

USC Dornsife  UnionBank®

# LABarometer



## The Affordability & Prosperity Report

Release Date: February 17, 2021

USC Dornsife  
*Center for Economic  
and Social Research*



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# EXECUTIVE SUMMARY

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When COVID-19 arrived in the United States in early 2020, it hit Los Angeles County particularly hard. Compared to the rest of the country, a higher percentage of L.A. County residents were unable to afford basic needs like housing and food. Levels of economic insecurity and psychological distress were systematically higher in L.A. County than in the rest of the country, and rates of infection and death were exceptionally grave.

Why were Angelenos particularly vulnerable to the effects of the pandemic on their finances and health? Because so many struggled to afford basic needs long before the pandemic arrived.

The goal of this Affordability & Prosperity Report – the fourth in our series of USC Dornsife-Union Bank LABarometer surveys – is to bring new data to an old problem, the problem of access and affordability in Los Angeles.

LABarometer is a quarterly, internet-based survey of approximately 1,800 L.A. County residents, designed and administered by the Dornsife Center for Economic and Social Research at the University of Southern California. It is the first survey of its kind to regularly engage with the same group of L.A. County residents over time, tracking how individual lives change in the face of L.A.'s dynamic environment.

LABarometer is made possible by the generous financial support of Union Bank.

Each year, LABarometer's Affordability & Prosperity survey will evaluate the accessibility and affordability of four key resources in L.A. County: housing, healthcare, food, and education. It will also assess residents' financial health and spending habits, their barriers and pathways to social and economic mobility, and the real and perceived impact of growth and change in their neighborhoods.

In this first wave of the survey – which was fielded from September 30, 2020, to November 1, 2020 – Angelenos were still coping with the social and economic effects of a global pandemic. Correspondingly, our survey reveals a population in struggle.

With respect to housing, we see that the high cost of housing in L.A. hurts renters and non-white residents the most. Approximately 65% of L.A. renters are rent-burdened, or spend more than 30% of their income on rent; 44% are severely rent-burdened, or spend more than 50% of their income on rent. In contrast, we find that 23% of homeowners are mortgage-burdened. Rates of rent and mortgage burden are also much higher among Black and Hispanic residents than they are among non-Hispanic white residents. Meanwhile, among Asian residents, we see relatively

low rates of rent and mortgage burden but relatively high rates of overcrowding. Approximately 40% of Asian residents – as well as 55% of Hispanics– live in overcrowded homes.

We also see that displacement pressure is ubiquitous in L.A. In 2020, 3 out of every 4 residents saw changes occur in their neighborhood that are known to increase risk of displacement – from young people moving in and neighbors, friends, and family moving out, to new housing developments and the closing of restaurants and stores. Among the renters who moved last year, 1 in 3 did so because they had been formally or informally displaced by their landlord – most commonly, due building neglect, rent hikes, or eviction.

With respect to health, our survey reveals that 40% of Angelenos rate their overall health as fair or poor and many are not getting the care they need, due in part to their inability to afford healthcare. Just 60% of residents saw a primary care doctor last year, down to 50% among Asian residents and 55% among Hispanic residents. One in 3 report that they postponed or went without necessary medical care – most commonly, dental or vision care – because the cost of care was too high.

When it comes to educating their children, we see that the challenge for L.A. parents is not affordability but equity. Public schools guarantee an affordable education to all yet not all public schools are of equal quality, and Black parents appear to work harder than white and Asian parents to secure a high-quality education for their children. According to our survey, Black parents are the most likely to feel their children are getting a better education than they did, yet they are the least likely to send their children to neighborhood public schools and the most likely to rely on magnet, charter, and home schooling. This racial difference in school choice is likely attributable to racial disparities in neighborhood school quality.

Finally, our data suggest that levels of food insecurity in L.A. have declined substantially since the record numbers we saw at the start of the pandemic, dropping from 31% in April 2020 to 11% in October 2020. Still, 1 in 9 – or approximately 870,000 adults – suffer from food insecurity, especially those who are young, low-income, or isolated in food deserts.

Altogether, these results paint a sobering picture of the social and economic conditions in L.A. County. In particular, they highlight the challenges many Angelenos face in accessing and affording the housing, food, healthcare, and schooling they need for their families. Only time will tell which of these challenges are singular to the pandemic and which reflect more entrenched social problems.

Over the next decade, our hope is that the results of this survey will provide policymakers with a valuable baseline against which to measure L.A.’s progress in becoming a more affordable and equitable place to live.

# DATA AND METHODS

## Sample Information

A total of 1,326 Los Angeles County residents participated in the Affordability & Prosperity survey from September 30 through November 1, 2020. Participants were recruited from LABarometer's survey panel of 1,761 adults living in randomly selected households throughout Los Angeles County, described in greater detail in the Appendix. The participation rate for the survey was 75%. The margin of sampling error<sup>†</sup> is 2.6 percentage points.

The table below summarizes select characteristics of our Los Angeles County sample, with and without survey weights.

| Select Sample Characteristics |              |          |
|-------------------------------|--------------|----------|
| Fraction of                   | LA (n=1,326) |          |
|                               | Unweighted   | Weighted |
| Males                         | 37%          | 49%      |
| NH Whites                     | 30%          | 29%      |
| NH Blacks                     | 7%           | 8%       |
| NH Other                      | 17%          | 17%      |
| Hispanics                     | 45%          | 46%      |
| College Graduates             | 45%          | 36%      |
| Age 18-34                     | 33%          | 30%      |
| Age 35-44                     | 22%          | 21%      |
| Age 45-54                     | 18%          | 16%      |
| Age 55-64                     | 14%          | 15%      |
| Age 65+                       | 13%          | 18%      |

We calculate weights in two stages: (1) base weights account for the probabilities of selection in our sampling procedures, and (2) post-stratification weights align survey distributions to population benchmarks. Population benchmarks for L.A. County were obtained from the American Community Survey. The weighted statistics in the figure below correspond to the population benchmarks.

