KEEPING THE LIGHTS AND WATER ON:

COVID-19 AND UTILITY DEBT

IN LOS ANGELES' COMMUNITIES OF COLOR

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ACKNOWLEDGMENTS

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TABLE OF CONTENTS

Left: 2009 March for Water, inspired by marches held around the world in support of the human right to water; Los Angeles, California. Photo credit: Urban Semillas

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 interrelated 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 less access to critical utilities such as broadband internet service. The pandemic's economic impacts have also exacerbated the unaffordability of basic environmental service utilization for many households.

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. Our findings highlight the reproduction of racial and economic inequality during the pandemic. We use data from the one-time Drinking Water COVID-19 Financial Impacts Survey conducted by the California State Water Resources Control Board in November 2020 to examine the prevalence and degree of residential past-due accounts and debt. Utility debt levels serve as a useful proxy to track 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 will be due when the moratorium ends.

We provide findings for three analyses within City of Los Angeles neighborhoods served by the Department of Water and Power (LADWP). LADWP is by far the largest utility operating in California; it is one of few utilities to jointly provide both water and electricity services and thus jointly bill for these services. First, we provide an overview of the spatial distribution of housing units with past-due utility bills in Los Angeles city and identify neighborhoods facing the greatest debt burden. Second, we use bivariate analysis to examine the economic, housing, and ethnoracial characteristics in areas with the highest burden as well as communication barriers residents face in these neighborhoods. Third, we further examine these associations using statistical models.

Overall, our focus on neighborhoods allows elected officials to understand how distribution impacts their constituents; encourages advocacy for an equitable distribution of aid; and informs thoughtful solutions as we move into recovery.

▶ **Our main findings are:**

1. Between 25% and 30% of all households are facing financial difficulties paying for the most essential services.

2. Utility debt burden is unevenly distributed across Los Angeles; historically underserved areas and those left behind more broadly during the COVID-19 pandemic are experiencing disproportionate levels of debt.

3. Black, Latinx, and low-income neighborhoods face the greatest utility debt burden and most communication barriers.

4. Ethnoracial disparities persist even after accounting for socioeconomic and housing characteristics.

▶ **Based on our findings, we recommend:**

1. Generous allocation of COVID-19-related federal, state, and local aid to develop and implement utility debt-forgiveness programs for low-income households and severely burdened neighborhoods. The LADWP and other utilities serving Los Angeles should also consider developing arrearage management plans such as those recently announced by other major California utilities.

2. Further coordination by city officials and utilities with local advocates, such as RePower LA Coalition, to implement equitable, accessible, and targeted relief programs for low-income ratepayers during and after the pandemic.

3. Continued improvement in the value, quality, and availability of debt and shutoff data by utilities throughout California to better understand the depth and breadth of utility burden on low-income residents and residents of color. Improved data will allow for targeted and relevant policy that addresses the distinct needs of these residents as relates to their housing tenure.

4. Replication in other jurisdictions of the analysis of LADWP debt, ideally using spatial data on larger, combined, energy bill debt so that state and local governments can better develop and target policies and programs to protect renters and homeowners.

INTRODUCTION

THE SPREAD OF COVID-19 has created upheavals not seen since the 1918 Spanish flu pandemic. By the end of March 2021, the nation reported over 30 million confirmed cases and over 547,000 deaths.[1] In Los Angeles County, the death toll totaled more than 23,000 and cases reached 1.2 million; the county was the epicenter of the crisis in the U.S. in late 2020.[2] In addition to the direct health costs of illness and death, the indirect impacts on the economy are 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.

COVID-19 has exacerbated pre-pandemic health and economic neighborhood inequalities including widespread job and income loss,[3] housing vulnerability,[4] and food insecurity.[5] Further, 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" impacts virtual learning and remote work opportunities.[6] The pandemic's economic impacts have also made access to critical utilities less affordable for many. In this brief, we study unpaid residential water and electric bills to measure the economic pressure facing low-income neighborhoods in the City of Los Angeles, with an emphasis on the impacts on racial equity.

