CalExodus: Are People Leaving California?

NATALIE HOLMES

*February 28th, 2022 update*

The research team has identified an error in how some 2020 domestic entrances to California were calculated. In particular, data and figures reflecting single-year changes, between 2019 and 2020, potentially understate new entrants to the state. Please see the [February 2022 errata](#) for more details. This policy brief will be updated as soon as corrected estimates are available.
Recent news reports, preliminary data, and anecdotes suggest the COVID-19 pandemic is either causing or accelerating an exodus from California. There are many reasons Californians might move because of the pandemic. Faced with the prospect of indefinite remote work and school, some families have sought additional space or proximity to support networks. Others, out of work because of public health directives or weak demand for their services, have sought relief from high costs of living. The extent of any such exodus, and whether it proves to be temporary or permanent, is not yet clear — at least not in data sources traditionally used to quantify residential mobility. The stakes are high: significant population shifts could affect the size and composition of regional labor markets as well as rent and home values. Some fear that mass departures by the state’s wealthy could reduce local and state tax revenues, potentially affecting the services governments are able to provide for years to come.

Using the University of California Consumer Credit Panel (UC-CCP), a new dataset containing residential locations for all Californians with credit history, we are able to track domestic residential moves at a quarterly frequency through the end of 2020.

**KEY RESEARCH FINDINGS**

• We find no evidence of a pronounced exodus from the state.

• Drilling down, however, we find that net exits from the Bay Area have increased during the pandemic, particularly in San Francisco, where exits in the second through fourth quarters of 2020 were 31% higher than during the same period in 2019, and new entrances were 21% lower.

• Historically, the number of people leaving California tracks the number of people entering California, but this pattern deviated in Q4 2020, when 267,000 people left the state and only 128,000 entered.

• Despite concerns about tax revenue impacts, there is little evidence that wealthy Californians are leaving en masse.
HOW IS THE PANDEMIC CHANGING STATEWIDE MOBILITY TRENDS?

First, the overall percent of Californians moving anywhere, either within California or out of California, each quarter has declined steadily since 2004 (the first year we are able to observe), from 6% to 4%, and has hovered around 4% since the end of 2014 (see Figure 1). This finding is consistent with other research documenting an overall decline in rates of residential mobility in the U.S. in recent decades.

Second, residential mobility is highly seasonal, with reported moves in our data typically lowest in the first quarter and peaking during the third or fourth quarters of each year. We expect a short lag between actual moves, when an individual moves locations, and reported moves, defined as the date when that move is reported to financial institutions and shows up in our data. In 2020, that seasonality was somewhat disrupted, perhaps because planned moves were delayed due to the pandemic. Statewide residential mobility was at its lowest during the second quarter, 14% lower than a year prior. Third quarter mobility in 2020 was 9% lower than in 2019. Mobility increased by 3% in the fourth quarter of 2020 compared to the prior year.

Third, in most years the number of people leaving California closely tracks the number who arrive (see Figure 2). In particular, these typically move in the same direction — if entrances increase, so do exits, and vice versa. The same pattern appears true through the third quarter of 2020, but deviates in the fourth quarter. While the number arriving in California appears to have decreased year-over-year in the second and third quarters, it is not markedly different from changes we see in prior years. In the fourth quarter, by contrast, exits and entrances clearly move in opposite directions. About 267,000 left the state in the fourth quarter, while just 128,000 moved in. Despite this, the peak number of departures in 2020 is on par with those in earlier years. In sum, we see no marked increase in exits, though entrances have slowed.

FIGURE 1. Percentage of California residents that move each quarter, 2015–20

Source: California Policy Lab analysis of University of California Consumer Credit Panel (UC-CCP) data.
Notes: A move is defined as having a different ZIP code in the next quarter. The data universe for this analysis is individuals in the UC-CCP with credit history. We cannot report people moving into or out of the state from outside the U.S.
Fourth, among those that do move, the share leaving the state — versus moving within the state — has grown only slightly since 2015, from 16% to 18% (see Figure 3).

This slight upward trend continued in 2020, with no marked increase.

