POVERTY TRACKER

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MONITORING POVERTY AND WELL-BEING IN NYC

The Prevalence and Persistence of

ENERGY INSECURITY

in New York City

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INTRODUCTION

Across the nation and in New York, the cost of household energy has increased in recent decades due to rising utility rates and greater reliance on energy to carry out daily functions involving cooling, heating, lighting, refrigeration, and the use of electronic devices.[1] Just last July, New York State's Public Service Commission approved rate hikes for Con Edison over the next few years that should increase the average customer's gas and electricity Con Edison bill by $65 per month by 2025. These are basic necessities that families depend on to maintain healthy and safe households; however, when a family cannot afford to pay for their energy bill, they may: 1) reduce or forgo basic necessities (such as food, child-care expenses, etc.) to pay their bills or 2) miss their payments entirely and eventually experience a shutoff.[2] This is known as energy insecurity — defined as the inability to meet basic household energy needs.

Despite the consequences of energy insecurity for family and individual well-being, there are few sources of data on this phenomenon, making it challenging to understand its full scope and scale. Existing research from cross-sectional studies of energy insecurity show that it's widespread among the U.S. population. Data from the Residential Energy Consumption Survey reveal that 15% of households in the U.S. received a disconnection notice in 2015, and that Black- and Hispanic-headed households, as well as households with young children, are more likely to experience energy insecurity and to face utility disconnections.[3] Overall, energy insecurity affects an estimated 30 million households (27%) across the country. Yet energy insecurity remains under-discussed by policymakers relative to other forms of material hardship such as food insecurity, even though both types of hardship (among others) are associated with adverse health and social consequences.[4]

While annual data has been useful to characterize some elements of energy insecurity such as the socio-demographic distribution of energy burden[5] or utility disconnections,[3] these point-in-time surveys fail to capture the severity of the issue over time and in a holistic way. Furthermore, it is unknown how persistent energy insecurity is: do families experience energy insecurity on a chronic basis, persistently across years, or acutely as an isolated occurrence? Also, we do not know which segments of the population are disproportionately exposed to chronic or acute energy insecurity. Moreover, we do not know if energy insecurity is a standalone issue or if it co-occurs with other material hardships such as food and housing insecurities, in what is known as the "trifecta of insecurity."[6]

Longitudinal data from the Poverty Tracker offers the opportunity to fill a critical gap in the energy insecurity research. Poverty Tracker data allows us to chart the prevalence and persistence of energy insecurity in the nation's largest city: New York. We harness this novel dataset to determine the overall state of energy insecurity in the city, which New Yorkers are most at risk of persistent energy insecurity, and how it overlaps with other forms of hardship.

[1] *Hernandez, "Energy insecurity and health: America's hidden hardship."*
[2] *Hernández, "Understanding 'energy insecurity' and why it matters to health."*
[3] *Hernández & Laird, "Surviving a shut-off: U.S. households at greatest risk of utility disconnections and how they cope."*
[4] *Jessel, Sawyer, & Hernández, "Energy, poverty, and health in climate change: a comprehensive review of an emerging literature."*
[5] *Hernández, Aratani, & Jiang, "Energy insecurity among families with children."; Drehobl, Ross, & Ayala, "How high are household energy burdens? An Assessment of National and Metropolitan Energy Burdens across the US."*
[6] *Hernández, "Energy insecurity: A framework for understanding energy, the built environment, and health among vulnerable populations in the context of climate change."*

KEY FINDINGS

Analysis from our study years reveals that:

In an average year, **a fifth (20%) of New Yorkers fall behind on utility payments** because they're unaffordable and roughly **1 in 10 (9%) have their utilities shut off** because there isn't enough money to pay the bills.

Average year

20%

FALL BEHIND ON UTILITY PAYMENTS

Average year

9%

HAVE THEIR UTILITIES SHUT OFF

Over a five-year period, more than **4 in 10 (42%) New Yorkers fell behind on utility payments** in at least one year and more than **1 in 5 (23%) faced a utility shutoff** because of an affordability issue.

Over a five-year period

42%

FALL BEHIND ON UTILITY PAYMENTS

Over a five-year period

23%

HAVE THEIR UTILITIES SHUT OFF

New Yorkers in poverty, female New Yorkers, Black and Latino New Yorkers,[7] renters, and Bronx residents **all faced elevated rates of energy insecurity in an average year** and when looking at the persistence of energy insecurity across multiple years.

70% of New Yorkers who could not afford a utility payment at least once in a five-year period also faced multiple other forms of material hardship in the same period, including not being able to afford rent, food, or medical care. **The same is true for 85% of New Yorkers who had their utilities shut off.**

Over a five-year period

43% **of New Yorkers living below the poverty line had their utilities shut off at least once because they could not afford to make payments.**

[7] *See Appendix A for details on how race and ethnicity are reported on the Poverty Tracker surveys.*

ABOUT OUR APPROACH

Statistics presented in this report are based on the Poverty Tracker, a longitudinal study of poverty and disadvantage in New York City which interviews a representative sample of New Yorkers multiple times a year for up to four years, collecting data on income, material hardship, health, and several other factors related to well-being. The Poverty Tracker is one of the few longitudinal studies that can both provide a snapshot of New Yorkers' experiences with energy insecurity, as well as show how these experiences play out over time. To measure energy insecurity in New York City, we analyze responses to two questions available to us from the Poverty Tracker:

Couldn't afford a utility payment and fell behind: In the past 12 months, did you not pay the full amount of your phone, gas, oil, or electricity bill because there wasn't enough money?[8]

Utilities shutoffs after not being able to make full payments: In the past 12 months, was your phone, gas, or electricity service ever cut off because there wasn't enough money to pay the bills?

