

# **NEW YORK'S RENT-BURDENED HOUSEHOLDS:**

Recalculating the Total, Finding a Better Solution

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## **INTRODUCTION**

n advancing his signature proposal to build or preserve 200,000 units of affordable housing, New York mayor Bill de Blasio has offered a specific, little noticed, justification: too many New Yorkers, says the mayor's Housing New York plan, pay too high a percentage of their income in rent. New York, the plan asserts, faces a "crisis of affordability" that takes a specific form. It asserts that drastic action is required because more than 600,000 households—approximately 32 percent of the city's renter households—pay over 50 percent of their income in rent and should be considered "severely rent-burdened."

This paper finds good reasons to question Housing New York's measurement of the city's affordable housing problem, as well as the policy proposals that it offers to fix it. By roughly a factor of two, Housing New York overestimates the extent of those facing severe rent burdens. Meanwhile, its key proposal—based on using zoning requirements to increase the number of permanently affordable housing units—is unlikely to reduce the overall number of severely rent-burdened households.

Stated differently: there are likely only half as many severely burdened New York renters as the figure cited by Housing New York; that number, moreover, is likely to stay that high even if Mayor de Blasio's housing plan is implemented. At the same time, although the number of severely rent-burdened households may remain at a static level, many individual households are likely to see their rent burden mitigated, even if the Housing New York plan is not fully implemented—and more could be better assisted through other means.

#### I. BACKGROUND

Affordable housing initiatives are not new for the nation's largest city. Since 1943, New York has regulated multiunit apartment rent levels through rent "stabilization" and rent control policies—regulation predicated on the finding that the city suffers from the effects of a "housing emergency" as a result of a vacancy rate lower than 5 percent. Indeed, historical concern about the cost and quality of New York's housing has led the city to undertake the development of the largest public housing system in the United States.

In contrast to the first era of public housing—inspired by concerns over slum conditions as much as by housing costs—Housing New York highlights a different issue: the share of renter household income devoted to rent. Asserting that "a larger share of renters [is] suffering from rent burdens," the report specifically asserts that 55 percent of all New York City rental households are "rent-burdened," a situation defined as paying more than 30 percent of income on rent. Notably, it reports that more than 600,000 households can be classified as "severely rent-burdened," defined as paying more than 50 percent of income on rent. The report claims: "More than 30 percent of rental households are 'severely rent-burdened' because they spend more than 50 percent of their incomes on housing." It is in this context that the goal of 200,000 "affordable" units is presented.

Analysis of the data and method used to derive these figures, however, leads to the conclusion that the size of this key group—the severely rent-burdened—is significantly overstated, as a result of the report's methodology failing to account for key sources of household income in the form of existing government assistance. Specifically, the determination that more than 600,000 households are severely rent-burdened fails to take into account important government in-

come transfer programs, including: (i) the Housing Choice Voucher (often referred to as "Section 8"), under which recipients' rents are limited to 30 percent of income; and (ii) the Supplemental Nutritional Assistance Program (SNAP, widely known as "food stamps"), under which households earning less than 130 percent of the Federal Poverty Level are eligible and which premises assistance, in part, on households' housing costs in relation to income.

Put another way, in his zeal to do more to help lowincome households, the mayor ignores a great deal of what is already being done.

Specifically, by failing to take into account the significant forms of assistance already provided to low-income households, Housing New York overstates the number of severely rent-burdened New Yorkers by at least 40 percent: it is not 600,000+ but rather closer to 350,000, after income is adjusted by assistance programs. Even this reduced number, it is worth noting, includes some 50,000 households likely relying on help from family members; most of these latter households report paying more in rent than their entire incomes, while all of them pay rents significantly higher than the citywide average. Thus, the most accurate estimate of severely rent-burdened households is lower still: approximately 300,000.

