Rising Housing Costs and Re-Segregation in the San Francisco Bay Area
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Between 2000 and 2015, as housing prices rose, historically Black cities and neighborhoods across the region lost thousands of low-income Black households. These areas include the Bayview in San Francisco, flatland neighborhoods in Oakland and Berkeley, and the cities of East Palo Alto, Richmond, and Vallejo. Low-income Asian and Latinx households decreased in several neighborhoods in San Francisco, Oakland, and San Jose that traditionally have been home to large immigrant communities.

Low-income households increased in many cities and neighborhoods in the region’s outer edges with relatively lower housing prices and fewer resources. This pattern was most apparent for low-income Black and Latinx households, who moved to eastern Contra Costa County, Solano County, and southern Alameda and Santa Clara counties. Low-income Latinx communities also grew in once predominantly Black neighborhoods in the cities of Richmond and East Palo Alto, as well as across the North Bay.

Communities of color were particularly vulnerable to the impact of rapid rent increases in the Bay Area between 2000 and 2015. A 30% tract-level increase in median rent (inflation-adjusted) was associated with a 28% decrease in low-income households of color. There was no significant relationship between rent increases and losses of low-income White households.

Upon moving, a substantial share of low-income people left the region altogether; approximately 30% of low-income people of color who moved in 2015 left the Bay Area. The share of movers leaving the region was highest among those moving from San Francisco and San Mateo counties (which have some of the highest rents in the region).

Low-income households who made any kind of move in 2015—whether they stayed within the county or left it—ended up paying a higher share of their income on rent than those who did not move.

Large increases in the number of low-income people of color living in areas that became newly segregated and high-poverty between 2000 and 2015 suggest that rising housing costs and migration patterns are contributing to new concentrations of segregation and poverty in the region.

The share of low-income households of color living in high-poverty, segregated areas also increased between 2000 and 2015. Fifty-three percent of low-income Black households lived in high-poverty, segregated neighborhoods in 2015, up from 38% in 2000. The share of low-income Latinx households living in high-poverty, segregated neighborhoods nearly doubled to 31%. Families in these types of neighborhoods typically face greater barriers to economic mobility and are more likely to suffer adverse health outcomes.

At the end of the 2000-2015 period, disparities in access to higher resource neighborhoods were more pronounced between racial groups than between income groups of the same race. For example, low-income White households were seven times more likely to live in higher resource neighborhoods than moderate- and high-income Black households.

For specific charts and tables for the nine Bay Area counties, see the accompanying “County Results Supplement.”
Between 2000 and 2015, thanks in part to rising housing prices, the Bay Area experienced significant and uneven shifts in the neighborhoods where low-income residents of color lived. Some of these shifts were involuntary moves resulting from evictions, foreclosures, large rent increases, uninhabitable housing conditions, or other reasons beyond a household’s control, otherwise known as “displacement.” Research has shown that involuntary moves have adverse and destabilizing effects across many aspects of everyday life.

Shifts in where low-income people of color live also have broader consequences for racial and economic inequality because where we live matters. Neighborhood-level factors such as poverty rates, schools, social capital, and exposure to environmental pollution have powerful and independent effects on child development, economic mobility, and health outcomes.

Focusing on housing price and demographic changes between 2000 and 2015, this report documents which neighborhoods in the Bay Area saw increases and decreases among low-income people of color, and describes how these patterns related to concurrent changes in local rental housing prices. Examining how regional and county-level trends played out at the neighborhood scale also provides a basis for understanding how these trends may be reproducing patterns of segregation and unequal access to high-resource neighborhoods that have defined the Bay Area’s racial and economic geography for decades.

Finally, documenting neighborhood-level trends is meaningful because people are physically and emotionally tied to places through social networks, community organizations, and local commercial and cultural institutions. The neighborhood is also the scale at which people experience displacement pressures and demographic change.

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**Definition of Terms**

- **Income categories** are defined relative to the regional Area Median Income (AMI) for the nine-county Bay Area. “Low-Income” is defined as less than 80% of AMI, unless noted otherwise.

- This report combines U.S. Census definitions for race and ethnicity in the following way:
  - **White**: Non-Hispanic White
  - **Latinx**: Hispanic or Latino of any race
  - **Black**: Non-Hispanic Black or African American
  - **Asian**: Non-Hispanic Asian
  - **People of Color (POC)**: All who are not non-Hispanic White (including people who identify as “some other race” or “two or more races”)

*Given the uncertainty in tract-level estimates for racial and ethnic groups not included in the Black, Asian or Latinx categories, this report only analyzes these racial groups in the aggregate POC category. For household-level data, race refers to that of the householder (the person who answered the census).

- This report uses census tracts as proxies for neighborhoods. Tracts in Alameda County typically contain between 3,000 and 5,500 people.

*See the appendix for more detail on definitions and methodology.*
Between 2000 and 2015, the Bay Area’s population grew by nearly 10%, or approximately 675,000. The number of households with low (50-80% of AMI) and moderate (80-120% of AMI) incomes decreased, while the number with extremely low (0-30% of AMI), very low (30-50% of AMI), and high (>120% of AMI) incomes increased (Table 1).

However, trends for individual racial groups varied. Black and White households decreased in all income categories except for extremely low-income. On the other hand, Latinx and Asian households grew in all income categories—most notably in the lowest income categories for Latinx, and the lowest and highest ones for Asian. Low-income households of color increased by 36% in the Bay Area during this period, driven mostly by an increase of more than 150,000 low-income Latinx and Asian households (Table 2). The number of low-income White households decreased by 9%, particularly within the low- and moderate-income groups.

Both overall and race-specific demographic shifts reflect factors such as rising income inequality, residential displacement, high immigration rates from Latin America and Asia, as well as aging Black and White populations.\textsuperscript{6,9}

Households from different income and racial groups were not evenly distributed across the region in 2000, nor did they increase or decrease uniformly across all neighborhoods by 2015. Demographic changes varied by neighborhood, and in some cases local demographic changes were the opposite of regional or county-level trends. See the tables for all nine counties in the “County Results Supplement.”

The following section highlights the cities and neighborhoods in the Bay Area where the low-income Black, Latinx, and Asian populations increased and decreased most substantially. For a more detailed discussion of neighborhood demographic change in San Francisco, Alameda, and Contra Costa counties, see the individual county reports at \url{http://www.urbandisplacement.org/research}.

