Key Takeaways

- Cities use tenant protection policies to help low-income households avoid displacement spurred by gentrification and the growing affordable housing crisis. However, due to the lack of fine-grained data, there is limited empirical evidence on the effectiveness of these policies on mitigating displacement – both direct and exclusionary. Our report overcomes previous data challenges for the first time by building unique and cross-validated datasets on mobility and linking them to a bespoke block-level housing construction database.

- With this novel data, we find that rent stabilization helps some – the lowest socio-economic status residents – to remain in a neighborhood. However, it discourages moving in for all socio-economic groups except moderate-middle. Thus, rent stabilization does not improve the ability of residents to access neighborhoods with greater coverage and may be exclusionary.

- While we do not find conclusive evidence that just cause protections prevent displacement, we do find that they help to keep residents of the lowest socio-economic status in place in gentrifying neighborhoods, where displacement pressures may be especially strong.

- Although tenant protection policies may help to keep existing low-socio-economic status tenants housed, they do not expand housing opportunities and may have exclusionary impacts.

- Our findings reveal that equitable solutions to the housing crisis will require more than tenant protection policies. To address the housing affordability crisis and mitigate displacement and exclusion, policy makers should consider pursuing not only the preservation of unsubsidized affordable housing, but also bolder initiatives that substantially expand social housing.

- Social housing is the provision of rental or homeownership units affordable at a moderate income or below, and is run by a public or nonprofit entity. To work, it would need to be widely implemented, requiring government investment at levels that match the urgency of the housing crisis.
Executive Summary

Municipalities have increasingly turned to tenant protection policies to help low-income households avoid displacement spurred by gentrification and a growing affordable housing crisis. However, there is limited empirical evidence on the effectiveness of these policies on stabilizing communities. This policy brief presents findings from an extended study that fills this gap by building unique, fine-grained datasets that capture the impacts of specific housing interventions in the nine-county San Francisco Bay Area, with an additional focus on gentrifying areas in its core cities. With this novel data, we are able to pinpoint how tenant protections impact both direct and exclusionary displacement by looking at movement out of and into local neighborhoods over a four-year period. Our findings suggest that both rent stabilization and just cause for eviction are effective in preserving the ability of residents of the lowest socioeconomic status to stay in their neighborhoods. At the same time, they discourage moving into neighborhoods, and thus may be exclusionary. These findings reveal that tenant protections alone cannot improve access to housing. To address the housing affordability crisis and mitigate displacement and exclusion, policymakers must pursue the preservation of unsubsidized affordable housing as well as bolder initiatives that substantially expand social housing.

Introduction

The San Francisco Bay Area is an extreme case of a constrained housing market, with job growth outpacing new housing production and resulting in supply shortages and price spikes that date back at least thirty years. The Bay Area’s structural shortage of housing that is affordable at all income levels affects the regional economy by increasing commuting and housing costs, which creates barriers to full economic participation, especially for lower income workers. Governments at all levels enact a wide array of policies and programs to ensure that residents of all incomes have access to housing, yet they consistently fail to meet the housing needs of the lowest income residents. For those unable to procure housing via the market, policymakers support subsidized housing production, housing choice vouchers, affordable housing preservation, and tenant protection programs.

Despite these efforts, an affordable housing crisis still afflicts many US housing markets, including most of California. As the regional economy in the Bay Area continues to grow, an influx of high-income workers has put new pressure on the affordable rental housing stock. The lack of affordability has forced some households to move out of the region and makes it challenging for even middle-income households to move in. With scarce resources available to mitigate the crisis, lawmakers need to target spending to the most effective programs. Yet, in part because of the unavailability of appropriate data, there is little evaluation research on which housing solutions will be most effective in stabilizing communities so that those who wish to stay are able to, even as newcomers arrive.

