

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

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Complainant,

v.

CASCADE NATURAL GAS  
CORPORATION,

Respondent.

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KEEPING THE STOVE ON:  
**COVID-19 AND UTILITY DEBT**  
IN COMMUNITIES SERVED BY  
SOUTHERN CALIFORNIA GAS COMPANY

Paul M. Ong, Silvia González, Kelly Trumbull, and Gregory Pierce

**UCLA** Luskin Center  
for Innovation

**UCLA** Center for  
Neighborhood  
Knowledge

## AUTHORSHIP

**Paul M. Ong**, Director, UCLA Center for Neighborhood Knowledge

**Silvia R. González**, Director of Research, UCLA Latino Policy & Politics Initiative, Affiliated Researcher

**Kelly Trumbull**, Researcher, UCLA Luskin Center for Innovation

**Gregory Pierce**, Co-Director, UCLA Luskin Center for Innovation

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This project builds on the UCLA's Center for Neighborhood Knowledge (CNK) COVID-19 Equity Research Initiative, which includes studies examining how the negative economic impacts of COVID-19 are distributed across neighborhoods, as well as the UCLA's Luskin Center for Innovation collaborations with civic partners that help advance renewable and affordable energy in California. This research brief is the last in a three-part series that explores utility debt as a useful measure to track housing stability in California's neighborhoods. Learn more [here](#) about our first brief, *Keeping the Lights and Water On: COVID-19 and Utility Debt in Los Angeles' Communities of Color*; and [here](#) for the second brief, *Keeping the Lights and Heat On: COVID-19 Utility Debt in Communities Served by Pacific Gas and Electric Company*.

As a land grant institution, the Center for Neighborhood Knowledge and the Luskin Center for Innovation at UCLA acknowledge the Gabrielino and Tongva peoples as the traditional land caretakers of Tovaangar (Los Angeles basin, Southern Channel Islands) and that their displacement has enabled the flourishing of UCLA.



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### DISCLAIMER

The views expressed herein are those of the authors and not necessarily those of the University of California, Los Angeles, as a whole. The authors alone are responsible for the content of this report.

### FOR MORE INFORMATION

Contact: Silvia R. González, [sil.rgonzalez@ucla.edu](mailto:sil.rgonzalez@ucla.edu)

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Woman placing saucepan on burning stove.

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## EXECUTIVE SUMMARY

**THE COVID-19 PUBLIC HEALTH CRISIS** has deepened existing economic and environmental justice crises in the United States. Previous research by the [UCLA Center for Neighborhood Knowledge](#) and its partners shows that the pandemic has exacerbated pre-pandemic health and economic inequalities for disadvantaged neighborhoods. Communities of color in particular have shouldered a disproportionate share of related health and economic risks due to widespread job and income loss, increased housing vulnerability and food insecurity, a lack of basic resources to shelter in place and worse access to critical utilities, such as broadband internet service. Taken together, the research highlights how systemic racial and economic inequality has been reproduced during the pandemic.

In this brief, we study household utility debt burden as another measure of the economic pressure facing low-income neighborhoods, with an emphasis on the impacts on racial equity. We define utility debt burden in this brief as the share of households in arrears (with past-due utility bills) within a zip code. We use data from Southern California Gas Company (SoCalGas)—an investor-owned utility that provides gas service to 21.8 million customers in Central and Southern California (about 50 percent of the state’s residents)—to examine the prevalence and degree of residential past-due accounts and debt.<sup>1</sup> Utility debt levels serve as a useful proxy to identify households that are facing difficulties paying their rent or mortgage, because these two types of debt are likely to be highly correlated during economic crises. Further, when families are unable to pay their bills, they face difficult trade-offs, including skipping meals, delaying or avoiding medical treatment, and risking eviction. While the April 2020 statewide moratorium on utility shutoffs has provided continued utility access for many families, debt on residential accounts has not been forgiven; thus, residential utility debt has accumulated and is now due, as the California state moratorium ended on September 30, 2021.

We provide findings from two analyses on residential utility debt up until February 28, 2021 in neighborhoods served by SoCalGas. These are the most recently available public data and reflect the California Public Utility Commission’s April 2020 order to suspend service disconnections. First, we provide an overview of the spatial distribution of housing units with past-due utility bills in SoCalGas service areas and identify neighborhoods facing the greatest debt burden. Second, we use bivariate analysis to examine economic, housing and ethnoracial characteristics in areas with the highest debt burden. Our focus on neighborhoods is core to this study. The area-based analysis enables elected officials to use our findings to understand how utility debt relief distribution impacts their constituents. It also encourages advocacy for an equitable distribution of utility debt relief from federal stimulus and state budget surplus aid. Finally, it informs thoughtful, long-term solutions as we move into a phase of recovery, especially in the context of increasing focus on residential building electrification to meet climate and air quality goals.