### Table 1. Demographic Changes in the Bay Area (Households), 2000-2015

<table>
<thead>
<tr>
<th></th>
<th>Extremely Low (0-30% AMI)</th>
<th>Very Low (30-50% AMI)</th>
<th>Low (50-80% AMI)</th>
<th>Moderate (80-120% AMI)</th>
<th>High (&gt;120% AMI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>22%</td>
<td>-7%</td>
<td>-10%</td>
<td>-16%</td>
<td>-8%</td>
</tr>
<tr>
<td>Latinx</td>
<td>81%</td>
<td>70%</td>
<td>41%</td>
<td>21%</td>
<td>27%</td>
</tr>
<tr>
<td>Asian</td>
<td>58%</td>
<td>46%</td>
<td>28%</td>
<td>19%</td>
<td>68%</td>
</tr>
<tr>
<td>White</td>
<td>5%</td>
<td>-7%</td>
<td>-20%</td>
<td>-23%</td>
<td>-2%</td>
</tr>
<tr>
<td>All POC</td>
<td>50%</td>
<td>37%</td>
<td>22%</td>
<td>11%</td>
<td>43%</td>
</tr>
<tr>
<td>All Races</td>
<td>27%</td>
<td>13%</td>
<td>-2%</td>
<td>-9%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: U.S. Census 2000 (Table P151), ACS 2011-2015 (Table B19001)

### Table 2. Change in Low-Income Households (<80% AMI) in the Bay Area by Race, 2000-2015\textsuperscript{10}

<table>
<thead>
<tr>
<th></th>
<th>Change</th>
<th>Pct. Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>4,700</td>
<td>4%</td>
</tr>
<tr>
<td>Latinx</td>
<td>93,300</td>
<td>60%</td>
</tr>
<tr>
<td>Asian</td>
<td>60,700</td>
<td>44%</td>
</tr>
<tr>
<td>White</td>
<td>-49,000</td>
<td>-9%</td>
</tr>
<tr>
<td>All POC</td>
<td>157,400</td>
<td>36%</td>
</tr>
<tr>
<td>All Races</td>
<td>108,400</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: U.S. Census 2000 (Table P151), ACS 2011-2015 (Table B19001)
Low-income Black households in the Bay Area increased by 4% between 2000 and 2015 even as the Black population overall fell. However, as shown in Map 1 and Map 2, this modest overall change reflected concentrated increases and decreases in only a handful of cities and neighborhoods, while large swaths of the region had so few low-income Black households that tract-level estimates of change were unreliable.

Decreases in low-income Black households were concentrated in central, historically Black neighborhoods, while increases occurred mostly in the region’s outer suburbs. In 1970, most Black households in the Bay Area lived in small number of cities: Oakland, Richmond, Vallejo, East Palo Alto, and Pittsburg, as well as in some neighborhoods in San Francisco. This pattern of Black segregation was similar to many other cities in the U.S. at the time. However, most of the Bay Area cities and neighborhoods that housed the majority of the Black population in the 1970s have since seen a large outmigration of Black residents. Qualitative research has shown that this shift was motivated by both “push” factors including environmental injustice and violence, as well as “pull” factors like affordable homeownership and better public schools in more distant suburbs.

In San Francisco, most losses of low-income Black households were in the Western Addition, Bayview-Hunters Point, Oceanview, and the Outer Mission, contributing to a 17% decrease in low-income Black households in the city between 2000 and 2015. This loss continued decades-long trends of displacement and outmigration from San Francisco driven by deindustrialization, redevelopment projects, and exclusionary housing practices. In the East Bay, there were large losses of low-income Black households in historically Black neighborhoods in North Oakland, South Berkeley, far East Oakland, and Richmond. Several parts of Vallejo also saw decreases in low-income Black households, particularly in the neighborhoods near the decommissioned shipyards where housing stock is older. Finally, decreases in San Mateo County were almost entirely in East Palo Alto.
Alto; more than half of East Palo Alto’s residents were Black when the city incorporated in 1983, but today they represent only around 15% of the population. This demographic shift in East Palo Alto and the eastern edge of Menlo Park reflects the out-migration of Black families, as well as a large influx of Latinx families, which has contributed to an increase in the city’s overall population.14

Increases in low-income Black households were concentrated in the eastern Contra Costa cities of Antioch and Pittsburgh as well as in parts of Solano County: Fairfield, Suisun City, and Vallejo’s eastern neighborhoods. These two counties gained approximately 7,500 low-income Black households during this period. Santa Clara County saw an increase of 1,700 low-income Black households, almost all extremely low-income.15 Lastly, although Alameda County experienced an overall decrease in low-income Black households, parts of San Leandro and Hayward saw increases in this group. Historically, Antioch, San Leandro, and Hayward were working-class, mostly White cities that excluded Black residents through housing discrimination and threats of violence.16 The large recent demographic changes documented in this report and elsewhere therefore represent both the undoing and reconfiguration of these historic segregation patterns.
**Latinx Households**

Low-income Latinx households increased by over 93,000 (60% between 2000 and 2015)—more than any other low-income racial group during this period. As shown in Map 3, some of the largest increases were in the North Bay. Sonoma County’s low-income Latinx population more than doubled and Marin’s nearly doubled. The Canal neighborhood in San Rafael experienced the greatest increase of any tract in the Bay Area, gaining nearly 600 low-income Latinx households during the 15-year period. Neighborhoods in other urban centers in Marin and Sonoma counties also saw increases, including in Novato, Petaluma, and Santa Rosa. Two of the five largest tract-level increases in low-income Latinx households the Bay Area were in Santa Rosa, each gaining more than 500 households.

**Map 3. Change in Low-Income (<80% AMI) Latinx Households (2000-2015) in the North Bay and Contra Costa County**

Source: U.S. Census 2000 (Table P151H), ACS 2011-2015 (Table B19001H)
Other immigrant gateways such as East Palo Alto, Richmond, and the Monument Corridor in Concord also saw large increases. In East Palo Alto, Richmond, and parts of East Oakland, low-income Latinx households largely replaced low-income Black households, a pattern of neighborhood succession that has been documented in several U.S. cities. In southern Alameda and eastern Contra Costa counties, on the other hand, both Black and Latinx low-income households grew substantially. Some of the largest increases of low-income Latinx households were in the Eden Area of southern Alameda County, containing the unincorporated areas of Ashland, Cherryland, Castro Valley, and San Lorenzo (Map 4). Low-income Latinx households increased in Santa Clara County as well (Map 5), particularly in parts of East and South San Jose, and Morgan Hill and Gilroy to the south.

Despite increasing in many parts of the region, low-income Latinx households are often still vulnerable to gentrification and displacement and undocumented or mixed-status immigrant families are at particular risk due to fear of retaliation for reporting housing violations or asserting their tenants’ rights. Although some cities that saw large increases of low-income Latinx households—including East Palo Alto, Richmond, and Hayward—have tenant protection laws (such as rent control or just cause for eviction) that can help address these challenges particular to immigrant renters, most jurisdictions do not. In addition, an under-supply of both market-rate and affordable housing in the affluent areas surrounding East Palo Alto and the Canal neighbor-
hood in San Rafael has contributed to price pressure in these areas.\textsuperscript{22}

Some parts of the region also experienced concentrated losses of low-income Latinx households, most notably in the Mission District of San Francisco, a historical Latinx cultural center. This neighborhood stands out in Map 4 as one of the few neighborhoods in the Bay Area that saw substantial losses of low-income Latinx households (shown in dark purple). Rapidly appreciating rents and vacancy decontrol in rent-controlled units has led to significant residential displacement in this neighborhood over the past three decades and has accompanied the loss of many locally owned businesses and industries. The Mission had the highest rate of no-fault evictions and tenant buyouts in the city between 2008 and 2014.\textsuperscript{23}

\textbf{Map 5. Change in Low-Income (<80\% AMI) Latinx Households (2000-2015) in the South Bay}

Other notable areas that experienced decreases in low-income Latinx households were in central San Jose surrounding Diridon Station and in the Little Portugal neighborhood in East San Jose (Map 5). Diridon Station, a regional transit hub, sits at the juncture of several distinct neighborhoods just west of downtown. Many of the neighborhoods around the station have experienced population growth and gentrification over the past two decades, with increases in median income, college-educated residents, and households without children.\textsuperscript{24} The area has also seen substantial commercial and luxury housing development and will be the site of a large Google campus, sparking fears about housing affordability and continued displacement in the coming decade.\textsuperscript{25}
**Asian Households**

Low-income Asian households in the Bay Area increased by approximately 60,000 (44%) between 2000 and 2015. More than half of this growth was in Santa Clara and Alameda counties. In general, the increases and decreases of low-income Asian households were less geographically concentrated than for low-income Black and Latinx households. This difference may reflect the fact that the low-income Asian population is more dispersed across the region and less often confined to poor, racially segregated neighborhoods (as discussed later in this report).