This policy brief presents findings from a longer report entitled Housing Market Interventions and Residential Mobility in the San Francisco Bay Area, authored by researchers from the Urban Displacement Project at the University of California Berkeley and the University of Toronto, the Changing Cities Research Lab at Stanford University, and the Federal Reserve Bank of San Francisco. Our report overcomes previous data challenges for the first time by building unique, cross-validated, and fine-grained datasets on mobility and linking them to a bespoke block-level housing construction database. Our findings improve on those of other studies as we are able to examine the socio-economic status of household that move, rather than assuming that households have the same characteristics as their overall neighborhood. By accounting separately for both moves in and moves out by socio-economic status, our study is better able to pinpoint neighborhood change.
Our first policy brief detailed the relationship between new market-rate housing production and mobility into and out of neighborhoods. In this brief, we focus on the impact of tenant protections on displacement, residents’ mobility, and neighborhood change in the Bay Area. Subsequent briefs will focus on new subsidized housing production and the outcomes of residents who move.

First, we broadly describe just cause and rent stabilization policies, followed by a discussion of our data and methods. We next outline the coverage of these protections in the San Francisco Bay Area before describing their impacts on outmigration and immigration, in the region overall and then in the gentrifying areas of its core cities. We conclude with the implications of our results for policymakers and practitioners.

Background

Rent Stabilization

While specific rent regulation policies vary across time and geographic context, rent stabilization today refers to a set of policies restricting the amount landlords can raise rent in a given year, along with provisions that exempt new construction and bring rents to market rate once tenants move out. Studies generally find that rent stabilization policies are effective in preventing displacement and stabilizing neighborhoods. Yet, rent stabilization distorts housing markets in several ways that may end up exacerbating displacement. Various studies have shown that owners of rent stabilized units keep them off the rental market, convert them to condos, renovate them so they are no longer covered by rent stabilization, or let their properties deteriorate. In sum, rent stabilization protects current tenants, who are not necessarily lower-income, while potentially harming lower-income residents who are not benefitting from the policy. The limited pool of units covered by rent stabilization may also induce residents to remain in a location they would want to move away from. Notably, the majority of these studies do not measure displacement directly, instead using proxy measures such as housing costs or rent prices to estimate the effect on existing tenants.

Just Cause

Just cause eviction policies are a form of tenant protections that forbid property owners from evicting tenants except under certain specified circumstances, such as nonpayment of rent, violation of lease terms, or permanent removal of a dwelling from the rental market. In the absence of such restrictions, landlords may give tenants notices to vacate without cause (“no fault” evictions), legally compelling the surrender of the unit to the property owner within a certain period. Just cause protections therefore generally shield tenants from arbitrary evictions that may occur for reasons including economic incentives in a warming rental market, retaliation against tenants, or other instances in which tenants are not at fault. The coverage of just cause ordinances varies by jurisdiction: they may apply their protections universally or only to a subset of the housing stock (e.g., structures built prior to 1980). There is little systematic evidence about whether just cause ordinances reduce evictions (and thus displacement). However, one recent study of California found that cities with just cause protections saw a decrease in both evictions and eviction filings after passage, compared to their counterparts without such protections in place.

Data and methods

Most studies try to measure displacement by comparing the number of low-income residents in a neighborhood across two time periods, but this approach prohibits determining whether households actually moved out of the neighborhood or simply changed income level, making it difficult to compare displacement in other neighborhoods, such as those without rent-stabilized units. The displacement identified in such studies turns out to have little relationship to involuntary household mobility. In this study, we use individual and household mobility and the type of neighborhood moved to (similar or downward) as proxies for displacement, or forced moves, and assess exclusionary displacement by examining who moves into neighborhoods with specific interventions. Direct displacement pushes people to move out of their neighborhoods, whereas exclusionary
displacement limits who can move into a neighborhood, highlighting reduced housing choice particularly for lower-SES people.

We use two different proprietary datasets on individual and household characteristics. This provides unique robustness to our study, since we can validate results across datasets. To measure mobility, we use Infogroup and Federal Reserve Bank of New York Consumer Credit Panel/Equifax (CCP) data, excluding data for individuals or households where the head is under 25 years old. Using these two very different data sources, it is challenging to devise equivalent socio-economic categories for comparison. Infogroup offers income data but requires significant smoothing and weighting to be comparable to the American Community Survey. CCP provides credit scores that measure financial stability, an alternative dimension from income of socio-economic status (SES). The datasets were mapped to four SES categories: extremely low (under 30% area median income (AMI)), very low-low (30%-50% AMI), moderate-middle (50%-100% AMI), middle-high (over 100% AMI), and the Infogroup analysis added a high category (over 150% AMI).