Utility debt can lead to difficult trade-offs for disadvantaged communities, including paying utility bills to keep the lights on versus buying groceries, making unsafe housing decisions such as coping with inadequate cooling systems, and debt accumulation.[7] In 2015, one-third of American households faced challenges in meeting their energy needs.[8] Energy insecurity in the United States disproportionately affects households with children, households of color, and

low-income and fixed-income households.[9] Moreover, an estimated 1.5 million households in a dozen major U.S. cities with publicly operated water utilities owed $1.1 billion in past-due water bills prior to the pandemic.[10] In 2020, 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.[11]

In 2012, California enacted the Human Right to Water Act (Assembly Bill [AB] 685), establishing a policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. The pandemic has threatened the progress made by the various laws and programs aimed at making AB 685 a reality. For this reason, the state issued a moratorium on water and electricity service shutoffs starting in April 2020.

Although the statewide moratorium on water and energy shutoffs has provided continued utility access for many families, accumulating debt levels are a crisis that has yet to be resolved. The City of Los Angeles allocated funds from the Coronavirus Aid, Relief, and Economic Security (CARES) Act to fund a utility grant program providing cash assistance to as many as 100,000 low-income customers to pay their water and electricity bills. However, the amount of aid is only a bandage for the estimated 28% of Angelenos facing serious problems paying their utility bills between July and August 2020.[12] While Los Angeles is taking action to address utility debt,[13] inadequate aid has led community, labor, environmental, and environmental justice advocates, such as the RePower LA Coalition, to call on LADWP to begin planning for the time when the moratorium is lifted.[14]

Using data from the Drinking Water COVID-19 Financial Impacts Survey conducted by the California State Water Resources Control Board, we provide findings for three analyses on residential utility debt in areas served by LADWP. First, we provide an overview of the spatial distribution of housing units with past-due utility bills in Los Angeles 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 burden as well as communication barriers residents face in these neighborhoods. Third, we further examine these associations using statistical models. Monitoring utility debt is a useful proxy to track households that are facing difficulties paying their rent or mortgage, because the two types of debt are likely to be highly correlated.[15]

METHODOLOGY

OUR UNITS OF ANALYSIS in this study are 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 from the California State Water Board's Drinking Water COVID-19 Financial Impacts Survey, which was publicly released and presented on January 19, 2021. Throughout November 2020, the Water Board collected data on water system financial impacts and household water bill debt accumulation during the COVID-19 pandemic from a sample of public water systems. The survey was designed to formulate statewide estimates for water systems that may be facing financial crisis and for the number of households with water bill debt, including the level and geographic distribution of debt.[16]

Residential account data from the COVID-19 Financial Impacts Survey were then merged with the second data source, ZCTA-level economic and housing information from the 2015 to 2019 five-year American Community Survey (ACS). For the purposes of our analysis, we used only those ZCTAs the boundaries of which are at least 90% contained within the City of Los Angeles. For the statistical analysis, we categorized ZCTAs into three utility burden categories ranked by the percent of households that are past due on their utility bills in the ZCTA: lowest burden (bottom 25% quartile), highest burden, (top 25% quartile), and the remainder representing the middle (roughly 50%). The share of households in debt is the sum of past-due accounts in a ZCTA divided by the number of occupied housing units in the area. An important note is that a high share of renters (especially low-income renters) do not

hold their own water, as opposed to energy, accounts; instead, landlords usually hold water accounts.[17] As such, the number of past-due accounts does not correlate 1:1 to households. We also examine the share of households with high debt, which we define as households at least $300 behind on their utility bills, which is roughly equivalent to half a week's pay for Angelenos making minimum wage ($13 per hour) in November 2020.