The most concentrated increases and decreases of low-income Asian households were in San Francisco (Map 7). Historic, centrally located Asian neighborhoods such as Chinatown and SoMa lost low-income Asian residents; immigrants and seniors have been particularly vulnerable to displacement pressures in these neighborhoods due to rising rent burdens and no-fault evictions. The low-income Asian population grew substantially in San Francisco's western and southern neighborhoods, as well as in nearby cities in San Mateo County, including Daly City, Millbrae, and San Bruno.

In the East Bay, increases in low-income Asian households were concentrated in Downtown Oakland and in Chinatown. This accompanied decreases in the Eastlake and Cleveland Heights neighborhoods on the east side of Lake Merritt, which are home to many East and Southeast Asian immigrant communities. Parts of Berkeley, El Cerrito, and Ala-

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**Map 6. Change in Low-Income (<80% AMI) Asian Households (2000-2015) in the North Bay and Contra Costa County**

![Map 6](image-url)

(Source: U.S. Census 2000 (Table P151D), ACS 2011-2015 (Table B19001D))
meda, all of which have large Asian populations, also saw losses of low-income households. Most tracts in the corridor from San Leandro down to San Jose experienced increases, notably in Milpitas and in the San Jose neighborhoods of Little Saigon, Alum Rock, Berryessa, and South San Jose (Map 8). San Jose has historically had a large Asian population, including the largest Vietnamese-American community in the U.S., which is centered on the Little Saigon neighborhood near downtown. Despite an overall increase in low-income Asian households, parts of the South Bay experienced losses, including in Foster City, Mountain View, Campbell, and some of San Jose’s more affluent western neighborhoods.

Map 7. Change in Low-Income (<80% AMI) Asian Households (2000-2015) in San Francisco, the Peninsula, and Alameda County

Source: U.S. Census 2000 (Table P151D), ACS 2011-2015 (Table B19001D)

An interactive version of these maps, with customizable combinations of household race and income and tract-level data, is available online at https://www.urbandisplacement.org/rentchangemap.
Understanding where low-income residents from different parts of the Bay Area move provides a fuller picture of ongoing displacement and migration patterns in the region—including the ways in which migration has contributed to segregation, unequal access to high-resource neighborhoods, and income inequality in the region. Among U.S. metro areas, the Bay Area has the largest income disparity between in-movers and out-movers, with in-movers earning approximately $12,000 more per year than out-movers.

**Destinations for Low-Income Movers**

Figure 1 shows destinations for the approximately 410,000 low-income Bay Area residents (both renters and owners) who moved in 2015, regardless of county of origin. Movers are categorized according to whether they remained in their county of origin, moved to another county in the region, left the region, or left the state.

Approximately 30% of low-income movers of color and 44% of low-income White movers left the region or state when they moved. Low-income Asian-Pacific Islander, Latinx, and Black movers were more likely than low-income White movers to remain in their county of origin.

These patterns varied by county (see “County Results Supplement”). In higher cost counties like San Francisco and San Mateo, the share of low-income movers of color who stayed in their county of origin was below the regional average. Approximately 40% of low-income Latinx and Black movers from San Francisco remained in the city when they moved, and less than one-quarter of San Mateo County’s low-income Latinx movers and approximately 6% of its low-income Black movers remained in the county. This finding corroborates earlier research that documented the difficulty displaced tenants in San Mateo County face when trying to stay in their community. In Contra Costa, Sonoma, and Solano counties, by contrast, low-income movers tended to stay in their county of origin when they moved; this was true, for example, for more than 75% of Latinx movers from these counties.

Neighborhood-level destination patterns reinforced the finding that low-income people of color in the Bay Area generally moved outward from the region’s

**Figure 1. Destination of Low-Income Movers in the Bay Area by Race (2015)**

![Figure 1](source: IPUMS-USA, University of Minnesota, 2011-2015)
center—from San Francisco to cities and neighborhoods in Alameda and San Mateo counties, and from the East Bay into the Central Valley and parts of Santa Clara County. Low-income people of color in the North Bay moved to areas in Solano, Yolo, and Sacramento counties, while many movers from the South Bay left for Stockton, Santa Cruz, and southern Santa Clara County (around Morgan Hill and Gilroy). Destinations for low-income movers of color from San Mateo County were particularly dispersed, including parts of the East Bay and the Central Valley. The migration of low-income people of color from the inner to the outer part of the region contributed to the creation of new areas of racial segregation and poverty (as described later in this report).

Neighborhood destinations for low-income movers also varied considerably by race. Table 3 shows the most popular neighborhood destinations for movers from each low-income racial group in 2015, independent of county of origin. In general, most low-income residents moved to these neighborhoods from within the same county. The table also indicates the most common county of origin for people arriving from another county.

In general, the data on 2015 migration patterns reflected the findings of tract-level demographic changes described earlier in this report. Many low-income people of color who moved in 2015 came from San Francisco, likely reflecting its especially high housing costs. The migration of low-income people of color towards the outer parts of the region was especially clear, with mover pathways from San Francisco to Oakland, San Leandro, and Daly City—and from Alameda County to parts of Contra Costa and Solano counties.

Low-income Latinx movers, whose most common destinations included Richmond, Santa Rosa, Oakland, and eastern Contra Costa County, were more likely than other low-income groups to have originated from within the same county. This finding is consistent with Figure 1, which showed low-income Latinx residents to be the least likely group to leave the county when they move, as well as qualitative studies of immigrant neighborhoods and social networks. Lastly, the top four destinations for low-income White movers were in the North Bay—especially Sonoma County—with most movers also originating in the North Bay. Sonoma County is highly segregated, containing three of the whitest segregated neighborhoods in the Bay Area. The primary destinations for low-income White movers also tended to be more resource-rich. On the other hand, places where low-income people of color moved were more likely to be segregated and high-poverty, as discussed further in a later section.