Using the Poverty Tracker data, we are able to show the share of New Yorkers who fell behind on utility payments or experienced a shutoff in a given year. But this annual snapshot fails to show the share of New Yorkers who are persistently energy insecure – unable to pay utilities or facing utility shutoffs year in and out. We thus supplement these annual results with a longitudinal analysis on the persistence of energy insecurity among New Yorkers overall and further broken out by income level, borough, housing status, race and ethnicity, sex, and education level.

We evaluate both the prevalence of energy insecurity in every year from 2015 to 2022, and its persistence across a typical five-year period[9]; that is, the share of people who faced these forms of energy insecurity in one year, two years, and so on for up to five years.

[8] *While this question also asks respondents about phone services, we focus on gas and electricity services in this report and discuss the policies tied to these forms of hardship.*

[9] *In our analysis, when examining the persistence of energy insecurity in a typical five-year period, we use data from 2015-2019 and do not include the peak pandemic years (2020-2021) or 2022. In 2020 and 2021, there was a moratorium on utility shutoffs and New Yorkers received several additional government supports delivered in response to the pandemic (e.g., stimulus payments, additional unemployment benefits, the expanded Child Tax Credit, among others). The moratorium is no longer in effect, and families are not receiving additional benefits beyond those received in the pre-pandemic years, therefore 2020 and 2021 are atypical years and the pre-pandemic data is likely more reflective of New Yorkers' risk of persistent energy insecurity today and in coming years.*

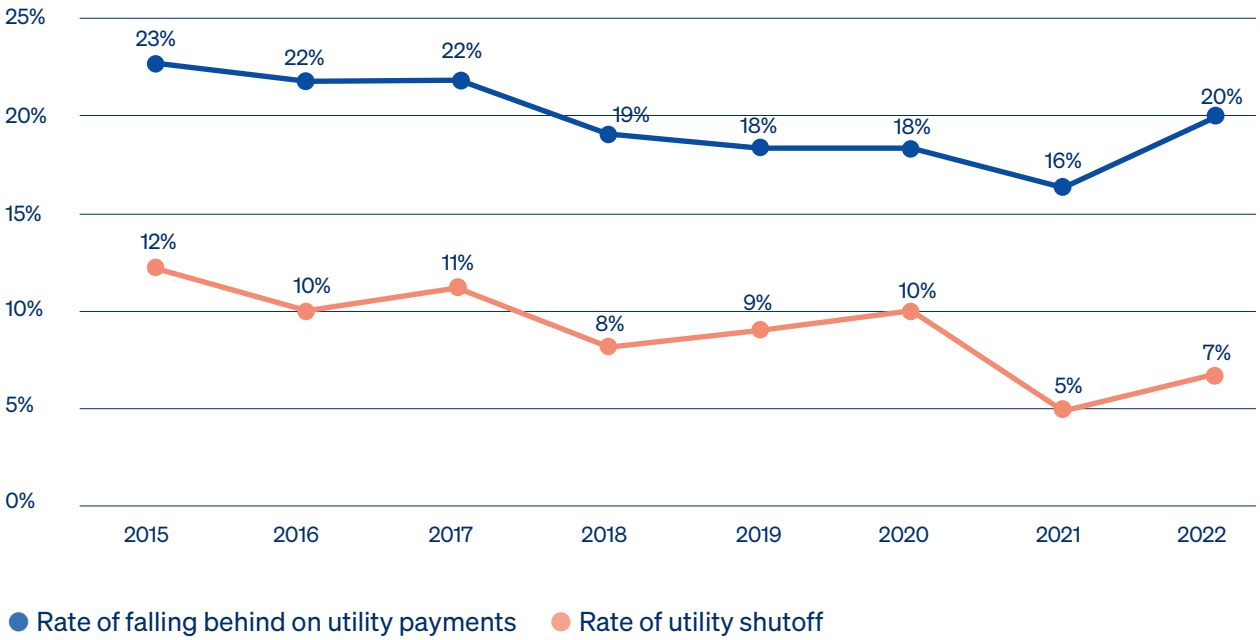
RESULTS

Prevalence of energy insecurity

Figure 1 shows the share of New Yorkers who endured a utility shut off or fell behind on utility payments within each year between 2015 and 2022.

Figure 1

Annual rates of falling behind on utility payments or experiencing utility shutoffs



Source: Poverty Tracker annual survey data with cross-sectional weights, cohorts two through five.