FIGURE 3. Destinations of California residents that move, 2015–20

Source: California Policy Lab analysis of University of California Consumer Credit Panel (UC-CCP) data.
Notes: A move is defined as having a different ZIP code in the next quarter. The data universe for this analysis is individuals in the UC-CCP with credit history. We cannot report people moving into or out of the state from outside the U.S.
Fifth, the rates at which people exit the state from the wealthiest 10% of California ZIP codes, as well as the rates at which people move into those ZIP codes from out of state, have closely tracked patterns of mobility in the bottom 90% of ZIP codes (see Figure 4, below) over the past five years. This pattern largely appears to have held during the pandemic. Note that, although the wealthiest 10% of ZIP codes saw departures relative to the prior year increase more than did the bottom 90% of ZIP codes, these changes still parallel each other.

**FIGURE 4. Year-over-year percent change in California entrances and exits, by income, 2016–20**

Source: California Policy Lab analysis of University of California Consumer Credit Panel (UC-CCP) and 2015-19 American Community Survey (ACS) data. Notes: A move is defined as having a different ZIP code in the next quarter. The data universe for this analysis is individuals in the UC-CCP with credit history. We cannot report people moving into or out of the state from outside the U.S. The top 10% wealthiest ZIP codes are determined by median household income in the 2015-19 ACS.

**THE BAY AREA IS DIFFERENT**

While our analysis reveals no obvious exodus from the state, the story is different in the 11-county Bay Area economic region, and San Francisco in particular. Net domestic exits from the Bay since the onset of the pandemic have increased 178% compared to pre-pandemic trends, reflecting both a 9% increase in departures and a 21% decrease in entrances in the last three quarters of 2020 relative to the same period in 2019.

Deviation from prior trends is even starker in San Francisco, which has seen a 31% increase in departures and 21% decrease in entrances since the end of March 2020. Net exits from San Francisco increased 649%, from 5,200 to 38,800.

The series of maps in Figure 5 show, in the top row, year-over-year changes in quarterly residential exits from a given county, and in the bottom row, year-over-year changes in quarterly residential entrances to a given county. In each of the last three quarters of 2020, San Francisco experienced the largest percentage increase in residential exits of any California county. Meanwhile, it experienced the largest percentage decrease in residential entrances of any county during the last two quarters of 2020, and was third-highest in the second quarter.
FIGURE 5. Percent change in county migration, compared to one year prior

Exits

<table>
<thead>
<tr>
<th>Q2 2019 to Q2 2020</th>
<th>Q3 2019 to Q3 2020</th>
<th>Q4 2019 to Q4 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>% change in exit from county</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0% or less</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0% to 5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5% to 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% to 15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15% to 20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20% or more</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Entrances

<table>
<thead>
<tr>
<th>Q2 2019 to Q2 2020</th>
<th>Q3 2019 to Q3 2020</th>
<th>Q4 2019 to Q4 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>% change in entrance to county</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0% or less</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0% to 5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5% to 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% to 15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15% to 20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20% or more</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: California Policy Lab analysis of University of California Consumer Credit Panel (UC-CCP) data.
Notes: A move is defined as having a different ZIP code in the next quarter. The data universe for this analysis is individuals in the UC-CCP with credit history. We cannot report people moving into or out of the state from outside the U.S.

FIGURE 6. Destinations of San Francisco residents that move, 2015-20

Source: California Policy Lab analysis of University of California Consumer Credit Panel (UC-CCP) data.
Notes: A move is defined as having a different ZIP code in the next quarter. The data universe for this analysis is individuals in the UC-CCP with credit history. We cannot report people moving into or out of the state from outside the U.S.
Although net migration to the Bay Area and San Francisco has dropped since this time last year, most movers appear to be sticking close to home, with approximately two-thirds of San Franciscan movers remaining in the Bay Area economic region and nearly 80% remaining in the state (see Figure 6). This is consistent with pre-pandemic patterns.

The patterns of where San Franciscans have been moving since the onset of the pandemic look largely the same as before COVID. The most common destinations continue to be Bay Area counties and urban centers in Southern California. Figure 7 shows the destination counties of people moving from San Francisco each quarter over the past two years. The consistency underscores that the overall distribution of destinations has not budged during the pandemic.

While overall patterns of where San Franciscans move do not appear to have changed during the pandemic, from the perspective of the destination counties in California, 2020 saw large swings in the number of Bay Area residents moving in. Figure 8 shows the percent change in the number of Bay Area arrivals. The Sierras saw some of the largest increases in population coming from the Bay Area, particularly in the last quarter of 2020, when overall reported mobility during the pandemic was at its highest.

