



Public Health

in affiliation with



**Riverside County Public Health
Community Health Assessment
2023**

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ACKNOWLEDGEMENTS

HARC would like to thank the Riverside University Health System – Public Health staff who worked on this project, presented here in alphabetical order by last name:

- Erin Curlee
- Sandra Escobar
- Wendy Hetherington
- Kevin Meconis

This project was supported by Epidemiology and Laboratory Capacity Enhancing Detection funds, which expands upon previous COVID-19 awards and is provided by the Centers for Disease Control and Prevention by way of the Paycheck Protection Program and Health Care Enhancement Act Response Activities for Cross-Cutting Emerging Issues. These funds provide critical resources to local health departments in support of a broad range of COVID-19/SARS-CoV-2 testing and epidemiologic surveillance related activities, including the establishment of modernized public health surveillance systems.

HARC extends its appreciation to the following contributors for their valuable support:

1. Ace Printing, notably Mark Lawrence and Sandy Miller, for their dedicated efforts in mailing out surveys and post-incentives. Discover more about Ace Printing at: <http://www.aceprintingps.com/>.
2. Our diligent volunteers and interns, including Braden Hinely, Fernanda Diaz, and Xitlaly Lopez, who played crucial roles in the project.
3. Brian Kriz, the skilled statistician, for his expertise in weighting the data, ensuring accurate representation of Riverside County.
4. Local artist, Consuelo Marquez, who contributed artwork to this report. Learn more about her in Appendix A.
5. Riverside County residents who took the time to respond to the survey. Without you, this knowledge would not have come to fruition.

EXECUTIVE SUMMARY

Introduction

This report summarizes data collected to assist with Riverside University Health System – Public Health’s Community Health Assessment (CHA). It was collected as a part of a survey conducted on COVID-19 attitudes towards the virus and vaccination as well as the needs of Riverside County adults. The present report was developed by HARC, Inc. on behalf of Riverside University Health System – Public Health (hereafter referred to as RUHS – Public Health). HARC and RUHS – Public Health conducted the first Riverside County COVID-19 Needs Assessment in 2021; this second study is a continuation of that previous work.

Methods

HARC and RUHS – Public Health worked together to create the survey content. CHA content was added by RUHS – Public Health team members. This survey was conducted via address-based random sampling. Specifically, paper surveys in English and Spanish were mailed out to 40,000 residential addresses across Riverside County with a \$2 pre-incentive, a pre-paid return envelope, and the possibility of winning a \$100 Visa gift card upon completion and return of the survey. Initial invitations were sent out in November 2022, reminders were sent to non-responders in January 2023 and February 2023.

The final sample size was 4,804 local adults, representing a 12% response rate. This data was then weighted by a statistician to better represent the demographics of the population as a whole. The demographics of the sample, once weighted, represented the actual population of the County.

Results

Racial Equity

Overall, about a quarter of participants said they had paid “a lot of attention” to issues of race and racial inequality over the past three months. However, another quarter said they’d paid no attention at all. Similarly, opinions were split on whether the amount of attention paid to racial issues in the U.S. was appropriate.

The majority of participants (63%) believe that it is “very important” to educate themselves about the history of racial inequality in our country. In contrast, only 18% believe it is “very important” to attend protests or rallies focused on issues related to racial inequality.

Inflation

Participants were also asked about how inflation had impacted them. Most described how inflation had affected their life (e.g., increased cost of goods and services without an increase in income). Several said that it had not affected them in any way. However, others said they were trying to fight back by working more (even coming out of retirement to go back to work) and budgeting/minimizing their spending. A common theme was how stressful living on a tight budget can be; some were forced to dip into their savings to make ends meet while others racked up credit card debt.

Great Resignation

To assess the impact of the “Great Resignation” locally, participants were asked whether they voluntarily quit a job in 2021 or 2022; approximately 11% did, equating to 172,112 adults. The most common reasons for quitting included low pay, being disrespected at work, lacking opportunities for advancement, and lacking flexibility in scheduling.

Neighborhood Quality

Participants were asked to rate the quality of their neighborhood as it pertained to several different domains. Overall, transportation and the economy have the lowest ratings overall; 15% rate the quality of transportation in their neighborhood as “poor” and 14% rate the quality of the economy in their neighborhood as “poor”. In contrast, health/wellness, housing, and the environment are at excellent, with 16.5%, 14.2%, and 13.9%, respectively.