This report details the methods by which the number of severely rent-burdened New Yorkers should be adjusted downward. It notes further that because of an additional policy flaw—the proposal that all new inclusionary units be "permanently" affordable, limiting rents even if households become better-off—the lower number (300,000) of severely rent-burdened households is unlikely to be reduced by Housing New York's proposals.

# II. DETERMINING THE NUMBER OF SEVERELY RENT-BURDENED HOUSEHOLDS

Housing New York, the de Blasio administration policy document, uses a straightforward method

to calculate the number of severely rent-burdened households in the city. It uses data from the federal Census Bureau's annual American Community Survey (ACS), which gathers data on two key factors: "gross rents" and "gross money income." A household-based comparison of gross rent and gross money income in ACS data leads to the conclusion that there were approximately 620,000 severely rent-burdened households in New York City in 2011-32 percent of all rental households—in line with Housing New York's estimate of slightly over 30 percent of rental households in the city. While the 620,000 figure does not appear in the Housing New York document, a graphical representation of the problem of severe rent burden sets the figure at slightly more than 600,000 in 2012.2 Moreover, the document's footnotes on methodology for calculating rent burdens specifically relies on ACS and other census data.3

It is accurate to say that these roughly 600,000 households live in housing units for which gross rent exceeds 50 percent of gross income. It is misleading, too: a significant number of low-income households identified as severely rent-burdened may not, in practice, pay as high a percentage of their income in rent as census data suggest. One reason is that the ACS does not collect regular payment information on numerous key forms of income assistance.

Another recurring and reliable data source, the New York City Housing and Vacancy Survey (HVS), conducted by the Census Bureau on behalf of the city, does include household-based data on income assistance. Housing New York makes clear, in a footnote regarding its methodology, that it relies on census ACS data, not the HVS, in its rent-burden calculations. "[T]welve year rent burden estimates," the document notes, "are based on 2000 Decennial Census and 2012 American Community Survey data. Note that rent burden and severe rent burden estimates may vary by data source in addition to time period" (emphasis added).

HVS is commissioned by the New York City Department of Housing Preservation and Development in

order to comply with city and state rent regulation laws. The survey's primary focus is to accurately determine the vacancy rate; so long as the vacancy rate remains below 5 percent, a "housing emergency" is declared and rent control and rent stabilization laws continue in force. But this same survey also asks about household housing subsidy status and "out-of-pocket" gross rent, meaning "rent including utility costs" actually paid by the household itself. The HVS also collects income assistance and household subsidy information, including receipt of benefits from Section 8, as well as smaller assistance programs such as the Home Energy Assistance Program. In addition, HVS provides a poverty measure useful for estimating food-stamps benefits.

Adding these commonly received benefits to household income significantly reduces the number of severely rent-burdened households in the city. We adjusted rent and income measures cumulatively, as follows:<sup>5</sup>

# Adjustment 1: Section 8 Participation and Self-Reported Out-of-Pocket Rent

New York City has many rent subsidy programs, the largest of which is the Housing Choice Voucher program. HVS requests a measure of "out-of-pocket gross rent" actually paid by the household in addition to the unit's full gross rent. This out-of-pocket (OOP) measure captures the value of housing vouchers and other subsidies. The Housing Choice Voucher program is a federally appropriated rent subsidy administered by local authorities. In New York City, the so-called Section 8 program (named for the section in the 1974 National Housing Act authorizing the program) is administered chiefly by the New York City Housing Authority and, to a lesser extent, by the Department of Housing Preservation and Development. Households apply for housing vouchers based on need, which includes factors such as income and household size. Such vouchers are used by recipients to rent privately owned housing units. By statute, recipients of housing vouchers pay no more than 30 percent of "adjusted monthly household income" to the private

owners of the housing that they rent. The remainder is paid directly by the local agency administering the program. (On rare occasions, recipients are allowed to voluntarily pay up to 40 percent of income to rent larger units than those for which the program would normally pay.) Therefore, by definition, no Section 8 renter can possibly be severely rent-burdened. (It is important to note that not all income-eligible households receive housing vouchers; the program is not an entitlement but is, instead, subject to a fixed annual congressional appropriation.)