**FIGURE 7. Destinations of San Francisco movers who stay in California**

Source: California Policy Lab analysis of University of California Consumer Credit Panel (UC-CCP) data.
Notes: A move is defined as having a different ZIP code in the next quarter. The data universe for this analysis is individuals in the UC-CCP with credit history. We cannot report people moving into or out of the state from outside the U.S.
CONCLUSION

Consistent with recent reporting, we find that people have left the Bay Area, and especially San Francisco, since the onset of the COVID-19 pandemic. They tend not to move far, but many Sierra counties are getting 50%+ more San Francisco in-migrants than in the prior year. This net loss of San Franciscans helps explain the dramatic decline in the city’s rents in 2020: with fewer people competing for housing, landlords slashed rents to keep units occupied. Most movers have relocated within California, and the overall rate of exits from the state does not appear abnormally high — or indeed to have changed at all — relative to existing trends. Nor do exits originating from California’s wealthiest ZIP codes appear to have changed in their relationship to exits from all other areas. Another, less-discussed trend is the pronounced decrease in new entrances to California’s urban centers.

In short, to date the pandemic has not so much propelled people out of California as it has shifted them around within it. The absence of a pronounced exodus from the state should come as a relief to people concerned about effects on state tax revenues. However, an important caveat is that because the top 0.5% of California taxpayers account for 40% of state income tax revenues, the choice of a single billionaire to leave the state could have an outsized effect on the state’s coffers. Our analysis, although based on geographically granular data, cannot track the behavior of specific wealthy individuals. Local tax revenues, in particular sales tax and San Francisco’s payroll tax on workers, may well experience swings in the coming year due to residential moves as well as documented changes in spending behavior.

While this analysis is able to quantify moves, it cannot tell us why people have chosen to move or remain where they are. Future planned analyses will investigate trends by housing costs, political affiliation, and exposure to wildfires and wildfire smoke.

---

FIGURE 8. Year-over-year change in number of county arrivals from Bay Area

Source: California Policy Lab analysis of University of California Consumer Credit Panel (UC-CCP) data.

Notes: A move is defined as having a different ZIP code in the next quarter. The data universe for this analysis is individuals in the UC-CCP with credit history. We cannot report people moving into or out of the state from outside the U.S.
This analysis uses the University of California Consumer Credit Panel (UC-CCP), a new dataset created through a partnership between the California Policy Lab, the Student Borrower Protection Center, and the Student Loan Law Initiative. The UC-CCP consists of data from Experian, and contains longitudinal information about adults with a credit history who have lived in California since 2004. Data includes each person's ZIP code of residence, as reported by creditors, and credit information at a quarterly frequency. We define moves as changes in ZIP codes from one quarter to the next. We omit from the analysis individuals who do not live in a U.S. state or the District of Columbia, who are deceased, or for whom the credit agency does not have a birthdate on file. Note that because we omit individuals residing outside the U.S. in a given period, we are limited to describing domestic migration. Because California experiences significant in-migration from abroad, we will understate the total number of entrances. Finally, moves in a given quarter are not evaluated unless an individual is present at both the beginning and end of that period: in this way, we do not mistakenly characterize people entering the data for the first time or dropping out of the data as having moved.

Several factors may cause our estimates of residential mobility to be biased. We do not capture moves within the same ZIP code, which will cause us to understate the frequency of moves. We are not able to capture moves not reported to financial institutions, which will cause us to understate the frequency of moves. Credit data may also lag in its ability to measure mobility because it relies on people changing their addresses with creditors. Finally, because our sample consists of adults with credit histories (nearly 90 percent of adults, according to the Consumer Financial Protection Bureau), it is slightly older, more financially advantaged, and less racially and ethnically diverse than the overall adult population. As such, these results are not able to capture patterns of residential mobility among California's most disadvantaged residents.

We define wealthy ZIP codes as the 10 percent with the highest median household income in the 2015–19 5-year American Community Survey (ACS). ZIP codes are converted to ZIP Code Tabulation Areas (ZCTAs) for better correspondence with the ACS using a publicly available crosswalk file from the Missouri Census Data Center.

The smoothed trendlines in Figures 1, 2, and 4, represent four-quarter moving averages.

ACKNOWLEDGMENTS

We thank Arnold Ventures, the University of California Office of the President Multicampus Research Programs and Initiatives, MRP-19-600774 and M21PR3278, The James Irvine Foundation, and the Bylo Chacon Foundation for their generous support. All errors should be attributed to the authors.