We see that in **nearly all years since 2015, roughly a fifth of New Yorkers fell behind on utility payments in each year and 1 in 10 experienced a utility shutoff.** In 2020 and 2021, one might expect to have seen a spike in the share of New Yorkers falling behind on utility payments or facing shutoffs as so many lost work in response to the pandemic. Instead, rates remained stable between 2019 and 2020, and then fell in 2021. These stable and then declining rates are, at least in part, attributable to the moratorium on utility shutoffs during the period and the substantial government supports provided in those years, including expanded unemployment insurance and stimulus checks, among others. In 2022, the moratorium was no longer in effect and families were not receiving any additional government support beyond that received before the pandemic. With this, we see a return to the pre-pandemic levels of energy insecurity.[10]

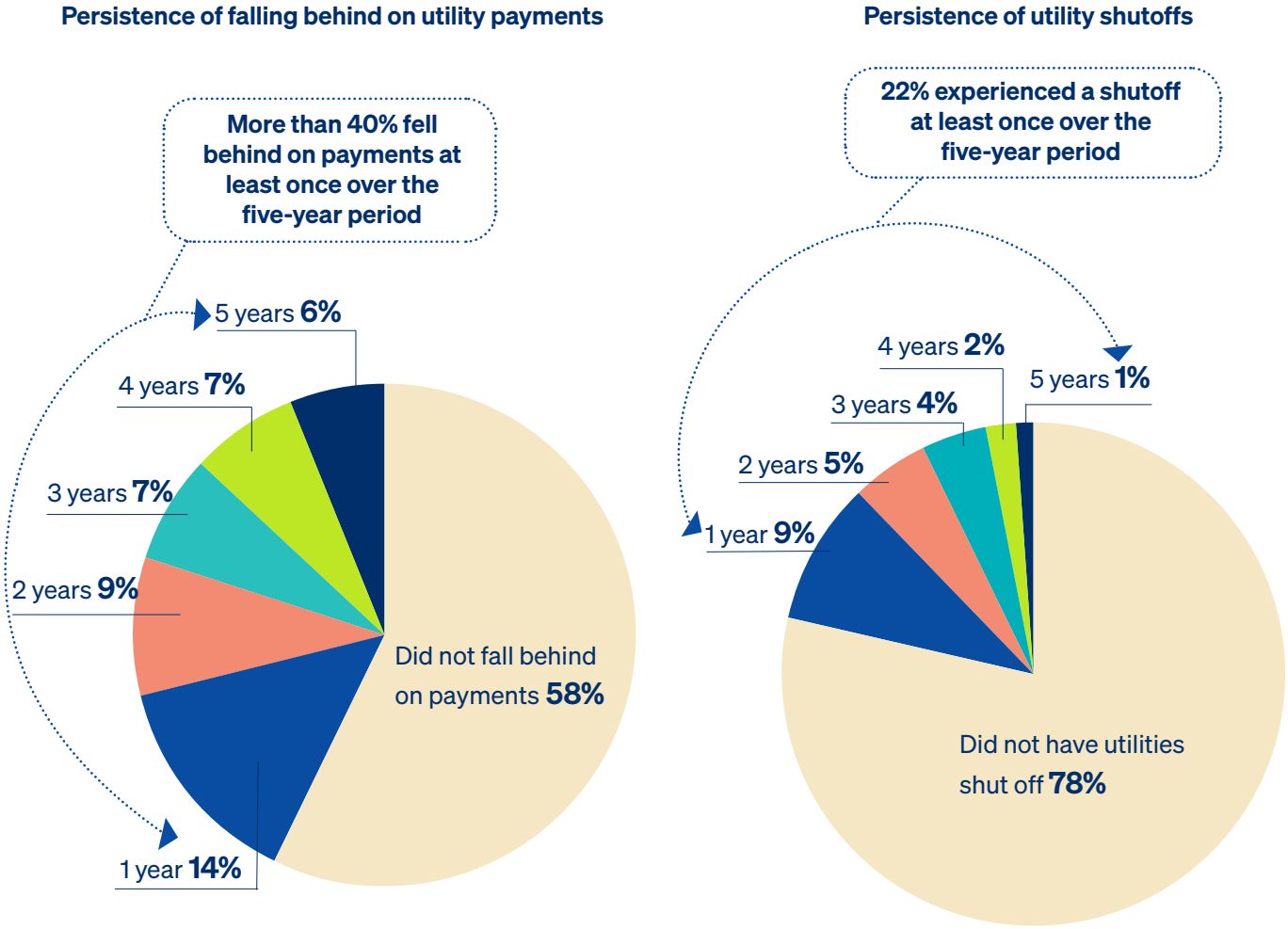
[10] *Using data from 2015 to 2019, Table B1 in Appendix B shows the average annual rates of falling behind on utility payments and utility shutoffs across sociodemographic groups, including level of educational attainment, poverty status, sex, race and ethnicity, housing status (e.g., renters vs. owners), and borough. The results show that annual rates of energy insecurity were highest for historically disadvantaged groups, including those with less formal education and income, females, Black and Latino New Yorkers, renters, and residents of the Bronx.*

Persistence of energy insecurity

Looking across multiple years, we find that the share of New Yorkers ever facing energy insecurity is much higher than annual statistics suggest. Figure 2 shows the percentage of New Yorkers who fell behind on utility payments or experienced utility shutoffs over a typical five-year period. **More than 40% fell behind on payments at least once over the five-year period, and more than a quarter fell behind in more than one year. As for utility shutoffs, nearly a quarter (22%) experienced a shutoff at least once across five years, and more than 1 in 10 had a shutoff in two or more years.**

Figure 2

Persistence of falling behind on utility payments and utility shutoffs in a typical five-year period



Source: Poverty Tracker annual survey data with longitudinal weights, cohort two.