## <sup>†</sup> Survey Error

Factors other than sampling error, including question wording, question order, sample type (e.g. opt-in panels vs. probability panels such as UAS), population coverage, and impact of current events, may affect the results of any survey. In addition, the results of questions asked without an interviewer (e.g. in an internet panel) may differ somewhat from similar questions asked by

an interviewer over the phone. The margin of sampling error is calculated at the 95% confidence level, using a sample proportion of 0.5 to generate an upper bound of uncertainty. Please note that this is only an approximate measure of error. A more precise measure would require upper and lower bounds to be calculated for each individual question or outcome.

### **Survey Information**

The Affordability & Prosperity Survey (UAS 312) took an average of 9 minutes to complete. Respondents participated via computer, mobile device or tablet, at any time of day or night during the field period. The data, codebooks, and questionnaires associated with these two surveys are available at <https://uasdata.usc.edu/survey/UAS+312>.

### **Analysis**

The summary statistics included in this report are based on weighted data. Multivariate statistical analyses were conducted using unweighted data and the following demographic controls: gender, age, education, income, race, ethnicity, nativity, homeownership status, marital status, employment status, and residential urbanicity. Statistical tests and regression models are not included in this report, but they are available upon request. Throughout the text, we identify effects that are statistically significant at a confidence level of 95%.

This report and links to the data archive are available at <https://cesr.usc.edu/labarometer>.  
For questions about the survey, contact us at [labarometer-l@usc.edu](mailto:labarometer-l@usc.edu).

The USC Dornsife Center for Economic and Social Research is a proud member of the American Association for Public Opinion Research's [Transparency Initiative](#).

**LABarometer is funded by Union Bank**

# SURVEY RESULTS

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## Housing Affordability and Quality

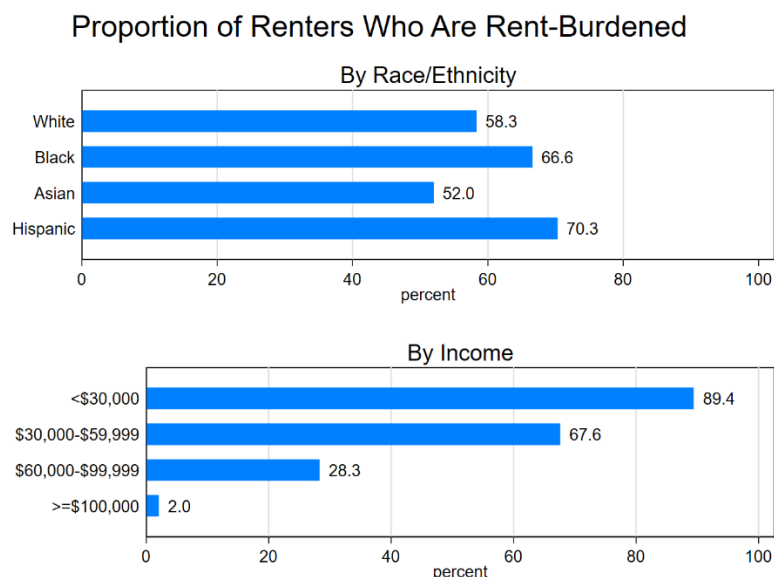
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**Takeaway #1:** The high cost of housing in L.A. County hurts renters and non-white households the most.

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◆ **In L.A. County, 65% of renters are rent-burdened.**

According to our survey, 65% of renters are currently rent-burdened, or spend more than 30% of their income on rent; 44% are severely rent-burdened, or spend more than 50% of their income on rent. Rates of rent burden vary substantially across racial and ethnic groups, with non-Hispanic white and Asian renters exhibiting lower rates of rent burden (58% and 52%, respectively) and Black and Hispanic renters exhibiting higher rates of rent burden (67% and 70%, respectively).



As expected, rates of rent burden increase as household income decreases. According to our survey, 89% of renters who make less than \$30,000 a year spend more than 30% of their income on rent, compared to only 2% of renters who make six figures or more.

Among the sample of L.A. renters who responded to our surveys in both the fall of 2019 and the fall of 2020, we see a slight increase in rent burden between the two periods. In the fall of 2019, 65% of respondent were rent-burdened; by the fall of 2020, 67% were rent-burdened.

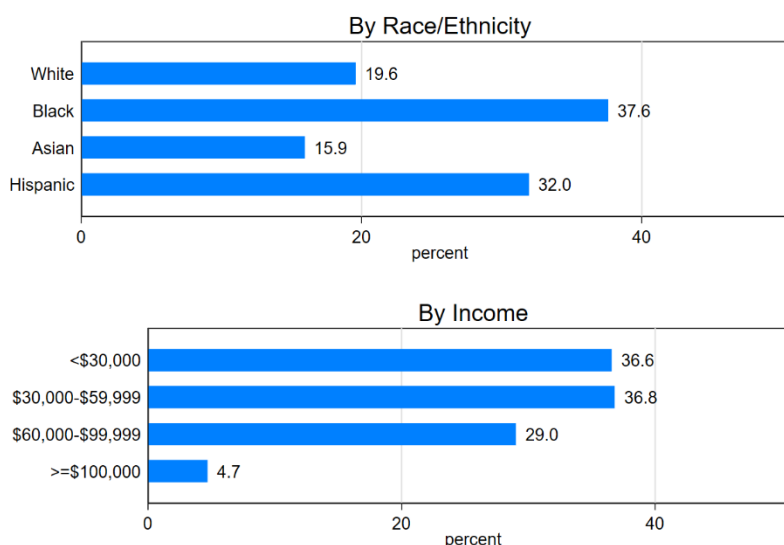


This slight increase in the prevalence of rent burden was due to an increase in the cost of rent. Household incomes remained virtually unchanged between 2019 and 2020 but rent increased from \$15,500 per year to \$17,000 per year at the mean and from \$14,400 to \$15,000 per year at the median.

◆ **In L.A. County, 23% of homeowners are mortgage-burdened.**

Relative to renters, a much lower percentage of homeowners are burdened by the cost of housing. Overall, 23% of L.A. County homeowners report that they are mortgage-burdened, or spend more than one-third of their income on a mortgage or house loan. Rates of mortgage burden do vary across racial and ethnic groups, however. Among Black and Hispanic homeowners, rates of mortgage burden increase to 38% and 32%, respectively. Among non-Hispanic whites and Asians, they decrease to 20% and 16%, respectively.