### Our main findings are as follows:

- Almost one-in-ten (9 percent) households in neighborhoods served by SoCalGas were 90 or more days behind.
- Utility debt burden varies systematically across neighborhoods. For instance, more than one in five households are behind on their gas bills both in core urban areas in South and Southeast Los Angeles neighborhoods and in some rural communities, such as Tupman in Kern County. These places are also among those most impacted by COVID-19.
- Neighborhoods with the highest utility debt rate were those with the highest poverty and unemployment rates, and lowest incomes. These neighborhoods had a higher proportion of renters, Latinx and Black residents compared to the average neighborhood in the SoCalGas service territory.

### Based on our findings, we recommend:

1. Target low-income households and severely impacted neighborhoods for existing COVID-19-related government aid and utility debt-forgiveness programs to ensure that resources flow to the most vulnerable.
2. Continue to monitor utility debt to ensure that disadvantaged communities are receiving needed services and assistance and to help utilities more effectively implement equity policies and programs.
3. Further improve the availability of debt and shutoff data publicly reported by all utilities to holistically assess the combined impact of utility bill debt (natural gas, electricity, and water). This will enable research to better understand total energy burden, supporting more precise identification of households and neighborhoods in need of support.
4. Conduct additional research to understand the impact of residential building electrification on households vulnerable to utility bill debt. Future research and policy should identify ways to support an equitable building transition, including policies and programs to mitigate any potential increases in energy burden.

## INTRODUCTION

**THE SPREAD OF COVID-19** has created upheavals not seen since the 1918 Spanish flu pandemic. By the end of September 2021, the nation reported over 43 million confirmed cases and almost 690 thousand deaths.<sup>2</sup> In California alone, cases reached more than 4.48 million and the death toll reached 68 thousand<sup>3</sup>—the state was the epicenter of the crisis in the U.S. in late 2020. In addition to the direct health costs of illness and death, the indirect impacts on the economy have been tremendous. To flatten the curve and prevent the number of new cases from overwhelming the healthcare system, public officials took dramatic actions to limit person-to-person interactions by restricting group

gatherings, encouraging social distancing, and ordering people to shelter in place. These direct and indirect disruptions have created enormous financial hardships for workers, families, businesses, and communities.

The pandemic has also exacerbated pre-pandemic health and economic neighborhood inequalities, including widespread job and income loss<sup>4</sup>, housing vulnerability<sup>5</sup>, food insecurity<sup>6</sup>, and tap water precarity<sup>7</sup>. People of color have been disproportionately affected by COVID-19-related layoffs and barriers to accessing a variety of essential services—for instance, a digital divide affects virtual learning<sup>8</sup> and remote work opportunities<sup>9</sup>. The pandemic's economic impacts have also made access to critical utilities less affordable for many. Furthermore, the pandemic has led to an increase in residential energy consumption, as people spent much more time at home due to shelter-in-place orders and associated closures.

In this brief, we study unpaid residential natural gas bills to measure the economic pressure facing neighborhoods served by Southern California Gas Company (SoCalGas), with a focus on racial disparities in utility debt. In April 2020, the California Public Utilities Commission (CPUC) ordered SoCalGas and other investor-owned utilities to suspend service disconnections due to non-payment for residential and commercial customers until April 16, 2021. It later extended these COVID-19 emergency protections through September 30, 2021.<sup>10</sup> As a result of this moratorium, SoCalGas also paused income verification and re-enrollment requirements for its bill discount programs, California Alternate Rates for Energy (CARE) and Family Electric Rate Assistance (FERA), to make it easier for customers to enroll or stay enrolled.