In New York City, nearly all the approximately 220,000 households receiving housing vouchers in 2011 would have been classified by the de Blasio administration—by virtue of its ACS-based method of calculation—as severely rent-burdened. When recalculating rent burdens based on OOP rent, the rate of severe rent burden falls from 32.5 percent of renter households to 21.7 percent, while the absolute number of severely rent-burdened households falls from 619,000 to approximately 412,000 households.

Some Section 8 recipients nevertheless still claim to pay more than 50 percent of income in rent. Yet because the Housing Choice Voucher program ensures that low-income households are not severely rent-burdened, such recipients should not be included in this category. In short, some households underreport their income, overstate their rent and utilities—or both—in survey interviews, thereby appearing to be severely rent-burdened when they are not. When treating these households as not severely rent-burdened, the rent-burden rate falls slightly further, to 21 percent of renter households. Accounting for housing voucher households thus reduces the number of severely rent-burdened households from more than 600,000 to approximately 400,000.

#### Adjustment 2: SNAP Income and Energy Subsidies

Household assistance provided through SNAP takes the form of a monthly debit card, usable at most grocery stores in the city. SNAP eligibility in New York State is available for households without dependents, up to 130 percent of the Federal Poverty Level (FPL)—or up to 200 percent of FPL if the household has elderly or disabled members, or dependent children. Dependent-care expenses are deducted from income for SNAP benefit calculations, thereby qualifying certain households that might not otherwise qualify purely on the basis of their income. The program even takes housing costs into account. So-called excess shelter costs (defined as more than 50 percent of adjusted income paid in rent plus generous utility imputation, where adjusted income is 80 percent of money income minus any dependent care and other deductions) are also deductible from SNAP income. to an unlimited extent for households with elderly or disabled dependents, or up to \$458/month for others in 2011. Therefore, SNAP benefits are, in practice, targeted toward poor households facing severe rent burden to a greater degree than this paper's estimate for SNAP benefits is able to capture.

Technically, SNAP is an "in-kind transfer" program because it effectively provides goods rather than income. Functionally, it is closer to cash, in that it frees up an equivalent amount of cash to be spent on things other than groceries. (Recent and undocumented immigrants are ineligible.)

In contrast to its treatment of housing vouchers, HVS does not include a "flag" for SNAP participation. In other words, households whose in-kind SNAP income would effectively increase their overall income—and decrease the proportion of any one expense, such as rent, as a share of income—would not be noted.

To ensure the number of severely rent-burdened accounts for the SNAP benefit, this paper uses a modeling approach. It attributes the 2011 NYC average SNAP benefit per recipient<sup>6</sup> only to households earning 130 percent of the FPL or less, excluding those that did not report their immigration status or that immigrated to the U.S. less than ten years before the survey. The model includes immigrants below 130 percent FPL receiving Social Security or other public

assistance because legal immigration status for other assistance implies that the household is legal for SNAP, too. Indeed, the model is a conservative estimate: it under-predicts actual 2011 SNAP outlays in NYC by more than 30 percent, providing a comfortable safety margin. The model reveals that there are approximately 577,000 households receiving SNAP benefits; therefore, it is appropriate to reduce the overall number of severely rent-burdened households by an additional 51,500.

The Home Energy Assistance Program (HEAP) is an energy subsidy program. Though much smaller than SNAP, HEAP covers utility expenses in the same way SNAP pays for groceries. This paper adds the HEAP subsidy to household income among program recipients. For those receiving more than the top-coded amount (\$620/year), it attributes the average benefit above the top-coded amount (\$1,266/year). The paper calculates that there are 166,000 households receiving HEAP benefits; therefore, it is appropriate to reduce the overall number of severely rent-burdened households by an additional 200 households.