Most important Health Problems

Participants were asked to select the five most important health problems that need to be fixed in their community from a list of options, and additional comments were available to write in. Results show that the most important health problems included mental health, a shortage of healthcare professionals, and delays in access to healthcare.

Most Important Social Issues

To determine social issues, participants were asked to select the five most important social problems that need to be fixed in their community with an option to fill other concerns. Results show that the most important social problems included homelessness, and high housing costs (purchase or rental).

General Health

In general, participants rate their mental health slightly better than their physical health. Approximately 19% of people rated their physical health as “fair” or “poor”, and 16% rated their mental health as “fair” or “poor”.



INTRODUCTION

About RUHS – Public Health

Established in 1926, the RUHS – Public Health is the local, public agency responsible with ensuring the health and well-being of county residents and visitors. RUHS – Public Health's values of respect, integrity, service, and excellence are demonstrated through their strong partnerships with community-based organizations, academic institutions, tribal organizations, faith-based organizations, local governmental agencies and community leaders, local business, social service providers, nongovernmental organizations and other relevant partner organizations necessary to improving the health of Riverside County's community.

About HARC

HARC, Inc. (Health Assessment and Research for Communities) is a nonprofit research and evaluation organization based in Riverside County. HARC advances the quality of life by helping community leaders use objective research and analysis to turn data into action. HARC specializes in providing data that helps improve the social determinants of health. Social determinants of health are the nonmedical factors or conditions that influence health outcomes. This includes factors such as the economy, education, social structures and support, neighborhoods, the built environment, and of course, healthcare. A healthy community provides residents with education, jobs that pay a living wage, safe and affordable housing, social support, accessible and affordable healthcare, safety from discrimination and injustice, and much more. HARC provides data to support these healthy communities in all aspects of health and wellness.

Presented in this report is a comprehensive summary of a survey conducted on attitudes towards COVID-19, vaccination, and health and social problems identified by Riverside County adults. This project was supported by Epidemiology and Laboratory Capacity Enhancing Detection funds, which expands upon previous COVID-19 awards and is provided by the Centers for Disease Control and Prevention by way of the Paycheck Protection Program and Health Care Enhancement Act Response Activities for Cross-Cutting Emerging Issues. The present report was developed by HARC, Inc., on behalf of Riverside University Health System – Public Health (hereafter referred to as RUHS – Public Health). This is the second study on COVID-19 in Riverside County conducted by HARC and RUHS – Public Health.

METHODS

Survey Development

HARC and RUHS – Public Health conducted an initial COVID-19 needs assessment in 2021 (hereafter referred to as “2021 study” for the sake of simplicity, despite the report coming out in 2022). The initial survey developed by HARC and RUHS – Public Health in 2021 was adapted for 2022/2023, reflecting lessons learned from the first round of the survey, as well as emerging issues (e.g., long COVID). The final survey¹ included 116 questions that covered both COVID-19 and general health. The survey included questions in which respondents could select one response, check all that apply, or write in their own words. The final survey was translated into Spanish by HARC staff; it was offered in English and Spanish to all participants.

The methods used in the 2021 study were paper surveys mailed out with a \$2 pre-incentive and the promise of a \$25 post-incentive. However, based on funding restrictions, the methods this time around included a paper survey with a \$2 pre-incentive and the opportunity to potentially win a \$100 post-incentive (randomly selected from all participants). The survey and data collection methods were approved by Heartland Institutional Review Board (IRB) on October 10, 2022.

Ace Printing purchased (from a database of residential mailing addresses) a random sample 40,000 households in Riverside County. HARC and Ace mailed an “invitation package” to all 40,000 households, which included a cover letter (in English and Spanish), a paper survey in English, a paper survey in Spanish, a pre-paid return envelope, and a \$2 bill as a pre-incentive. Each survey was printed with a unique identifier code so that each household could only participate once. The initial invitation survey package was mailed out in late November/early December 2022; residents were asked to return the completed surveys by the end of December 2022.