Although the statewide moratorium on utility shutoffs has ensured continued energy access for many families, accumulating debt levels are a crisis that has yet to be resolved. Utility debt can lead to difficult tradeoffs for disadvantaged communities, like paying utility bills to keep the lights on rather than buying groceries; making unsafe housing decisions, such as coping with

inadequate cooling systems; and accumulating debt.<sup>11</sup> Utility debt is not a new problem. In 2015, one-third of American households faced challenges in meeting their energy needs.<sup>12</sup> Energy insecurity in the United States disproportionately affects households with children, households of color, and low- and fixed-income households.<sup>13</sup> At the start of the pandemic, an estimated 4.8 million low-income American households were unable to pay an energy bill, an issue that intensified in the early months of the pandemic.<sup>14</sup>

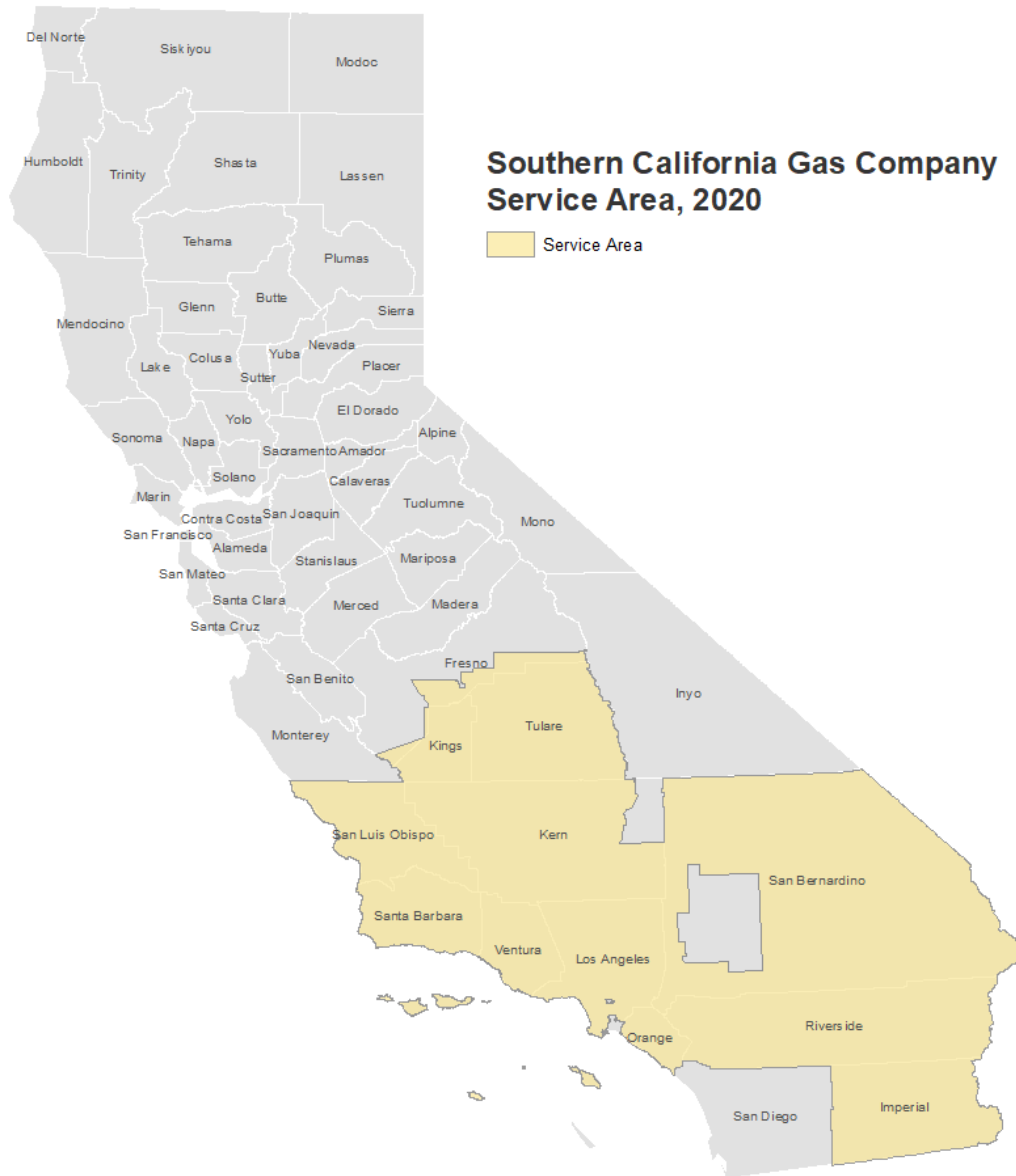
SoCalGas is the largest natural gas distribution utility in the United States. Based in Los Angeles, the company provides natural gas service to 21.8 million customers across 24,000 square miles of Central and Southern California,<sup>15</sup> where more than 90 percent of residents use natural gas for heating, hot water, cooking, or other uses.<sup>16</sup> Map 1 illustrates SoCalGas's natural gas service territory, which extends from the southern part of Fresno County in Central California to Imperial County in the southern border region. In this brief, we examine the extent of utility bill debt (defined as the share of households in arrears) in SoCalGas's service territory. Specifically, we analyze the disparities in utility debt across neighborhoods as reported in SoCalGas's COVID-19 Emergency Customer Protections Transition Plan. This includes data through February 28, 2021, which captures several months after the CPUC's April 2020 order to suspend service disconnections.