Sociodemographic predictors of persistent energy insecurity

In Table 1, we examine the persistence of falling behind on utility payments and utility shutoffs among different sociodemographic groups. We show the share of New Yorkers who fell behind on utility payments or had utility shutoffs at least once across a five-year period and the share who faced these hardships in two or more years across that same period. We find that no group was entirely protected from these hardships, but some groups were disproportionately burdened.

Looking across these five-years, we find that:

- New Yorkers in poverty were three times as likely to have fallen behind on utility payments at least once compared to New Yorkers above 300% of the poverty line (62% vs. 18%) and eight times as likely to have had their utilities shut off (43% vs. 5%).[11]

- Compared to residents of all other boroughs, Bronx residents were more likely to have fallen behind on utility payments because they were unaffordable, as well as to have had a utility shutoff (55% and 32%).

- Renters were more than four times as likely to have fallen behind on utility payments than homeowners without a mortgage (52% vs 12%), and close to a third of renters faced a utility shutoff (30%), while shutoffs were hardly ever experienced by homeowners without a mortgage (2%).

- Black and Latino New Yorkers were more than twice as likely as white New Yorkers to have an unaffordable utility bill and fall behind (59% and 56% vs. 23%) and close to eight times as likely to have a utility shutoff (37% and 33% vs. 5%).

- Female New Yorkers were more likely to have fallen behind on utility payments than male New Yorkers (46% vs. 36%) and to have their utilities shutoff (25% vs. 16%).

- More than half (53%) of New Yorkers with a high school degree or less fell behind on utility payments and a third (34%) had a utility shutoff. These experiences were notably less common among New Yorkers with a Bachelor's degree (30% and 11%, respectively).

Across all groups disproportionately experiencing utility shutoffs or falling behind on utility payments in this five-year period, the majority faced these hardships in two or more years.

[11] *100% of the poverty threshold corresponds to $43,890 for a family four with two children in rental housing and 300% corresponds with $131,670 (in 2022 dollars).*

Table 1

Persistence of falling behind on utility payments and utility shutoffs by sociodemographic groups

	Fell behind on utility payments		Utility shut off because couldn't afford payments	
	Ever in a five-year period	Two years or more	Ever in a five-year period	Two years or more
Average income relative to the poverty threshold				
Under 100%	62%	46%	43%	28%
100% to 200%	58%	41%	33%	19%
200% to 300%	42%	27%	19%	9%
300%+	18%	9%	5%	3%
Borough				
Brooklyn	44%	29%	23%	13%
Bronx	55%	39%	32%	18%
Manhattan	33%	20%	17%	10%
Queens	39%	27%	19%	11%
Staten Island*	43%	35%	18%	11%
Housing tenure status				
Owner with a mortgage	27%	16%	7%	4%
Owner without a mortgage	12%	5%	2%	1%
Renter	52%	37%	30%	18%
Race/ethnicity				
Asian non-Latino	24%	11%	11%	6%
Black non-Latino	59%	43%	37%	22%
Latino	56%	40%	33%	20%
Other or multi-racial, non-Latino*	53%	36%	27%	18%
White non-Latino	23%	14%	5%	2%
Sex				
Male	36%	23%	16%	10%
Female	46%	32%	25%	14%
Educational attainment				
High school degree or less	53%	37%	34%	21%
Some college or associate's degree	54%	37%	29%	17%
Bachelor's degree or higher	30%	19%	11%	5%

Note: Income-to-needs were determined by taking the average of respondents' income and poverty threshold across the five-year period and using these averages to determine average income-to-needs. For housing tenure status, we identified the housing tenure that respondents reported residing in for the majority of the time that they were interviewed and assigned them to that tenure status; we followed the same approach for borough residence.
**Interpret with caution due to sample size constraints.*
Source: Poverty Tracker longitudinal survey data, cohort two.

The overlap between energy insecurity and other material hardships

So far, we've seen that energy insecurity is a major challenge for many New Yorkers. The share of New Yorkers falling behind on utility payments and experiencing utility shutoffs is troublingly high every year, and even higher when looking across a five-year period. And our next set of results reveal that energy insecurity is seldom the only form of material hardship energy insecure New Yorkers are facing.

In Figure 3, we show the prevalence of various forms of material hardship among New Yorkers who fell behind on utility payments and who experienced utility shutoffs at least once across the five-year period in our study. The results show a large overlap between energy insecurity and other forms of material hardship. For example, **more than 2-in-3 New Yorkers (68%) who fell behind on utility payments were not able to pay the full amount of rent or mortgage at least once in the five-year period examined.** That rate increases to 4-in-5 among New Yorkers (82%) who experienced a shutoff. In addition, more than half of New Yorkers that fell behind on utility payments reported often running out of money before the end of the month (54%), and close to two-thirds reported not being able to afford seeing a doctor at least once in this five-year period (59%). These hardships were even more common among those who faced a utility shutoff (65% and 66%, respectively). **Overall, the majority of New Yorkers that face energy insecurity experience it alongside housing insecurity, financial hardship, or medical hardship.**