After including HEAP income and estimated SNAP income, this paper finds that the rate of severe rent burden fell to 18.3 percent, or 350,000 households. In so doing, the percentage of severely rent-burdened households, properly adjusted, declines from over 30 percent to around 18 percent.

#### **Adjustment 3: High-Rent Exceptions**

Housing New York—in addition to failing to reduce the number of severely rent-burdened households by taking into account the above streams of public assistance for which low-income households qualify—overlooks another significant group of households that should logically be excluded: those that report severe rent burdens while paying more than the 90<sup>th</sup> percentile citywide of per-capita OOP rent. The typical household within this group reports devoting nearly all their income to rent. Logic dictates that such households have significant existing savings

or assets themselves, or they receive assistance from family or other sources. Such households should be considered high-rent exceptions to the ranks of the severely rent-burdened. In so doing, the number of severely rent-burdened households falls by approximately 50,000, thereby reducing the total number of severely rent-burdened further, to approximately 300,000 households.

## Additional Consideration: Earned Income Tax Credit

Low-income working families in New York, like those across the U.S., can qualify for another form of government wage supplement, through the Earned Income Tax Credit (EITC). Through this program, households receive a tax "refund" greater than their actual income tax withheld. New York State's Office of Tax Policy Analysis estimates that about 866,000 NYC residents claimed credits in 2010, the latest year for which data are available.8 The median amount received was \$2,700.9 It is beyond the scope of this report to estimate how many of these residents might be included, or excluded, from the ranks of the severely rent-burdened based on receipt of this additional income. (Unlike pretax benefits such as housing vouchers and food stamps, the EITC is a posttax benefit, making inclusion of both types problematic.) Nevertheless, it seems reasonable to conclude that a potentially significant group of additional households would be excluded from the ranks of the severely rent-burdened based on this additional assistance (which is neither taken into account nor acknowledged by Housing New York). Excluding the EITC also provides a significant buffer to this paper's findings, in addition to its caution in estimating SNAP benefits—increasing the likelihood that the paper's findings overstate the number of severely rent-burdened households.

The American Housing Survey (AHS), another Census Bureau input for the U.S. as a whole, queries respondents on the extent of rent payments in relation to income. Nationally, it is worth noting, median pre-

SEVERELY RENT-BURDENED HOUSEHOLDS IN FIVE BOROUGHS, AS PERCENT OF TOTAL RENTER HOUSEHOLDS*				
Borough	Housing NY Baseline (%)	Out of Pocket + Section 8 (%)	Imputed SNAP + HEAP (%)	Exclude Per Capita OOP Rent Above 90 <sup>th</sup> Percentile of NYC Rents (%)
Bronx	42	22	16	15
Brooklyn	33	22	18	16
Manhattan	27	20	18	10
Queens	31	25	22	21
Staten Island	30	18	16	15
Citywide	32	21	18	15
* Adjustments cumulative, left to right. For reasons previously discussed, EITC not included in table. Source: Author's calculations; Census Bureau 2011 Housing and Vacancy Survey				

subsidy rent burden for renter households overall is 34 percent of income, <sup>10</sup> comparable with the 32 percent median paid by renter households overall in New York City. Notwithstanding Housing New York's assertion that the city faces an ongoing housing crisis, federal data indicate that New York City renter households are unexceptional in the national rental landscape. (Indeed, this was a main point of a recent Citizens Budget Commission report).<sup>11</sup>

It is also worth considering whether benefits provided to low-income New Yorkers not typically available to low-income residents elsewhere might compensate for the city's rents to an even greater degree. Such benefits include, for instance, access to New York's extensive public transit, making costly car ownership less common.

In short, the housing needs of low-income New Yorkers must be acknowledged and addressed. Still, they should not be exaggerated by numbers that fail to reflect the income and in-kind assistance that benefit poor households.

