Keeping up with the Light Bill: Renter Energy Insecurity Trends and Policy Implications

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ABSTRACT

Renter households living in older inefficient housing are more likely than others to experience energy insecurity, meaning they have a higher likelihood of falling behind on their energy bills, reducing payments for other essential expenses, or pursuing risky strategies to keep their lights and heat on such as using an oven to heat a home or a high-interest payday loan to pay energy bills. Previously published ACEEE research used a sample of the US Census Bureau's Household Pulse Survey to document trends in renter energy insecurity over the second half of 2021 and first half of 2022. The Census Bureau created the Household Pulse Survey in 2020 to document the effects of the COVID-19 pandemic and subsequent recovery efforts on households across the United States. The survey included several energy insecurity questions beginning in 2021. This paper will present findings from a more comprehensive analysis of Household Pulse Survey data responses to its energy insecurity questions for all available months they were included. To the extent possible, we will assess differences in renter energy insecurity across both time and demographic groups. We will also discuss the implications of our findings for the energy efficiency policymakers and program administrators that have a critical role to play in alleviating renter energy insecurity.

Introduction

Over the course of the past several years, policymakers and energy efficiency program administrators have become increasingly aware of the heavy burden that energy costs are placing on many low-income, Hispanic, Black, Native American, renter, and older households. Using data from 2017, Drehobl, Ross, and Ayala (2020) found that one-quarter of American households were energy burdened, meaning that they spent more than 6% of their income on energy bills, and 13% of households had severe energy burdens, meaning they allocated more than 10% of their income towards energy bills. Furthermore, these researchers found that the median renter experienced energy burdens that were 13% higher than the median homeowner – 3.4% versus 3.0%. However, a 3.4% energy burden is still well below the threshold of being considered a high energy burden. As this paper will examine, looking at energy burden rates alone cannot sufficiently capture the challenges and risks that many renters experience in relation to their home energy use and costs. The following sections will provide a more comprehensive view of these challenges and risks using the lens of energy insecurity and will conclude by offering a set of recommendations for policymakers and program administrators.

Defining and Characterizing Renter Energy Insecurity

The concept of energy insecurity can be used to more comprehensively capture the energy-related challenges faced by many renters in the United States. Hernandez (2016) defines energy insecurity at its most fundamental level as, "an inability to adequately meet basic household energy needs." Hernandez (2016) goes on to describe how this insecurity operates along three dimensions – economic, physical, and behavioral. The economic aspects of energy insecurity involve a household's ability to pay for their energy bills or cope with incorrect billing situations given their income. This dimension includes, but is not limited to, a consideration of energy cost burdens. The physical dimension of energy insecurity refers to the homes and surrounding environments that may affect a household's energy use and costs. Renters may live in older energy-inefficient homes that have not been weatherized or lack newer and more efficient appliances, resulting in higher-than-expected energy use. Other households may not be able to keep their home heated or cooled properly because they lack properly functioning equipment. A home's surrounding environment may also complicate indoor climate control. For example, neighborhoods with a high ratio of impermeable and nonreflective surfaces to vegetated spaces may experience especially high summer temperatures that increase the demand for energy to cool homes. The behavioral dimension of energy insecurity involves the strategies that households use to provide for their energy and financial needs. Households may use risky strategies, such as heating their home with an oven during the winter or leaving their home at an unsafe temperature to keep their energy costs manageable. Other behavioral strategies may involve taking out a high-interest payday loan or incurring credit card debt to pay for their energy needs. Households may also make financial tradeoffs, such as falling behind on energy bills to pay for other household needs, or staying current on energy bills while falling behind on other expenses.

Research over the past decade has documented that renters are more likely to experience energy insecurity because their homes tend to be less energy-efficient and because these households often have lower incomes than homeowners (Carliner 2014, La Jeunesse 2016). Memmott et al. (2021) describes how Black or Hispanic households, many of which are renters, have been found to experience high rates of energy insecurity over time. In examining how the

COVID-19 pandemic affected the above groups, Memmott et al. (2021) found that these same groups were more likely to experience more severe forms and higher rates of energy security during the first months of the pandemic. Samarripas and Lee (2022) examined energy insecurity for renters over one year (from mid-2021 to mid-2022) and similarly found that renters of color and those with low incomes were the groups most frequently falling behind on energy bills. They also found that those reporting being behind on their energy bills reported higher rates of keeping their homes at an unsafe temperature and forgoing paying for other necessities to try and pay for their energy bills. Furthermore, the further renters fell behind on their energy bills the more likely it was that they were also falling behind on their rent. This study picks up where Samarripas and Lee (2022) left off and examines these same indicators using data gathered from July 2022 through April 2024.