Proportion of Homeowners Who Are Mortgage-Burdened

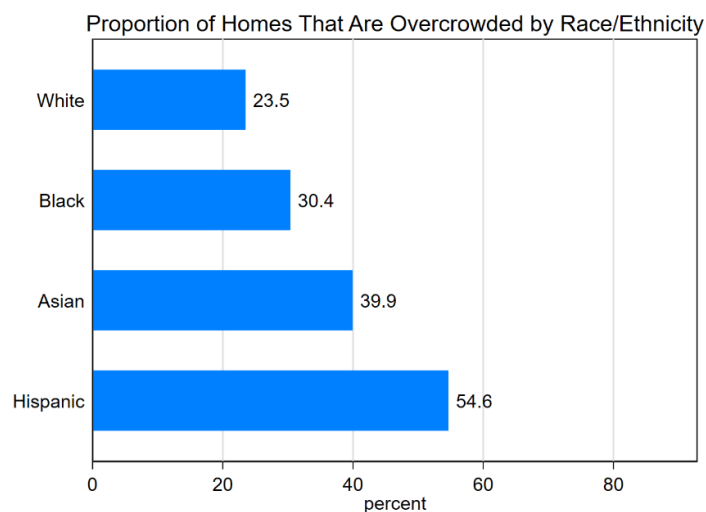


We also find that a higher percentage of low- to middle-income homeowners (73%) are mortgage-burdened compared to middle- to high-income homeowners (34%). Only 5% of homeowners who make more than six figures in household income report spending more than 30% of their income on a mortgage.

Combined with our data on the prevalence of rent burden in L.A. County, these data suggest that both low- and middle-income residents are living beyond their means to cope with the high cost of housing in L.A. Furthermore, Black and Hispanic residents are more likely than white and Asian residents to stretch their finances to afford the cost of renting or owning a home.

◆ **41% of L.A. County residents live in overcrowded homes, including 55% of Hispanic residents.**

The U.S. Department of Housing and Urban Development defines an overcrowded home as one in which the ratio of people to bedrooms is more than 2 to 1. According to our survey, 41% of residents live in homes that qualify as overcrowded. Rates of overcrowding also vary across racial and ethnic groups. Hispanic residents (55%) are far more likely -- 31 percentage points more likely -- than non-Hispanic white residents (24%) to live in overcrowded housing conditions. Likewise, Asian residents (40%) are 16 percentage points more likely than non-Hispanic white residents (24%) to live in an overcrowded home.



It is notable that Asians are more likely than Black residents to live in overcrowded housing given that they are *less* likely than Black residents to be rent- or mortgage-burdened. This suggests that both Asian and Black residents struggle with the high cost of housing in L.A. but cope with the cost in different ways. Black residents are more likely to stretch their incomes to afford rent; Asian residents are more likely to live in crowded conditions.

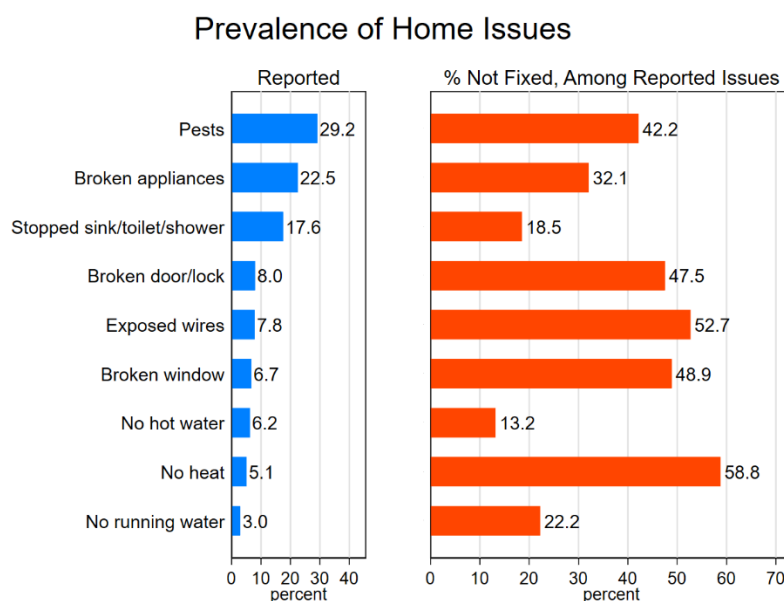
◆ **1 in 3 L.A. County residents worried about losing their home in 2020.  
1 in 5 believe they are unlikely to make their housing payments on time in the next 6 months.**

Although the CARES Act provided much-needed assistance to many L.A. County residents in 2020, 30% still worried about losing their housing, with renters, females, middle-aged residents, and low-income residents reporting the highest degree of worry, on average.

About 15% of residents reported at least one late rent or mortgage payment in the second half of 2020, and an even higher percentage – 20% -- believe they are somewhat or very likely to be late on their rent or mortgage in the next 6 months. Again, middle-aged and low-income residents were more likely to report this sentiment than young adults and higher income residents, respectively.

♦ **A majority (61%) of residents report feeling satisfied with their current housing, but some homes have problems in need of repair.**

When asked to rate their level of satisfaction with their current housing, 61% of L.A. County residents report that they are satisfied or very satisfied with their home. Levels of satisfaction do vary according to demographic factors, including age, housing tenure, and income. Residents aged 60+ report greater satisfaction than residents aged 18-39; homeowners report greater satisfaction than renters; and high-income residents report greater satisfaction than low-income residents. Furthermore, about 1 in 4 residents report issues with their home that have not been fixed for some time.



About 50% of respondents report experiencing at least one issue with their home in the last 12 months. The three most common housing issues were household pests (29%), broken appliances (22%), and clogged drainage pipes (18%). For many, these issues have yet to be fixed, including 42% of those who reported pests, 32% of those with broken appliances, and 18% of those experiencing clogged sinks/toilets/baths.