# III. FURTHER CONSIDERATIONS: THE PROBLEM OF "PERMANENT" AFFORDABILITY

While Housing New York focuses on the percentage of rent-burdened households in one year, it makes no effort to determine the extent to which a given household remains rent-burdened from one year to the next. This is problematic in the context of the city's inclusionary zoning law, the vehicle through which the de Blasio administration seeks to incentivize the construction of new affordable housing units. The law allows private developers to build additional units if they agree to set aside a percentage of "affordable" units. (The Bloomberg administration required 20 percent to be set aside; de Blasio has proposed 30 percent.) The de Blasio plan, moreover, calls for new units to be "permanently" affordable. Rents are set at 30 percent of a percentage of the area's median income, as determined by the federal Department of Housing and Urban Development. For low-income households, rents would be set at 30 percent of 80 percent of the area's median income. (Under the plan, rents can be set higher for moderate-income and middle-income households, which could also qualify for affordable units.)12 Over time, rents would continue to be linked to a percentage of area median income (or lower, if city rent stabilization guidelines set rent increases at lower levels). Crucially, rents in affordable units would not rise to reflect an increase in household income.

Indeed, a household member could win the lottery, or sign a multimillion-dollar major league baseball contract, and an affordable unit's rent would remain unchanged. Affordable units would be "permanently" affordable, creating what economists term a "lock-in effect," limiting the likelihood that such units will be vacated. This is problematic for a city housing policy that seeks to decrease the overall number of severely rent-burdened households.

In fact, many low-income households increase their income over time—and would no longer be severely rent-burdened even if they did not live in affordable units. Nationally, 30 percent of adults who started in the bottom fifth of household incomes have ascended to the top three-fifths<sup>13</sup> (including many households formed by young adults whose incomes rise). This raises the possibility that such adults would, as a result of upward income mobility, cease to be severely rentburdened regardless of whether they received housingspecific assistance. At the same time, newly formed households might, for some period of time, replace them among the ranks of the severely rent-burdened. Yet housing units with permanently below-market rents encourage slow turnover and low vacancy rates: permanently low rents are an incentive not to move.

#### IV. CONCLUSION

For these reasons, housing policy focused on providing permanently affordable units, at below market levels, to specific households may not diminish the overall total of severely rent-burdened NYC households. Better alternatives exist.

City officials might consider expanded income policies—such as the EITC—that provide direct income

supplements to low-income households. Alternatively, new "inclusionary" units could be a time-limited benefit, to provide work incentives to qualifying households and to make room for other severely rent-burdened households. The city could identify regulatory changes that lower housing construction costs and boost new housing supply, including rezoning to permit more housing on specific sites and reducing the time required to obtain building permits and other city approvals. This, in turn, will increase the overall supply of housing of all kinds, including incentives to build in neighborhoods where land values are lower (and where rents on new residential structures will likely be lower, too).

New York City, it should be noted, has long enjoyed the nation's largest physical stock of affordable housing units. Despite this distinction, many low-income New York households continue to experience high OOP rent costs.

Encouraging increased housing supply of all kinds should be considered as a more effective means to reduce the city's overall number of severely rent-burdened households. Adjustments to the latter number—the focus of this paper—make it clear that doing so is a goal within closer reach than previously thought.

#### APPENDIX: NOTES ON METHODOLOGY

To re-create Housing New York's 2011 baseline, this paper starts by selecting sample households in the HVS survey with a defined gross rent, a defined rent burden greater than zero, and a defined out-of-pocket rent. This yields a total of 1,906,626 renter households. The (single year) 2012 ACS total cited by Housing New York similarly reports 1,981,798 calculable renter households.

Next, this paper calculates pre-subsidy gross rent burdens, using HVS's "gross rent burden" variable within the previously defined sample selection. By this measure, 32.48 percent of households were severely rent-burdened (slightly more than the 2012 ACS estimate of about 30 percent). This finding—in addition to the fact that the paper's total renter household population numerator was within 5 percent of the 2012 ACS sample estimate—gives reassurance that a household sample comparable with the ACS data used in Housing New York's rent-burden charts was successfully reproduced. (Indeed, it yields a 2011 pre-subsidy severe rent-burden rate 2 percentage points worse than the Housing New York report itself claimed for 2012.)