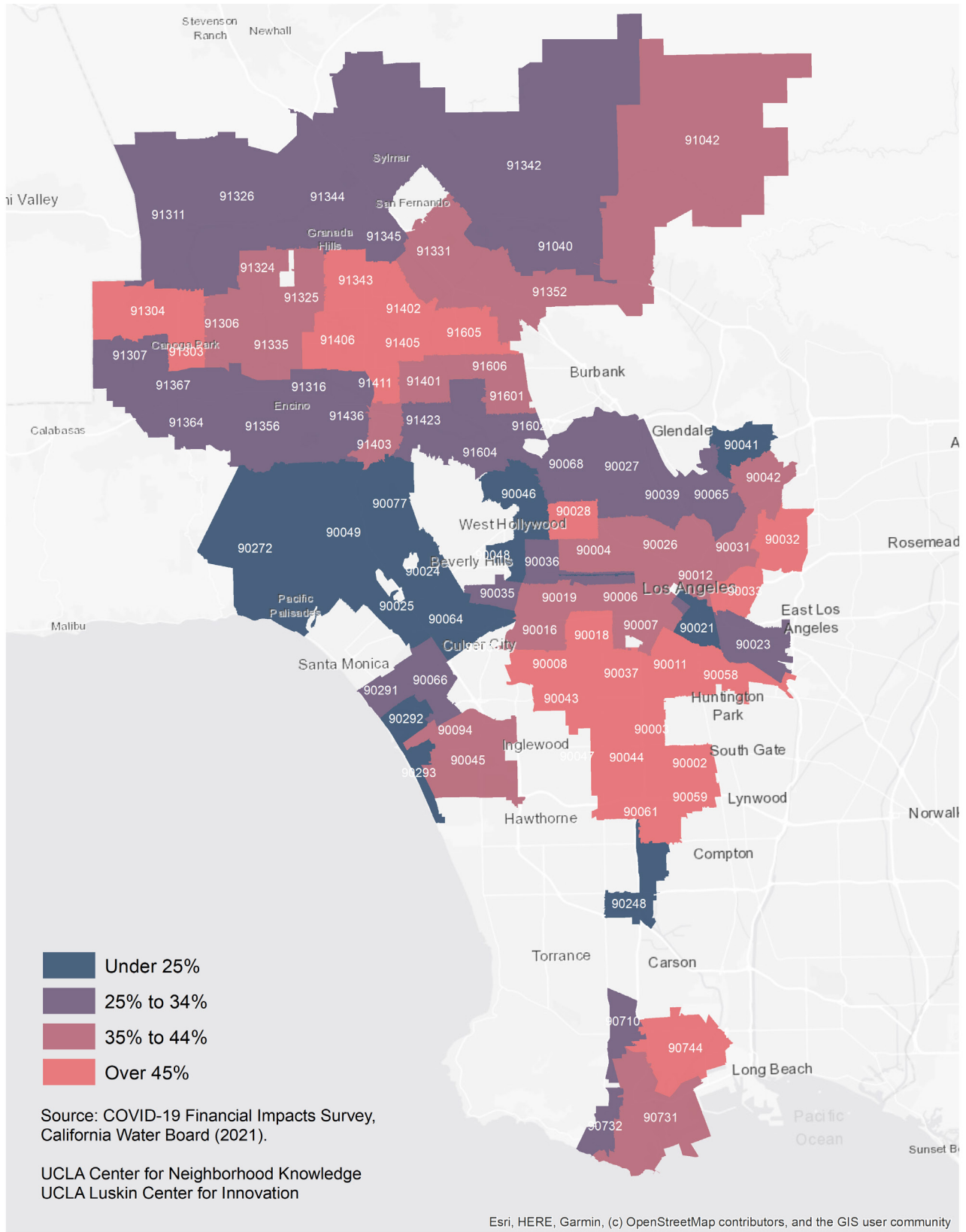## UTILITY DEBT BURDEN IS UNEVENLY DISTRIBUTED ACROSS LOS ANGELES

WE FIND THAT HOUSEHOLDS who are burdened by utility debt are unevenly distributed across Los Angeles. We find disproportionately high debt in historically underserved areas and areas left behind more broadly during the COVID-19 pandemic. Map 1 shows the estimated share of households behind on their utility bills. On average, at least four in 10 households in Wilmington (90744) and South Los Angeles zip codes, from Baldwin Hills to Compton, are behind on their utility bills. Other highly impacted areas include central parts of the San Fernando Valley such as Canoga Park (91304), Panorama City (91402), and Van Nuys (91405), as well as eastside neighborhoods.