## Displacement Pressure

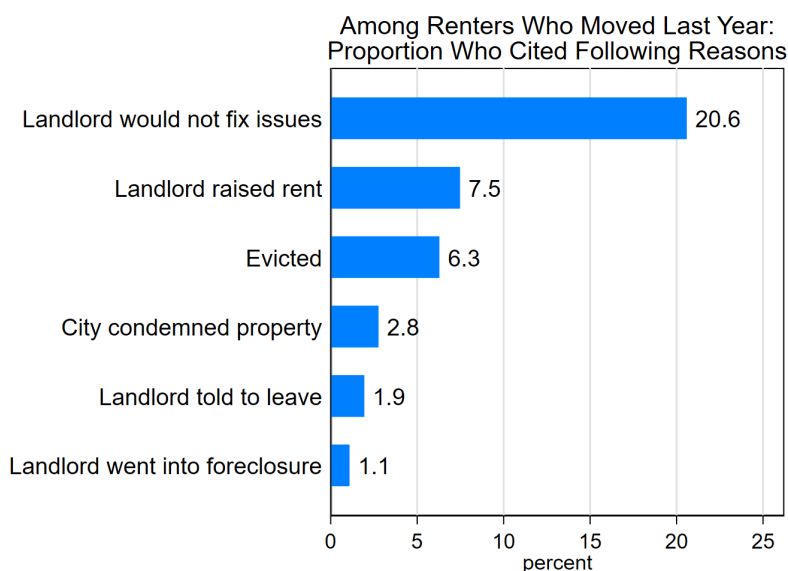
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**Takeaway #2:** Displacement pressures are pervasive in L.A. A third of the moves made by renters last year were attributed to formal or informal displacement.

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- ◆ **Of the renters who moved last year, almost 1 in 3 did so because they had been evicted or informally displaced.**

According to our survey, 12% of L.A. County residents moved in the last 12 months. When asked to provide the primary reasons why they had moved from their previous residence, 29% of the movers who rent reported that they moved because they had been evicted or displaced by their landlord through formal or informal means.



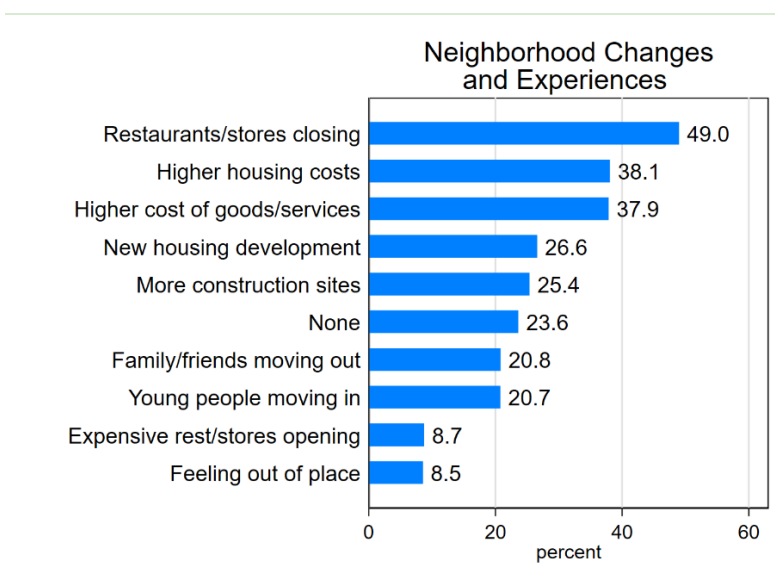
In the figure above, we provide a breakdown of the reasons our respondents cited for moving. According to our data, 6% of renters left their previous residence due to a formal eviction and 2% left because they were explicitly told by a landlord to leave. A high percentage of movers also reported informal processes of displacement: 8% reported leaving because their landlord raised the rent and 21% reported leaving because their landlord would not fix anything and the place had become too rundown to live in.

- ◆ **Last year, 3 in 4 Angelenos witnessed changes in their neighborhood that increase risk of displacement.**

Approximately 76% of residents reported some form of displacement pressure in their neighborhood in 2020, from young people moving in and neighbors, friends, and family moving

out, to upscaling, new housing developments, and the closing of restaurants and stores. Almost half of all Angelenos saw restaurants or stores close and 1 in 3 saw housing costs increase. About 1 in 4 saw signs of residential or commercial development and 1 in 5 watched friends and family leave or new younger neighbors move in.

Overall, renters, non-Hispanic whites, and residents under age 40 were more likely to observe these changes in their neighborhood than homeowners, non-white residents, and seniors (age 60+), respectively.



While a majority of residents saw signs of change in their neighborhood, only 9% reported feeling out of place. Furthermore, our data suggest that neighborhood participation may buffer residents from feelings of displacement. According to our analyses, residents with high levels of participation in their neighborhood (i.e. residents who chat frequently with neighbors and regularly participate in neighborhood organizations) are less likely than residents with low levels of neighborhood participation to report feeling out of place.

## Health and the Cost of Care

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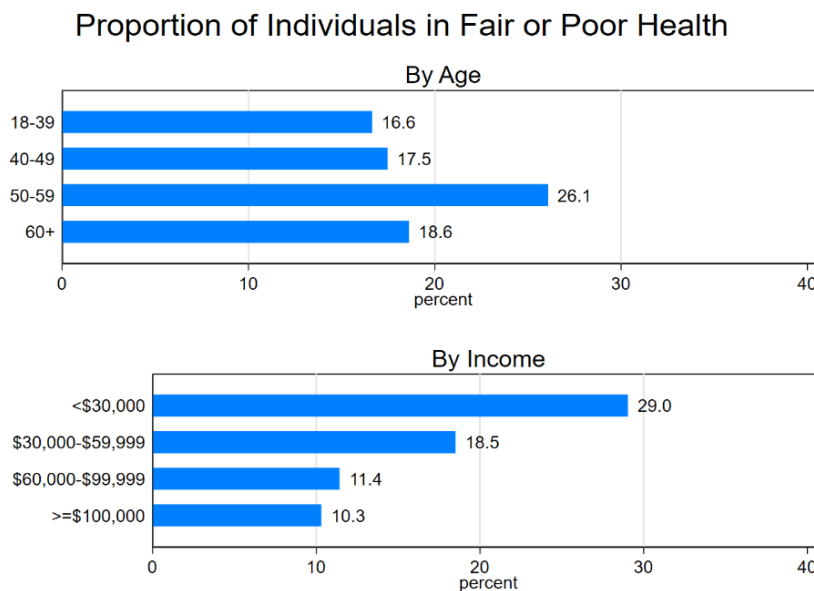
**Takeaway #3:** Last year, Asian and Hispanic residents were the least likely to seek medical care, and the high cost of care hurt dental health the most.