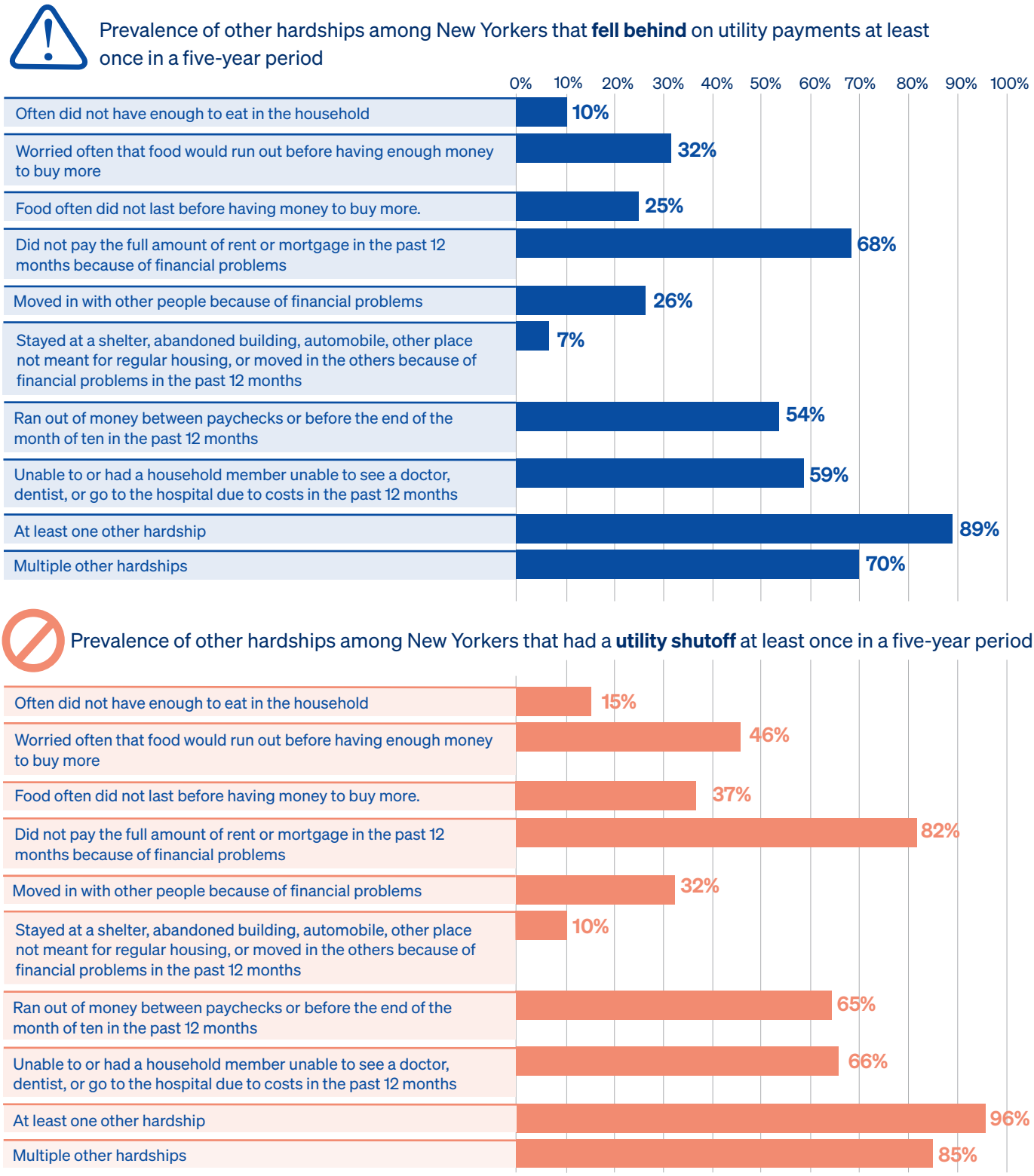
Food hardship is also prevalent among New Yorkers that face energy insecurity. More than a third (37%) of New Yorkers that experienced a shutoff in the five-year period examined reported often running out of food and not having money to get more, and close to half (46%) reported often worrying about running out of food without having money for more. Among the New Yorkers that fell behind on utility payments, a quarter (25%) ran out of food often and nearly 1-in-3 (32%) worried often about running out of food.

The intersection between falling behind on utility payments, utility shutoffs, and other experiences of material hardship is both staggering and alarming as energy insecurity is infrequently experienced in isolation but concurrently with food, housing, financial, and medical hardship, as the trifecta of insecurity suggests.[12] **Across the five-year period, the vast majority of New Yorkers that fell behind on utility payments or that had a utility shut off experienced at least one other form of hardship (89% and 96%, respectively).** The rates of New Yorkers facing energy insecurity and multiple other hardships across the five-year period are also strikingly high: 70% of New Yorkers that missed a utility payment and 85% of New Yorkers that had a utility shut off experienced at least two other forms of material hardship.

[12] *Hernández, "Energy insecurity: A framework for understanding energy, the built environment, and health among vulnerable populations in the context of climate change."*

Figure 3

Prevalence of other forms of material hardship across a five-year period among energy insecure New Yorkers



Source: Poverty Tracker longitudinal survey data, cohort two.

BOLSTERING THE POLICY RESPONSE TO ENERGY INSECURITY

Bolstering the policy response to energy insecurity requires a comprehensive approach that addresses both short-term and long-term challenges. Some strategies that can help include: (1) expanding access to programs that directly reduce electricity costs; (2) expanding disconnection protections and reducing added fees and deposit requirements; (3) improving building performance and energy efficiency; and (4) boosting New Yorkers' incomes. We discuss each in turn below.