We present these results for the overall Bay Area and run an additional analysis on a subset of gentrifying tracts in the three major cities (Oakland, San Francisco, San Jose), representing “hot-market” areas. We also run an analysis on a subset of gentrifying tracts in these cities, representing only “hot-market” areas. For more detail on the model controls and variable construction, see Appendix A.

The San Francisco Bay Area context: Relatively few units in the Bay Area are covered by tenant protections.

Figures 1 and 2 display the number of units covered by rent stabilization and just cause for eviction ordinances, respectively, for each jurisdiction in the Bay Area where these tenant protections existed between 2002 to 2019. Between 2014 and 2017, the number of units covered by both types of protections increased. Of all the jurisdictions, San Francisco consistently has the highest number of units subject to both types of tenant protections. San Jose and Oakland have the next highest coverage for rent stabilization; San Jose did not adopt any just cause for eviction protections until 2017.

Figure 1. San Jose and Oakland follow San Francisco in the number of units covered by rent stabilization

Number of Units Subject to Just Cause for Evictions Ordinances by Jurisdiction
Source: Tenant Protection Database
Figure 2. San Francisco has the highest number of units covered by just cause, followed by Oakland.

Number of Units Subject to Rent Stabilization Ordinances by Jurisdiction
Source: Tenant Protection Database

Figures 3 and 4 show the percentage of units subject to rent stabilization and just cause in each census block in 2019. San Francisco houses the greatest share of units with tenant protections, while protections are more sporadic in the South Bay.

Figure 3: Percent of Units Subject to Rent Stabilization Ordinances in 2019 by Census Block

Source: Tenant Protection Database
The Impacts of Tenant Protections on Displacement (Outmigration)

Next, we show a series of visualizations of changes in outmigration rates in a typical neighborhood (defined as a block group) from when there are no units covered by rent stabilization and just cause, compared with when roughly the mean percentage of units are covered across neighborhoods—25% and 50% for rent stabilization and just cause, respectively—looking at one year after units are counted. Since the robustness of our analysis relies on two different datasets of individuals and households, the figures present findings from each dataset. Our analysis describes mobility for nine SES groups from the CCP (solid lines) and Infogroup (dotted lines) datasets, ranging from extremely low in yellow to very low-low in orange, moderate-middle in green, middle-high in blue, and high in purple. The two different datasets agree on most, but not all, patterns. We present results only where there is agreement among the two datasets. For figures presenting outmigration, an upward slope indicates increased displacement, while a downward slope indicates decreased displacement. A flat line indicates that new production does not ease displacement.

Tenant protections decrease displacement for the lowest-SES and increase it for others

Overall in the Bay Area, the effects of tenant protections are mixed. We find that rent stabilization allows some—the lowest SES residents—to stay in their neighborhoods, while our results on the impacts of just cause on mobility are insignificant across the two datasets.

Rent stabilization (Figure 5) decreases the probability of
moving out for the lowest SES residents in our sample, indicating that the ordinance may help these residents remain in place in their communities. However, for moderate-middle, middle-high, and high-SES residents, rent stabilization encourages outmigration from the neighborhood.

**Figure 5. Rent stabilization decreases moving out for extremely low SES (ELI) residents.**

![Graph showing the impact of rent stabilization on moving out rates](image)

San Francisco Bay Area: Moving out after one year.
Sources: FRBNY Consumer Credit Panel/Equifax Data, Infogroup, and Tenant Protection Database

In gentrifying areas, tenant protections generally reduce moving out for extremely low and high SES groups.

Within a strong housing market like the Bay Area, low-income neighborhoods may experience growth dynamics that are different from weaker markets or high-income areas. Specifically, gentrifying areas in core cities may experience such high demand that tenant protections are not able to alleviate housing market pressures and prevent displacement, making it crucial to conduct an analysis specific to gentrifying areas. We subset our sample to the set of Oakland, San Francisco, and San Jose neighborhoods that are gentrifying (i.e., increasing in housing values or rents, while also experiencing an influx of high-income, high-educated residents) to examine the impacts of tenant protections in these hot-market areas.