Table 3. Top Destinations for Low-Income Movers in the Bay Area by Race (2015)

<table>
<thead>
<tr>
<th>Destination</th>
<th>In-Movers (approx.)</th>
<th>Top Out-of-County Origin (Pct.)</th>
<th>Destination</th>
<th>In-Movers (approx.)</th>
<th>Top Out-of-County Origin (Pct.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richmond &amp; San Pablo</td>
<td>6,100</td>
<td>Alameda (3%)</td>
<td>East Oakland</td>
<td>3,100</td>
<td>Solano (6%)</td>
</tr>
<tr>
<td>Santa Rosa</td>
<td>5,000</td>
<td>Solano (3%)</td>
<td>Richmond &amp; San Pablo</td>
<td>2,500</td>
<td>Alameda (11%)</td>
</tr>
<tr>
<td>East Oakland</td>
<td>4,600</td>
<td>San Francisco (4%)</td>
<td>Antioch</td>
<td>2,400</td>
<td>Alameda (2%)</td>
</tr>
<tr>
<td>Antioch</td>
<td>4,400</td>
<td>Alameda (12%)</td>
<td>Vallejo &amp; Benicia</td>
<td>2,200</td>
<td>Contra Costa (15%)</td>
</tr>
<tr>
<td>Pittsburg &amp; Concord</td>
<td>4,100</td>
<td>San Mateo (3%)</td>
<td>Oakland (North/West/Downtown)</td>
<td>2,200</td>
<td>San Francisco (14%)</td>
</tr>
<tr>
<td>Berkeley &amp; Albany</td>
<td>2,600</td>
<td>Contra Costa (10%)</td>
<td>Santa Rosa</td>
<td>4,600</td>
<td>Solano (4%)</td>
</tr>
<tr>
<td>Daly City &amp; Pacifica</td>
<td>2,400</td>
<td>San Francisco (33%)</td>
<td>Healdsburg &amp; Windsor</td>
<td>4,300</td>
<td>Solano (4%)</td>
</tr>
<tr>
<td>San Leandro &amp; Alameda</td>
<td>2,300</td>
<td>San Francisco (8%)</td>
<td>Petaluma &amp; Rohnert Park</td>
<td>4,000</td>
<td>Marin (5%)</td>
</tr>
<tr>
<td>Milpitas &amp; San Jose</td>
<td>2,000</td>
<td>Alameda (8%)</td>
<td>Vacaville &amp; Dixon</td>
<td>3,500</td>
<td>Napa (3%)</td>
</tr>
<tr>
<td>Vallejo &amp; Benicia</td>
<td>1,900</td>
<td>Alameda (16%)</td>
<td>Concord &amp; Martinez</td>
<td>3,100</td>
<td>Alameda (6%)</td>
</tr>
</tbody>
</table>

Source: IPUMS-USA, University of Minnesota, 2011-2015
Rent Burden Among Low-Income Movers

As shown in Table 4, low-income renters who moved in 2015 experienced higher rent burdens than those who did not move. Extremely low-income renter households paid 68% of their income on rent if they did not move, but 83% if they moved out of the county to another part of the Bay Area and 80% if they left the region. In other words, any kind of move was associated with incurring higher and more burdensome rents. This increase in rent burden could have resulted from moving out of more affordable homes—some of which may have been rent-controlled—and into market-rate apartments, as well as loss of income that may have precipitated the move.

Table 4. Average Rent-to-Income Ratio in the Bay Area by Move Status and Household Income (2015)

<table>
<thead>
<tr>
<th>Household Income Range</th>
<th>Did not Move</th>
<th>Moved Within County</th>
<th>Moved Within Region</th>
<th>Left Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Low</td>
<td>68%</td>
<td>77%</td>
<td>83%</td>
<td>80%</td>
</tr>
<tr>
<td>(0-30% AMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Low</td>
<td>31%</td>
<td>34%</td>
<td>36%</td>
<td>32%</td>
</tr>
<tr>
<td>(30-50% AMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>43%</td>
<td>48%</td>
<td>51%</td>
<td>46%</td>
</tr>
<tr>
<td>(50-80% AMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: IPUMS-USA, University of Minnesota, 2011-2015

Destinations for Moderate- And High-Income Movers

Destinations for moderate- and high-income movers in the Bay Area in 2015 were broadly similar to those of low-income movers (Figure 2). This similarity could reflect the region’s increasingly burdensome housing costs, even for households with greater means. There was a similar, though less pronounced, eastward migration of moderate- and high-income people of color, including to Contra Costa and Solano counties and the Central Valley. Overall, moderate- and high-income movers were more likely than low-income movers to stay in the region when they moved. When compared to other counties in the Bay Area, moderate- and high-income movers from San Francisco and San Mateo County—especially Black and Latinx movers—were more likely to remain in their county of origin. This trend indicates that moderate- and high-income movers in these counties have also reacted to rapidly escalating housing costs.
Figure 2. Destination of Moderate- and High-Income Movers in the Bay Area by Race (2015)

Source: IPUMS-USA, University of Minnesota, 2011-2015
This section documents where some of the most extreme rent increases took place in each of the nine Bay Area counties. All of the changes in the median rent paid are described in inflation-adjusted dollars, and due to data limitations these figures are likely underestimates. In tracts where rent increased by at least 30% between 2000 and 2015, the average median rent was $870 in 2000 (in unadjusted 2000 dollars) and $1,863 in 2015. However, rents vary greatly across the region and have further increased in recent years. For example, the median asking rent for a two-bedroom apartment in San Francisco in the first quarter of 2018 was $4,300. Renters would need to earn $83 per hour—over $170,000 annually—to afford this rent. Even asking rents in relatively less expensive counties are out of reach for lower income households; median asking rent for a two-bedroom unit was $2,300 in Sonoma County and $2,250 in Contra Costa County. Renters would need to earn more than $40 per hour to be able to afford these rents.

Many of the neighborhoods that experienced the largest increases in rental housing costs also experienced significant losses of low-income households of color, as described earlier in this report. In the nine-county Bay Area, a 30% tract-level increase in median rent (in inflation-adjusted dollars) was associated with a 28% decrease in low-income households of color. There was no significant relationship between rent increases and losses of low-income White households, thus highlighting the particular vulnerability of low-income communities of color to rent increases in the Bay Area.

### Rent Changes by County

#### Alameda County

More than one-quarter of the tracts in the Bay Area that experienced rent increases above 30% between 2000 and 2015 were located in Alameda County. Many tracts in the flatlands of Oakland and Berkeley saw increases well above 30%, while West Berkeley, Downtown Oakland, and the neighborhoods around the Coliseum and Mills College in East Oakland saw increases of more than 50%.

#### Contra Costa County

The most dramatic increases in Contra Costa County during this time period were in the easternmost part of the county around Brentwood, where median rents in some tracts increased by more than 50%. These were the same places that saw some of the highest foreclosure rates in the state during the late 2000s. Rents also rose more than 30% in parts of Concord, Richmond, Pittsburg, San Pablo, and Hercules.

#### Marin County

Only six of Marin County’s 54 census tracts experienced rent increases above 30%. However, this county had a smaller proportion of rental properties and rental households compared to the rest of the region, and its rents in 2000 were already among the highest of any Bay Area county. The county’s largest rent increases were concentrated in San Rafael and Novato, as well as in unincorporated areas near these cities.

#### Napa County

In Napa County, rents rose in nearly every census tract between 2000 and 2015. The median rent in un-
incorporated areas to the east of the City of Napa surged by more than 50% while median rents within the City of Napa increased between 20% and 50% in many areas.

**San Francisco**

Rents increased in nearly every neighborhood in San Francisco between 2000 and 2015. Multiple neighborhoods saw increases above 50% in median rents, including SoMa, Dogpatch, Mission Bay, and parts of the Bayview. Other eastern neighborhoods such as Nob Hill, Hayes Valley, Noe Valley, and parts of the Mission experienced increases between 30% and 50%. Notably, a majority of San Francisco households (65%) are renters—a far higher percentage than the regional average of 45%.

**San Mateo County**

The highest rent increases in San Mateo County were in East Palo Alto, where one tract saw rents rise by 60%. In this community, the majority of residents are renters. Elsewhere in the county, parts of Pacifica experienced increases above 30% in median rent, as did neighborhoods in Daly City close to the San Francisco border.

