Policy Report

The State of Housing Insecurity in Oakland

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Stanford University

Policy Report: The State of Housing Insecurity in Oakland

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I. Executive Summary

Safe and stable housing for all sets the foundation for thriving communities, health, and jobs. Yet despite fifty years of legislation prohibiting racial discrimination in lending and housing, low-income renters and people of color remain disproportionately housing insecure. In the City of Oakland, policymakers have made progress by introducing policies to protect tenants and mitigate displacement, but stable housing remains out of reach for many. Amid COVID-19-related economic shocks and a worsening affordability crisis, residents are struggling to keep up with the rising costs of housing.

In this brief, we examine the state of housing insecurity in Oakland, focusing on conditions among the City's lowest-income renters and communities of color. We draw from a large-scale longitudinal dataset and in-depth interviews with 80 low-income residents conducted during the pandemic. We conclude with two sets of policy recommendations to promote housing stability in Oakland.

Core findings in this report include:

- Extremely Low Income and Very Low Income residents experienced high levels of
 moving out and crowded housing conditions in recent years. Trends in moving out
 in recent years add to concerns about displacement of these income groups. These
 residents also face high levels of instability even before they move, in the form of
 household crowding. There are clear racial inequalities at play: higher instability was
 prevalent in East Oakland and parts of West Oakland, and in Predominantly Black,
 Mixed-Black, and Multiethnic neighborhoods.
- Lowest income respondents experienced severe financial distress despite
 financial and rental assistance programs. Existing housing interventions did not
 sufficiently address respondents' economic needs. Respondents in our interview
 sample experienced severe financial distress to pay rent during the pandemic,
 forcing them to forego necessities, work additional jobs, and fall into debt and
 harming their long-term well-being.
- Lack of accurate information about housing programs limited their effectiveness.
 Misinformation about eligibility criteria and requirements of the rental assistance program discouraged most of our respondents from applying for rent relief. A lack of knowledge about tenant protections also limited their effectiveness and left respondents vulnerable to exploitative practices by landlords.
- Respondents had tense and deeply precarious relationships with their landlords.
 Respondents battled high levels of fear and anxiety about harassment by landlords,
 so they did not challenge violations of their tenant rights to avoid any chance of
 conflict. Many landlords did not perform proper maintenance of their properties, so
 many renters in our sample, especially renters of color, lived in uninhabitable units.
- Few resources were available to help struggling renters search for safe and affordable housing alternatives. Renters in our sample endured substandard living

conditions because the alternatives seemed much worse. Respondents could not find accessible ways to look for rentals, and exorbitant credit check fees deterred respondents from relocating to stable housing, pushing them into informal living situations.

 Renters of color, immigrants, and less digitally proficient residents experienced higher levels of housing insecurity. Black respondents faced high levels of harassment and discrimination from both current and prospective landlords, and Latinx and Asian respondents, particularly those who were recent immigrants, lived in extremely poorly maintained and uninhabitable rental units.

I lost my job and my husband also lost his job ... We were very frustrated and very desperate because we could not stop paying the rent. After all, what I understood was that if we did not pay the rent this month, and it is not that I understood it that way, but that is how [the landlord] said it, "You do not pay the rent today, there are people who will pay it," as if he was telling me, "You do not pay, you are leaving." We couldn't ask him to wait for us because he had said no. We were all emotionally depressed. Emotionally, we were all depressed thinking about what was going to happen, and if we got infected, what [we were] going to do.

- Marta, a Latina renter

Recommendations to promote housing stability in Oakland

We present two sets of recommendations to promote housing security and reduce racial disparities. First, to ensure that low-income renters can remain in stable housing:

- 1. Increase financial assistance for renters' economic needs in addition to rent.
- 2. Design a targeted outreach and information-sharing campaign to improve knowledge of local programs, tenant rights, and landlord responsibilities.
- 3. Connect households with other forms of government or non-profit administered aid, such as food assistance and employment training.

Second, we recommend that the City take several steps to ensure that low-income renters who move are able to find suitable housing locally without resorting to informal housing or homelessness:

- 4. Create a streamlined, one-stop housing resource where renters can access accurate information and find affordable housing.
- 5. Tackle renter-borne costs, like credit check fees and security deposits, to help residents move into stable housing faster.
- 6. Support renter-centered financial literacy education for credit building among low-income and undocumented residents.

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II. Introduction

A. About this report

In this brief, we present research findings and policy recommendations that employ two main sources of data:

- The Federal Reserve Bank of New York Consumer Credit Panel/Equifax (CCP)
 Data, a large-scale anonymized dataset of Oakland residents, describe high-level trends in residential instability in Oakland.
- 80 in-depth, semi-structured interviews with extremely and very low-income renters in Oakland shed light on the drivers of housing insecurity and the specific constraints faced by renters.

We begin our discussion with a summary of our previous research engagement in Oakland, followed by a description of our data sources. Then, we present research findings from the CCP and interview data. We conclude with a discussion of our policy recommendations.

B. What we know from prior research

From 2000 to 2020, Oakland changed dramatically by race and class

Our previous work in Oakland leveraged several sources of data to understand neighborhood change and residential instability from 2000 to 2020. We found that Oakland changed dramatically by race and class: Oakland's white and Hispanic populations and share of high-income residents grew dramatically, while its Black population declined by over one-third. Nearly all of Oakland's previously lower-income neighborhoods, especially those with substantial Black populations in 2000, showed at least some signs of gentrification and declines in shares of Extremely Low Income (ELI) residents.

Residents with Extremely Low Income (ELI) are making hard tradeoffs to avoid moving Oakland residents moved less after the Great Recession than before, but ELI residents made more constrained choices after the Recession. Specifically, they made tradeoffs with moving, which includes crowding and rising financial debt. For example, although financial instability generally declined after the Great Recession, new delinquencies became more prevalent in parts of East Oakland since 2015. In these areas, ELI residents moved at relatively lower rates, suggesting that residents in these areas may have been offsetting other financial needs to afford rising housing costs and remain in place.

Many households experience instability (crowded conditions and financial precarity) even before they move

Our previous research suggests that people live in crowded conditions, substandard

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¹ Hwang, Gupta, and Shrimali 2020.

housing, and financial precarity even before moving or forced displacement ever take place. Limited affordable housing further affects residents beyond the move by constraining where movers can end up. These forms of residential instability have far-reaching consequences, affecting individuals' physical and mental health, community well-being, educational attainment, and social mobility, and worsening racial inequality. Hence, understanding housing insecurity and the mechanisms driving racial disparities in these experiences is critical for developing effective interventions that advance housing stability and racial equity in Oakland.

C. About the research team

The Changing Cities Research Lab (CCRL) at Stanford University has engaged in research and dialogue with the City of Oakland's Housing and Community Development Department (HCD) since our founding in early 2020. During the pandemic, we worked closely with current HCD director Christina Mun, and former director Shola Olatoye, to develop a careful understanding of Oakland's landscape and housing needs.

In 2021, after an interactive process of data-sharing and feedback with HCD, we published two reports on the state of instability in Oakland over the last 20 years: Neighborhood Change and Residential Instability in Oakland (in collaboration with the Federal Reserve Bank of San Francisco) and Residential and Neighborhood Instability in Oakland, and an accompanying data dashboard and data vignettes. This work was featured in and helped inform HCD's 2021-2023 Strategic Action Plan that developed a framework and strategies to protect tenants, preserve existing affordable housing, and produce new housing. Our partnership specifically informed several of HCD's protection goals and will be used to evaluate and measure progress through a data-driven approach.

To help guide meaningful progress in Oakland, we have also engaged with other stakeholders. Our approach is guided by previous discussions with other HCD staff, the Housing Preservation Table, and the City's service providers for the COVID-19 Emergency Rental Assistance Program. Finally, our work in Oakland is informed by our research in the rest of the region. In the past, we have evaluated specific housing interventions in the Bay Area, outlined the effects of the COVID-19 pandemic on housing conditions in the region, and explored the mechanisms of gentrification and household crowding, among other research.

In part informed by our engagement with Deputy Director Emily Weinstein and Senior Advisor Chris Norman, HCD's Request for Proposals for a new program to remove barriers to long-term housing for the City's most vulnerable residents is the latest step in this direction.

III. Data Sources

We drew from two main sources of data to better understand housing insecurity in Oakland. We describe these data sources below.

A. Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data (CCP)

First, we analyzed the Federal Reserve Bank of New York Consumer Credit Panel/Equifax (CCP) Data, a large-scale anonymized dataset of Oakland residents.² The CCP is a proprietary, longitudinal, and large-scale dataset of adult consumers. It consists of a 5% anonymized random sample of adults (~over 14,000 Oakland residents per year) and includes information about the census block group in which residents live, adult household size, and indicators of financial health, including Equifax Risk Scores (proprietary credit scores that estimate the likelihood that an individual will pay their debts without defaulting). We elaborate on our data sources in Appendix A.

To measure residential instability, we consider two main outcomes: moving out and household crowding. For moving, we consider the extent to which residents move out of their census block groups and where they move to in a given time period. For household crowding, we examine the extent to which individuals in households with one to two adults transition into households with at least four adults (including people who move out of their home and people who move into their home) in a given time period. Appendix B details additional information on these outcomes.

We build on our previous work by extending our focus to trends that emerged with the onset of the COVID-19 pandemic until the end of 2021, using three-year rolling averages. Additionally, because some pandemic-related trends in residential instability may have seen short-term swings as a result of the lockdowns and economic downturn in 2020, we also analyze annual changes between September 2021 and September 2022—after most sectors of the economy reopened and many pandemic-specific support programs expired—to examine recent variations on patterns of instability.

² CCP data findings in this report draw from Hwang, Kumar, and Kneebone 2023, a separate <u>report</u> published by the Federal Reserve Bank of San Francisco.

³ Our past work has leveraged this data to examine financial instability as indicated by delinquencies and declining credit scores. However, since many creditors, such as mortgage lenders and credit card companies, offered temporary payment relief during the pandemic and did not report missed payments, we focus only on moving and household crowding in this policy brief. Nevertheless, analyzing trends in financial stability will be crucial to the evaluation of programs and policies in the future.

We group residents in the CCP sample into four categories based on their credit scores. Categories are defined using Equifax Risk Scores. While Equifax Risk Scores are highly correlated with income and wealth, they reflect a distinct dimension of financial health that has implications for one's stability in the housing market, where landlords often use credit scores to screen tenants and lenders use credit scores to distribute mortgage products and make lending decisions. We proxy income bands (including those relevant to targeting housing assistance) by bounding credit score categories as follows⁵:

• Extremely Low Income (ELI): an Equifax Risk Score < 580 or no score (i.e., too few accounts or new credit)

Very Low Income (VLI): 580–649
Low/Moderate Income: 650–749
Middle/High Income: 750 or higher

Ethnoracial Composition

We also examine variations in residential instability by the ethnoracial composition of Oakland's neighborhoods. To do so, we assign census tracts to one of four categories based on their racial and ethnic composition in the year 2000: Predominantly Black, Mixed-Black, Multiethnic, and White/White-Mixed. Predominantly Black refers to census tracts where Black residents made up at least 60% of the population according to the 2000 Census. Mixed-Black neighborhoods are tracts where at least 20% of the population was Black but less than 20% was White. Multiethnic neighborhoods are those with sizable populations of each major ethnoracial group or those with at least 40% Hispanic/Latinx or Asian & Pacific Islander population. Finally, White/White-Mixed neighborhoods are tracts with at least a 60% White population or tracts with a substantial White population that were not Multiethnic. For more information on these categories, refer to Appendix C.