Methodology

This paper's research and findings are based on data drawn from the US Census Bureau's experimental Household Pulse Survey (Census Bureau 2024). Originally deployed to track how the COVID-19 pandemic was impacting people's lives, the Household Pulse Survey now tracks an array of emerging social and economic trends across the United States. The survey is considered part of the Census Bureau's Experimental Data Series because it is designed to be deployed and publicly released more quickly and is not subject to the Census Bureau's more rigorous survey standards used for other data products such as the American Community Survey. From April 2020 through October 2023, the survey was regularly deployed in periodic phases that consisted of three thirteen-day deployment intervals. Beginning in 2024, the survey is being deployed continuously. In July 2021, the Census Bureau began asking about energy insecurity, documenting households' ability to pay energy bills and the methods they used to cope with unaffordable energy costs, from forgoing other expenses to adjusting household temperatures to unhealthy levels. Renter energy insecurity questions included in the survey ask respondents about their experiences over the preceding 12 months.

Previous research by Samarripas and Lee (2022) analyzed the Household Pulse Survey's renter energy insecurity and other related data collected during the period of June 29 – July 11, 2022. The analysis focused on examining the characteristics of those reporting that they had been behind on their rent at least one month over the previous year. It analyzed how those arrears were experienced across different racial and ethnic groups as well as income brackets. It took stock of the degree to which those reporting being behind on their rent also reported keeping their home at an unsafe temperature and forgoing spending on medicine, food, and other necessities to help cover their energy expenses. The research also included a look at the rates of those who reported both energy and rent debt. In doing so, the analysis departed from its approach taken to analyze the associations between other variables. Because such an analysis required a closer look at a small sample of the survey, researchers analyzed averages of these rates using all survey microdata from the previous year.

This paper seeks to update the analysis conducted by Samarripas and Lee (2022) by examining the most recent Household Pulse Survey data and with the availability of more data, examine how the rates of rent debt have shifted for those behind on their energy bills over time.

Findings

Samarripas and Lee (2022) found that 33% of renters were behind on their energy bills in late June and early July 2022. The overall rates of renters reporting being behind on their energy bills has remained relatively unchanged since then as shown in figure 1. The rates have not fluctuated outside the range of 31-35% in the surveys conducted over this period, averaging 32%.

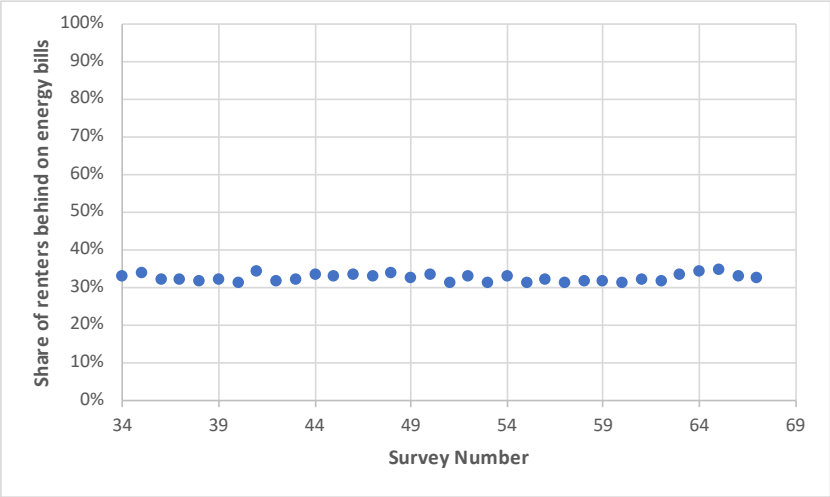

Figure 1. Share of renters behind on energy bills from July 27, 2022 to April 29, 2024. *Source*: Census Bureau 2024.