**Santa Clara County**

Some of the sharpest rises in rent in Santa Clara County were in San Jose, with neighborhoods around Diridon Station in Downtown San Jose experiencing increases of over 60% in median rent. The majority of households in this area are renters.

**Solano County**

Nearly one-fifth of tracts in Solano County saw rents rise by more than 30%. Neighborhoods with the largest increases in median rent were concentrated in Fairfield, Vacaville, and Vallejo. Notably, the Flosden Acres neighborhood in the north part of Vallejo experienced a rent increase of 68%. This area encompasses several mobile home communities, and more than two-thirds of the residents in the neighborhood are renters.

**Sonoma County**

In Sonoma County, neighborhoods near SMART train stations in Petaluma and Rohnert Park experienced rent increases above 30%. The median rent also rose by more than 30% in Windsor and nearby unincorporated areas close to the Sonoma County Airport.

An interactive map showing tract-level median rents in 2000 and 2015 is available online at [http://www.urbandisplacement.org/rentchangemap](http://www.urbandisplacement.org/rentchangemap).

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**Rising Rent Burdens**

Across the region, low-income renters’ incomes did not keep up with rising housing costs between 2000 and 2015, leading to increasing rent burdens. Households are considered rent-burdened when they pay over 30% of their income on rent, and severely rent-burdened if this ratio exceeds 50%. Research has shown that severely rent-burdened low-income households spend much less on essentials such as food, health care, and transportation than low-income households that are not rent-burdened. High rent burden is also associated with greater displacement risk.

Figure 3 shows how rent burden changed for households of different income groups in the nine-county Bay Area between 2000 and 2015.
Figure 3. Rising Rent Burdens by Household Income Category for Bay Area Households (2000-2015)

Although rent burden increased across all income groups, it rose most substantially for low- and very low-income households. In both 2000 and 2015, extremely low-income renters were by far the most likely to experience severe rent burden, with approximately 70% percent of households spending more than half their income on rent. Severe rent burden was low in both 2000 and 2015 for moderate- and high-income households.

Table 5. Average Rent-to-Income Ratio in the Bay Area by Race and Income (2015)

<table>
<thead>
<tr>
<th></th>
<th>Asian-Pacific Islander</th>
<th>Black</th>
<th>Latinx</th>
<th>White</th>
<th>All Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Low</td>
<td>65%</td>
<td>69%</td>
<td>70%</td>
<td>73%</td>
<td>70%</td>
</tr>
<tr>
<td>Very Low</td>
<td>43%</td>
<td>42%</td>
<td>42%</td>
<td>48%</td>
<td>45%</td>
</tr>
<tr>
<td>Low</td>
<td>31%</td>
<td>29%</td>
<td>29%</td>
<td>34%</td>
<td>32%</td>
</tr>
<tr>
<td>Moderate</td>
<td>23%</td>
<td>22%</td>
<td>22%</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>High</td>
<td>16%</td>
<td>16%</td>
<td>16%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>All Incomes</td>
<td>36%</td>
<td>47%</td>
<td>42%</td>
<td>36%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Source: IPUMS-USA, University of Minnesota, 2011-2015

Table 5 shows the average rent-to-income ratio in the Bay Area in 2015 for different race and household income categories. Across all races and income categories, renter households in the Bay Area spent an average of 38% of their incomes on housing in 2015. This table shows that households of similar incomes experience similar rent burdens across racial groups. However, the average rent burden for racial groups as a whole varied due to different income distributions within these racial groups. For example, Black households are overrepresented in lower income categories, so the overall rent burden for Black households (47%) is much higher than the regional average.
The first sections of this report establish that the racial and economic geography of the region changed between 2000 and 2015 and that some neighborhoods in the Bay Area experienced large losses of low-income households of color during this period, while others saw substantial increases.

But what do we know about the neighborhoods where these changes were happening? Are shifts in where low-income people of color live in the region affecting their access to resource-rich neighborhoods that give them a better chance of educational success, good health, and upward mobility? Or are old patterns of segregation and neighborhood disadvantage simply being reproduced in new areas?

The analysis below describes how the geography of racially segregated, high-poverty neighborhoods expanded into new parts of the region between 2000 and 2015 and demonstrates that the increase in low-income households of color was concentrated in these neighborhoods. Entrenched racial disparities in access to higher resource areas also persisted, despite significant shifts in the neighborhoods where low-income people of color lived during the 15-year period.

Contextualizing Segregation and Re-Segregation

In answering these questions, it is important to first recognize that racial segregation has been a defining feature of the U.S. urban landscape for centuries and became entrenched in especially consequential ways after World War II. Through both legal and extralegal forms of discrimination and exclusion, African-Americans and other people of color were both denied access to emerging high-resource areas—in urban and suburban neighborhoods alike—and redlined so that their communities did not have equal access to financial services and other resources.

Over time, the twin legacies of exclusion and disinvestment produced a racially segregated geography of opportunity that persists in every metropolitan area across the country. Recent research on the Bay Area has highlighted how this geography has increased vulnerability to displacement and has shown that the region is also in the process of re-segregating due to increases in poverty and people of color at the outer edges of the region.

The term re-segregation does not imply that older patterns of segregation have disappeared and are only now reappearing (as discussed further below), nor does it imply that residential integration occurred and is now becoming undone. Rather, the term re-segregation recognizes that the large neighborhood-level demographic transformations documented in this report represent the reconfiguration of racial segregation and spatial inequality in the Bay Area. As discussed below, broader patterns of segregation have persisted in the region for decades even as some neighborhoods have undergone major changes.

Approximately one-fifth of the 117 Bay Area tracts that were both racially segregated and high-poverty (as defined later in this report) in 2000 no longer met both definitions in 2015. However, these areas also saw dramatic rent increases that were associated with significant losses of low-income people of color, indicating that they may be experiencing gentrification.

During the same period, some middle-income suburbs that were once mostly White—such as San Leandro and Antioch—experienced large increases of low-income people of color. Many of the suburban or exurban places to which low-income people of color moved in recent years have become racially segregated and high-poverty and face serious challenges, including aging infrastructure, a lack of jobs, and insufficient social services to address rising poverty and homelessness.

The term re-segregation helps link these related phenomena—including gentrification, displacement, migration, the suburbanization of poverty, and a changing labor market—through a broader geographic and historical lens.
Segregation and Concentrated Poverty in the Bay Area

According to the dissimilarity index, which measures the share of a racial group that would need to move in order to achieve full neighborhood-level integration with another racial group, patterns of racial segregation that were established in earlier decades persisted across the region between 1990 and 2010 despite the significant concurrent demographic shifts described earlier in this report.

Black residents are the most segregated racial group in the Bay Area; one-quarter of the region’s census tracts contain three-quarters of the Black population. In 1990, Alameda, Contra Costa and San Mateo counties had the highest levels of Black-White segregation in the region. At the time, approximately two-thirds of Black and White residents in these counties would have needed to move to achieve neighborhood-level integration between the two groups. Although the levels of Black-White segregation have decreased somewhat in these three counties, in 2010 more than 55% of the Black and White residents in these counties would have needed to move to achieve neighborhood-level integration. In 2010, Sonoma, Solano, and Santa Clara counties were the only places where less than half of Black and White residents would have needed to relocate in order to achieve integration. Additionally, Black-White segregation increased in Napa and Solano counties between 1990 and 2010—a period during which the Black population grew.