In gentrifying areas, we find that both policies help to keep the lowest SES residents in place, and high SES groups also appear particularly well-positioned to take advantage of tenant protections. As Figure 6 demonstrates, in these hot-market areas, rent stabilization and just cause can reduce the likelihood of displacement by up to 1 percentage point for the extremely low group. In these neighborhoods, high-SES residents benefit the most from rent stabilization and just cause, experiencing decreases in moving out of 2.5 and 6 percentage points, respectively. Additionally, overall mobility rates tend to be higher in gentrifying tracts, perhaps due to transient occupancy by higher SES groups.

The impacts of tenant protections vary for the very low-low and middle-high SES groups in gentrifying areas. Rent stabilization leads to no significant changes in rates of displacement for very low-low SES residents, while middle-high SES residents are less likely to move out as coverage of just cause protections increases.
The Impacts of Tenant Protections on Exclusionary Displacement (Inmigration)

This section turns to the effects of tenant protections on immigration, i.e., the potential of protected units to encourage residents to access neighborhoods in the Bay Area.

Rent stabilization discourages immigration for all SES groups, except moderate-middle, and thus may be exclusionary.

While we do not find conclusive evidence regarding the effects of just cause on immigration, with an increase in units covered by rent stabilization, all groups except those of moderate-middle status experience declines in moving in (Figure 7). This exclusionary impact is likely due to the lower numbers of available units, as tenant protections effectively reduce outmigration rates by helping renters remain in place. Most notably, residents in the highest SES group experience the largest decrease in their likelihood of moving into a neighborhood; as rent stabilization coverage increases from 0 to 25%, this likelihood decreases by 1 percentage point.
Figure 7. As rent stabilization coverage increases, residents in all SES groups except moderate-middle SES experience declines in moving in.

San Francisco Bay Area: Moving in after one year
Sources: FRBNY Consumer Credit Panel/Equifax Data, Infogroup, and Tenant Protection Database

In gentrifying neighborhoods, as more units are covered by tenant protections, lower socio-economic status residents are not much more or less likely to move into neighborhoods, and high socio-economic status residents are less likely to move in.

Figure 8 shows that in gentrifying areas, both types of tenant protections have little effect on the likelihood of lower SES households to move into neighborhoods, but rent stabilization and just cause discourage moving in among the highest SES groups the most, by 5 and 15 percentage points, respectively.11

Figure 8. Lower SES residents experience little change in movement into neighborhoods as coverage of tenant protections increases, whereas high SES residents experience declines.

Conclusion and policy implications
**Conclusion and policy implications**

In the context of the San Francisco Bay Area’s tight housing market, this study overcomes previous data challenges for the first time to examine the impacts of specific housing interventions. Our analysis of tenant protections shows that they help to mitigate displacement but may increase exclusion. In particular, rent stabilization reduces displacement for some residents – those of lowest socio-economic status – and helps them remain in place, both in the Bay Area overall and in gentrifying areas specifically. Though we do not find conclusive results regarding the effects of just cause across the Bay Area, the policy does support lowest socio-economic status residents in gentrifying areas, where displacement pressures may be especially strong. At the same time, tenant protections appear to have exclusionary impacts as they discourage lower socio-economic status residents to move into neighborhoods with greater coverage.

Our full study examines the impacts of new housing production, tenant protections, and subsidized development. We find that building more market-rate housing and tenant protections may not alleviate the housing crisis or improve access to housing. Displacement disrupts lives and livelihoods, often forcing residents to move far from their jobs, schools, and social networks. Because these effects can be devastating and long-lasting, policymakers have a moral obligation to prevent displacement. Fortunately, there are tools that work; our leaders should use them much more—at a level that matches the urgency of the housing crisis.

As a specific strategy, acquiring multi-unit rental properties that are at risk of becoming unaffordable via a program like San Francisco’s Small Sites Acquisition and Rehab Program may be effective. Other potential approaches include tenant or community opportunity to purchase policies such as San Francisco’s, transfer tax breaks for building owners when selling to a nonprofit or community land trust condominium conversion restrictions, and community land trusts. To address the housing affordability crisis and mitigate displacement and exclusion, policymakers must pursue not only the preservation of unsubsidized affordable housing, but also bolder initiatives that substantially expand social housing. Social housing is the provision of rental or homeownership units affordable at a moderate income or below, and is run by a public or nonprofit entity. To work, it would need to be widely implemented, requiring government investment at levels that match the urgency of the housing crisis.

