population counts do not include those who live in group quarters and institutions. (2) The poverty-level groups each include all people at or below each poverty level; for example, the group labeled "<150%" includes all people with family incomes below 150 percent of the poverty threshold, including all the people in the "<100%" group.

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## **About ATTIS**

The Urban Institute's Analysis of Transfers, Taxes, and Income Security (ATTIS) microsimulation model allows Urban experts to examine how today's safety net supports US families and how changes to it could affect their economic well-being. By using data and evidence created with ATTIS, today's decisionmakers are better positioned to advance equitable and effective policy solutions that help individuals and families meet their basic needs. To learn more, visit <a href="https://www.urban.org/research-methods/attis-microsimulation-model">https://www.urban.org/research-methods/attis-microsimulation-model</a>.

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