⁴ A census block group is a cluster of blocks and contains approximately 600–3,000 residents. Refer to Appendix B for additional information.

⁵ Analysis of population distributions using data from the Comprehensive Housing Affordability Strategy (CHAS) for the City of Oakland suggests that our credit score categories are similar to the following the U.S. Department of Housing and Urban Development (HUD) Area Median Income (AMI) categories, categorizations: <30% AMI ("extremely low,"), between 30% and 50% AMI ("very low"), between 50% and 100% AMI ("low/moderate"), and above 100% AMI ("middle/high"). For more detail, see Appendix C.

B. Interviews with Low-Income Renters

Next, we conducted 80 in-depth, semi-structured interviews with extremely and very low-income renters (<50% AMI) in Oakland to understand the complex experiences of residents as they adopt a variety of strategies to stay housed. We aimed to stratify our sample across the major ethnoracial groups: Asian/Pacific Islander, Black, Latinx/Hispanic, and White.

Our team conducted 80 interviews between September 2021 and November 2022 via phone or Zoom. These were designed as 1-1.5-hour conversations and were conducted in English, Spanish, Cantonese, or Mandarin. All participants were compensated with \$40 gift cards. We recruited participants by sharing flyers about our study at BART stations, public libraries, community organizations, community and cultural centers, food banks/distributions, grocery stores, farmers' markets, health centers, DMVs, and religious institutions. Participants also learned about the study through door-to-door flyering and word-of-mouth.

In the interviews, renters were asked about their residential history, living arrangements, housing conditions, rent and other finances, and the impact of COVID-19 on their housing, among other themes. About every six months after the first interview, we are contacting the respondents to participate in a short follow-up survey to learn how their experiences change over time. We will invite participants for a second in-depth interview two years after the first interview.

Interviews were conducted during the City of Oakland's COVID-19 State of Emergency when the City instituted an emergency moratorium on evictions. In April 2021, the City launched its application portal for rental assistance and housing stability services to residents impacted by the pandemic. The program prioritized applicants previous experience of homelessness, earning less than 30% AMI, and/or living in a zip code with the highest rates of COVID-19 infection.⁶ Given this context, we also asked participants about their knowledge and engagement with the eviction moratorium and the rental assistance program.⁷

Our final sample consisted of 16 White, 21 Black, 22 Asian & Pacific Islander, and 21 Latinx/Hispanic respondents. These respondents came from all the major neighborhoods in Oakland including West Oakland, Downtown & Central Oakland/Chinatown, Fruitvale, and the Elmhurst areas (Figure 1). Table 1 shows the main characteristics of our sample.

⁶ For additional detail on ERAP, refer <u>here</u> and <u>here</u>.

⁷ While our findings draw from the experiences of extremely and very low income renters during the pandemic, this report is not an evaluation of the rental assistance program. Instead, this report sheds light on patterns of residential instability and racial equity to identify struggling renters' needs and inform future interventions.

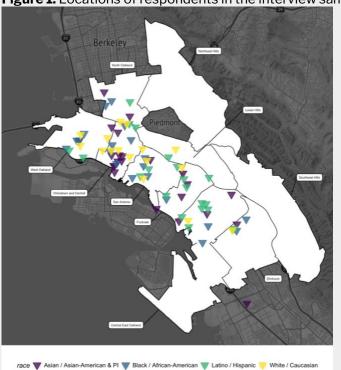


Figure 1. Locations of respondents in the interview sample.

Note: A random amount of noise was added to each participant's location to maintain confidentiality.

Table 1. Characteristics of the interview sample.⁸

	·				
	White / Caucasian	Black / African- American	Latino / Hispanic	Asian / Asian- American & PI	ALL
Number of Participants	16	21	21	22	80
Income					
Extremely Low	69%	81%	76%	59%	71%
Very Low	31%	19%	24%	41%	29%
Living Conditions					
Crowded Home	19%	24%	52%	45%	36%
Informal set-up	13%	14%	43%	36%	28%
Emergency Rental Assistance					
Did not apply	81%	81%	86%	82%	82%
Applied, did not receive	0%	10%	0%	18%	8%
Received	19%	10%	14%	0%	10%
Other government assistance (i.e, received CalFresh, SSI, Medi-c	56% cal)	52%	33%	41%	44%

Note: Percentages are based on the number of participants from each racial group. (E.g., 19% of White respondents in our sample lived in crowded conditions.)

⁸ These provide only a high-level description of our participants. See Section V: In-Depth Interviews for a detailed examination of respondents' qualitative experiences.

IV. CCP Data: High-Level Trends

The CCP data highlights the extent of residential instability in Oakland over the last two decades. Below, we present key takeaways from our analysis, before discussing these trends in greater detail.

- 1. Moving out in the last two decades: Over the last two decades, ELI residents generally moved out of their neighborhoods and out of Oakland at lower rates than some other groups, but these rates have accelerated in recent years, leaving ELI residents vulnerable to rising housing costs and economic shocks. In 2019 and 2020, ELI residents moved out of Oakland at the highest levels. Among residents who moved, ELI residents were the most likely to leave Oakland and the Bay Area altogether. Compared to other groups, a higher proportion of VLI residents moved to Contra Costa County and the North Bay-the outer edges of the Bay Area.
- 2. **Household crowding in the last two decades:** Transitions to crowded housing conditions rose for lower-income households in the wake of the Great Recession, coinciding with declines in moving out and suggesting that residents may be doubling up, sharing spaces, and facing other constraints in order to avoid moving elsewhere. In the period following the onset of the pandemic, however, we note some small increases in crowding alongside sharp increases in moving out.
- 3. **Neighborhood variations across outcomes:** Trends in moving out and crowded household conditions varied by the geography of Oakland. Between September 2021 and 2022, the most recent annual period for which we have available data, higher shares of ELI and VLI residents moved out from East Oakland and parts of West Oakland. These areas are home to large concentrations of people of color and other at-risk populations.
- 4. **Ethnoracial variations across outcomes:** Trends in moving out and crowded household conditions also varied by the ethnoracial composition of Oakland's neighborhoods. Following the Great Recession, residents in Multiethnic and Predominantly Black neighborhoods moved out at higher rates compared to other groups. Mixed-Black neighborhoods and Predominantly Black neighborhoods also experienced the highest rates of transitions to crowded housing for most of the last decade.
- 5. **Resident tradeoffs:** Finally, we show that rates of moving out and crowding over the last 20 years often trended in opposite directions, suggesting that residents may be doubling up and sharing spaces in order to avoid moving. However, since the onset of the pandemic, moving out has increased sharply, coinciding with some small increases in household crowding. While it is possible that residents will face difficult tradeoffs between moving and crowding, multiple forms of instability may also continue to increase simultaneously, i.e., increases in both moving and crowding.

A. Trends in moving out

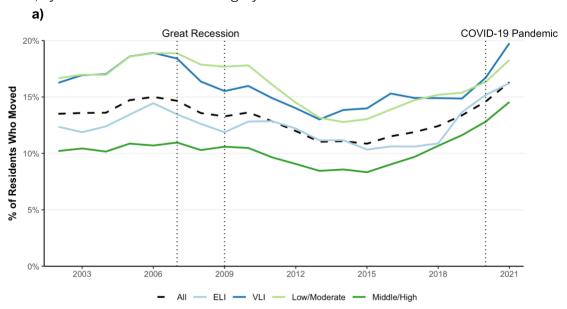
While ELI residents moved out of their neighborhoods and out of Oakland at lower rates than some other groups until 2019, they have seen sharp increases and left Oakland at the highest rates in recent years

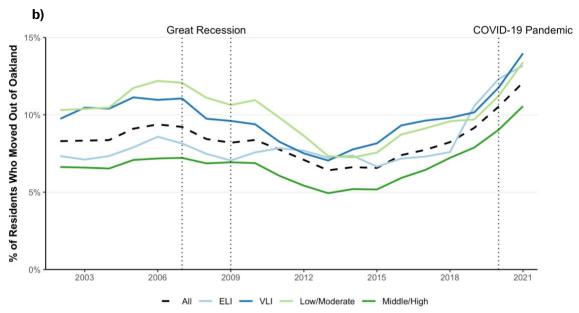
First, we analyze trends in rates of moving out from 2002-2021 by the credit score categories of residents in the CCP sample. Over the last two decades in Oakland, there has been considerable variation in the rates at which residents moved out of their homes in Oakland (Figure 2). Apart from a slight rebound in 2010, on the whole, the period following the Great Recession ushered in a relative lull in moves until the mid-2010s when rates began to tick upward again. The onset of the COVID-19 pandemic and the economic shocks that accompanied it saw moving rates climb even further in the years that followed.

As Figure 2a demonstrates, ELI residents have moved at lower rates than VLI and low/moderate residents throughout the past two decades. This difference may reflect the effectiveness of housing assistance policies such as just cause for evictions in protecting the most vulnerable renters from displacement, or it may also be a result of the lowest-income renters staying in place due to the shortage of affordable housing alternatives available to them. However, in the period following the Great Recession (after 2009), the rates of ELI residents who moved both out of their neighborhoods and out of Oakland entirely grew more sharply compared to other groups (Figure 2).

After 2010, while most groups moved out of Oakland (Figure 2b) at declining rates, ELI residents were leaving at increasing rates. The ELI group also experienced sharp increases after 2018 and surpassed other groups in rates of leaving Oakland in 2019 and 2020. These trends add to concerns about displacement of ELI residents due to rising housing costs and economic shocks.

Figure 2. Percentage of residents who (a) moved out of their neighborhood, and (b) moved out of Oakland, by socio-economic status category.





Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data.

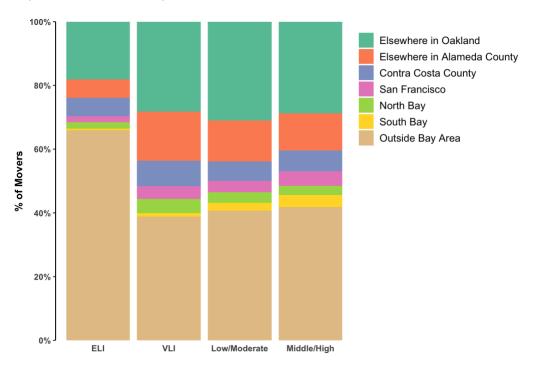
Note: Data points reflect 3-year rolling averages.