The San Francisco Bay Area is an extreme case study, with job growth outpacing new housing production and resulting in supply shortages and price spikes that date back at least thirty years. In this context, the traditional mechanism for providing housing affordability for all but the lowest SES households—filtering—is broken. In the face of this structural problem, just cause ordinances and rent stabilization are only providing minimal relief, and their impacts may be distorted. In regions where there is no shortage of affordable housing to start with, these policies may have very different impacts.
About the Authors

Jackelyn Hwang, Ph.D., is Assistant Professor of Sociology and Director of the Changing Cities Research Lab at Stanford University.

Iris Zhang, M.A., is a Ph.D. student in Sociology at Stanford University.

Jae Sik Jeon, Ph.D., is Assistant Professor of Real Estate Studies at Konkuk University.

Karen Chapple, Ph.D., is Professor Emerita of City & Regional Planning at UC Berkeley, and Director of the School of Cities/Professor of Geography & Planning at the University of Toronto.

Julia Greenberg, M.P.P., is Research Manager at the Urban Displacement Project at UC Berkeley.

Vasudha Kumar, B.Sc., is the Social Science Research Analyst at the Changing Cities Research Lab at Stanford University.

Acknowledgements

We thank Casey Pablo Butcher, Alex Kim, Brooke Ada Tran, Patricia Wei, Alisha Zhao, and Isaac Schmidt for their excellent research assistance with the full report, Lizzy Mattiuzzi, Rocio Sanchez-Moyano, James Pappas, Pedro Peterson, Brian Asquith, and Kate Pennington for their thoughtful comments, and Rachel Schten for formatting and graphic support. Funding for the report was provided to UC Berkeley and Stanford University by the Chan Zuckerberg Initiative DAF and the Silicon Valley Community Foundation. For the new housing production and tenant protections databases, we used data provided by Zillow through the Zillow Transaction and Assessment Dataset (ZTRAX). More information on accessing the data can be found at http://www.zillow.com/ztrax. The results and opinions are those of the author(s) and do not reflect the position of Zillow Group.

About IGS

The Institute of Governmental Studies is California’s oldest public policy research center. As an Organized Research Unit of the University of California, Berkeley, IGS expands the understanding of governmental institutions and the political process through a vigorous program of research, education, public service, and publishing.

About CCRL

The Changing Cities Research Lab at Stanford University uses innovative data and methods to study the relationship between contemporary changes in U.S. cities and the durability of neighborhood inequality and segregation. With a focus on gentrification and racial stratification, CCRL aims to advance policy solutions that promote equity as cities change.

About UDP

The Urban Displacement Project (UDP) is a research and action initiative of the University of California Berkeley and the University of Toronto. UDP conducts community-centered, data-driven, applied research toward more equitable and inclusive futures for cities. Our research aims to understand and describe the nature of gentrification, displacement, and exclusion, and also to generate knowledge on how policy interventions and investment can support more equitable development.
Endnotes

1  Chapple et al. 2022. This full report can be accessed here.
2  Pastor et al., 2018.
3  Asquith 2019; Diamond et al., 2019; Sims 2007.
4  Diamond et al., 2019.
5  Cuéllar 2020.
6  Ibid.
7  Carlson, 2020.
8  Carlson 2020.
9  DeLuca et al. 2013; Desmond and Shollenberger 2015; [link to destinations brief].
10 Patterns are generally similar for the same year as well.
11 Separate analyses of non-mortgage holders aged 25-64 in the CCP data further support that tenant protections do not appear to increase the likelihood that lower-SES residents will move into neighborhoods overall (as opposed to not moving). This likely reflects the lower overall inmigration into these neighborhoods as fewer people move out once they are in protected units, but rent stabilization coverage slightly increases the share of low-SES movers among those who move in.
References


Appendix A. Data and Model Construction.