The characteristics of those renters reporting being behind on their energy bills has also remained relatively unchanged. Those with lower incomes were more likely to report that they had fallen behind on their energy bills than those with higher incomes. Table 1 shows the breakdown of renters with different incomes that reported being behind on their energy bills at least once during the previous 12 months.

Table 1. Shares of renters with different household incomes reporting being behind on energy bills

Household income	6/29/22 – 7/11/22 survey	7/27/22 – 7/10/23 surveys average	7/26/23 – 4/29/24 surveys average
Less than $25,000	44%	43%	41%
$25,000 - $34,999	40%	41%	38%
$35,000 - $49,999	38%	36%	35%
$50,000 - $74,999	26%	28%	28%
$75,000 - $99,999	24%	21%	21%
$100,000 - $149,999	12%	13%	13%
$150,000 - $199,999	7%	8%	8%
$200,000 and above	2%	3%	4%

Source: Census Bureau 2024

As was the case in mid-2022, white and Asian renters were likely to report lower rates of being behind on energy bills compared to renters of any other race. Table 2 shows the rates of those belonging to different racial and ethnic groups reporting being behind on their energy bills at least once in the previous 12 months. These rates have also remained relatively unchanged when compared to the data published by Samarripas and Lee (2022).

Table 2. Shares of renters of different races and ethnicities reporting being behind on energy bills

Race or ethnicity	6/29/22 – 7/11/22 Survey	7/27/22 – 7/10/23 surveys average	7/26/23 – 4/29/24 surveys average
Asian	17%	16%	15%
Black	50%	48%	49%
Hispanic	37%	39%	37%
White	26%	26%	27%
Other	42%	40%	40%

All Hispanic respondents were included in the Hispanic category regardless of race. Because of this, these respondents were excluded the other categories. *Source*: Census Bureau 2024

The shares of renters behind on their energy bills reporting that they kept their home at an unsafe temperature or reduced expenses on other household necessities such as medicine and food in order to help pay for their energy bills have remained stable since the research conducted by Samarripas and Lee (2022). Forty-four percent of renters with energy bill debt said that they kept their home at an unsafe temperature at least one month of the year year preceding July 2022 and an average of 46% of renters with energy debt reported the same in Household Pulse Surveys conducted between late July 2022 and April 2024. In survey data examined by Samarripas and Lee (2022), 81% of renters with energy bill debt said that they had forgone paying for other necessities in order to help pay for their energy bills at least one month of the year preceding July 2022. In the year of Household Pulse Surveys conducted after this date, an average of 80% of renters with energy bill debt reported the same and an average of 82% of these renters reported the same over the months from July 2023 to April 2024.

While much about renters with energy bill debt has not changed, the share of those renters behind on their energy bills reporting to be also behind on rent has decreased. As shown in figure 2, the shares of renters behind on energy bills also reporting that they are behind on rent has decreased for renters experiencing any amount of rent debt. The remainder of this paper will explore potential explanations for this development and implications for public policy.