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- ◆ **81% of Angelenos rate their health as good or excellent, although poverty appears to be as harmful to health ratings as old age.**

Past research shows that a person's perception of their overall health is a strong predictor of their future mortality. The lower a person's perceived health, the lower their life expectancy is

likely to be. When asked to rate their overall health today, 81% of LA County residents report that their health is good, very good, or excellent; 19% report that their health is fair or poor.



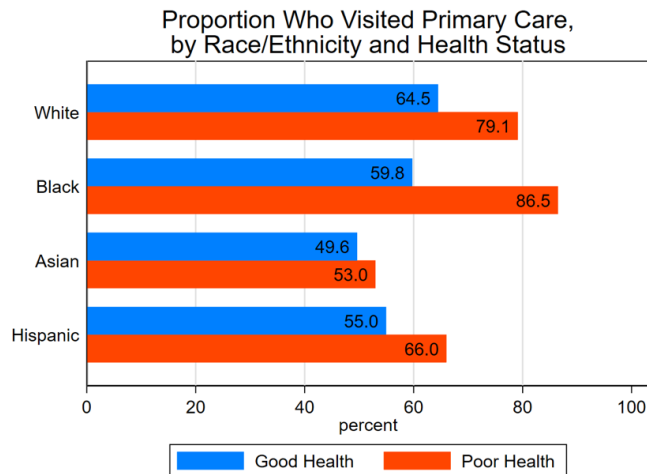
Upon further analysis, we find that health ratings vary substantially by income, age, ethnicity, marital status, and health insurance status. Respondents are significantly more likely to perceive their health as fair or poor if they are low income versus high income, 60+ years old versus 18-39 years old, Hispanic versus non-Hispanic white, and single versus married.

In fact, when we control for other demographic factors, we find that a household income below \$60,000 increases one's likelihood of reporting fair or poor health as much as aging 50+ years. We also find that 1 in 5 of the residents who report being in fair or poor health do not have access to health insurance or are unsure if they have health insurance.

◆ **In 2020, Asian and Hispanic residents were the least likely to seek medical care, regardless of their health. Men were less likely to seek care than women.**

On average, 60% of adult residents visited a primary care doctor at least once last year and 20% visited an urgent or emergency care center. Rates of care-seeking were consistently lower among Asian and male residents. Just 50% of Asian residents visited a primary doctor, compared to 67% of non-Hispanic white residents. Likewise, 14% of Asian residents visited an urgent or emergency care center, compared to 21% of non-Hispanic white residents. According to our analyses, racial differences in care-seeking diminish several percentage points when we control for differences in perceived health status and other demographic characteristics but the differences still remain large and statistically significant.

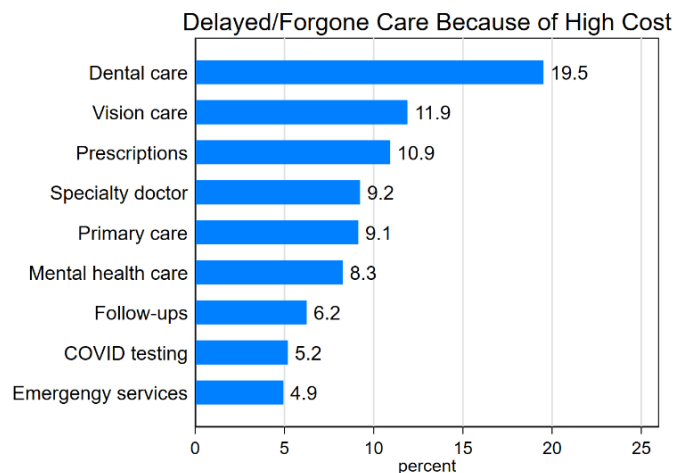




It is possible that this lower rate of care-seeking is at least partially attributable to the pandemic. Reports suggest that many in the U.S. have postponed necessary medical care due to concerns about COVID safety. Furthermore, from our survey work on the pandemic has shown that Asians and Hispanics are more likely than non-Hispanic whites to engage in certain protective behaviors like avoiding public spaces and sheltering in place.

◆ **1 in 3 L.A. County residents did not get the medical care they needed in 2020 because the cost of care was too high.**

When asked if they had delayed or gone without medical care in the last 12 months because the cost of care was too high, 30% of residents report having delayed or gone without at least one form of care. According to our survey, the health domains most frequently neglected by residents due to their high cost are teeth and vision, with 20% of residents not getting needed dental care due to cost and 12% not getting needed vision care.



- ◆ **Almost 90% of the people who saw a doctor last year were satisfied with the quality of the care they received, but 10% are still paying their medical bills.**

Among residents who *did* get the care they needed in 2020, a sizable majority reported feeling somewhat to very satisfied with the quality of the healthcare they received. The most satisfied patients were men, seniors, and high-income individuals, all of whom reported greater satisfaction with the quality of their care and the responsiveness of their doctors than females, young people, and low- or middle-income individuals. We also find that 10% of Angelenos are still paying off debt from medical bills, and the biggest determinant of having unpaid medical debt is reporting a household income that is less than \$100,000.