Among residents who moved, ELI residents were the most likely to leave Oakland and the Bay Area altogether

Examining where residents moved after they left their neighborhoods reveals disparities across credit score categories. Between September 2021 and 2022, 4 out of 5 ELI residents who moved ended up leaving Oakland, and two-thirds moved out of the Bay Area completely (Figure 3). Similarly, ELI residents were also the least likely to remain in Alameda County after moving out of Oakland.

Substantially higher proportions of VLI, low/moderate, and middle/high residents moved elsewhere in Alameda County or within the Bay Area. ELI residents' likelihood to make long-distance moves far from their homes and communities can have lifelong impacts on their education, earnings, and overall well-being. That the city's most vulnerable residents are moving farther and farther away highlights the growing need to develop policies that better support them in staying rooted in their homes and communities. Notably, VLI residents moved to Contra Costa County and the North Bay at the highest proportion compared to other groups. These patterns may point to a growing number of workers commuting to Oakland for work but unable to afford housing in the city.

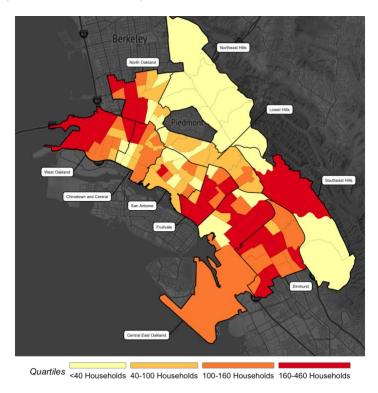
Figure 3. Destinations of Oakland residents who moved out of their neighborhood between September 2021 and September 2022.



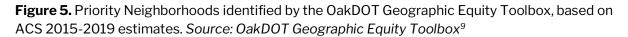
Higher shares of ELI and VLI residents who moved out of their neighborhoods lived in East Oakland and parts of West Oakland, areas that are home to large concentrations of people of color and other at-risk populations

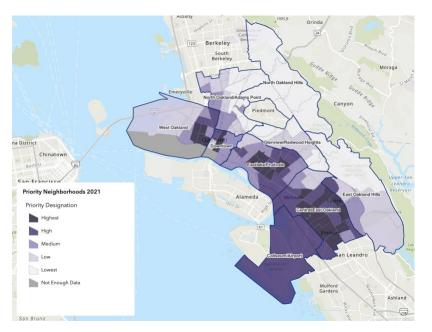
While ELI and VLI residents experience greater instability in terms of moving out across the city on average, this vulnerability is higher in certain parts of the city (Figure 4). Census tracts in East Oakland and parts of West Oakland are home to substantially higher numbers of ELI and VLI residents who moved out of their neighborhoods in the most recent year for which we have data. Some of these areas coincide with areas identified as high priority by the City's Geographic Equity Toolbox (Figure 5) based on populations of people of color, low-income households, and other demographic factors, suggesting that Oakland's most vulnerable residents and communities of color are moving out at disproportionately higher rates.

Figure 4. Number of ELI and VLI households who moved out of their neighborhoods between September 2021 and September 2022.



Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data





Residents in Multiethnic and Predominantly Black neighborhoods have moved out at higher rates than other groups since the Great Recession

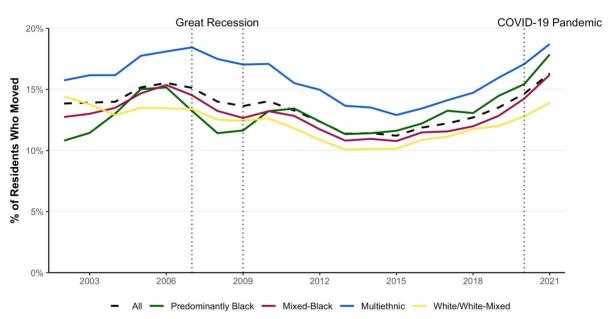
Based on our ethnoracial categorizations of Oakland's neighborhoods, since the Great Recession, residents across credit score categories who lived in Multiethnic and Predominantly Black neighborhoods have moved out of their neighborhoods and out of the city altogether at the highest rates over the past two decades (Figure 6).

The Great Recession marked an inflection point for Predominantly Black neighborhoods. Residents in Predominantly Black neighborhoods were the only group to see increases in moving out between 2009 and 2011. While residents in these areas sometimes used to move at lower rates in comparison to White/White-Mixed neighborhoods, since the Great Recession, they have consistently moved at higher rates. Since around 2018, these areas have also experienced sharper increases in rates of moving out of Oakland entirely.

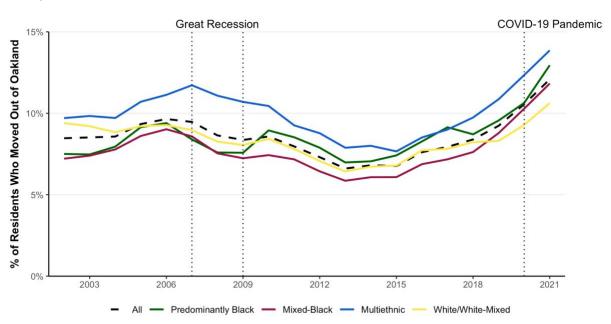
⁹ This Toolbox uses pre-pandemic American Community Survey data (2015-2019) as 2020 Census data collection was impacted by COVID-19 pandemic. https://www.oaklandca.gov/resources/oakdot-geographic-equity-toolbox

Figure 6. Percentage of residents who (a) moved out of their neighborhood, and (b) moved out of Oakland, by neighborhood ethnoracial category.









Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data.

Note: Data points reflect 3-year rolling averages.

B. Trends in household crowding

Transitions to crowded housing conditions rose for lower-income households in the wake of the Great Recession

While moving reflects one facet of potential housing instability, many households experience instability even before they move. As housing becomes increasingly unaffordable, individuals and families may "double up" and share spaces at greater rates which has various negative implications for housing, health, and well-being. Figure 7 shows the extent to which individuals in households with one to two adults transitioned into households with at least four adults in a given period. Almost throughout the last two decades, ELI and VLI residents transitioned into crowded households at the highest rates compared to other groups. These groups also see the largest growth in shifts to crowded households in the years following the Great Recession. This period, from 2010 to 2013, coincides with substantial declines in rates of moving (shown previously in Figure 2). Taken together, these trends suggest that low-income residents face difficult tradeoffs: to cope with the lack of affordable housing, they can either move out of the city, or they can resort to strategies like doubling up with others to avoid having to move.

High levels of household crowding are especially concerning in the context of the COVID-19 pandemic, putting residents at risk of increased transmission. While household crowding has increased only slightly since the onset of the pandemic (for all groups except ELI households), it is possible that larger increases, like those following the Great Recession, are imminent due to the lingering effects of the pandemic-associated economic downturn. Given the increase in moving out since the pandemic, it is also possible to for lowest-income residents to experience several forms of instability simultaneously in coming years, i.e., increases in moving out and household crowding.

Great Recession

Great Recession

Great Recession

COVID-19 Pandemic

3%

0%

2003

2006

2009

2012

2015

2018

2021

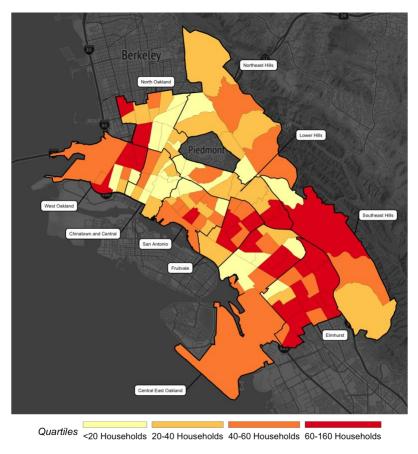
Figure 7. Percentage of low-density households (1-2 adults) who shifted into high-density households (4+ adults), by socio-economic status category.

Note: Data points reflect 3-year rolling averages.

Similar to rates of moving out, higher shares of ELI and VLI residents who transitioned into crowded housing conditions lived in East Oakland and some parts of West Oakland

Similar to moving, shifts to crowded households also vary by the geography of Oakland (Figure 8). Between September 2021 and 2022, large populations of ELI and VLI individuals who started experiencing crowded housing conditions resided in East Oakland and parts of West Oakland. According to the Geographic Equity Toolbox, these neighborhoods are home to large concentrations of people of color and other at-risk populations, and several of these neighborhoods also saw high rates of moving out during this period.

Figure 8. Number of low-density ELI & VLI households (1-2 adults) who started living in high-density households (4+ adults) between September 2021 and September 2022.



Mixed-Black neighborhoods and Predominantly Black neighborhoods have experienced higher rates of transitions to crowded housing for most of the last decade

Across credit scores, residents living in Mixed-Black neighborhoods transitioned into crowded conditions at the highest rates throughout most of the last two decades (Figure 9). Yet the most significant impacts of the Great Recession on household crowding were on Predominantly Black neighborhoods, which saw the largest uptick in shifts to crowded conditions after 2009. The persisting economic and health impacts of COVID-19 could affect these neighborhoods in similar ways in the next few years.

Great Recession COVID-19 Pandemic

9%

0%

2003

2006

2009

2012

2015

2018

2021

- All — Predominantly Black — Mixed-Black — Multiethnic White-Mixed

Figure 9. Percentage of low-density households (1-2 adults) who shifted into high-density households (4+ adults), by neighborhood ethnoracial category.

Note: Data points reflect 3-year rolling averages.

C. Limitations of the CCP Analysis

Despite the large-scale data, the CCP dataset does not capture important demographic information, like race and ethnicity, income, or tenancy status of households experiencing in the sample. This dataset also only captures residents with credit histories and may inaccurately capture whether people become homeless. To address these limitations and learn more about the mechanisms driving residential instability, we discuss our findings from interviews with 80 low-income renters next.

V. In-depth Interviews: Unpacking the Mechanisms of Housing Insecurity

Between September 2021 and November 2022, we conducted 80 interviews with ELI and VLI renters. In these conversations, we specifically sought to understand the mechanisms that drive housing insecurity both before and beyond a move. We focused on the strategies renters may adopt to avoid homelessness (e.g., doubling up, taking on new debt, living in uninhabitable conditions) and the situations they navigate before, while, and after moving out. With the goal of identifying targeted strategies to reduce housing insecurity and mitigate the associated racial disparities, we report findings across five domains: (1) severe financial distress, (2) tenant unawareness of local programs, (3) landlord behavior, (4) challenges in finding housing alternatives, and (5) racial disparities in housing security.