Using publicly available data from SoCalGas's Emergency Customer Protections Transition Plan to the CPUC, we conduct two analyses on residential utility debt. First, we provide an overview of the spatial distribution of housing units with past-due utility bills in SoCalGas service areas and identify neighborhoods facing the greatest debt burden. Second, we use bivariate analysis to examine economic, housing, and ethnoracial characteristics in areas with the highest debt burden. We conclude with a discussion of policy recommendations to address utility debt burden. The results of this study can serve as an early warning system that can assist state and local governments and utilities to develop more targeted and robust policies and programs for households

and neighborhoods most at-risk when the eviction moratorium expires, as well as to those who may be unable to pay bills if they change as a result of necessary residential building electrification.

MAP 1

SOCALGAS SERVICE AREA, 2020



Source: Southern California Gas Company service area boundaries (2020)  
California Gas Energy Commission

UCLA Center for Neighborhood Knowledge, Anne Yoon



## METHODOLOGY

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Our unit of analysis in this study is census zip code tabulation areas (ZCTAs), which we use as a proxy for neighborhoods. We used two data sources to construct our research dataset. The first source is zip code-level data submitted by SoCalGas to the CPUC in response to Resolution M-4849.<sup>17</sup> This is a part of SoCalGas's COVID-19 Emergency Customer Protections Transition Plan, dated April 1, 2021, which includes information on arrearage on utility bills.<sup>18</sup> The information includes the "number and percent of unique customers, by ZIP code, who are more than 90 days in arrears, not enrolled in a Recent Applicable Payment Plan or conventional extended payment plan, and more than \$250 in total arrears."<sup>19</sup> The data are for accounts with outstanding debt for the period ending February 28, 2021, capturing the months after the CPUC's April 2020 order to suspend service disconnections.

Residential zip code account data (n=615) were then merged with the second data source, ZCTA-level economic and housing data from the 2015 to 2019 five-year American Community Survey (ACS). Merging zip code-level data with the ZCTA produced 605 out of 615 matches, and data across all variables for 572 ZCTAs. For the statistical analysis, we categorized ZCTAs into three utility burden categories ranked by the percent of households that are past due on their gas bills in the ZCTA: lowest burden (bottom 25 percent quartile), highest burden (top 25 percent quartile), and the remainder representing the middle (roughly 50 percent). The share of households in debt is the sum of past-due accounts in a ZCTA divided by the number of residential customers. Each of the three categories is weighted by the number of customers in the neighborhoods, so that the lowest quartile contains a quarter of SoCalGas customers, the middle half contains half of the customers, and the top quartile the rest.