## Food Insecurity

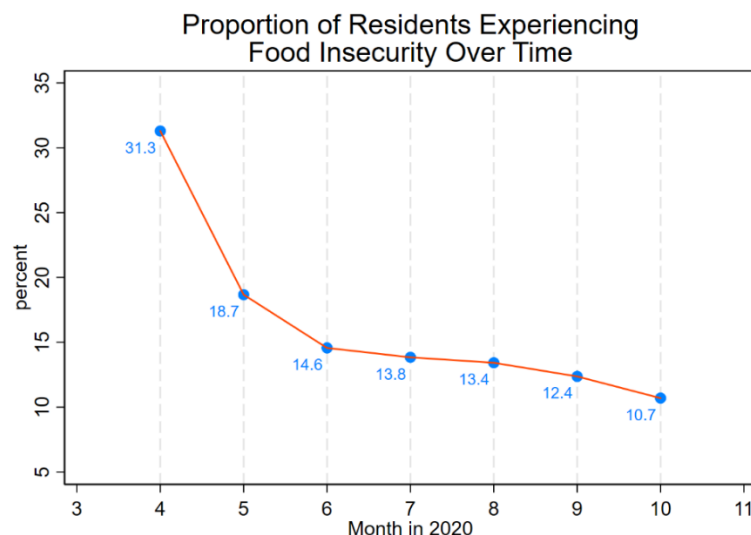
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**Takeaway #4:** Food insecurity affects 1 in 9 adults and is most common among residents who are young, low-income, and isolated in food deserts.

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- ◆ **In late 2020, 1 in 9 adults – approximately 870,000 Angelenos – experienced mild to severe food insecurity.**

When asked to report on their food habits and experiences over a two-week period, 11% of residents reported experiencing some level of food insecurity, including 11% who worried about having enough food to eat (mild food insecurity), 9% who ate less than they thought they should (moderate food insecurity), and 4% who did not eat for a whole day (severe food insecurity).

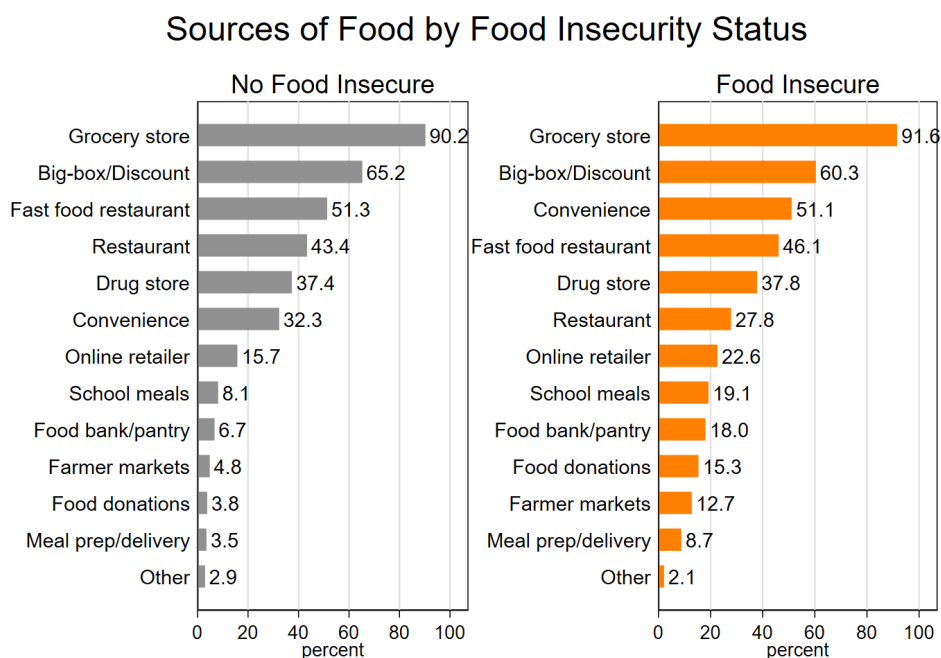


While levels of food insecurity were high towards the end of 2020, they were much lower than towards the start of the COVID-19 pandemic in April 2020, when 31% of residents experienced some form of mild to severe food insecurity. This is likely attributable to the economic relief many received from the CARES Act, as levels of food insecurity were particularly high among residents who had lost their jobs as a result of the lockdowns.

◆ **Food insecurity is more prevalent among residents who travel further for food and rely more heavily on convenience stores – two common markers of living in a food desert.**

Upon further analysis of food insecurity in L.A. County, we find that age, income, and distance from food are all significantly correlated with experiences of food insecurity. More specifically, we find that food insecurity is more common among young adults, low-income residents, and residents who must travel a long distance to get their food. Residents who travel more than 5 miles for food are twice as likely to be food insecure as those who travel less than 5 miles.

There are also clear differences in where food secure and insecure residents get their food. When asked about their food sources over a two-week period, 14% of L.A. County residents, including 33% of food insecure residents, reported getting some or all of their food through school-provided meals, food pantries, or donations from community organizations.



Additionally, food insecurity was significantly associated with an increased reliance on convenience stores, a common source of food in food deserts. Approximately 49% of food-insecure residents reported getting their food from a convenience store, compared to 32% of

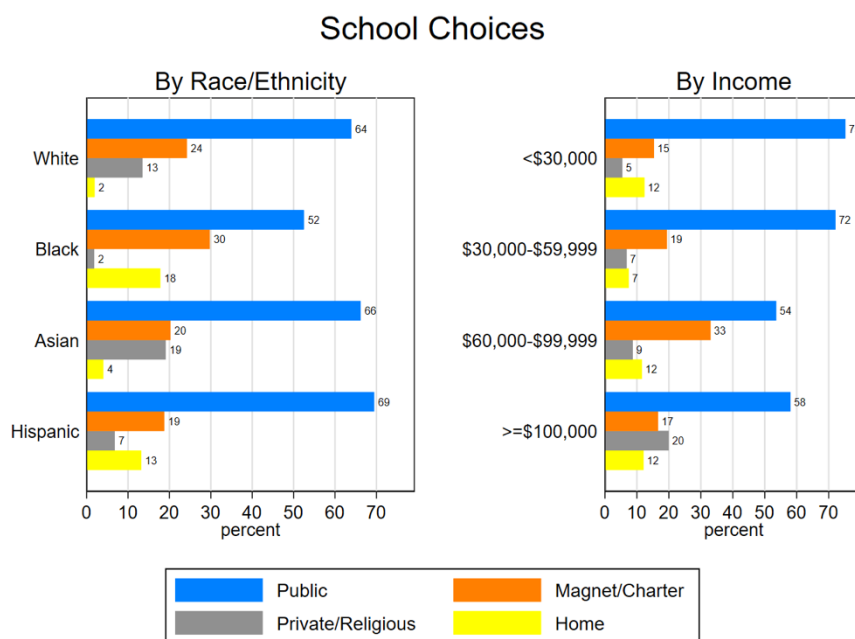
food-secure residents. While our data do not include measures of the types of food purchased by respondents, it is well established that convenience stores offer higher-priced food, on average, of lower quality and less variety than many other types of food stores.