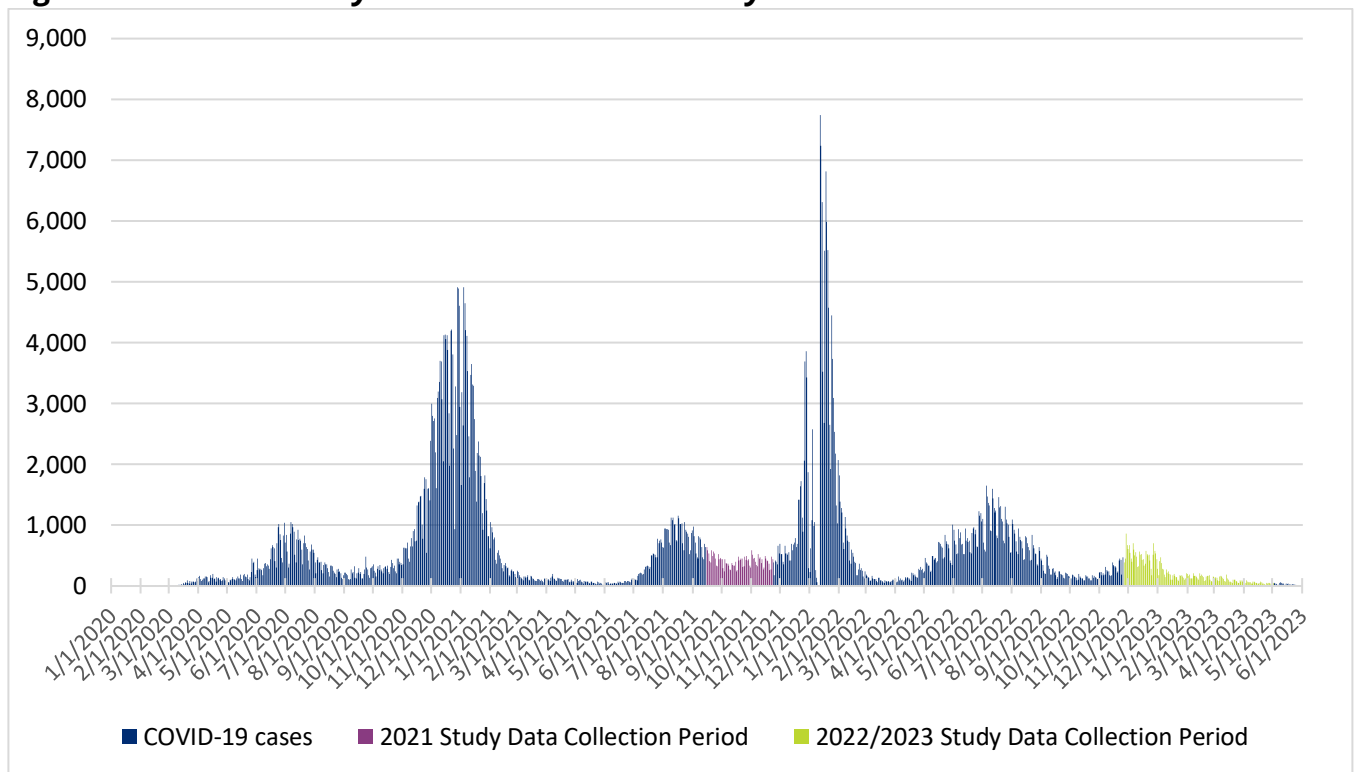
Reminder packages were mailed to non-respondents, in late January 2023. Reminder packages included the same materials with the exception of the \$2 pre-incentive. The letter specified that responses should be received by mid-February 2023. A second round of reminder packages (same materials mentioned previously) were mailed to non-respondents at the end of February. The letter specified that responses should be received by the end of March 2023.

¹ See Appendix B for the full survey utilized in the 2022/2023 study (in English), as well as endnotes containing references for question sources and modifications.

HARC processed incoming surveys and entered them into an online database. Data entry was completed on May 3, 2023. Some surveys came trickling in after data entry was completed on 5/3/2023; however, due to time constraints on the reporting, these were not included in the final dataset or the final report.

Figure 1 below provides additional context to the data collection timeline for both studies (2021 study is represented in purple, the 2023 study is represented in green).

Figure 1. COVID-19 Daily Cases in Riverside County



Note: Data in chart are from RUHS - Public Health.

Next, the dataset was sent to a statistician for weighting. Weighting is important to ensure that the results of the survey appropriately represent the county. Missing data were imputed using a hot deck method. Iterative proportional fitting was used to ensure marginal distributions for age, sex, race by ethnicity, and household income aligned. Weights were rescaled to the 2021 Census population estimates (1,853,876 adults living in Riverside County). See Appendix C for the details of the weighting methodology.

The final sample size of 4,804 equates to a response rate of approximately 12.0%; this is substantially lower than the 2021 study response rate of approximately 21.5%. This decrease is likely due to the methods change from giving a \$25 Visa card to all completers to an opportunity to win a \$100 Visa card.