Map 2 shows the share of households with high debt, which we define as more than $300 in unpaid utility bills. Central parts of the San Fernando Valley such as Canoga Park (91304) and Panorama City (91402) are among the areas most burdened with high debt. However, high debt neighborhoods are disproportionately concentrated in South Los Angeles, the historical home of the Black population.

The zip code with the greatest share of households behind on their utilities is 90002, which encompasses the Watts neighborhood. Almost 85% of households in Watts are behind on their utility bills. Adjacent to Watts is the Green Meadows neighborhood, which includes the zip code (90003) with the greatest share of households with high debt. Almost half of households (49%) in the 90003 area are at least $300 in debt with LADWP.

MAP 1

SHARE OF HOUSEHOLDS IN COVID-19 UTILITY DEBT, NOVEMBER 2020

Under 25%

25% to 34%

35% to 44%

Over 45%

Source: COVID-19 Financial Impacts Survey,
California Water Board (2021).

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MAP 2

DISTRIBUTION OF HOUSEHOLDS WITH HIGH COVID-19 UTILITY DEBT, NOVEMBER 2020

Legend:
- Under 20%
- 20% to 24%
- 25% to 29%
- Over 30%

Source: COVID-19 Financial Impacts Survey, California Water Board (2021). High debt is defined as $300 or more in arrearst.

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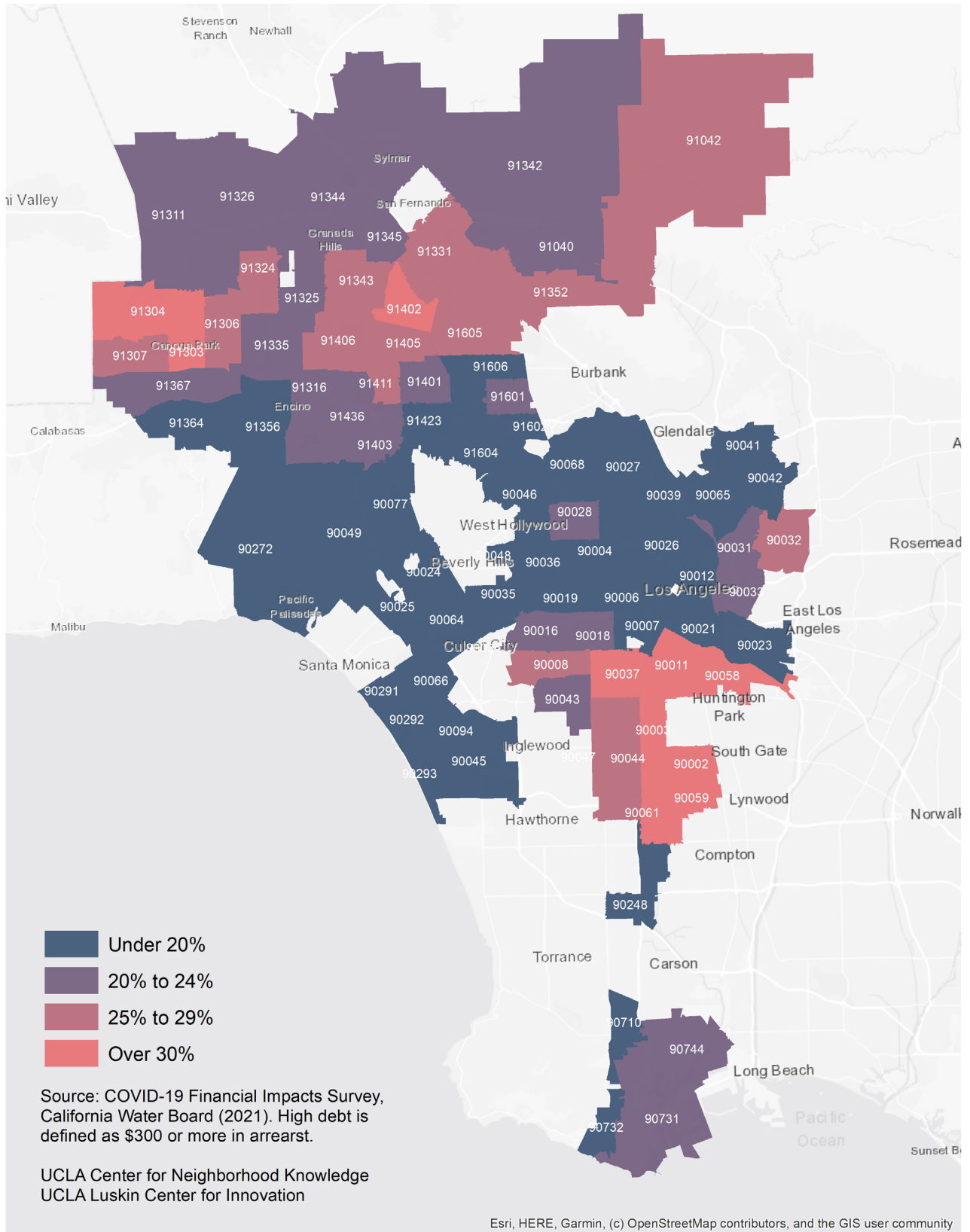
BLACK, LATINX, AND POOR NEIGHBORHOODS FACE THE GREATEST UTILITY DEBT BURDEN AND MOST COMMUNICATION BARRIERS