## Quality of Education

**Takeaway #5:** The majority of non-white parents feel their children are getting a better education than they did as children, yet black parents are more likely to look outside their neighborhood for schooling options.

- ◆ **Two-thirds of L.A. County parents send their children to neighborhood public schools, but less than half of Black parents do.**

While only about half of L.A. County parents rate the overall quality of their local schools as good or excellent, 67% send their children to neighborhood public schools. After neighborhood public schools, the most frequently attended are public magnet schools (12%), charter schools, home schools (11%), and private, religious, or charter schools (9%).

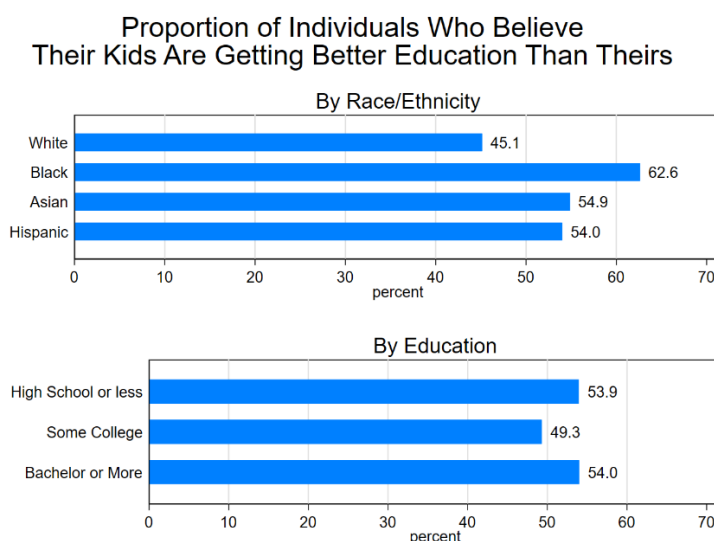


Notably, our data show that patterns of school choice vary substantially by race. Black parents (52%) are significantly less likely than white (64%), Asian (66%), and Hispanic (69%) households to send their children to local public schools.

This racial difference in school choice is likely attributable to longstanding racial inequalities in access to high-quality public education. It is well-established that predominantly white and Asian neighborhoods offer residents higher quality public schooling options, on average, than predominantly black neighborhoods. As a result, black parents who live in predominantly black neighborhoods and want their children to attend a high quality school must spend more time and energy than other parents searching outside of their neighborhood for adequate schooling options.

◆ **Over half of non-white parents and lower-educated parents report that the quality of their children’s schooling is better than the schooling they received as children.**

When asked to compare the education their children are currently receiving to the education they received as children, Black, Hispanic, and Asian parents are significantly more likely than non-Hispanic white parents to report that their children are receiving a better education than the one they received as children. More specifically, we find that 63% of Black parents, 55% of Asian parents, and 54% of Hispanic parents report that their children are receiving a better education, compared to 45% of non-Hispanic whites.



We see less variation by education in the percent of parents who feel this way about their children’s education. However, it is notable that 54% of parents with a high school education or less, along with 54% of parents with a Bachelor’s degree or more, feel their children are getting a better education than they did. Altogether, these findings offer some hope of intergenerational mobility in households that have historically faced many disadvantages in L.A.’s educational system.

## ABOUT US

### USC Dornsife-Union Bank LABarometer

LABarometer is a quarterly, internet-based survey of approximately 1,800 randomly selected Los Angeles County residents, designed and administered by the *Center for Economic and Social Research* at the University of Southern California. The survey monitors social conditions in Los Angeles, with a focus on four key issues: livability, mobility, sustainability & resiliency, and affordability & prosperity. By following the same residents over time, LABarometer aims to capture trends and shifts in residents' attitudes and circumstances, allowing decision-makers in the public and private sectors to better understand the evolving lives and needs of L.A. residents. LABarometer is made possible by the financial support of Union Bank.

### Center for Economic and Social Research

The Center for Economic and Social Research (CESR), part of the USC Dornsife College of Letters, Arts and Sciences, conducts basic and applied research in economics, psychology, demography, and sociology. The center's name signifies the breadth of the research, which encompasses numerous disciplines, topics and methodologies. The Center's multi-disciplinary philosophy fosters an informal and free-flowing research environment.

### About the Affordability & Prosperity Survey

The LABarometer Affordability & Prosperity survey assesses the accessibility and affordability of four key resources in L.A. County: housing, healthcare, food, and education. It will also assess residents' financial health and spending habits, their barriers and pathways to social and economic mobility, and the real and perceived impact of growth and change in their neighborhoods.

### The Team

\*Special thanks to the Understanding America Study team and the USC Dornsife Office of Communication for their expertise and support. Thank you as well to the government agencies, businesses, and non-profits we consulted with at the early stages of survey design.

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# APPENDIX

## LABarometer Panel Information

### The LABarometer Panel

The LABarometer panel is an internet survey panel of approximately 1,800 individuals (as of September 28, 2020) residing throughout Los Angeles County. LABarometer is a subpanel of the Understanding America Study (UAS), a national internet panel managed by the USC Dornsife Center for Economic and Social Research.

Following UAS procedures, LABarometer panel members are recruited through address-based sampling using postal codes. Eligible individuals are all non-institutionalized adults aged 18 and older living in a contacted household in LA County. Compared to convenience (“opt-in”) panels, LABarometer’s probability-based panel is more likely to accurately reflect our population of interest, LA County, and to reduce biases in our estimates. All LABarometer surveys include weights, which allow data users to generalize survey results to the larger population of Los Angeles County residents.