Expanding access to programs that directly reduce electricity costs

There are several programs targeted towards New Yorkers struggling to afford gas and electricity bills. This includes the federally administered Low Income Home Energy Assistance Program (LIHEAP), which provides income-eligible New Yorkers with an annual subsidy to offset heating costs, with the subsidy amounting to $400 per year for those reliant on natural gas for heating[13] (as most city residents are). While LIHEAP can help enrolled families avoid missed payments and shutoffs, LIHEAP's limited funding means that not all eligible families actually receive a benefit.[14] Further, only households that pay for heat directly (as opposed to through their rent) are eligible for the full subsidy,[15] there is limited assistance provided for cooling,[16] and the benefit is distributed once per year (typically in early winter), as opposed to monthly to coincide with monthly bills. Expanding funding, eligibility, structure, and coverage for electricity and cooling are just some ways that the LIHEAP program could better meet the needs of energy insecure New Yorkers.

Another program New Yorkers may benefit from is New York State's Energy Affordability Program (EAP). New York State established the EAP to prevent low-income New Yorkers from spending more than 6% of their income on utilities.[17] A set discount rate is provided by the State to the utility companies to meet this goal,[18] and the Office of Temporary and Disability Assistance (ODTA) or the City's Department of Social Services (DSS) informs utility companies who qualifies based on their enrollment in other programs.[19] New Yorkers can also self-enroll in the program. Under-enrollment is, however, a concern,[20] particularly outside of New York City: ODTA only informs the utility companies about customers' enrollment in HEAP,[21] while they have to self-enroll if they are eligible through other programs. In the City, DSS performs more data matching so that city residents qualifying through programs like SNAP and SSI are automatically enrolled.

[13] *For information on LIHEAP in New York States, see: https://otda.ny.gov/programs/heap/*
[14] *Hernández, "Energy insecurity: A framework for understanding energy, the built environment, and health among vulnerable populations in the context of climate change"; Nishi, Hernández, & Gerard, "Energy insecurity mitigation: The Low-Income Home Energy Assistance Program and other low-income relief programs in the U.S."*
[15] *For more information on cooling assistance in New York State, see: https://otda.ny.gov/programs/heap/#cooling-assistance*
[16] *Households may apply for a cooling assistance benefit to aid with the cost of purchasing an air conditioner, but the benefit cannot be used for higher electricity costs that rise when using the air conditioner.*
[17] *For information on New York State's EAP, see: https://dps.ny.gov/energy-affordability-program*
[18] *Discount rates are set based on Census data and utility costs. For more information, see: https://www.nysenate.gov/sites/default/files/public_utility_law_project_-_pulp.pdf*
[19] *This includes programs like SNAP, SSI, Medicaid, among others.*
[20] *For more information, see testimony from Laurie Wheelock of the Public Utility Law Project: https://www.nysenate.gov/sites/default/files/public_utility_law_project_-_pulp.pdf*
[21] *HEAP provides grants to address utility arrears or for purchasing heating fuel or other heating sources. New Yorkers can qualify for one HEAP grant per year.*

That said, comprehensive information on enrollment and under-enrollment is not available and ensuring full take-up of the program is key to ensuring it meets its goals.

Expanding disconnection protections and eliminating fees and deposit requirements

In 2023 and 2024, the New York State Legislature considered another bill, the New York Home Energy Affordable Transition (NY HEAT) Act, which would, among other things, codify the state goal that low-to-moderate income customers do not spend more than 6% of their income on energy bills. Ultimately, this bill passed the Senate but did not pass in the Assembly. Under current law, utility companies can terminate services for lack of payment unless a doctor has certified that someone in the household is experiencing a medical emergency, is elderly (aged 62 or older), blind, or disabled.[22] However, while the degree of under-enrollment of elderly and medically vulnerable in shutoff protection plans is unknown in New York State, under-enrollment is likely given the administrative burdens associated with certification and recertification.[23]

In addition to monthly gas and electricity costs, New Yorkers are sometimes unable to access utilities at all because they must make a deposit to turn on these services or face additional fees on top of their bill for usage. After a missed payment, households can be charged a late fee set as a proportion of their unpaid balance. And after a shutoff or missed payments, a household may be required to pay a deposit of up to half their average monthly bill in order to avoid a shutoff or to reconnect their services.[24] Together, added fees and deposits make affording utilities even more challenging for those already economically burdened.

Improving building performance and energy efficiency to reduce energy use and costs

New York City has over one million buildings and 90% of them are expected to still be in use by 2050.[25] The vast majority of these buildings suffer from old age and are energy inefficient — and these inefficiencies can drive up tenants' utility bills. Retrofitting these structures to improve building performance and energy efficiency is a key long-term strategy for addressing energy insecurity in the city as it could reduce energy use, and lower New Yorkers' utility bills in turn. In the effort to accelerate the retrofitting of existing buildings and ensure that new buildings are sustainable, New York City has implemented certain policies and laws, including Local Law 97 (LL97).[26] The legislation sets carbon emissions caps for buildings' energy use with the intent to meet the citywide emissions reduction goals. LL97 aims to help New York City reach its 40 percent reduction in aggregate greenhouse gas emissions target by 2030 and an 80 percent reduction in citywide emissions by 2050.[27]

These investments have the potential to improve thermal conditions and reduce building operating expenses. However, on the cautionary end, some of the building decarbonization strategies being implemented to reach compliance with LL97 include the installation of heat pumps and electric stoves. While more