TABLE 1 SHOWS THE AVERAGE profile of Los Angeles neighborhoods by utility debt burden. Utility debt burden is defined as the share of households with past-due account balances. We find that utility burden varies inversely with economic capacity. On average, highest burdened neighborhoods have lower incomes and higher poverty rates. For instance, the highest burdened neighborhoods (those in the top 25% quartile) have a poverty rate that is two times higher than the lowest burdened neighborhoods (bottom 25%).

In terms of housing characteristics, utility burden correlates directly with severe housing burden (spending more than 50% of income on rent or mortgage payments) and housing tenure (renters versus owners). High-burdened neighborhoods have a larger share of renters — 68% on average compared to 61% in low-burdened neighborhoods. Furthermore, renters are severely burdened by housing costs, paying more than half of their income for housing. Black and Latinx neighborhoods face the highest utility debt burdens. On average, highest burdened neighborhoods have more Black and Latinx residents and fewer white residents.

Aside from the socioeconomic divisions, communication barriers may compound the disparate effects. Neighborhoods facing the highest utility burden have a greater share of residents with limited English proficiency than neighborhoods with the lowest utility burden. An uneven distribution of access to digital communication technologies also impacts these neighborhoods. For example, twice as many residents in the lowest burdened neighborhoods have access to broadband relative to the highest burdened neighborhoods (29% compared to 12%). Communication barriers may affect assistance awareness and uptake.

TABLE 1

PROFILE OF UTILITY DEBT-BURDENED NEIGHBORHOODS

	Lowest Burden (lowest 25%)	Middle Half	Highest Burden (top 25%)
Percent Burdened Households			
Any debt amount	24%	37%	53%
High debt ($300 or more)	12%	20%	30%
Economic Characteristics			
Average household income	$91k	$65k	$47k
Poverty rate	12%	18%	25%
Housing Characteristics			
Severe housing burden	23%	26%	30%
Percent renters	61%	63%	68%
Communication Barriers			
Limited English proficiency	8%	16%	18%
Without broadband	12%	20%	29%
Demographic (Percent)			
Asian	14%	14%	5%
Black	5%	8%	18%
Latinx	19%	46%	64%
Non-Latinx White	57%	30%	12%

Source: Tabulated by authors from the California Water Board's November 2020 Drinking Water COVID-19 Financial Impacts Survey.