Below is a summary of the demographic composition of the LABarometer panel (as of September 28, 2020), alongside LA County population benchmarks for individuals aged 18 and older obtained from the Basic Monthly Current Population Survey (March 2020-August 2020).

**LABarometer Panel Demographic Characteristics and Population Benchmarks**  
(percentages)

| Demographic Characteristics | LABarometer Panel<br>(N = 1,761) | Los Angeles County<br>(N = 7,846,375) |
|-----------------------------|----------------------------------|---------------------------------------|
| Male                        | 38.0                             | 48.8                                  |
| Age                         |                                  |                                       |
| 18-34                       | 35.8                             | 30.5                                  |
| 35-44                       | 22.0                             | 20.2                                  |
| 45-54                       | 16.4                             | 16.0                                  |
| 55-64                       | 12.8                             | 14.9                                  |
| 65+                         | 13.0                             | 18.4                                  |
| Race & Ethnicity            |                                  |                                       |
| NH White                    | 28.1                             | 29.2                                  |
| NH Black                    | 7.9                              | 8.0                                   |
| NH Other                    | 16.5                             | 17.5                                  |
| Hispanic                    | 47.5                             | 45.3                                  |
| Education                   |                                  |                                       |
| High school or less         | 21.1                             | 39.4                                  |
| Some college                | 37.2                             | 24.9                                  |
| BA or more                  | 41.7                             | 35.7                                  |

### The Understanding America Study

The Understanding America Study (UAS) is a national internet panel of approximately 9,000 non-institutionalized adults living in households throughout the U.S. It includes special subpanels of California residents, LA County residents (the LABarometer panel), and Native Americans. The

UAS started in 2014 and has been expanding since. Panel members are recruited in batches through a probability-based sampling design. As of September 28, 2020, there are 21 recruitment batches. The UAS draws from multiple sample frames ( U.S., California, Los Angeles County, Native American populations), but each batch is drawn from only one frame. The UAS uses an adaptive sampling approach to keep the subpanels representative of their target populations, even in the face of selective nonresponse and attrition. Nevertheless, sampling weights that adjust for imbalances in the distribution of demographics and socio-economic variables are provided with each survey. To ensure full coverage of the targeted populations, the UAS provides internet-connected tablets to individuals who do not have internet access.

## **Panel Recruitment and Retainment**

Procedures for LABarometer panel recruitment and retainment follow UAS procedures. For a full description of UAS recruitment procedures, visit: <https://uasdata.usc.edu/page/Recruitment>. For a full description of UAS retainment procedures, visit: <https://uasdata.usc.edu/page/Retainment>.

In line with the general UAS recruitment procedure, LABarometer panel members were recruited in batches. The bulk of the LABarometer panel (91%) belongs to batches specifically targeting LA County residents, namely LA County Batches 2-5.<sup>1</sup> The remainder of the sample is split between California Batches 1 and 2 targeting California residents, which account for 5% of the LABarometer sample, and the ASDE Nationally Representative Batch and MSG Nationally Representative Batches 1 and 4-8, accounting for another 4% of the sample. For a full description of response rates for each batch, visit: <https://uasdata.usc.edu/page/Response+And+Attrition>.

Attrition rates have not yet been calculated for the LABarometer panel. LABarometer attriters are defined as panel members who have not participated in a UAS survey in 10 months or who, according to the UAS quarterly household survey, no longer reside in Los Angeles County.

## **Survey Participation**

LABarometer panel members take surveys specifically designed for LA County residents, as well as general UAS surveys, which allow for comparisons of outcomes between LA County and other geographic areas in the country. Response rates for each LABarometer survey are provided with each survey's documentation. All surveys are distributed online in English and in Spanish and are mobile-friendly. To participate in a survey, panel members can use any computer, cell phone, or tablet with internet access.

## **Standard Variables**

Following UAS procedures, each LABarometer data set contains a set of default survey and demographic variables. Default survey variables include individual, household, and batch identifiers, language indicator, time stamps, and respondents' rating of how much they liked the survey. The demographic variables provide background information on the respondent and household, including gender, age, race/ethnicity, education, marital status, work status, state of

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<sup>1</sup> UAS recruitment batch 4 is a simple random sample from a list of women who gave birth in Los Angeles County between 2009 and 2012 in zip codes around restaurants participating in a healthy menu options project. Because of the highly specific nature of this subsample, we do not include UAS members from batch 4 in the LABarometer sample.

residence, family composition, and family income. Demographic variables are taken from the most recent MyHousehold survey, which elicits UAS members' basic demographic information every quarter. If at the time of a survey, the information in MyHousehold is more than three months old, a respondent is required to check and update the information before being able to take the survey. The complete list of standard variables included with each LABarometer (and UAS) data set is available at <https://uasdata.usc.edu/page/Standard+Variables>.

## Survey Weights

Each LABarometer data set includes a set of survey weights. These weights allow data users to generalize survey results and statistics to the reference population. This is the Los Angeles County adult population, for LA County-specific surveys, or the U.S. adult population for general UAS surveys.<sup>2</sup> The weighting procedure consists of two steps. In the first step, we generate base weights that correct for unequal probabilities of selection in the sample. Due to selective nonresponse, the sample of actual respondents may have different characteristics than the population of interest, even after correcting for different sampling probabilities through the base weights. Hence, in the second step, we calculate post-stratification weights (using a raking algorithm) so that weighted distributions of specific socio-demographic variables in each survey sample match their population counterparts. The socio-demographic variables used in this second step of the weighting procedure are gender, race/ethnicity, age, and education. For post-stratification purposes, population benchmarks are obtained from the Basic Monthly Current Population Survey. A full description of the general UAS weighting procedure can be found at <https://uasdata.usc.edu/page/Weights>.

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<sup>2</sup> In national surveys relevant for the LABarometer project, separate weights for Los Angeles residents, California residents (excluding Los Angeles), and U.S. residents (excluding Los Angeles and California) are also provided.