A. Severe financial distress

Most respondents experienced severe financial distress to keep paying rent during the pandemic, forcing them to forego necessities, work additional jobs, and borrow money

In response to the COVID-19- economic crisis, the City's Keep Oakland Housed administered federal emergency rental assistance funds to assist low-income tenants in covering past rent due, prospective rent, and utility expenses. In addition, the City has instituted a moratorium on evictions during the pandemic emergency. Despite this, most renters in our interview sample did not invoke emergency protections or apply for rental assistance (Table 1); instead, they faced severe financial precarity. Almost all of our respondents, particularly Black, Latinx, and Asian renters, adopted strategies like foregoing food and medication, falling behind on loan repayments, selling possessions, and working additional jobs to pay for rent and living expenses during the pandemic.

Housing costs in the form of rent represent the biggest living expense for Oakland tenants, and rising rents in the region are forcing residents to forego basic necessities to afford rent. Our respondents worked low-wage jobs that did not keep up with rising costs or survived on meager social security or disability benefits. Our respondents reported cutting costs, being frugal, and "living simply" to deal with rising costs of living. But despite every effort, they could barely manage to stay afloat. Julia, an Asian renter living in a 2-bedroom home with five other family members, described such challenges.

We cannot pay the rent at all. To be honest, it [is] so hard. I mean, catching [up with] the bills for two people or one people working only, it's very, very tough. I feel sorry for the dad of my kids. He's exhausted and working hard for 24 hours. He doesn't sleep just to [pay] this expensive rent.

Residents lived in severe financial precarity that involved cutting costs at every step. Hector, a Latino renter, sacrificed needs like transportation car and clothing to pay rent on time throughout the pandemic.

When I work here, I walk from home, or by bus. Because with how expensive gas, oil, tires and maintenance are, it's very expensive. Or I walk if I go early, since I start work late. On Saturday and Sunday, I walk home. But yes, I reduced expenses in terms of clothes. [...] I haven't bought any clothes or shoes.

Existing programs and protections may be too limited to sufficiently address renters' financial needs

The risk of a missed rent payment, even if protected from eviction due to the moratorium, was far too great, so renters paid rent by any means necessary to stay housed, barely scraping by in the process. For low-income tenants, foregoing basic necessities in the name of rent did help ensure basic housing security inasmuch as they had a roof over their heads, but this tradeoff damaged several other facets of their well-being. More than 63% of respondents recounted cutting back on food and grocery expenses to make ends meet. Consistent with other research on food insecurity in Oakland, rental payments made up a considerable portion of our respondents' budgets and forced them to make hard choices.¹⁰ Tomato, a 48-year-old immigrant from South America, described these tradeoffs.

I thought [Keep Oakland Housed] was for people that really couldn't pay rent because they didn't have any money. I didn't think it's like, 'oh, I could use my money to eat and not pay rent.' I was like, 'I have the money to pay rent. So, I'll pay rent and then I won't eat.'

Derek, a Black renter living in a short-term rental, also described cutting back on food and transportation expenses to make ends meet:

Food is not cheap here. It's more expensive than where I'm from. So, just adding that along with it makes housing something... Housing is a priority, so it makes it harder to put money towards the other two, meaning transportation and food.

The region's shortage of affordable housing and the ever-present fear of being forced to move out-be it due to a formal eviction procedure or an informal removal-influenced every financial decision. Besides food, renters described sacrificing health expenses to make ends meet. Lina, a 72-year-old Chinese renter in Oakland's Chinatown commented about her daily dental struggles.

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¹⁰ Whittle et al. 2015.

There's nothing I can do. I can't afford it, so I'm just waiting. We can't eat, we eat porridge three times a day. That is soft. We don't have teeth, so how could we eat anything else?

Even after cutting costs wherever possible, more than half of renters of color had no choice except borrowing money from friends and family, straining their already resource-constrained community networks. Other households, like that of Sarah, a Black mother of two, had to resort to predatory lenders to make ends meet.

I was having a couple health issues. I took off of work for about a month. We were waiting on our taxes. [...] The money that we were waiting for did not come. We were worried about actually paying our rent. This was two days ago. My husband had to get one of those same day loans over the internet basically to basically pay our bills.

Fear of eviction pushed respondents to sacrifice other needs for the sake of rent

Despite experiencing severe financial hardship, 82% of our respondents did not apply for rental assistance or invoke the eviction moratorium. These renters had strong justifications for making use of the moratorium and informing their landlords of their inability to pay rent during the pandemic. However, they decided against using their earnings for needs other than rent due to fear of losing their housing. Even if their landlords were bound by emergency moratorium, many of our respondents lived in constant anxiety as they believed their landlords could find (or fabricate) other reasons to force them out. For example, Mateo, a 56-year-old Latino renter of Fruitvale, feared being evicted once the moratorium ended.

We also didn't want to give the landlord an excuse to evict us because sooner or later, the laws that are protecting the renters are going to end. Right now, I think it's going to happen. So, we didn't want to get behind on our rent. We sold what we could. We took whatever jobs we could. I know this [redacted] association in my neighborhood. I participated there and through there, I was doing gardening. I went back to Napa to do the vineyard again just for the weekends. At the end, we didn't get behind on our rent. [...]

Lupe, an elderly Latina renter, shared similar fears.

I'm afraid they're going to kick me out. [...] One is always afraid that a piece of paper will arrive. Just thinking that, it's like a fear. [...] I'm going to be very honest with you. In an account that I had, I had a credit card. I went, as they say, to bankruptcy because I couldn't make the payments anymore. [...] When I had the credit card, I [wanted] to take money from there to pay rent. That's why I also exceeded the card.

Like Mateo and Lupe, about 73% respondents of color feared that landlords could force them to move out regardless of the moratorium and/or believed that emergency

protections would not apply to their specific circumstances. Tenants scrimped and saved to ensure that they always had adequate funds for rent. Words from Candy, a single Black mother, illustrate such hardship.

Like I said, you don't eat, you starve, you don't go shopping, you don't buy food for yourself, you don't get your hair done, you don't get your nails done, you don't buy iPhones, you don't pay cable. You basically struggle, and you do without. [...] You can't take off the rent. I keep trying to get you to understand, that's not no option. If you gotta eat some pasta with some spaghetti sauce, that's what you're going to eat, but you're not going to go buy no meat and take it out your rent, unless you're trying to be homeless.

The sacrifice of necessities like food, transportation, and healthcare indicates the distress and hardship created by the high cost of housing. All of our respondents reported withdrawing money from their savings (including savings for their children or for future education) to pay rent, and many renters plunged deeper into debt. While most tenants who spoke with us were eligible to apply for rental assistance during the pandemic, many expressed that the program could not address their needs or specific circumstances. Such sentiment was most pronounced among renters of color and was exacerbated by high levels of misinformation about local programs. We discuss this next.

B. Lack of accurate information

The City of Oakland, in collaboration with community-based organizations, offers a variety of programs and resources to support tenants in navigating complex financial and legal circumstances. However, 82% of our respondents did not (or could not) take advantage of these programs or resources. In this section, we identify misinformation and/or lack of information (most likely due to a lack of targeted outreach to some groups) as one of the principal reasons for low program uptake among our respondents.

As some respondents had previously been denied assistance for other programs (due to immigration status, informal lease, or other restrictions), they felt that they would not qualify for Oakland's moratorium or the rental assistance program as well. Socioeconomic factors like education and digital literacy contributed to knowledge and information gaps, and lack of accurate information about these programs left the City's most marginalized populations even more vulnerable to housing insecurity. Below, we report these findings concerning the emergency rental assistance program and other local tenant protections, like rent control and the eviction moratorium.

Misinformation and confusion about eligibility criteria and requirements of the rental assistance program discouraged respondents from applying for rent relief

While 85% of our respondents experienced severe financial hardship during the pandemic, only a handful applied for rental assistance (Table 1). Misinformation about eligibility criteria for local programs was a significant contributor to tenants' unwillingness to apply. While all of our respondents were eligible to apply for rental assistance funds based on income, most did not apply for the program because they believed they did not qualify for various reasons that we enumerate below. Importantly, undocumented residents and those without formal lease agreements were most prone to misperceptions about eligibility criteria for local resources. Hector, an undocumented renter, commented:

I hear about [the programs] sometimes in the news, but it's never been granted to me because of immigration status, I think. I imagine that's why one doesn't qualify.

In addition to immigration status, we also note confusion about the nature of assistance available through Keep Oakland Housed program. While Keep Oakland Housed offered assistance for up to three months of prospective rent, 11 most renters believed the program covered only past rent due. Chantal, a 46-year-old Black renter living in East Oakland, described her needs.

But the thing about that is [the programs] only pay back rent. I worked through the full pandemic, so I paid my rent nervous and scared that something wasn't going to go through and just held everything in and was like — well, I'm going to keep paying my rent as if we're not in a pandemic. So, I don't know if they'll assist me. Yeah, I don't know if they'll assist me with future rent but I'm looking for a program that'll help with like... Only thing that I would actually be worried about is my car note and insurance. Because everything else, I try to pay. If I have to put 20, 40 dollars down, I'll pay it just so I don't have no big deal when everything falls down.

Rules about landlord participation were also subject to misinformation. The City removed strict requirements of landlord participation during Round II of the program, but confusion and misinformation persisted. Renters like Candy, who we spoke with in October 2021, assumed (based on prior experience) that their landlords would refuse to participate in programs like Keep Oakland Housed and, thus, they would not qualify for assistance.

Another thing is, your landlord has to be willing to deal with the program. If your landlord don't want to deal with the program, then that's another thing that makes it hard, too. They

¹¹ http://www.oakha.org/Residents/Resident-programs/Documents/KOH-ERAP%20Fact%20Sheet%20FINAL%20DRAFT%204.1.21.pdf

promote things on television, on the Internet, but when you look into the finer print... if the landlord ain't okay with it, then it can't be happening.

Lack of knowledge about the eviction moratorium and protections like rent control limited program effectiveness, leaving tenants in our sample vulnerable to unallowable landlord practices such as rent hikes and wrongful eviction

Respondents expressed little knowledge about tenant protections such as rent control and the COVID-19 eviction moratorium. Oakland's Rent Adjustment Program limits rent hikes for eligible units based on the rate of inflation. The City's emergency COVID-19 moratorium also prohibits rent increases above the Consumer Price Index. These directives were designed to protect Oakland renters, but their effectiveness hinges on renters' awareness of and ability to enforce these rights. Renters like Ronald, a 68-year-old Black resident of North Oakland, were unaware of local tenant protections. When we asked Ronald what he would do if his rent increased by an amount that was unallowable (e.g., 20%), he told us that he would move out rather than fight the increase:

I would say I can't handle [the rent increase] so I got to move out. I won't be able to handle too many more of those or too many more dollars. I won't be able to help [the landlord] on that. That would take my food money. That would be part of my bill money. I wouldn't be able to handle it.

Other respondents, like Flower, a 52-year-old Latina mother residing in West Oakland, exhibited some knowledge of local regulations but were unwilling to enforce their rights (or did not know how to do so) if their rent increased above the allowable limit.