This paper creates a new, out-of-pocket (OOP) rentburden variable by dividing annualized HVS OOP rent by HVS annual household income. This yields the majority of the paper's first adjustment (see Section II, Adjustment 1). Additionally, the paper finds that about 12,000 sample households still faced severe rent burden by this measure, despite also reporting receipt of Section 8 vouchers in the relevant HVS variable. Accordingly, the paper decided that this was not a forced-choice-related survey error, since there was also an option to report "I don't know" for this variable. There is also long-standing literature documenting how household income surveys consistently underreport actual income,14 making it nearly certain that the households scrutinized almost certainly underreported their income to HVS. This paper then

recodes all 12,000 remaining Section 8 voucher recipients as "not severely rent-burdened" in its OOP rent-burden variable.

Next, the paper creates a proxy variable for SNAP receipt. Because SNAP participation is not 100 percent of the eligible population, the paper cautiously selects only those households it could determine were categorically eligible. SNAP benefits are easily (and plausibly) available to such households as accessible resources: asset tests are not required, only a simple verification procedure. Accordingly, the paper selects only those households whose gross money income was less than 130 percent of FPL. HVS conveniently provides a variable that denotes households beneath 125 percent FPL, which is used as the paper's initial threshold. The paper then excludes households that did not report their immigration status or that immigrated in the last ten years—so long as they did not report receipt of cash public assistance or Social Security payments.<sup>15</sup> This yields an estimate of 577,000 households receiving SNAP (well below the more than 1 million households that actually received SNAP in NYC in 2011). 16 In other words, the paper assumes an average participation rate below 60 percent of actual household participation, with high participation for categorically eligible households<sup>17</sup> and zero participation among those with over 125 percent FPL in gross money income.

To calculate the value of SNAP benefits, this paper starts by attributing the average payment of \$158/ month/recipient to single households. Since the maximum incremental per-recipient benefit declines with increasing household size, the paper preserves the ratio of the average to the maximum benefit with increasing household size. With the actual distribution of SNAP benefits by various household characteristics unknown, the paper makes the most cautious estimate possible, rather than simply attributing the same per-beneficiary average to all households. Overall,

the paper understates total 2011 SNAP outlays in NYC by over \$1 billion.<sup>20</sup> It then creates a new variable, adding this model estimate of SNAP value to household income and households' Home Energy Assistance Program payments. Dividing Section 8–adjusted OOP rent by this augmented income variable yields the paper's second adjustment (see Section II, Adjustment 2).

For the paper's final quantitative adjustment (see Section II, Adjustment 3), it recodes those in its augmented income variable who paid more than the 90th percentile of OOP per-capita rent citywide as "not rent-burdened." By

excluding those who report little income but pay uppermiddle-class rents, the paper excludes those who receive family help or draw on other resources. As one might expect, this produces a large impact on rent-burden rates in Manhattan but little impact on outer borough rates.

Overall, despite the adjustments described, this paper still likely overestimates the actual rate of severe rent burdens. The multiple cautions built into the SNAP model estimate—as well as the decision not to directly impute EITC payments—offer a considerable safety margin around the paper's headline conclusions.