Black-White segregation remains higher than both Latinx-White segregation and Asian-White segregation in most of the region. In addition, from 1990 to 2010—as the White population decreased and the Latinx and Asian populations grew substantially—White-Asian and White-Latinx segregation rose in nearly every county.

For more on changing county-level segregation patterns between 1990 and 2010, see the “County Results Supplement.”

Even if patterns of segregation have broadly persisted in the region, the geography of racially segregated poverty has shifted in recent years. For this report, tracts were considered high-poverty if more than 20% of their population was living below the federal poverty line and racially segregated if the population of at least one non-White group was overrepresented in the tract relative to their share of the region’s population by more than 50%. Approximately 90% of high-poverty tracts in the region in both 2000 and 2015 were also racially segregated, according to these definitions.

Neighborhoods characterized by both racial segregation and poverty are rare in the Bay Area, although these areas increased in number between 2000 and 2015. In 2015, 13% of tracts in the Bay Area were segregated and high-poverty (204 of 1,552 tracts), up from under 8% of tracts in 2000 (117 tracts). Ninety percent of tracts that were newly characterized as both high-poverty and segregated in 2015 were also segregated in 2000, meaning economic hardship increased in neighborhoods already affected by racial segregation; however, segregation also became more pronounced in more than half of these tracts, even if they met this report’s definition of segregated in 2000.

As shown in Maps 9-11, areas that were segregated and high-poverty in both 2000 and 2015 include portions of San Francisco’s eastern neighborhoods (including SoMa, the Tenderloin, and Bayview-Hunters Point), Richmond, much of the Oakland flatlands, parts of Vallejo, and downtown San Jose. New areas of high-poverty and racial segregation emerged in Antioch, Pittsburg, Fairfield, Hayward, Redwood City, East Palo Alto, and South and East San Jose.

Approximately one-fifth of tracts that were segregated and high-poverty in 2000 no longer met this definition in 2015. The majority of these were neighborhoods in Alameda, San Francisco, and Santa Clara counties that experienced gentrification and substantial increases in housing prices during this period. These areas include parts of North Oakland and South Berkeley, the Mission, and the Tenderloin in San Francisco, and around Diridon Station in San Jose.
Map 9. Changing Landscape of Segregation and Poverty in the North Bay and Contra Costa County

Source: U.S. Census 2000 (Table H063), ACS 2011-2015 (Table B25064)
Map 10. Changing Landscape of Segregation and Poverty in San Francisco, the Peninsula, and Alameda County

Source: U.S. Census 2000 (Table H063), ACS 2011-2015 (Table B25064)
Map 11. Changing Landscape of Segregation and Poverty in the South Bay

Source: U.S. Census 2000 (Table H063), ACS 2011-2015 (Table B25064)
Figure 4 shows the share of low-income households for different racial groups living in segregated, high-poverty tracts in 2000 and 2015. As the chart shows, low-income Black residents were the most likely group to live in high-poverty, segregated neighborhoods in both 2000 and 2015. Over half of low-income Black households lived in these neighborhoods in 2015, up from approximately 38% in 2000. At the same time, this figure increased most notably for low-income Latinx households, nearly doubling to 30% by 2015. The change for low-income Asian and White households was substantially smaller.

Figure 4 also shows that, depending on the racial group, much of the growth in the share of low-income people living in segregated, high-poverty areas during the 15-year period was a result of living in—or moving to—tracts that became segregated and high-poverty by 2015. This pattern suggests that migration and displacement patterns outlined earlier in this report are contributing to new clusters of racial segregation and poverty in the Bay Area.

Contra Costa and Solano counties saw some of the most dramatic increases of low-income households living in segregated, high-poverty neighborhoods. For example, in Contra Costa, approximately 46% of low-income Latinx households lived in high-poverty, segregated neighborhoods in 2015, up from 17% in 2000. In Solano County, this figure jumped from 6% to 34% for low-income Latinx and 10% to 36% for low-income Black households. These two counties have seen large increases in low-income people of color, including many households displaced from other parts of the Bay Area. In San Mateo County, which had no high-poverty segregated tracts in 2000, approximately 23% of low-income Black households and 19% of low-income Latinx households lived in segregated, high-poverty neighborhoods in 2015. This contrasts with the figures for low-income Asian and White households, which were 7 and 4%, respectively. For county-specific charts, see the “County Results Supplement.”

**Figure 4. Share of Low-Income Households Living in Segregated, High-Poverty Tracts in the Bay Area (2000 and 2015)**

Source: U.S. Census 2000 (Table P007), ACS 2011-2015 (Table B03002)
Patterns of segregation in the Bay Area have also contributed to an uneven geography of opportunity where long-term prospects for low-income children vary by neighborhood. In 2017, the State of California adopted “opportunity maps” for each region to guide and incentivize the construction of affordable housing for low-income families in higher “resource” neighborhoods. These maps categorize each tract based on its composite score determined by neighborhood-level characteristics and then compare it to other tracts in the region. In general, the region’s highest resource tracts are concentrated in Marin and San Mateo counties, San Francisco’s western neighborhoods, the Berkeley and Oakland Hills, and in parts of suburban Alameda and Contra Costa counties.

Figure 5 shows where households of different racial and income groups lived in 2015 according to the State’s opportunity map for the Bay Area. It shows clear disparities in access to opportunity by income, but more so by race. Differences in access between races were much larger than differences between income groups of the same race. For example, the share of low-income Black households living in higher resource tracts was the same as the share of moderate- and high-income Black households living in these areas (less than 6%). However, in 2015, low-income White households were seven times more likely to live in higher resource tracts than moderate- and high-income Black households. Access to higher resource neighborhoods for Latinx households in 2015 closely resembled that of Black households, and Asian households’ access to higher resource neighborhoods was similar to that of White households.

**Figure 5. Level of Neighborhood Resources in the Bay Area by Race and Income (2015)**

Source: California Fair Housing Task Force, 2017, ACS 2011-2015 (Table B19001)
This pattern varied by county, in part because some counties have higher shares of high-resource tracts than others (see “County Results Supplement”). In Solano County, for example, most low-income people of all races lived in lower resource tracts; however, low-income White households in Solano County were still approximately seven times more likely to live in a higher resource tract than moderate- and high-income Black households. On the other hand, few Black households of any income group lived in higher resource neighborhoods in San Mateo or Marin counties, which—as previously noted—are home to many higher resource neighborhoods. This Black-White disparity was smaller in San Francisco and Santa Clara counties, but it was still substantial in both counties (3:1 and 4:1, respectively).

In-migration patterns between different racial groups suggest the perpetuation of disparities in access to opportunity across the region. Figure 6 shows the racial breakdown of in-movers in 2015 for tracts with different levels of resources.\(^57\)

In 2015, Black and Latinx households represented a substantially higher share of in-movers in lower resource tracts than in higher resource ones. The opposite was true for White and Asian households: they represented a much higher share of movers in higher and moderate resource tracts than in lower resource ones. These patterns were consistent across the nine counties (see “County Results Supplement” for more).
THE NEED FOR BOLD SOLUTIONS THAT ACCOUNT FOR NEIGHBORHOOD CONTEXT

The findings in this report highlight the urgent need to increase access to affordable housing and stabilize housing prices throughout the Bay Area while reducing racial disparities in access to high-resource neighborhoods. To do so, policies and investments must account for neighborhood context and respond to new and enduring patterns of racial and economic segregation. Specifically, they should:

A. Stabilize rental housing prices in neighborhoods where they are rising fastest and low-income people of color may be at heightened risk of displacement, especially as these neighborhoods experience an influx of investments and resources;

B. Create new opportunities for low-income people of color to live in higher resource areas where they have historically been excluded; and

C. Increase economic opportunities and institutional supports for those living in high-poverty, racially segregated neighborhoods.