But I'm not going to [fight back]. I'm going to move then, because I know that even though, if you fight back [...] the plan is to increase the rent. So, you have to know that if you can't pay the increase, you have to move because it is not going to be livable for you.

The consequences of these information gaps are damaging to respondents' housing security and well-being. Consider the City's prohibition of late fees for rent during the COVID-19 emergency. Many respondents were unaware of this regulation and had to sacrifice additional needs to pay for late fees. Lily, a Pacific Islander renter living with her mother, illustrates:

We literally just was late. Our rent was due on the first and we just paid it yesterday [the 11th]. We only have half of the money because we have to pay our PG&E, phone bill. Our insurance also. I had to put money on my Clipper card because I don't drive but my mom drives. All of those things, even though our rent is important, we had to pay those. We had half the money. We ended up paying our rent yesterday. Lately, it's just been getting harder and harder to keep up with all the bills. [...] I don't feel they [landlords] care. [...] If you're late on rent, you

have to pay your rent plus the late fee. I don't feel they care, or they have any understanding at all.

Among respondents who benefitted from tenant protections and resources, most learned about their rights through local organizations and institutions

Respondents who understood the moratorium's provisions were able to request and negotiate payment plans with their landlords or, at the very least, pay rent a few days late. Sofia, a Latina and White college-educated renter, relied on her knowledge of the moratorium to invoke its provisions. Despite her ability to access informational easily, she described her experiences as stressful.

When [the moratorium] happened, I went to the Oakland City Council website where they have the exact verbatim transcripts of all the deliberations and the actual legal language of the moratorium. And then through my activism, I knew some of the lawyers at [a legal aid organization]. I asked them about it and I tried to get all the information from, like just, [reading] really closely the language of the actual resolution, but it was scary. It was a big risk just because it went against every bone in my body to not be paying rent like that.

For respondents who could not use online resources, community-based organizations and trusted local institutions like churches, food pantries, and senior centers became crucial. About half of our respondents had previously engaged with local groups that helped them access much-needed support, advocated on their behalf, and directed them to appropriate resources. Considering that some renters of color may view government programs with suspicion, local organizations can leverage ties with communities to improve residential stability. Robina, a Latina mother, recounted a prior experience:

Once when I was in another apartment they wanted to do that [increase rent]... for some reason, I would have had to leave, they raised the rent a lot, but I went to an organization called [housing organization], and there they helped me and gave me a letter that I told the owner. So if that were to happen again, I would go to an organization.

Overall, low levels of accurate knowledge and awareness of local laws and programs prevented our respondents from enforcing their rights and remaining housed. Renters of color, non-English speakers, and less digitally savvy renters were less likely to express awareness of local programs. Even when respondents exhibited basic knowledge about rent control laws, many did not know how to actually enforce their rights. Some shared that they would go to community organizations or other local institutions, like libraries and churches, to seek aid and support, but many renters told us that their main course of action would simply be to move out. Thus, lack of knowledge and misinformation about local laws and programs showcase the imperative to adopt targeted outreach strategies and

strengthen the city's commitment to ensuring landlords are following laws and programs that protect renters.

C. Landlord behavior and relationship

Low-income renters in our sample have deeply precarious relationships with their landlords. In the context of the region's housing affordability crisis, property owners and managers were able to exert great control over tenants' sense of stability. About 84% of our respondents believed that nowhere to go if they were forced to move, and, hence, they tried to minimize any tension or conflict with landlords. In this section, we describe how landlord actions like property maintenance, retaliation and unallowable rent hikes, and lack of overall cooperation severely impacted renters' housing security. While many respondents lived in poorly maintained and uninhabitable conditions and were charged unallowable rent increases and fees, they did not challenge or fight back against their landlords due to fear of retaliation and legal conflict. Respondents also described landlords who were uncommunicative and generally unamenable. The small number of renters whose landlords performed proper maintenance, followed local laws and informed tenants of their rights, and communicated frequently generally expressed a higher degree of confidence and stability in their housing.

As many landlords did not perform proper maintenance and upkeep of their properties, renters in our sample, especially renters of color, lived in extremely poor and uninhabitable conditions

More than half of our respondents lived in poorly maintained and substandard housing. While some respondents repeatedly requested repairs and better upkeep, others were too scared to create tension or conflict with their landlord. In the context of the region's affordability crisis, renters in our sample had nowhere else to go and counted themselves lucky for having a roof over their heads, regardless of the conditions in which they had to live. Elena, a Latina renter who lived with her spouse and four children, reflected on her landlord's negligence of her unit's uninhabitability. Later in our conversation, she remarked that her situation was worse than living on the streets.

There are mice under the house. I've had rats get inside the apartment about five times. I've been flooded three times. So, you say, "Wow, how come they asked me for my insurance, my taxes, my paycheck stubs?" They wanted to see if I had the money to pay the rent. I'm paying \$2,300 and at the end of the day, I don't have a decent home because it is not well-equipped. For example, we don't have a vent for the kitchen, we don't have a heater. There is no heating. But we can't do anything else.

¹² We do not differentiate between property owners and managers in this brief and use the term 'landlord' to refer to these actors throughout.

Black mold, lack of heat, pest infestations, flooding and leakage, and deteriorating paint were among a litany of habitability issues faced by renters in our sample. Deidre, a White renter with a disability, expressed similar dissatisfaction with her landlord's maintenance of her unit.

That was this damn landlord. This place had roaches. This place's electricity was not up to scratch. This place, my water heater was servicing the laundry facility of my upstairs neighbor. They had their own water heater, but it hadn't been properly put to, you know. It was installed but their line hadn't been hooked to it or what the frick ever.

While tenants like Elena and Deidre both repeatedly requested repairs and better upkeep, other renters in our sample were terrified of sounding too demanding or difficult to their landlords. Chantal, a single Black renter, expressed feeling anxious about asking for repairs.

Of course, I wanted to complain and it's like, "Okay, well, if [the rent] is going to go up, could you guys wash and paint the outside of the building or clean the stairs?" Of course, I wanted to complain but I humbled myself and was like... well, I just have to do what I have to do because I'm not homeless and I'm able to go out and get another job to make the money. So, I just had to adapt, and I know that they know that. I know that they know that for sure. Like you deal with it or move on. Somebody else would love to get [this apartment].

Several respondents reflected that their landlords were taking undue advantage of their financial precarity. After being selected to receive a Section 8 voucher, John, a Black immigrant, experienced great difficulty in finding rentals; he attributed these challenges to landlords of poorly maintained properties who preferred renting out to low-income tenants who did not know their rights or would not enforce them. By neglecting duties of property maintenance, landlords could severely impede the housing stability, health, and well-being of respondents of color.

Because at that time, I was on Section 8 and they was giving people on Section 8 a very hard time. These landlords weren't renting to people with Section 8 because they know they have to answer to the government when they rent [voucher recipients] places. So they was renting to people that are immigrant. People from like El Salvador, from Mexico, from all these different places, to people who they know they wouldn't say anything. They rent them all kinds, where pipes and stuff wasn't working. Sinks wasn't working, bathroom wasn't working. Some of them was infested with roaches and rats, and charging them a whole bunch of money.

Respondents battled high levels of fear and anxiety about being harassed by landlords, so they did not enforce their rents to avoid any chance of conflict with landlords

Even among respondents who understood their rights in such scenarios, they expressed high levels of unwillingness to enforce them to avoid creating conflict or tension. Most respondents were anxious that their landlords would react negatively if they were to request repairs, enforce their rights, or apply for support programs. Specifically, respondents worried that their landlords would retaliate by increasing rent and forcing them to move out. Angel, a Latina renter in her mid-30s who lived with three roommates, shared how she did not apply for rental assistance due to fear of a rent increase.

I guess for me I feel I'm a little bit afraid to try to do that because I don't want her to raise the rent. I just don't really know much about it. Once I saw that you had to get your landlord's sign off on it, I was not interested in it anymore. I don't know how my landlord would take that. She's a little touchy. I don't really trust her as a landlord or a person. For me to go to her to that, I just didn't trust it, so I didn't try.

Experiences with landlord retaliation went beyond rent hikes. John, a Black immigrant senior quoted previously, described several instances where his landlord acted illegally and cut his utilities.

That other landlord, after [his wife] died, what that man do, he ripped my junction box out that was bringing me the electricity. He ripped all the electricity off where I had no lights, no water, everything. [...] Man went in the garage while I wasn't home and was doing garage sale and selling out all my stuff. Yes. He was selling out all my stuff. I had to call the police on him. The police had to come and tell him he couldn't do that. [...] He was bringing trucks to throw sand all up in front of the house to make it look like the place had been [abandoned].

Suleika, an Arab renter who was unemployed during the pandemic and had been previously homeless, also experienced extreme forms of aggression and harassment from her landlord because she and her six roommates could not pay rent in 2020. After months of living in a hostile environment, she had to move out at the height of the pandemic.

The landlord became very hostile and aggressive and violent, basically. [...] I had spoken to a tenants' rights lawyer that was just like, "Do not leave. We're going to help you fight for your right to stay there," all this stuff. But it kind of just became increasingly just dangerous to be there. We felt we had to be constantly on the lookout for the car of the landlord or his wife. And that somebody had to be home at all times in order that we wouldn't be locked out, because then we would lose all of our things. And basically, we just took our things and we left.

Renters in our sample, especially renters of color and those who were immigrants, lived in fear of retributive actions by their landlords if renters demanded changes or enforced their rights. Landlord retaliation generally materialized in the form of rent hikes, exorbitant late fees, lack of proper maintenance, and in extreme cases, constant harassment.

Respondents of color had to deal with landlords who actively harmed their housing security, such as by not properly communicating and declining to participate in local programs

In addition to facing issues with property maintenance and retaliation, 43% of renters in our sample also described landlords as generally uncooperative and uninterested in their renters' housing stability. Candy, a Black mother quoted previously, had expressed frustration that her landlord refused to participate in a utility assistance program. Similarly, Marta, a Latina renter living in a seven-person household, lost the rental assistance funds she was granted by a community organization because her landlord declined to participate.

When we asked him [the landlord] to help us with the rent, he said no, that other people could pay what we were paying and more. When the pandemic came, I lost my job because I was cleaning houses. All the [clients] canceled, they didn't want me to come back. He didn't want to [help] us. My children's father was going to be supported by an organization to pay the rent, they just needed to talk to the owner and get the owner's permission. He said no, so they could not help us. My children's father started to borrow money to be able to pay the rent because we could be kicked out and we had nowhere to go because the rents were very expensive. [...]

The truth is that we do not want to look bad with the landlord because he told us last time that if we did not pay rent... he knows that it is against the law to ask us to leave for not having paid rent, but based on the rents that are so expensive, for a room they almost ask up to \$1,500. So, even if it is scratching here and looking for it there, even if it is borrowed, we have to pay the rent on time.