Because of the weighting of the data, the population estimates illustrated in this report are closer to 1,853,876 (the number of adults in Riverside County) rather than 4,804 (the number of completed surveys). This report may refer to “residents” a number of times, and these residents are always Riverside County residents who are ages 18 and older.

While figures/tables may include estimates such as “percentages”, “frequencies”, “counts”, etc., these all refer to weighted estimates (i.e., estimates weighted to the population counts provided by the Census) and weighted percentages (percentages based on the weights from the Census). Lastly, many questions on the survey were open-ended and residents could provide any response they desired. These areas were qualitatively analyzed in which common responses were grouped into themes post-data-collection.

RESULTS

A total of 4,804 surveys from the randomly selected sample of 40,000 Riverside County households were completed and sent back to HARC by the close date of the survey. Throughout the report, comparisons may be made to the first COVID-19 needs assessment conducted by HARC and RUHS – Public Health; for simplicity's sake, the first study shall be referred to as “2021 study” while the current study will be referred to as “2023 study”.

Weighted Data

Overall, a diverse sample of Riverside County residents responded to the survey. However, there were some slight biases towards older and White-identifying individuals. Thus, the survey results were weighted to account for these demographic differences to provide a more representative illustration of the county.

All results that follow were weighted² according to the United States Census Bureau, American Community Survey, 2021 1-year estimates (Age, Sex, Race, Ethnicity, Household Income, and Education). This essentially helps to “correct” for the skewed data, although it does not match the Census data identically.

It is worth noting that the data from this second study (2022/2023) was less closely matched to the Census data than the prior study from 2021. It is likely that the lack of a post-incentive in the methods made the survey less appealing to people with limited time (e.g., younger working adults vs. older retired adults).

Finally, the survey results contain data for and are weighted for the adult population only. Thus, this report may refer to “residents” a number of times, and these residents are always Riverside County residents who are ages 18 and older.

² See Appendix C for more detail on the weighting procedure.

Demographics

Geography

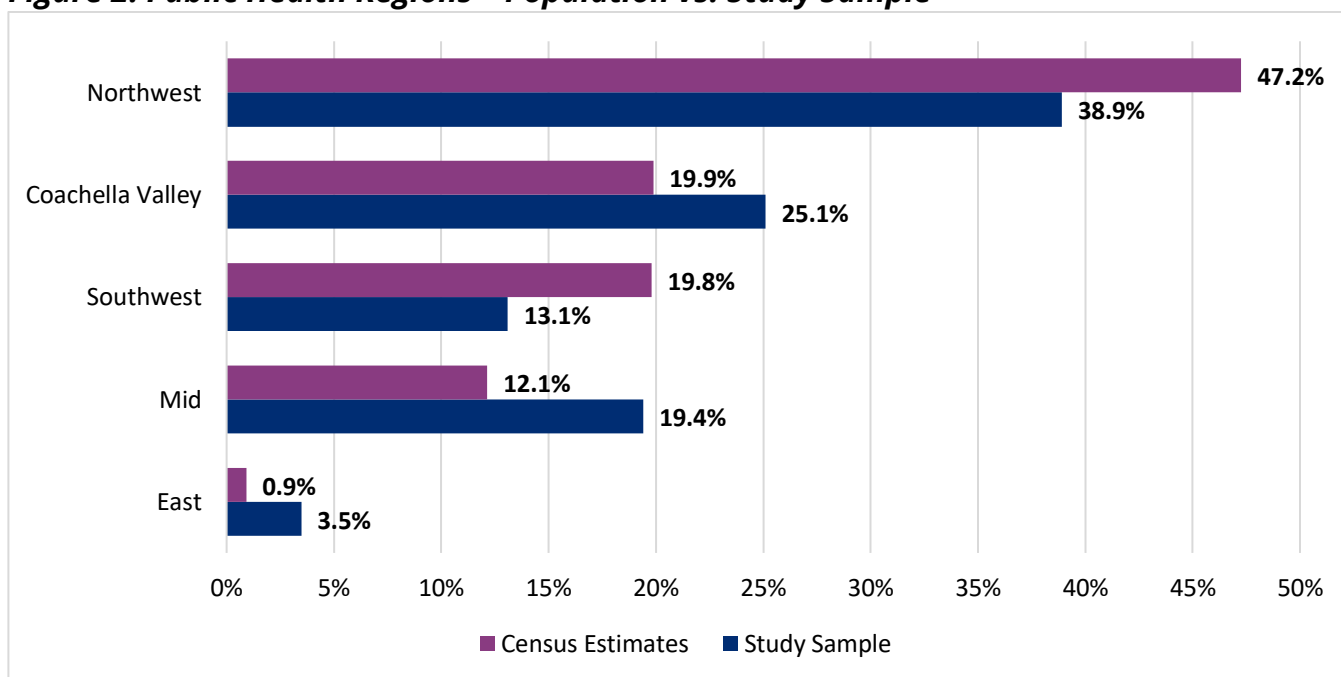
Residents were sampled from addresses across Riverside County. The most common city of residence in the sample was Riverside, accounting for 12.0% of the sample.