ETHNORACIAL DISPARITIES PERSIST EVEN AFTER ACCOUNTING FOR SOCIOECONOMIC AND HOUSING CHARACTERISTICS

IN THIS SECTION, WE EXAMINE the relationship between utility debt at the neighborhood level and economic, housing, and ethnoracial characteristics and associated communication barriers facing residents. Table 2 presents the results of two multivariate predictive (associative) models. In the first model, the dependent variable is the share of households in debt, regardless of debt level. In the second model, the dependent variable is the share of households with high debt. We define households with high debt as households at least $300 behind on their utility bills, an amount equivalent to almost half a week's pay for Angelenos earning minimum wage in November 2020. We use a stepwise regression approach to identify explanatory variables for the models and use a weighted

least square function. The models explain roughly 65% of the variability. Variables marked N/A indicate that the variable was not identified by the stepwise procedure for inclusion.

As it relates to economic and housing characteristics, we find that utility debt increases with the share of households experiencing a severe housing burden. Household income plays a significant and negative role only in the high-debt model. This indicates that higher-income neighborhoods are more likely to have a smaller share of households with high debt. Debt also decreases as the share of renters increases. The relationship is somewhat counterintuitive; as many renters do not directly pay their LADWP bill, such as residents of multifamily units on a single meter. In terms of the ethnoracial composition of neighborhoods, we find a positive relationship between debt levels and the share of Black and Latinx residents relative to non-Latinx Whites (reference category), even after controlling for economic and household characteristics.

TABLE 2

RELATIONSHIP BETWEEN DEBT AND NEIGHBORHOOD CHARACTERISTICS

	Share of Households With Any Debt	Share of Households With High Debt ($300+)
	Coefficient (Sig)	Coefficient (Sig)
Economic Characteristics		
Median household income (million)	N/A	-0.794*
Housing Characteristics		
Severe housing burden	0.794***	0.518***
Percent renters	N/A	-0.232***
Demographic (Percent)		
Asian	-0.183*	-0.191***
Black	0.195**	N/A
Latinx	0.237***	0.106***
Intercept	0.07	0.242***
Adjusted R-sq	0.65	0.655
n=	100	100

* p<.05; ** p<.01; *** p<.001

Source: Tabulated by authors from the California Water Board's November 2020 Drinking Water COVID-19 Financial Impacts Survey.

CONCLUSIONS AND POLICY RECOMMENDATIONS

THE EMPIRICAL ANALYSES PRESENTED in this research brief suggest that one-quarter to one-third of all households in the City of Los Angeles are facing financial difficulties paying for the most essential services. Our findings also highlight the reproduction of racial and economic inequality during the pandemic. We find disproportionately high debt in historically underserved areas and those left behind more broadly during the COVID-19 pandemic. Further, racial disparities in debt burden persist even after controlling for important factors such as income. These findings likely mirror systematic patterns of racial and income disparities in households facing difficulties paying housing costs. Some households may end up being evicted, while others will have a huge debt to repay, compounding impact on credit and physical and mental health impact due to rationing.

In light of our findings, we recommend immediate financial support and systemic reform in financing for essential services and infrastructure improvements to ensure that the most vulnerable residents have access to vital public services and housing. Support should include the generous allocation of COVID-19-related federal, state, and local aid to develop and implement utility debt-forgiveness programs for low-income households and severely burdened neighborhoods. The LADWP and other utilities serving Los Angeles should also consider developing arrearage management plans such as those recently announced by other major California utilities. Moreover, city officials and utilities need to further coordinate with local advocates such as the Repower LA Coalition to implement equitable, accessible, and targeted relief programs for low-income ratepayers during and after the pandemic.

While the analysis focuses on utility debt, the findings are likely to assist in understanding the geographic pattern of the housing crisis created by the pandemic and the growing number of renters and homeowners behind in their monthly rents and mortgages. To better understand the depth and breadth of utility burden on low-income residents and residents of color, utilities throughout California need to continue to improve the value, quality, and availability of debt and shutoff data. This will allow for targeted and relevant policy that addresses the distinct needs of these populations as relates to their housing tenure. We also recommend that the analysis of LADWP be replicated for other jurisdictions using spatial data on electric and gas debt. Moreover, to further understand the role of utility debt on housing cost burden, it is desirable to differentiate the impact on renters separately from homeowners. The results can serve as an early warning system that can assist state and local governments to develop better and targeted policies and programs to assist households and neighborhoods most at risk when the eviction moratorium expires.

ENDNOTES

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