The CASA Compact, which both the Association of Bay Area Governments Executive Board and the Metropolitan Planning Commission have signed onto (and which requires further State and local action to be implemented), includes several program and policy recommendations that align with these goals—including region-wide just cause eviction, rent caps, rental assistance, and access to legal counsel for low-income tenants facing eviction, and funding for affordable housing. In addition, zoning reforms should allow for affordable housing and other apartment buildings to be developed in high-resource areas. These and other place-conscious strategies are critical for preserving and expanding the important place low-income communities of color have in the Bay Area, and for increasing their long-term economic prospects in the region.
Although not every household move is an example of displacement, low-income households often move for reasons beyond their control. Data on migration patterns and demographic changes in Bay Area neighborhoods are useful indicators of potential displacement, given the scale of housing price changes increases over the last 15 years. The Census data used for this report does not track individual households, but rather reports on a cross-section of randomly surveyed households. Therefore, the Census cannot tell us definitively if changes between 2000 and 2015 were the result of out-migration, in-migration, birth and death rates, or income changes within the existing population. Further, if a household that left a Census tract was replaced with a demographically similar one, the Census would not register this replacement as a change. For this reason, we describe these demographic changes as potential indicators of displacement, rather than precise estimates.


The years 2000 and 2015 came at somewhat different points in the real estate cycle. The year 2000 was a peak and 2015 may have been just after the midpoint of the current cycle, since prices in the Bay Area are still rising in 2018. The use of 2015 data means that the change estimates since 2000 are potentially conservative; more recent data from a similarly high point in the real estate cycle would likely show more dramatic changes in rental housing prices and neighborhood demographics. Bay Area Real Estate Market Cycles,” Paragon Real Estate Group, accessed September 3, 2018, https://paragonpublic.blob.core.windows.net/public-assets/hosted_files/SF-Real-Estate-Cycles-Article_Condensed-Version.pdf.


The numbers presented in Table 2 are rounded to the nearest hundred in recognition of the uncertainty in the ACS estimates. Unlike the 2000 census, the ACS is a sample of the overall population and there are margins of error associated with the 2015 estimates.

Alex Schafran, The Road to Resegregation: Northern California and the Failure of Politics (Oakland: University of California Press, 2018).

Schafran, The Road to Resegregation.


Because the Black population in Santa Clara County remains fairly dispersed, tract-level estimates for 2015 there are largely unreliable.

Schafran, The Road to Resegregation.
RISING HOUSING COSTS AND RE-SEGREGATION | SF BAY AREA

17 The Canal neighborhood (defined here as Marin tract 1122.01) is a majority-renter community that has seen significant population growth over the past decades, largely due to its role as a gateway for immigrants from Latin America. Source: Mitchell Crispell, Canal: an Immigrant Gateway at Risk, (Center for Community Innovation, June 2015), http://www.urbandisplacement.org/sites/default/files/canal_final.pdf.

18 Defined here as Sonoma tracts 1530.01 and 1532


20 Celina Chan et al., Signs of Speculation in the Monument Corridor, Center for Community Innovation (June 2015), http://www.urbandisplacement.org/sites/default/files/concord_final.pdf; Crispell, Canal; Harris and Cespedes, East Palo Alto.


22 Crispell, Canal; Harris and Cespedes, East Palo Alto.


24 Logan Rockefeller Harris, Mitchell Crispell, Fern Unnatornwaranggoon and Hannah Clark, Urban Redevelopment Around Diridon Station, Center for Community Innovation (June 2015), http://www.urbandisplacement.org/sites/default/files/san_jose_final.pdf.


27 The ACS Public Use Microdata Sample (PUMS) used in this analysis is not available at the tract level. This data tracks a person’s county of origin and their destination by Public Use Microdata Area (PUMA), a sub-county geography containing around 100,000 people. For more information on PUMS data, see the appendix.

28 Issi Romem and Elizabeth Kneebone, Disparity in Departure: Who Leaves the Bay Area and Where Do They Go?, Terner Center for Housing Innovation and Build Zoom (October 2018), https://ternercenter.berkeley.edu/disparity-in-departure.

29 PUMS uses the racial category “Asian-Pacific Islander” rather than separating Asians from Pacific Islanders, as in the tract-level Census/ACS data.

30 Research has shown that interpersonal relationships and overall housing instability drive the mobility decisions of very low-income households in particular, and that many therefore remain in similar, nearby neighborhoods when they move. See for example: Skobba and Goetz, “Mobility Decisions of Very Low-Income Households.”

31 Marcus and Zuk, Displacement in San Mateo County, California.

32 The PUMS data used for the migration analysis indicates the origin of movers by county and their destinations by PUMA. This means that unfortunately, it is not possible to distinguish between someone who moved within the PUMA and someone who moved to the PUMA from another part of the county (from Richmond to Antioch, for example).

33 Bader and Warkentien, “The Fragmented Evolution of Racial Integration since the Civil Rights Movement.”


35 Census data on median rent paid represents the middle rent paid by all renters in the tract, including longer-term tenants living in rent-controlled units, residents of subsidized units or those receiving rent vouchers—as well as newly arrived tenants in vacancy decontrolled apartments or new luxury units. In this analysis, median rent values for 2000 were also inflated to 2015 dollars to adjust for the lower purchasing power in that year. Further, “2015” median rents in this report aggregate from the 2011-2015 period in order to ensure data reliability at the tract level, so median rents for 2015 do not represent actual 2015 values. Finally, as previously noted, 2015 was somewhere in the middle of the current housing market cycle, as opposed to 2000, which was the peak of that cycle. For all of these reasons, the percent changes in tract-level median rents included in this report likely underestimate the level of rent increases.

36 177 out of 1442 tracts with reliable data in the Bay Area saw median inflation-adjusted rent paid grow by over 30% between 2000 and 2015.

37 Paul Waddell, Urban Analytics Lab, University of California, Berkeley, retrieved from analysis of online Craigslist listings in April 2018.
This statistic comes from a regression analysis. For this regional report, the regression model produced a slightly larger percent decrease in low-income households of color due to rent increases than was found in the model used for the previous reports on Alameda, Contra Costa, and San Francisco Counties. This change is due to the introduction of new control variables to the model. For more details on the methodology, see the appendix.


75% of today’s exclusionary areas in the East Bay were rated “best” or “still desirable” in HOLC’s redlining maps. See [http://urbandisplacement.org/redlining](http://urbandisplacement.org/redlining) for more information on these relationships.


Kneebone and Berube, *Confronting Suburban Poverty in America*.

Jeff Chang, *We Gon’ Be Alright: Notes on Race and Resegregation* (New York: Picador, 2016); Schafran, *The Road to Resegregation*.

See the appendix for further explanation of the metrics of racial segregation and poverty used in this report.