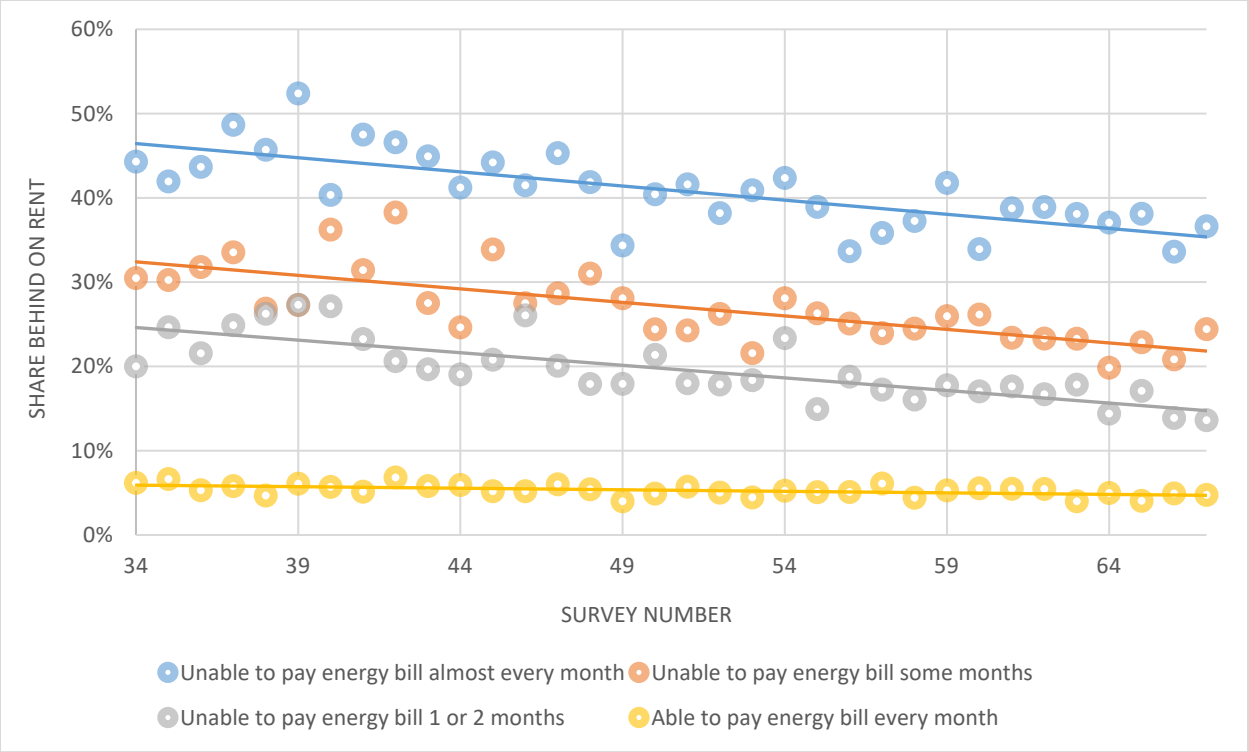

Figure 2. Share of renters behind on energy bills reporting to also be behind on rent from July 21, 2021 to April 29, 2024. *Source*: Census Bureau 2024.

Discussion

At quick glance, a decrease in rent delinquency for those already behind on their energy bills could be taken to indicate that some energy-burdened households are seeing their financial health improve. However, recent research about the financial condition of renter households indicates otherwise. The share of renters that are cost-burdened by rents has increased in recent years as rents have rapidly climbed. According to data analyzed by the Joint Center for Housing Studies of Harvard University (2024), rents began to grow in early 2021 after decreasing during the first year of the pandemic and peaked at a growth rate of 15.3% in early 2022. Rents continued to grow, albeit at a slower pace, through the third quarter of 2023. Despite modest income growth for renters over this period, median rents in the third quarter of 2023 still accounted for 30% of the median renter household income, indicating most rental properties were unaffordable for their residents (Moody's Analytics 2023). Furthermore, just a little more than a tenth of the federal Emergency Rental Assistance funding authorized during the pandemic remained unspent as of mid-2023, leaving many of those struggling with high rents without the option of turning to government aid (Joint Center for Housing Studies of Harvard University 2024).

Even though fewer renters are falling behind on rent, 57% described their current financial situation as poor in December 2023 according to a survey conducted by The Harris Poll (Axios 2024). In that same poll, 46% of renters stated that they were unable to pay a bill over the previous month and 36% indicated that they were falling behind financially. Previous research has documented that renters will tend to prioritize paying rent before any other expense given that it is typically the largest expense and must be paid on a fixed schedule (Airgood-Obrycki,

Hermann, and Wedeen 2021). Often, financially burdened renters will look for ways to avoid paying for other expenses rather than miss rent payments. With the share of renters behind on energy bills remaining relatively unchanged over the past two and a half years, renters may be falling behind on other expenses at increasing rates. Another potential explanation is that renters are increasingly turning to credit cards to cover expenses. Discover Financial and Synchrony Bank, whose customers are more likely to be renters given that they typically have lower incomes and credit scores compared to those of other credit card providers, reported in early 2024 that 30-day delinquency rates had climbed over the prior year (Sweet 2024). Discover's customers' credit card balances were up 13% from where they stood a year prior (Sweet 2024). Other research by Moody's Analytics (2023) has suggested that instead of falling behind on their financial obligations, some low-income renter households may be working as many as 60 extra hours beyond the 40 hours typically assumed to be full-time.