In sharp contrast, renters whose landlords were communicative and amiable to repair requests generally expressed a higher sense of housing security than renters whose landlords did not cooperate. Ethan, a White renter who lived with his spouse and child in San Antonio, perceived his property manager as communicative and accommodating.

Whenever I've let her know that I'm going to be a little bit late [in paying rent], she's never unfriendly about it, never aggressive or anything. She's always very much just like, "Oh, don't worry about it. Just pay it when you can. We understand the situation." At the end of the day, there's always that thought of like, COVID is a thing. So, I don't know if they're just being nice

right now but from what I have gathered, I don't have any reason to doubt that I would wake up one day and have an eviction notice taped to my door. I don't see that happening.

Landlords and property managers can exert significant control over their tenants' housing security. Their most direct influence was in the form of increasing rent and charging late fees, even when prohibited by law. Some landlords also harmed renters' housing security by neglecting their duties of property maintenance and upkeep. Finally, some landlords also declined to participate in assistance programs, such as for rent or utilities, that discouraged Oakland's most vulnerable respondents from taking advantage of local resources. These factors created an unwillingness to enforce rights among renters in our sample and pushed them to live in constant fear and anxiety about potential retaliation and harassment. When landlords neglected to act in accordance with Oakland policies and did not perform crucial responsibilities, they harmed renters' ability to remain stably housed. At the same time, landlords could substantially improve renters' sense of stability by performing proper maintenance and informing respondents of their rights and resources.

D. Challenges in finding housing alternatives

Renters in our sample endured substandard living conditions and exploitative landlords because the alternatives seemed much worse. In fact, renters expressed feeling that no other options even existed for them. Moving represented a last-resort strategy that renters avoided at all costs. Alex, a Latino father of a child with special needs, expressed that he had nowhere else to go in case he was forced to move.

I'm afraid that they're going to kick me out, and I don't have a Plan B. I don't have one. I think that the best plan is going to be the street. I could send my son to Mexico with his mother. While also, what is going to happen with him until he gets an answer from his education, from a special school, I don't know, or some help for him. I haven't focused much on Plan B. I just live [day-by-day]. I hope he just gets better. But I don't have another plan.

Respondents expressed two major challenges in finding alternatives to their current situation: difficulty in locating affordable rentals and the high cost associated with moving. Together, these constraints forced many renters in our sample to resort to substandard and overcrowded spaces, even renting out laundry rooms. We describe each of these challenges below.

When respondents needed to move (due to substandard conditions, exploitative landlords, or other reasons), few resources existed to help them search for safe and affordable housing alternatives

Many respondents, especially those of color, did not know how or where to search for available rental units. 65% of renters in our sample relied on personal connections and networks to find temporary or long-term housing. Renters also used online platforms like

Craigslist, but they reported a growing number of false listings and scams on these platforms that prevented them from finding housing alternatives in a timely fashion. Hannah, a Pacific Islander renter, summarized the anxiety experienced by many renters when searching for housing.

I would say we're definitely worried. We've been worried since the whole pandemic started. If they decide to take [the rent] back up, we might have to move. We can't afford it at all. That would be stressful because we have nothing else to fall back on. We have tried to stay in this place and keep it for as long as we can. Before that, me and my mom were homeless. We were living in a shelter. We try to keep it as long as we can because we don't ever want to be back in that situation again. What can we do? We won't be able to have any place to stay if we lose it.

When asked how they would go about looking for housing, respondents shared they had found their current housing through personal connections, like friends and family, and community resources, like WeChat groups. 63% of respondents also had to rely on online listings to find housing. Lola, a low-income White renter, explained the time-consuming and demanding nature of the housing search process:

I mean, it's such an emotional rollercoaster to look for a new place, and I spent a total of four months over the course of the year. I added up one time, the average number of hours I was putting into my home search, and I think it was like 30 a week. Because you have to be on top of it. And if you're not on top of it, you're going to miss the place that you want or you're never going to see the place. You have to check each of your sources—like Craigslist and Facebook, let's say—you have to check those twice a day. You have to check them as soon as you wake up and then you have to check them before the business day closes. And if you don't do that, then you miss the random, spontaneous open-houses and communications from the property managers. So I would start my spreadsheets again, I guess. I'd pull up the old spreadsheets and make a list of my criteria and rank those in order of priority and then start again. And I would have to block out some of my work schedule to accommodate the time it would take.

Lola was better equipped to deal with these challenges due to her flexible work schedule and savings, but the majority of renters of color could not keep up with the demands of the housing search. Generally, renters lacked streamlined ways to help them locate available and affordable housing, especially as many also had to deal with false listings on platforms like Craigslist. Estela, a Latina mother living in an ADU, shared:

I don't have any idea right now. But I think there are some offices for realtors that pretty much rent out places. I would look there first and amongst people I know because I don't really trust the Internet. [...] Sometimes I am looking around and I see some prices that make me think, "No, that is not true." I am talking about an apartment with two bedrooms that is about \$1,500 and I'm thinking, "No, that is not true." Not here in Oakland. I think, "That is not true. That's a scam. That is going to be a theft."

High costs of moving, in the form of credit check fees and security deposits, deterred respondents from seeking alternative housing options

Even in cases where respondents were able to navigate the housing search, they encountered challenges in paying exorbitant application fees and security deposits. Many reported paying for applications at dozens of apartments yet never hearing back from them. Elena, a Latina mother of four quoted previously, paid about five hundred dollars in application fees to landlords from whom she never heard back.

The first thing was to start sending applications. For example, in Oakland to find housing, something they are doing–I don't know if it's legal or not–but you have to apply with 60 or 70 dollars. The first thing you have to do is pay for the application. After you pay for the application, they run your credit. You also need social security, because if you don't, they won't rent it to you. You have to show them your bank papers so they can see that you have... They want to know how much money you are making. For example, if you get paid by check, they want to have at least three months of paycheck stubs. They want to know if you have a bank account. Those are the requirements they ask for. It is really hard. Imagine, for me to get to this place where I am living, I paid and filled out approximately six to seven applications. I'm telling you I paid for them. They didn't call me back and the money was lost. I finally found this place and had to submit my requirements, my paystubs. I moved before the pandemic started. They asked to see my taxes. I had to submit paystubs, I had to submit my taxes, I had to submit my husband's social security. They had to run my record to see how I was doing. It's a very difficult thing to be able to rent.

In California, landlords can charge prospective tenants these fees to obtain credit checks and other tenant screening reports. In lieu of paying a fee, a renter may share a copy of their credit report with a prospective landlord, but the landlord is not required to accept. John, a Black immigrant renter quoted previously, expressed his frustrations with the process.

You have to pay a fee, a credit check fee and all this kind of check fee. You pay all this money, 35, 40 dollars for the check fee, and you wasn't getting the places. And then when I would get the credit check [on my own] and I was taking the paper that will show what my credit

was, they don't want to accept it because they want to charge their own money. It was just a big game. [...] Robbing people, illegally. [...] They is crazy. They don't want to accept... You have a credit report already showing what your credit is. They don't want to accept it. They want to run the credit report, charging you 30, 40 dollars, 45, 50 dollars, but yet still, you don't get the place.

Other costs of moving like security deposits also limited many respondents' housing options. Robina, a Latina single mother, told us that she would try to stay in place—even if it meant paying higher rents—in order to avoid moving.

I would see the way because if you move you have to think that you have to pay a deposit, the first, the last. They are charging three rents to move. The rent is too expensive. Then it would be difficult to move elsewhere.

Credit checks represented an additional barrier for undocumented renters and those with low credit scores. Mateo, a Latino renter quoted previously, did not believe he could find an apartment to rent due. He shared that one of his only alternatives would be to live on the street.

Well, the only option that I see is to rent a room. I cannot afford to rent a place for myself, all mine. I don't have credit history and if I do, it's not going to be very good because I don't make a lot of money. I make minimum wage. I'm not considering to rent. I mean, if I move or if I'm forced to get out of this place, I don't see myself renting a place on my own. The only option that I see is the first one will be to rent a room somewhere where I can be with my dogs. My dogs are rescues and I just wouldn't leave them. So, that is the only option for me. And then the second one, it's a little extreme but I'm willing to live on the streets. Not that I want to but, yeah. I'd consider that. Yeah.

A lack of support for respondents looking to move pushed some into informal living situations

The process of searching for and securing affordable housing is exceedingly time-consuming and expensive. For 23% of our respondents (increasing to 31% among respondents of color), opting for housing arrangements without formal lease agreements became the only affordable option. When renters found themselves in such situations, housing security was sustained solely by the strength of the landlord-tenant relationship as they were completely unaware of whether any laws protected them. Matt, a 45-year-old Asian resident of Chinatown, noted the consequences of renting informally on his housing conditions.

I don't know what my rights are. I don't know what I can do in this situation. The only thing I can do is to wait. Our sublessor always tries to help us. However, when he isn't able to help us, then we are fully relying on the property management company. It is possible that the company has done their best as well. However, it is also possible that they are not trying their best to assist us. I don't know which one is the truth. But, as for me, I have no idea what I can do to speed up the process. The only thing I can do is to wait [until I make enough to move to a better unit].

May, a 32-year-old Asian renter in Fruitvale, also lived in an informal situation and shared similar anxieties about her rights.

I guess I would like to be protected, as like, my rights as a tenant to be protected. I don't know if not having a lease would affect that in Oakland. But yeah, I don't want to get evicted again. When I had the rodent problem, it took [the owner] like six months to finally deal with it. If I were to seek legal action with that, [would] not having a lease affect my legal rights in that case? Yeah, I don't know.

Most renters in our sample endured substandard living conditions and exploitative landlords because they believed they had nowhere to go. If forced to relocate, renters lacked an organized resource to help them find homes or apartments available to rent, and most wanted to avoid moving due to the high costs and bureaucracy associated with the process. As a result, about 40% of respondents of color had to resort to living in illegally subdivided basements, informal situations, and overcrowded homes to remain housed.

E. Racial disparities in housing security

The COVID-19 pandemic has exacerbated long-standing racial inequalities in housing security. In our sample, racial disparities persist across a variety of themes. First, White renters in our sample applied for rental assistance, invoked the eviction moratorium, and exhibited confidence in enforcing their rights at higher rates than renters of color. Not only were these respondents more aware of tenant rights and resources, but they also were more willing to confront their landlords in order to enforce their rights. Second, among renters of color, Black respondents in particular experienced racial discrimination from owners and property managers who denied their rental applications or tried to evict them. Immigrant Latinx and Asian renters lived in poorly maintained housing at higher rates than other groups. Finally, we note that residents who were less internet-savvy or who did not speak English engaged with informational materials on their rights and protections at lower rates than others.