[22] *For more information on shut-off protection coverage, see: https://www.nysenate.gov/legislation/laws/PBS/32*
[23] *For more information, see testimony from Laurie Wheelock of the Public Utility Law Project: https://www.nysenate.gov/sites/default/files/public_utility_law_project_-_pulp.pdf*
[24] *For more information on reconnection plans and the Home Energy Fair Practices Act, see: https://dps.ny.gov/consumer-guide-your-rights-residential-gas-electric-or-steam-customer-under-hefpa*
[25] *The City of New York Mayor's Office of Sustainability, "One city built to last: 2nd Edition."*
[26] *The City of New York Mayor's Office of Climate and Environmental Justice, "NYC greenhouse gas inventories."*
[27] *The City of New York Mayor's Office of Climate and Environmental Justice, "NYC greenhouse gas inventories."*

efficient and healthier than fossil fuel alternatives, these changes may present new hardships for tenants due to cost transfers and the fact that electricity-based appliances are often more expensive to operate. Specifically, while heat pumps allow residents to control indoor temperature, installing them will in most cases pass on the cost of heating and cooling to tenants. This may present greater financial hardship for tenants that are newly responsible for these additional utility costs. While this means that more households in New York City will be eligible for LIHEAP benefits (because it is restricted to tenants who pay their own heat), it may also further strain these safety net benefits. As building energy upgrades unfold, it is also necessary to implement greater financial supports for households in this transitional period and beyond.

Bolstering New Yorkers' incomes

Energy insecurity could also be reduced through policies that directly boost New Yorkers' incomes. For example, the temporary 2021 Child Tax Credit (CTC) expansion — which increased the value of the CTC, made the credit fully accessible to low-income families, and delivered the credit in monthly installments — led to a significant reduction (39%) in the share of New York City families with children running out of money at the end of the month.[28] One might expect that with this additional income, families would also be less likely to fall behind on utility payments or face utility shutoffs.[29] While future research should explore the direct effects of income-support policies like the EITC, unemployment insurance, and others on energy insecurity, there is strong evidence that these policies reduce various forms of material hardship — and quite substantially in some cases[30] — thus expansions to such policies could also play an important role in reducing energy insecurity in New York City.

[28] Poverty Tracker Research Group at Columbia University. "The state of poverty and disadvantage in New York City, volume 5."
[29] There was a moratorium on utility shutoffs in the city at the time that the 2021 monthly CTC payments were delivered, so we cannot assess if the expanded credit led to a reduction in shutoffs.
[30] Schmidt, Shore-Sheppard, and Watson, "The effect of safety-net programs on food insecurity."
[29] Shaefer et al, "The decline of cash assistance and the well-being of poor households with children."
[30] Parolin, Ananat, et al, "The effects of the monthly and lump-sum Child Tax Credit payments on food and housing hardship."
[31] Pilkauskas and Michelmore, "The effect of the Earned Income Tax Credit on housing and living arrangements."
[32] McKernan, Ratcliffe, and Iceland, "The effect of the U.S. safety net on material hardship over the past quarter-century."
[33] Pilkauskas et al, "The effects of income on the economic wellbeing of families with low incomes: Evidence from the 2021 expanded Child Tax Credit."

CONCLUSION

The rising costs of basic needs have been a high-priority issue for New Yorkers and policymakers in recent years as inflation hit record highs. But well before the more recent inflationary spikes, the cost of household energy had been rising due to both increasing cost of energy and mounting energy needs. Today, electricity, gas, and other energy sources are required for meeting everyday needs and basic functioning, but the costs of these essentials have put them out of reach for many New Yorkers. Our analysis of annual rates of energy insecurity shows that, in a typical year, 1 in 5 New Yorkers fall behind on utility payments because they are unaffordable and roughly 1 in 10 have their utilities shut off because they don't have enough money to pay the bills.

When looking across multiple years, the share of New Yorkers affected by energy insecurity is even higher: 4 in 10 (42%) New Yorkers fell behind on utility payments in at least one year in a five-year period we examined, and more than 1 in 5 (23%) faced a utility shutoff because of an affordability issue. Energy insecurity also fell most on those already facing disproportionately high rates of poverty: female New Yorkers, Black and Latino New Yorkers, renters, and Bronx residents. And New Yorkers facing energy insecurity seldom faced this form of hardship alone. 70% of New Yorkers who could not afford a utility payment at least once in a five-year period also faced multiple other forms of material hardship in the same period, including not being able to afford rent, food, or medical care. The same is true for 85% of New Yorkers who had their utilities shut off.

The high rates of energy insecurity in the city are, however, addressable, and there are several possible policy solutions that could mitigate this hardship among New Yorkers. Notable examples most directly tied to utility costs include expanding access to programs that directly reduce these costs, such as LIHEAP, expanding disconnection protections, and reducing added fees and deposit requirements that families face after a shutoff. Further, policies often more linked to reducing carbon emissions — such as improving building performance and energy efficiency — could also lead New Yorkers to need less energy to meet basic needs, driving down monthly bills in turn. Ensuring that low-income New Yorkers do not face new costs during these transitions is also key. And finally, energy insecurity is just one form of hardship that New Yorkers face, and they are often facing multiple overlapping hardships without enough funds to meet all needs. Policies that increase New Yorkers' incomes more broadly could also play an important role in reducing energy insecurity across the city.