Menendian and Gambhir, “Racial Segregation in the San Francisco Bay Area: Part 1.”

The data for the dissimilarity index calculations uses the decennial Censuses from 1990, 2000, and 2010, which are total population counts and do not have margins of error. Data collected by the Census in the years since 2010 represent estimates from samples of the total population and have associated margins of error. It is difficult to account for error in dissimilarity index calculations, and so only decennial Census data was used for this segregation indicator.

Tract-level poverty rates may have increased between 2000 and 2015 due to multiple reasons, including both in-migration of poor residents and existing residents becoming poorer.

Higher resource tracts are those whose characteristics are most predictive of educational success, economic mobility, and good health for both low-income children and adults.

The State just approved revisions to its opportunity maps in December 2018; however, this report used the previous version of the maps, which are largely similar and were available at the time analysis was completed for this report.

The tract-level Census data used for this analysis neither provides where the in-movers originated, nor their income.

For additional background on CASA, see: [https://mtc.ca.gov/our-work/plans-projects/casa-committee-house-bay-area](https://mtc.ca.gov/our-work/plans-projects/casa-committee-house-bay-area).


As reported in California Housing Partnership, Alameda County Needs Report.
Data Sources

This study primarily relies on tract-level data from the 2000 U.S. Census and the 2011-2015 5-year sample from the American Community Survey. For tract-level estimates used in this report, “2015” refers to 5-year aggregate (2011 to 2015). This increases the sample size and improves the reliability of the data at this small geography but may lead to lower estimates than what might be expected in terms of rents and demographic changes, since it encompasses preceding years.

Census tracts permit a detailed analysis of demographics transformations and housing trends over 15 years at a very local scale. However, the tract-level datasets did not contain data needed for analyses of mover destinations and rent burden. In these cases, we used the Census’ Public Use Microdata Sample (PUMS), a person-level sample available at the sub-county level (also known as a “PUMA”). Within analyses based on PUMS data, “2015” refers to the 2011 to 2015 aggregate period, since it draws on the 5-year sample. Finally, we used the opportunity map data from the California Fair Housing Task Force that the California Tax Credit Allocation Committee approved in December 2017.

Definitions

For the purposes of this study, “the region” refers to the nine-county Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. These counties are linked economically, politically, and through transportation infrastructure. There has also been substantial migration between the nine counties, as shown in this report.

Income categories are defined relative to the region because part of this study involves comparing trends across counties within the Bay Area. We use an interpolated Area Median Income (AMI) for the nine counties. This means that AMI in this report is lower than county-derived median incomes in wealthier counties like San Mateo or Santa Clara, and higher than county-derived medians in lower-income counties like Solano County. This regional approach also allows for consistent comparisons when looking at migration between counties. For 2000, regional AMI was $62,528; in 2015, it was $81,366.

We define income categories in 2000 and 2015 relative to the median income for the respective year in order to reflect incomes for that period. We interpolated the income data to estimate the number of households in each income category. The interpolation process made it difficult to report uncertainty in the 2015 income data. For this reason, we rounded demographic change estimates to the nearest hundred when reporting absolute instead of relative values.

In general, the study uses the term “low-income” to refer to households earning under 80% of AMI in a given year. Although tract-level Census data does not allow incomes to be adjusted for household size, PUMS data does allow for this adjustment. In analyzing the PUMS data, we used the household size-adjusted income limits provided by the California Department of Housing and Community Development and calculated a population-weighted average of the nine counties. In both cases, the income brackets are as follows: Extremely Low Income (under 30% AMI), Very Low Income (30-50% AMI), Low Income (50-80%), Moderate Income (80-120%) and High Income (above 120%). This follows definitions used by state and federal housing agencies.

This study combines the U.S. Census definitions of race and ethnicity, such that each racial category refers to non-Hispanic members of that group. In other words, “White” here refers to “non-Hispanic White” and so on. We use the gender-inclusive term Latinx in place of the census category of “Hispanic or Latino of any race.” “People of color” include all people who are not non-Hispanic Whites. One distinction between the Census/ACS and PUMS is the catego-
rization of Asians and Pacific Islanders. PUMS data uses the category of “Asian-Pacific Islander” while the Census and ACS groups Pacific Islanders with Hawaiians and puts Asians in their own category. For purposes of this study, Pacific Islanders are included in the “Asian-Pacific Islander” category when analyzing the PUMS migration and rent burden data but included in the larger “all people of color” category for the Census tract-level summary data. Finally, for household-level metrics, race refers to that of the householder (the person who answered the census).

Segregation and Poverty

Studies within academic and policy spheres have defined racial segregation and poverty within neighborhoods in different ways. Here we used two metrics for measuring segregation: a dissimilarity index and a location quotient. The dissimilarity index measures the relative distribution of two racial groups in a tract relative to the county. This report included the following dissimilarity indices: White-Black, White-Asian, White-Hispanic, Black-Asian, Black-Hispanic, Asian-Hispanic. We employed decennial Census data for 1990, 2000 and 2010, but chose not to use the 2011-2015 ACS, given the margins of error in its estimates. We reviewed other metrics, including the divergence and spatial proximity indices, but ultimately chose to use the dissimilarity index, given its ease of interpretation and utility for analyzing change at a larger, county scale.

In addition, we calculated a location quotient as a measure of racial concentration; unlike dissimilarity, a location quotient allows for simultaneous comparison across multiple racial groups. The location quotient is a ratio of the population of a given group within a tract to its share of the total Bay Area population. For example, the California Fair Housing Task Force used location quotients to measure racial segregation within the state, defining a neighborhood as segregated if the location quotient for Black, Latinx, Asian or all people of color was greater than 1.25 relative to the county. In other words, if any of these groups was 25% more concentrated in the tract relative to the state, the tract was considered segregated. We initially applied the 1.25 threshold but found it to be too low of a threshold, in some cases, to capture concentrations of non-White groups in the Bay Area. To be conservative in labeling neighborhoods segregated, we used the more stringent ratio of 1.5.

We defined a tract as high-poverty if over 20% of the population lives below the federal poverty line. Research has shown that the effects of poverty concentration begin to emerge at 20%, and this threshold is generally used as a shorthand for “high-poverty” neighborhoods in both policy and academic circles (other common terms include “extreme poverty” for tracts with more than 40% of the population below the federal poverty line). In addition, the high cost of living in the Bay Area means that the federal poverty line is an especially high bar for poverty. For example, according to the Public Policy Institute of California (PPIC), the poverty rate for Alameda County increases from 11.3% to 17.1% when accounting for the cost of living using the California Poverty Measure.

Regression

To understand whether rent increases were associated with demographic change at the local level—particularly the loss of low-income people of color—we conducted a linear regression using tract-level data from 2000 and 2015 for the nine-county region. We controlled for a variety of demographic and built environment variables to isolate the effect of rent on demographic change. The control variables we included are: proportion of adult population with a college degree (2000), proportion of POC households with severe rent burden (2000), proportion of POC population over 65 years old (2000), proportion of population without citizenship (2000), proportion of housing units built before 1939 (2000), Location quotient for POC (2000), # of housing units built (2000-2015), # affordable housing units built...

We clustered error at the city level to account for similarities among tracts in the same jurisdiction—potentially due to specific housing policies—and evaluated potential multicollinearity among independent variables using a variance inflation factor.