## UTILITY DEBT IS UNEVENLY DISTRIBUTED

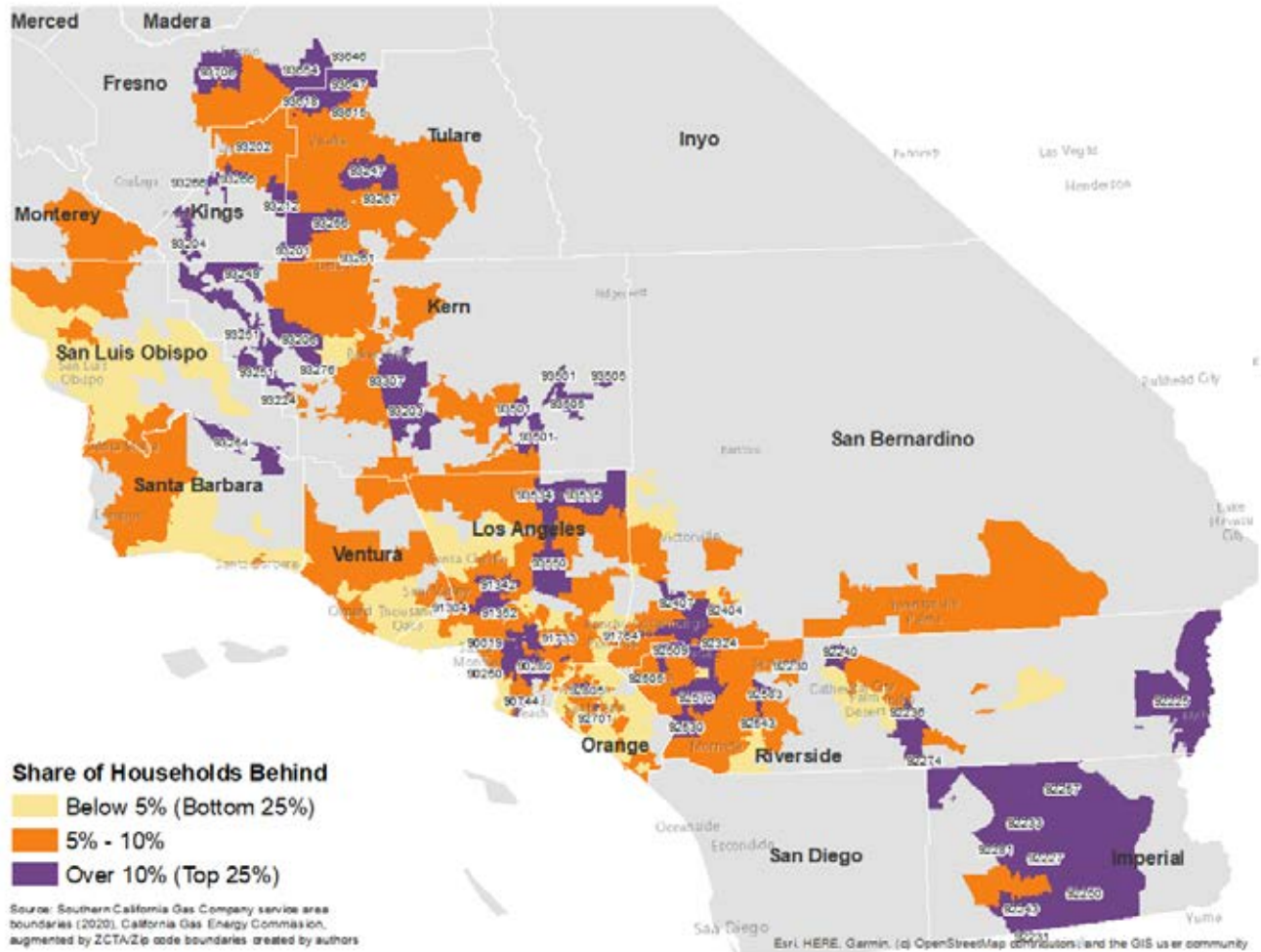
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According to data in SoCalGas's April 2021 Transition Plan, by the end of February 2021, a total of 1,206,084 unique customers were more than 30 days in arrears and not enrolled in a Recent Applicable Payment Plan or conventional extended payment plan. This represents more than 20 percent of SoCalGas residential customers, or 1 in 5 residential customers. About 47 percent of those behind on bill payment receive discounted rates through either the California Alternate Rate for Energy (CARE) program or the Family Electric Rate Assistance (FERA) Program.

These same data from the Transition Plan indicate that at least 11 percent of customers are more than 90 days behind. Map 2 shows the estimated share of households 90 days in arrears by zip code. We find that households who are burdened by utility debt are unevenly distributed across the SoCalGas service area. We find disproportionately high debt in historically underserved areas and areas left behind more broadly during the COVID-19 pandemic. For instance, four of the top five zip codes with the greatest share of burdened households are in the predominantly Black and Brown neighborhoods of Southeast Los Angeles (90003, 90011) and South Los Angeles (90044, 90037), followed by the Tupman area in Kern County (93276). The broader South and Southeast Los Angeles areas also experienced difficulties sheltering in place during the pandemic<sup>20</sup> and had a large share of residents at risk of not receiving a CARES Act individual rebate.<sup>21</sup> More than 24 percent of households were in debt in these five neighborhoods.