Higher shares of White respondents could leverage tenant protections and resources to boost their housing stability

While almost all respondents were vaguely acquainted with the moratorium on evictions, White respondents were more aware of specific rights and resources. Even when they were uncertain about their protections, White and internet-savvy renters were able to acquire accurate information through online resources and personal networks in order to remain in their housing. When we asked Amy, a low-income White renter, to consider an exorbitant rent hike, she shared that her immediate response would be to seek assistance from a local organization.

I would probably immediately contact the folks with [local organization]. They've been trying to reform, unsuccessfully, but reform the tenants' union, and they would probably be able to connect me with community resources. I could not afford a 20% rent increase. I would not try to move out, would not move out, though. I would fight it, probably, at least for a little bit. That would be my immediate impulse, would be to try to connect to community organizations that would support that. I know they can't increase my rent by 20%. I know they are limited in how much they can increase my rent. Yeah, that would be my first impulse.

On the other hand, about 75% of respondents of color were unaware of rent control policies. If faced with such an exorbitant rent increase, many exclaimed that they would move or work additional jobs to make ends meet (instead of challenging an unallowable increase). Sarah, a Black renter in San Antonio shared her reaction to a similar scenario of a rent hike.

I wouldn't even know what to do, truthfully. I would have to probably ask for more hours at work. My husband will most likely have to get a second job. [...] I would probably try to search, search, search to move. It's pretty hard to find. I have seen cheaper apartments in other cities that are just too far. Yeah, I'm paying less rent but there's no way that I can get to work living so far. That's one of our issues.

White renters were not only more aware of their rights but also more willing to risk a negative exchange with their landlords in order to enforce these rights, as Sally, a young White renter, illustrates.

I used to live in a different unit in this building and my blinds were broken. I kept asking for them to repair. They wouldn't repair them. Finally, because I read about like the right to deduct. I essentially threatened them with that and that finally got some response from them. They really, I think everybody in this building understands that they do not care until you threaten to mess with their money.

This story from Sally is in stark contrast to sentiments of fear shared by, for example, Angel and Elena, Latina renters quoted previously, and several other stories from Black, Asian, and immigrant respondents.

Black respondents faced a higher degree of harassment from both current and prospective landlords

Black respondents in particular faced additional barriers that harmed their ability to find and remain in stable housing. Many respondents reported dealing with anti-Black landlords or property managers who denied their rental applications or actively sought to force them out of their homes. John, a Black immigrant renter quoted previously, told us that a former landlord had cut all his utilities to try to force him out. Similarly, Jared, a Black senior, shared that he wished to move because of frequent negative and distressing interactions with his property manager.

With these people, they own other units. The only reason I don't want to live here, the only reason I want to leave is because of her, the manager. Because if I don't leave, I know it's going to be bad for me. It's going to be bad so I need to leave. [...] Me and her would get into it and I would go down there. One time, she was trying to evict me. I went to [legal organization] and [it] helped a lot. She pulls little stunts. She pulls little stunts on me. I was late with my rent and she pulls little stunts to try to get you out. It's hard to explain it. Not really hard but when you're late with your rent, you're supposed to have so many days to pay up or quit. She didn't give me that paper on purpose.

Latinx and Asian renters, particularly those who were recent immigrants, lived in extremely poorly maintained and uninhabitable rental units

Renters of color in our sample, specifically immigrant Latinx and Asian respondents, were also more likely to live in uninhabitable conditions regardless of how many times they requested better maintenance. Marta, a Latina renter living in an apartment with six family members, expressed her predicament.

The walls have no insulation, so it's very easy to get damp. If you're careless, a lot of cockroaches come in. I have to put a lot of things so that no worms come out. But since the whole building is impregnated with worms, all may get in. In that sense, it's very ugly here. But it is economical. In quotation marks economical, because since the rents have gone up so much here, I can still say it's passable, but in terms of conditions, it's very bad. The bathroom gets moldy, we have to constantly wash and paint the walls. It fills up with mold and the ceiling, the walls, the windows get very black. Because it has no ventilation. I don't have a hood in my kitchen.

Living in such conditions endangered the health and well-being of respondents of color, and some even claimed living on the streets as a better alternative.

Non-English speaking and less digitally proficient renters received unequal access and exposure to informational materials on their rights and resources

Among renters of color, we also observed issues of unequal access to informational materials, resources, and applications. Spanish- and Chinese-speaking renters in our sample struggled to access informational materials and applications in their primary languages. Similarly, renters with lower levels of digital proficiency and those with disabilities in our sample experienced difficulties in accessing materials, reducing their engagement with renter-stabilizing programs and policies.

VI. Conclusion

The COVID-19 pandemic has exacerbated housing insecurity and its racialized impacts. In this policy brief, we described findings from our research using large-scale credit data and 80 in-depth interviews. We found that ELI and VLI residents in Oakland experienced greater residential instability than other income groups. These outcomes vary by the geography and demographics of Oakland: residents in specific parts of East Oakland and West Oakland-areas also home to large populations of people of color and other at-risk groups-faced the greatest instability. We also found that respondents in our sample of 80 ELI and VLU renters lived in extreme financial distress and exhibited limited knowledge of their rights and willingness to enforce them. Additionally, renters feared harassment from their landlords in the form of rent hikes or late fees, poor maintenance, and an overall lack of cooperation. Respondents resorted to living in such precarious conditions because they believed they had nowhere else to go: most renters in our sample did not know how to look for housing alternatives and could not afford the exorbitant costs associated with moving on already tight budgets. Finally, Black, Latinx, and Asian renters in our sample bore disproportionate harms associated with these factors and experienced housing instability at much higher degrees than White, college-educated, and digitally savvy respondents.

The Promise of Housing Interventions

Despite high levels of housing insecurity in Oakland, local housing interventions and programs represent opportunities to significantly reduce housing instability in Oakland. Sofia, a low-income Latina renter, illustrates how securing support and rental assistance through government resources and community groups can be key to long-term housing stability for the City's most vulnerable renters.

But when the eviction moratorium came about, I'm like damn, this is a once in a lifetime blessing. I can take a little more time, not just take the first job that comes to mind but hold out to try to get one that could really provide me life-time's stability. I was able to not work for basically seven months while I looked for a job that was really going to provide living wage and long-term term stability and I ultimately found that.

I'm the sole breadwinner for our family. I was almost more worried that something was going to happen to me during pregnancy or labor where I was not going to be able to work and we were going to end up homeless. Having the moratorium in place and now having this savings to know that if I did have to take time off because my daughter is going to have to have surgery again in like a year [...], that if I do have to take time off, or God forbid, something terrible happened with my own health, that we would have like a year's worth of rent in savings, that has just been completely life-altering.

VII. Policy Recommendations

To address housing insecurity and reduce racial disparities in Oakland, we offer two sets of recommendations for policymakers and practitioners. These include solutions that foster housing stability for residents who wish to remain in place as well as for residents who wish to or need to move. Our recommendations prioritize low- and medium-level interventions that may be enacted on short timelines and with limited resources, yet they still promise large improvements in housing stability for Oakland's most vulnerable renters.

First, to ensure that low-income renters, especially renters of color most vulnerable to instability, can remain in stable housing:

Recommendation #1: Increase financial assistance for renters' economic needs in addition to rent

The majority of renters that we interviewed did not fall behind on rent, yet they still experienced severe financial distress and had to sacrifice expenses that were central to their work, families, health, and well-being in order to pay rent every month. Rental costs represented the biggest expense for all respondents, but respondents, especially those of color, feared retaliation from landlords if landlords were to know about their financial precarity. Future programs should consider offering flexible funding that can be utilized for a broad range of financial needs and does not require landlord participation. These may include assistance for food, transportation, and childcare, among other needs, to help relieve economic pressures that push renters to live in substandard conditions.

Recommendation #2: Design a targeted outreach and information-sharing campaign to improve knowledge of local programs, tenant rights, and landlord responsibilities

While the City of Oakland has a number of policies and protections in place to promote tenant stability, the vast majority of renters in our sample expressed little or incorrect knowledge about tenant protections such as rent control and the COVID-19 eviction moratorium. The small portion of renters who were aware of local rights, resources, and protections described them as central to their housing stability. To improve renter awareness, especially among people of color, non-English speaking residents, and immigrant renters, the City should develop an outreach strategy to improve knowledge and access to information in neighborhoods facing higher levels of instability (specific census tracts in West Oakland and East Oakland, based on the CCP data). As part of such a targeted outreach strategy, policymakers should:

 Adopt a community-focused approach to increase the reach of City programs, especially to non-English speaking, less digitally proficient, and immigrant renters.
 Among the small number of respondents who exhibited high levels of knowledge, renters learned about their rights through engagement with trusted local institutions.
 These included community organizations, non-profits, health centers, faith-based groups, public libraries, food distribution centers, veterans' organizations, etc. By collaborating with such organizations, the City can leverage these organizations' deep, long-term ties with communities of color and those most at risk of facing housing insecurity. Such a collaboration would also help address issues of mistrust among undocumented renters and others who may be skeptical of local government efforts.

- Actively tackle misinformation about eligibility criteria or other provisions that discourage renters from invoking protections or applying for programs. While most of our respondents were eligible to receive rental assistance during the pandemic, they did not apply for rent relief or invoke local protections. Based on their previous experiences, respondents expressed mistrust in City programs. Generally, these included residents who did not have formal lease agreements, residents who were undocumented, and those who had been excluded from previous programs. Future programs should explicitly address misinformation and myths about eligibility. Other areas of misinformation included questions about the nature of aid available (i.e., past vs. prospective rent) and requirements about landlord participation. The City should also specifically outline the rights and protections of tenants facing non-traditional circumstances, like renters living in multi-household homes.
- Conduct outreach to landlords to promote compliance with rules and regulations.

 Renter instability was exacerbated by fears of landlord retaliation, unallowable rent hikes, and poor property maintenance. Despite strong tenant protections, the burden of enforcing their rights remained on tenants who feared harassment. Future efforts to improve housing stability should also target property owners and managers. These efforts may take the form of education and outreach to inform owners of regulations and responsibilities toward their properties and tenants. Through deeper engagement with property owners, City officials may also be able to identify additional opportunities to address owner and tenant concerns simultaneously and better regulate unallowable practices.

Recommendation #3: Connect households with other forms of government or non-profit administered aid that improve housing stability, such as food assistance and employment training

Since a significant share of Oakland's low-income renter population lives in extremely precarious conditions, it is possible that not all residents in need will receive assistance from future housing programs. In such cases, policymakers should ensure that these applicants are not simply turned away. Instead, practitioners should encourage interconnectedness across local resources so that applicants, even if they are denied housing assistance, are properly redirected and referred to other programs for which they would be eligible. Renters in our sample were in need of a broad range of services, such as food assistance, tenant counseling, and job training, among others.

Second, to ensure that low-income renters who move are able to find suitable housing locally without resorting to informal housing or homelessness:

Recommendation #4: Create a streamlined, one-stop housing resource where renters can access accurate information and find affordable housing.