APPENDIX A.
How the Poverty Tracker identifies respondents' race and ethnicity

Throughout this report, we discuss race and ethnicity in the context of socioeconomic disparities among New Yorkers. We identify the race and ethnicity of adults in the Poverty Tracker sample using questions asked by the U.S. Census Bureau on various population-level surveys.[31] These questions allow us to better understand the needs of communities within New York City and to ensure that we are surveying a representative sample of New York City's racial and ethnic groups. The questions read:

Are you of Hispanic, Latino, or Spanish origin?
Yes
No

What is your race? Are you...
White
Black or African American
Asian
American Indian or Alaska Native
Native Hawaiian or Pacific Islander
Or something else

We combine responses to these questions into the following racial and ethnic groups:
Asian, non-Latino
Black, non- Latino
Hispanic, Latino, or of Spanish origin[32]
Multiracial or another race or ethnicity, non-Hispanic
White, non-Latino

In this report we refer to New Yorkers who identified as Hispanic, Latino, or of Spanish origin as Latino New Yorkers, and to Black non-Latino and white non-Latino New Yorkers as Black and white New Yorkers, respectively. "New Yorkers" refers to adults in New York City. There are limitations to this methodology. This type of classification is one dimensional while one's identity is often much more robust and intersectional. In addition, our results present averages for groups of people, but averages do not reflect the experiences of all individuals. One's personal experiences may diverge significantly from the results we present. And while our questions are relatively specific, each person might interpret them differently, resulting in subjective

[31] *Historically, the Census asks race and origin questions to gain an understanding of the makeup of the population and to help construct civil rights protections for all. These questions have helped to reveal gaps within various social policies and to address the economic, educational, and infrastructural needs of different communities. See Brumfield, Goldvale, and Brown (2019).*
[32] *With these groupings, New Yorkers who indicate that they are of "Hispanic, Latino, or of Spanish origin" are grouped together, regardless of their response to the question about their race. The majority of New Yorkers who identify as Hispanic, Latino, or of Spanish origin (62%) do not identify with a particular racial group (i.e., they respond "something else" when asked about their race). Roughly 25% identify as white and 13% identify as Black.*

answers. Our examination of poverty, hardship, and disadvantage in the context of race and ethnicity is intended to help explain how disparities across groups take shape economically, financially, and with regards to health in New York City.

Conventions used when discussing race and ethnicity

The Poverty Tracker uses the question from the Census Bureau listed above to identify if individuals are of "Hispanic, Latino, or Spanish origin." We must use this question in order to weight the sample to Census Bureau data and to make it representative of the city's population. When identifying New Yorkers who say yes to this question, we use the term Latino instead of Hispanic or Spanish origin. Hispanic is a term originally used in the U.S. by the Census Bureau to refer to a very diverse group of people who were linked by their history of colonization by Spain or by their Spanish origin. The term is thus thought to exclude many people with origins in Latin America who do not speak Spanish — including people with origins in Brazil and/or within many indigenous groups. The term Latino, on the other hand, is more inclusive of all people with origins in Latin America.[33] Because the Poverty Tracker is weighted to Census Bureau data, and because the term Latino is more consistent with the Census Bureau's question wording, we have chosen to use the term Latino in this report.

With regards to capitalizing the names of different racial groups, there has been a general consensus among organizations, publications, and news outlets that Black should be capitalized, as a recognition of the racial and ethnic identity that many claim. However, such a consensus has yet to be reached regarding whether or not the same should be done for white. Those in favor of capitalizing white argue that designating it as a proper noun assigns accountability to the white race, and invites white people to contemplate the role that their whiteness plays in society. The main argument against capitalizing white is that white people do not have a shared culture or history, and that capitalization has been used throughout history to signify superiority and white supremacy. In this report, we leave white uncapitalized, though we note that societal and editorial discussions on this topic are ongoing and unresolved.

[33] *Latino is also gendered, and many people choose to identify as Latinx to remove the gender binary implied in the term. There is also a debate around the term Latinx, with some identifying with the term and others not, or doing so only in specific settings (see Salinas, "The Complexity of the 'x' in Latinx.")*

APPENDIX B. Supplementary Results

Table B1

Rates of falling behind on utility payments or utility shutoffs by sociodemographic groups

	Rates of falling behind on utility payments	Rates of utility shutoffs
Income relative to the poverty threshold		
Under 100%	30%	18%
100% to 200%	27%	13%
200% to 300%	21%	9%
300%+	10%	4%
Borough		
Brooklyn	19%	9%
Bronx	29%	15%
Manhattan	17%	8%
Queens	19%	10%
Staten Island*	18%	5%
Housing status		
Owner with a mortgage	13%	4%
Owner without a mortgage	4%	1%
Renter	27%	14%
Race/ethnicity		
Asian, non-Latino	14%	6%
Black, non-Latino	30%	17%
Latino	31%	17%
Other or multi-racial, non-Latino	20%	9%
White, non-Latino	10%	2%
Sex		
Male	17%	9%
Female	24%	11%
Educational attainment		
High School degree or less	26%	15%
Some college or associate's degree	24%	12%
Bachelor's degree or more	13%	4%

Source: Poverty Tracker annual survey data with cross-sectional weights, cohorts two through five.
**Interpret with caution due to sample size constraints.*

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