### **ENDNOTES**

- <sup>1</sup> See http://www.nyc.gov/html/housing/assets/downloads/pdf/housing\_plan.pdf, p. 5.
- <sup>2</sup> Ibid, p. 17.
- <sup>3</sup> Ibid, p. 10.
- <sup>4</sup> Ibid, p. 104.
- <sup>5</sup> The authors thank the NYU Furman Center's Sean Capperis and Mark Willis for providing an SAS syntax template for the 2011 HVS data, which was adapted for use with Stata. See appendix for detailed methodology.
- <sup>6</sup> The overall average was calculated at \$158/recipient/month, based on the 2011 SNAP summary, available at https://otda.ny.gov/resources/caseload/2011/2011-12-stats.pdf. To be still more cautious, the paper assumes that the average benefit per beneficiary declined from \$158/beneficiary for single households to \$118.50/beneficiary for households larger than eight people. This preserves the ratio, of the average to the maximum benefit with increasing household size, to intentionally avoid over-crediting large households. See appendix for details.
- <sup>7</sup> Actual SNAP spending in NYC was \$3.458 billion in 2011. This paper's model predicts \$2.372 billion. This caution, in addition to SNAP's targeting of excess shelter costs in a way that the paper cannot easily capture, ensures that the paper's model underestimates the housing impact of SNAP along every relevant model assumption.
- See http://tax.ny.gov/pdf/stats/stat\_pit/eitc/ny\_state\_and\_ny\_city\_earned\_income\_tax\_credits\_analysis\_of\_credit\_claims\_ for\_2010.pdf.
- <sup>9</sup> Calculations provided by E.J. McMahon, Empire Center for Public Policy. IRS does not disclose disaggregated federal EITC receipts beyond the state level. McMahon projects from state EITC statistics for NYC to a combined state-federal total by multiplying the state credit by 3.33—since the state credit is calculated as 30 percent of the federal credit—and then adding the state figure to the federal estimate. This projection excludes the city's own add-on credit of \$100, because (oddly) 20,000 more households claimed the city credit than claimed the statewide credit.
- <sup>10</sup> Based on the census's 2009 American Housing Survey, the most recent AHS survey year available for NYC.
- <sup>11</sup> See http://www.cbcny.org/sites/default/files/NYC\_Affordable\_Housing/landingpage.html.
- <sup>12</sup> See http://www.nyc.gov/html/hpd/downloads/pdf/Inclusionary-Housing-Text-Amendments-FAQs.pdf, p. 3.
- <sup>13</sup> Chetty et al. (2014), http://www.equality-of-opportunity.org/files/mobility\_trends.pdf; see also http://www.politico.com/magazine/story/2014/01/war-on-poverty-conservatives-102548\_Page2.html#.U\_JqyPldX6I.
- <sup>14</sup> See http://www.nber.org/papers/w15181 and http://npc.umich.edu/news/events/summer13/sullivan-npc-sipp-lecture-underreporting.pdf.
- <sup>15</sup> A household is clearly not a SNAP-ineligible, undocumented, or recent-immigrant household if it legally receives other forms of aid.
- <sup>16</sup> See https://otda.ny.gov/resources/caseload/2011/2011-12-stats.pdf.
- <sup>17</sup> This paper uses only its HVS variable—defined as 125 percent FPL in gross money income—for income-based categorical eligibility, not SSI-based, TANF-based, or other measures of automatic eligibility.
- <sup>18</sup> The 2011 maximum benefit was \$200/month for a single-person household, and the average for all recipients was \$158/month, for a ratio of 0.79. The maximum for a two-person household was \$367/month; multiplied by 0.79, this yields an estimated benefit of \$289.93. The paper proceeded to multiply the ratio by the maximum for each increment of household size. The authors thank Manhattan Institute senior fellow Scott Winship for this suggested adjustment.
- <sup>19</sup> It is plausible that larger households would have deductible child-care costs, which would push their net SNAP budgets closer to the maximum benefit than the average single household within this paper's categorically eligible sample. This would mean that the ratio could actually increase with household size, offsetting the declining incremental maximum benefit per person. But without more detailed information, this paper cannot be sure of how the ratio proceeds with increasing household size—or how it interacts with other household characteristics with increasing size. The paper therefore decides to underestimate benefits for all households rather than risk overestimating for some.
- <sup>20</sup> Actual 2011 NYC SNAP spending was \$3.458 billion, compared with this paper's estimate of \$2.372 billion.