Residents may want to or be forced to move for a variety of reasons. Respondents often had to wait to "get lucky" through personal connections or sift through hundreds of potential scams on rental listing websites to find housing. A single-stop, City-developed housing resource (such as a phone hotline, web resource, and on-the-ground outreach) to support residents in finding and applying for affordable housing can help improve their housing security and well-being.

Recommendation #5: Tackle renter-borne costs, like credit check fees and security deposits, to help residents move into stable housing faster.

Exorbitant costs of moving, in the form of credit check fees and security deposits, impeded respondents from finding and moving into stable housing alternatives. They reported paying exorbitant amounts in credit check fees for dozens of rental units before they could find a place to rent. To tackle these burdens:

- Provide financial assistance for credit check fees, security deposits, and other
 moving expenses. Such funding would help residents move into safe and affordable
 housing without resorting to informal housing and homelessness and allow renters to
 divert their personal funds for crucial necessities like food and childcare.
- Regulate tenant screening laws to reduce renter-borne costs on credit reports. In California, landlords can pass on the fee for obtaining a credit check and other tenant screening reports to prospective tenants. In lieu of paying a fee, renters may share a copy of their credit report with prospective landlords; however, landlords are not required to accept this copy, and none of our respondents expressed knowledge that landlords may not charge an arbitrary amount as application fees. Policymakers should consider enacting laws to better regulate the tenant screening process so that neither landlords nor tenants have to repeatedly incur such high costs.

Recommendation #6: Support renter-centered financial literacy education for credit building among low-income and undocumented residents.

Credit checks represented a significant barrier for low-income respondents who needed to move. Many renters of color in our sample did not have high enough credit and, unlike some of their White counterparts, they also did not have friends or family members available to co-sign their lease agreements. Housing programs should incorporate financial literacy education components so that low-income and undocumented renters can build their credit and find safe and stable housing without resorting to informal housing or homelessness. For a longer-term approach, the City can also bolster equitable access to credit by encouraging landlords to report timely rent payments to credit bureaus.¹³

¹³ For an example, see https://www.fanniemae.com/newsroom/fannie-mae-news/rent-payment-reporting-program-launch

VIII. Appendix

Appendix A: Description of Datasets

Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data (CCP)

This restricted longitudinal dataset from the Federal Reserve Bank provides quarterly information on a 5 percent sample of adult consumers from January 2002 to September 2022. It contains census block group—level information on where respondents live, as well as respondents' age, loans, mortgages, financial issues (e.g., delinquencies, bankruptcy, foreclosure), and Equifax Risk Scores (credit scores that indicate financial stability). These data are used to analyze individuals' financial health and moving patterns over time for more than 14,000 Oakland residents per year. Adult consumers comprise those with at least one credit account or collection/public record (such as bankruptcy or foreclosure), as well as those with closed or authorized user accounts. We analyze residents aged 18 to 84.

The CCP dataset's anonymized 5 percent random sample comprises consumers over 18 years old with Social Security numbers (SSNs) and a credit history (collected quarterly by the credit bureau Equifax). The full sample is intended to be a nationally representative sample of consumers in a given quarter. About 1-3 percent of consumers are dropped, and a similar share are added to the panel each quarter to maintain this representativeness. Thus, younger people and new immigrants who become consumers are added, and consumers who die, move out of the United States, or have a prolonged period of inactivity are dropped. The sample includes consumers with at least one credit account or collection/public record (such as bankruptcy or foreclosure), as well as those with closed or authorized user accounts (Lee and van der Klaauw 2010). Although 45 million U.S. adults do not have credit scores (Wherry, Seefeldt, and Alvarez 2019), nearly half of these adults are represented in our data.

The CCP data include information on individuals' age, credit information (including Equifax Risk Scores—credit scores), census block group of address, and payment activity of mortgages and other credit accounts. Similar information is provided for all other adult consumers in the same household, based on their residential address. **The CCP data exclude individuals who lack credit or a credit history, which may underrepresent younger individuals, noncitizens or undocumented immigrants, and very low-SES individuals and may overrepresent older individuals and include those who are deceased. Further, our ability to assess mobility among homeless individuals and those who are severely residentially unstable is limited because their residential data are likely misreported.**

The Equifax Risk Score is a proprietary credit score that estimates the likelihood that an individual will pay his or her debts without defaulting. A variety of factors that relate to loan performance contribute to credit scores, including previous payment history, outstanding debts, length of credit history, new accounts opened, and types of credit used (Federal

Reserve Board 2007; Fair Isaac Corporation 2015); delinquency, large increases in one's debt, and events of public record (e.g., bankruptcy or foreclosure) often lead to low credit scores (Anderson 2007). The scores range from 280 to 850, with higher scores representing greater financial health and advantage. Having no score indicates that the consumer has a "thin" file, or too few accounts or new credit such that there is too little information to estimate a score (Brevoort, Grimm, and Kambara 2016). Because the CCP data contain individuals who have a public record for collection, thin files are disproportionately lower-income, but younger consumers are also more likely to have thin files (Brevoort, Grimm, and Kambara 2016). Credit bureaus do not consider income when calculating credit scores, though credit scores correlate highly with income levels and can reflect individuals across the income and wealth distributions (Bostic, Calem, and Wachter 2005; Brevoort, Grimm, and Kambara 2016).

U.S. Census

This publicly available dataset provides information for several variables, including demographic (race, ethnicity, nativity, age), socioeconomic (income, poverty, educational attainment), and housing (occupancy, rent, home value) indicators. These data are available at various geographies, with the lowest aggregation at the census block group level, from the decennial Census years from 1970 to 2020. Census variables rely on a one-in-six sample. We used race and ethnicity data from the 2000 Census to develop ethnoracial categories of Oakland's census tracts (described in Appendix C).

Appendix B: Measuring Residential Instability

Constraints on housing costs can entail residential displacement, but they can also involve complex tradeoffs and constrained choices when it comes to housing and neighborhoods for both movers and stayers. We draw on the CCP data to analyze residential instability in two outcomes described below. For both outcomes, we present the percentage of residents experiencing instability and, in Figures 4 and 8, the number of households facing instability. To create Figures 4 and 8, we multiplied the number of households in the dataset based on the scale of Oakland's population since the CCP data is a 5% sample (~14,000 Oakland residents).

Moving Out

- Extent of moving: For each year, we examine if residents move from their census block group (which contains an average of 39 blocks and about 600–3,000 people). Residents may certainly move within these block groups, and our data do not capture these short-distance moves.
- Move Characteristics: To examine where movers go, we assess whether they moved
 out of their city or outside of the Bay Area, as well as where they move within the
 Bay Area. Moving far distances can have implications for access to pre-existing
 networks, sources of support, and resources and opportunities, such as employment
 and health care. Moving to different cities or towns can also imply changes in school
 districts, as well as other resources and public goods that align with municipal
 boundaries.

Household Crowding

As housing becomes increasingly unaffordable, individuals and families may be "doubling up" and sharing spaces at greater rates, which has various negative health implications. For everyone in the CCP sample, the data contain the number of adults with a credit history who live in the individual's household. We examine the extent to which individuals in households with one to two adults transition into households with at least four adults.

Appendix C: Additional Definitions

Credit score categories

We present findings using Equifax Risk Scores, proprietary credit scores that estimate the likelihood that an individual will pay their debts without defaulting. Equifax Risk Scores are a proxy of financial stability and reflect a distinct dimension of socioeconomic status from typical measures, such as income or wealth, that are particularly relevant to the housing market, where landlords often use credit scores to screen tenants and lenders use credit scores to distribute mortgage products and make lending decisions. We define credit score categories in the following way to align with income bands commonly used to determine eligibility for housing assistance:

• Extremely Low Income (ELI): < 580 or no score (too few accounts or new credit)

• Very Low Income (VLI): 580–649

• Low/Moderate Income: 650–749

• Middle/High Income: 750 or higher

Separate analysis suggests that the distribution of residents in the Bay Area by these categories is similar to the distribution of adult residents in the following income categories, respectively: < 50% of the U.S. median household income; between 50%–100% of the U.S. median household income; between 100–200% of the U.S. median household income; and over 200% of the U.S. median household income. Because we do not have information on household size (including children) and the CCP data are a sample of individuals, not households, our data are not directly comparable to the U.S. Department of Housing and Urban Development (HUD) Area Median Income (AMI) categorizations, which are based on metropolitan area, family size, and income. Analysis of population distributions using data from the Comprehensive Housing Affordability Strategy (CHAS) for the City of Oakland suggests that our credit score categories are similar to the following HUD AMI categories, respectively: <30% AMI, between 30% and 50% AMI, between 50% and 100% AMI, and above 100% AMI.

Ethnoracial Composition

We separate Oakland's census tracts into categories by their ethnoracial composition in 2000. Census tracts are geographic units containing about 4,000 residents on average and are the smallest standard spatial aggregations for which consistent data are available over time. Census tracts are classified based on their racial and ethnic composition in the year 2000 with categories that recognize the multiethnic nature of cities today: Predominantly Black, Mixed-Black, Multiethnic, and White/White-Mixed.

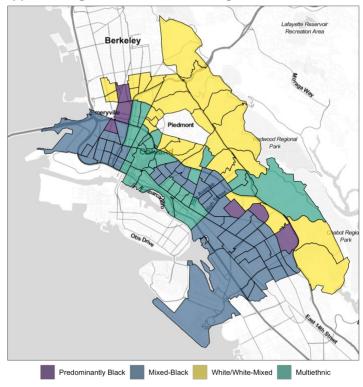
Appendix Table 1. Description of ethnoracial categories.

Ethnoracial Category	Subcategory	Criteria
Predominantly Black	Predominantly Black	over 60% Black; under 20% White, under 15% Hispanic, under
		10% Asian.
Mixed-Black	Mixed Black & Other Race	 mixed Black and other-race tract: under 20% White, over 20%
		Black, over 15% Hispanic or over 10% Asian.
Multiethnic	Predominantly Other Race	over 40% Hispanic, or over 40% Asian; under 20% each White,
		Black.
	Multiethnic	 over 20% each White, Black, and over 15% Hispanic or over 10%
		Asian.
White/White-Mixed	Predominantly White	over 60% White; under 20% Black, under 15% Hispanic, under
		10% Asian.
	Mixed White & Other Race	* mixed White and other-race tract: over 20% White; between 15%
		and 40% Hispanic or between 10% and 40% Asian; under 20%
		Black.
	Mixed Black & White	· mixed White and Black tract: over 20% each White, Black; under
		15% Hispanic, under 10% Asian.

Note: In all but one tract, the black, white, Hispanic, and Asian populations accounted for 96% of the total population. The only exception was tract 9820 (which was classified as Black-Other) in which 18% of the population were not reported as White, Black, Hispanic, or Asian.

Source: Authors' analysis of 2000 U.S. Census.

Appendix Figure 1. Ethnoracial categorization of census tracts in Oakland.



Source: Authors' analysis of 2000 U.S. Census.

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