Data

The Infogroup Residential Historical Data provides annual information on individual owner and renter households from 2006-2019, including geographic coordinates of where the households live, household income, and demographic characteristics (many imputed), with an average of approximately 3 million Bay Area households per year. The process of validation revealed that the Infogroup data requires careful data cleaning and wrangling, including elimination of households not consistently represented in the dataset, and weighting to be consistent with the American Community Survey. The CCP data provides quarterly information on a 5% sample of adult consumers from 2002-2018, with census block-CCP data requires careful data cleaning and wrangling, including elimination of households not consistently represented in the dataset, and weighting to be consistent with the American Community Survey. The CCP data provides quarterly information on a 5% sample of adult consumers from 2002-2018, with census block-

To determine coverage by tenant protections, we subset Zillow's Transaction and Assessment Database (ZTRAX) data to only renter-occupied residential properties in the limited number of jurisdictions in the Bay Area with tenant protections — the City of Alameda, Berkeley, East Palo Alto, Emeryville, Hayward, Los Gatos, Mountain View, Oakland, Richmond, San Francisco, San Jose, and Union City. We only counted units in years during or after the years the laws were passed in their respective jurisdictions and accounted for amendments to the laws that affected which units were covered, such as the Costa Hawkins Rental Housing Act. To standardize the unit counts across block groups, we calculated the percentage of units covered by each type of protection by dividing the number of units covered by the total number of housing units in each block group and year.

Model Construction

To account for household-level characteristics that are related to differences in whether individuals (or households) move, the Infogroup team controls for age and race of household head, length of residence, number of children, number of adults, and marital status. The CCP/Equifax team controls for age, whether the household has a mortgage as a proxy for homeownership, whether the household has delinquency on credit accounts as a proxy for financial instability, and the adult household size. Both control for locational characteristics by including indicators in our models of the subregion: the City of Oakland, the City of San Francisco, the City of San Jose, the North Bay (Marin, Napa, Sonoma, and Solano Counties), South Bay (San Mateo and Santa Clara Counties) excluding San Jose, and East Bay (Alameda and Contra Costa Counties) excluding Oakland. The Stanford team also includes indicators in our models for the panel year.

We account for several neighborhood-level characteristics that could be associated with mobility patterns. These include percent Hispanic, percent college-educated, percent foreign-born, poverty rate, percent homeownership, median home value, median gross rent, vacancy rate, and percent of housing built in the last 20 years, all based on 2000 U.S. Census data. In addition, we include the number of subsidized housing units as of 2016 from the National Housing Preservation Database.[iii] Finally, since neither of these data sources accounts for household size in assigning SES categories, the analysis controls for this. We subset the Infogroup data to renters, but the Equifax/CCP data does not differentiate between renters and owners.

We examine mobility each year into and out of block groups, a census geographic unit typically containing between 600 and 3,000 residents; the number of blocks in a block group ranges from about six in a dense city to as many as 30 in an outlying suburb. We estimate two linear probability models. First, we estimate the probability that an individual or household moves into a block group following passage of tenant protections. Second, we estimate the probability an individual or household moves into a block group following passage of tenant protections.

To examine only gentrifying neighborhoods in the three major cities (Oakland, San Francisco, San Jose), we construct gentrification measures from the 2000 and 2006-2010 (“2010”) ACS. Tracts are considered gentrifiable if the median household income in 2000 was less than the subregion’s median household income in 2000. Among gentrifiable tracts, tracts are split into gentrifying and non-gentrifying tracts. Tracts are considered be nongentrifying only if 1) the percentage increase in either the median rent or median home value was less than the subregion’s 25th percentile of the median increase in either of those indicators, and 2) the percent increase in either the population of college-educated residents or the median household income was less than the subregion’s 25th percentile of the percent increases on either of those indicators. Tracts are considered to be gentrifying otherwise.

[iii] These data are based on 2000 Census boundaries and utilize a crosswalk from the National Historical Geographic Information System to 2010 Census block...
group and tract boundaries for the analysis.

[i] For the Stanford team, because the CCP data starts at 2002 and does not include values for 2004, panel year 2002 (222,881 observation) is dropped, panel year 2003 is based on the prior year rates, panel years 2005 and 2006 are based on the two-year averages from 2002 and 2003, and 2003 and 2005 respectively. 3-year averages are only used for panel years 2007 and above.

[ii] Due to collinearity issues, the Berkeley team removes the “percent college-educated” control from the San Francisco and Oakland models.