It may also be possible that some of the renter households reporting that they were behind on both energy bills and rent in previous Household Pulse Surveys may have since been forced to leave their homes. Eviction moratoriums enacted during the COVID-19 pandemic have all expired, and evictions have since climbed back to their pre-pandemic rates (Joint Center for Housing Studies of Harvard University 2024). Forty-four percent of renters reported receiving pressure from their landlord to move in 2023 (Reynolds and Burton 2023). While rare, landlords that changed locks, removed possessions, or turned utilities off resulted in residents moving 69% of the time. A landlord threatening a resident with eviction occurred in 9% of the instances where a renter was pressured to leave. Forty-two percent of these residents left their home before an eviction was completed. Some evicted households or renter households that are facing pressures to move may have chosen to move in with family, friends, or other roommates to save on expenses. Homelessness has also spiked between 2022 and 2023 rising to an estimated all-time high of 653,100 people, an increase of 71,000 from the previous year's estimate (Joint Center for Housing Studies of Harvard University 2024).

Implications for Policymaking

Jarrah and Tanabe (2022) and Samarripas and Lee (2022) point out that policymakers and program administrators wishing to support renters experiencing the most severe forms of energy insecurity will need to provide owners of those properties with substantial funding to conduct retrofits given that their residents are more likely to be behind on rent, placing a financial strain on the owner. These publications have also suggested that policymakers and program administrators can benefit renters by providing them with a combination of bill and rent assistance, helping stabilize the finances of both the renter household and their property owners. These actions still make sense considering the research presented here. Those that are further behind on their energy bills are more likely to be behind on their rent than those that are either not behind on their energy bills or have only fallen behind occasionally.

However, this research reveals that policymakers and program administrators will need to consider the added complication that an increasing number of renters behind on their energy bills may be accumulating other debts to avoid falling behind on rent. Consequently, these renters' landlords may be in a healthy enough financial position to consider an energy retrofit of their property, but their financially-strained residents are at risk for several potentially negative financial and housing outcomes. While an energy efficiency retrofit of these properties may lower the energy cost burdens that these renters face, property owners may need to raise rents to repay any debt they incurred to undertake the work in the first place. This may drive renters

further into debt to avoid falling behind on rent by adding to already high credit card balances, taking out payday loans, or missing payments on bills. This demonstrates why a sole focus on an indicator like energy burdens is likely to be insufficient in guiding policy and program decisions – retrofits may lower energy burdens, but the overall financial burden that residents face may still mean that they fall behind on paying for energy or other necessities.

Taken together, this research elevates the importance of providing rental owners with more grants or forgivable loans to support retrofit projects since these do not require payback with interest, lessening or erasing the need to recoup the cost of a retrofit by increasing rents further beyond already unaffordable levels. While structuring financial support for retrofits in this way may alleviate the need to increase rents, it does not erase the possibility that property owners still do so. To do so, program administrators will need to attach rent affordability restrictions to these subsidies that require owner recipients to keep rents affordable for a specified number of years (Jarrah and Tanabe 2022). The Minneapolis Green Cost Share 4d Energy Efficiency Program provides one example of how to do so. As Jarrah and Tanabe (2022) document, the in-demand energy efficiency incentive program requires that participants take advantage of the State of Minnesota's 4d Affordable Housing Incentive which provides rental property owners with a 20% property tax reduction in exchange for a commitment to keep rents affordable. Finally, this research indicates the need for those providing renters with energy bill and rent assistance to partner with other programs that work to reduce the cost of other necessities such as transportation, medical care, and food. Low-income renters may be eligible for many forms of aid, but it can be an overwhelming process to navigate applying for and participating in all these programs separately (Jarrah and Tanabe 2022). Streamlining outreach about these opportunities, the application process, and the provision of support could prove to be very beneficial.

Conclusion

While answering some questions, this study has demonstrated a need for additional research to better understand the full extent of conditions that financially burdened renters face, the actions they consider for addressing those issues, and the motivations underlying the decisions they ultimately make. Relying on a single indicator of renter energy insecurity such as energy burden or the share of households behind on energy bills will not provide an accurate picture of the burdens and risks that many renters, especially renters of color and those with low incomes, face. As has been demonstrated here, the Census Bureau's Household Pulse Survey can be helpful in outlining a more complete picture of the challenges renters face, but it can still leave many unanswered questions. Surveys and ethnographic research that examine the ways in which renters make financial tradeoffs under different conditions will be helpful to inform the creation of more targeted programs that fully address renter needs.

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