MAP 2

SHARE OF HOUSEHOLDS IN COVID-19 UTILITY DEBT, FEBRUARY 2021



## BLACK, LATINX, LOW-INCOME, AND RENTER NEIGHBORHOODS FACE THE GREATEST UTILITY DEBT BURDEN

Table 1 shows the average profile of neighborhoods served by SoCalGas by their gas utility debt rate. Utility debt rate is defined as the share of households more than 90 days in arrears. The utility debt rate is nearly four times that in the highest-debt neighborhoods compared to the lowest-debt neighborhoods (15 percent of households compared to only 4 percent). The differences in debt are systematic. We find that the most economically vulnerable places are more likely to be among those with the highest debt rate. On average, neighborhoods with the highest debt rates have lower incomes and higher poverty rates (21 percent, compared to only 8 percent in the neighborhoods with the lowest

rates). The COVID-19 pandemic had a significant effect on every labor market indicator across all states and sectors in the nation. We show that utility debt is correlated with unemployment rates—neighborhoods with the highest burden have higher unemployment rates. As it relates to housing characteristics, high-debt neighborhoods are majority renter areas—60 percent renters on average, compared to 33 percent in lower-debt neighborhoods. Black and Latinx neighborhoods face the highest utility debt rates. In summary, the neighborhoods with the highest utility debt rate were those with the highest poverty and unemployment rates and the lowest incomes. These neighborhoods had a higher-than-average proportion of renters, Latinx and Black residents compared to the average neighborhood in the SoCalGas service territory.

TABLE 1

### PROFILE OF UTILITY DEBT BY NEIGHBORHOOD, FEBRUARY 2021

	Average All Neighborhoods	Lowest Debt (Bottom 25%, n=148)	Middle Half (n=287)	Highest Debt (Top 25%, n=137)
<b>Average % Behind 90+ Days</b>	9%	4%	8%	15%
<b>Economic Characteristics</b>				
Poverty rate	13%	8%	12%	21%
Average household income	\$77k	\$106k	\$76k	\$51k
Unemployment rate <sup>22</sup>	16%	15%	16%	18%
<b>Housing Characteristics</b>				
Renters	46%	33%	45%	60%
Do not pay utility separately	3%	2%	3%	4%
<b>Demographic</b>				
Asian	13%	20%	13%	7%
Black	6%	2%	5%	12%
Latinx	44%	21%	43%	66%
Non-Latinx White	35%	54%	36%	14%

## CONCLUSIONS AND POLICY RECOMMENDATIONS

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The data show that nearly one-in-ten SoCalGas customers are 90 days behind on their utility bill and the utility debt rate varies significantly across neighborhoods. The analysis finds disproportionately higher debt rates in historically underserved areas, which have also been disproportionately impacted by the COVID-19 pandemic. The systematic differences in the inability to pay for basic utility service contributes to systemic racial and income inequality. Our findings also highlight the reproduction of racial and economic inequality during the pandemic. These findings likely mirror systematic patterns of racial and income disparities in households facing difficulties paying housing costs.

This discussion around inequities in natural gas utility debt takes place as a larger conversation is occurring about replacing natural gas use with electricity. It is essential to electrify residential buildings, both to meet climate goals and to improve indoor air quality.<sup>23</sup> <sup>24</sup> However, there is potential for the costs of this transition to affect households inequitably. This is especially a concern if the transition occurs first among higher-income households, thus saddling lower-income households with fixed gas utility costs and further perpetuating the inequalities seen in this analysis. Therefore, it is important to ensure that building electrification does not leave behind households or disproportionately increase the energy burden for households already vulnerable to utility debt. Identifying which households already struggle to pay their natural gas bills may help identify which households may struggle to pay their electricity bills as more buildings electrify.

In light of our findings, we recommend the following:

1. **Target low-income households and severely impacted neighborhoods for existing COVID-19-related government aid and utility debt-forgiveness programs to ensure that resources flow to the most vulnerable.**
2. **Continue to monitor utility debt to ensure that disadvantaged communities are receiving needed services and assistance and to help utilities more effectively implement equity policies and programs.**
3. **Further improve the availability of debt and shutoff data publicly reported by all utilities to holistically assess the combined impact of utility bill debt (natural gas, electricity, and water). This will enable research to better understand total energy burden, supporting more precise identification of households and neighborhoods in need of support.**
4. **Conduct additional research to understand the impact of residential building electrification on households vulnerable to utility bill debt. Future research and policy should identify ways to support an equitable building transition, including policies and programs to mitigate any potential increases in energy burden.**

## ENDNOTES

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