Each city within Riverside County is organized into Public Health Regions, which are mutually exclusive of each other. The purple bars in Figure 2 below represent the approximate population of each region (based on the Census Bureau's estimates) while the blue bars represent the study participants.

Overall, the study sample matches well with the actual population; the study sample slightly over-represents the less populous regions (East region and Mid region) while slightly under-representing the most populous region (Northwest). However, no individual region of the County was especially over-represented in the final sample and as such can be utilized with confidence that it reflects the entire geography of the county.

See the table on the following page for a list of cities by each Public Health Region.

Figure 2. Public Health Regions – Population vs. Study Sample



Note: Census estimates based on adult population (18 years and over) American Community Survey – 5-year estimates. $n = 1,783,367$ for study sample.

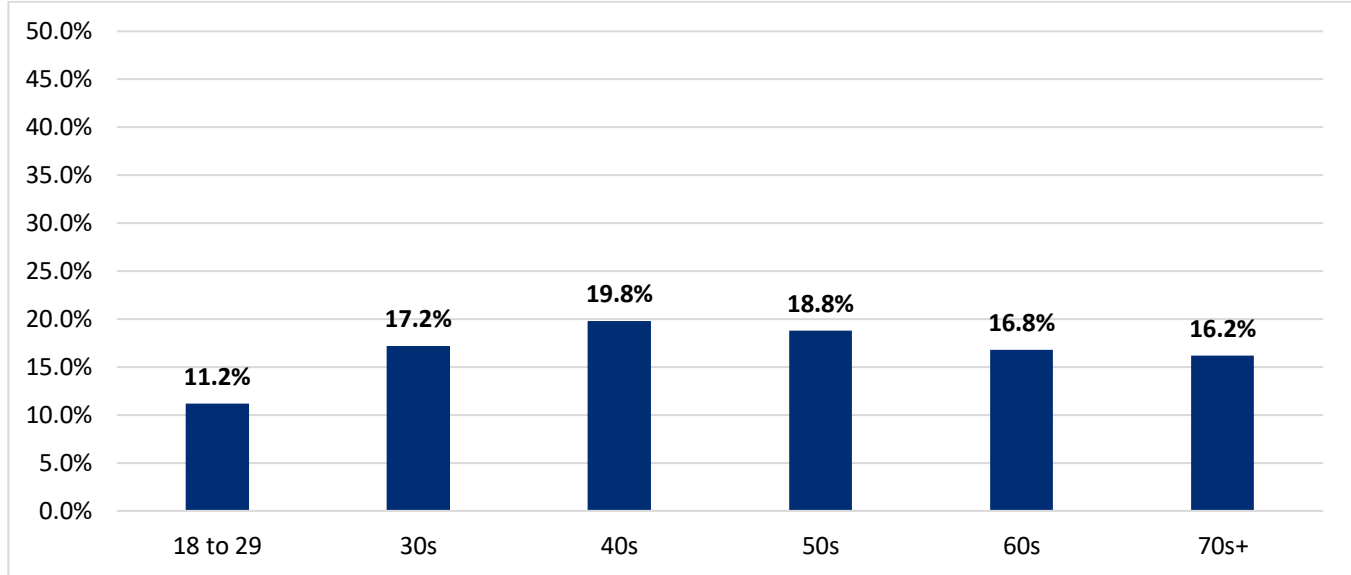
Table 1. Public Health Region by City

| Northwest | Southwest | Mid | Coachella Valley | East |
|------------------|------------------|---------------------|-------------------------|---------------|
| Corona | Canyon Lake | Aguanga | Bermuda Dunes | Blythe |
| Coronita | French Valley | Anza | Cathedral City | Desert Center |
| Eastvale | Lake Elsinore | Banning | Coachella | Mesa Verde |
| El Cerrito | Lakeland Village | Beaumont | Desert Edge | Ripley |
| El Sobrante | Meadowbrook | Cabazon | Desert Hot Springs | |
| Good Hope | Menifee | Calimesa | Desert Palms | |
| Home Gardens | Murrieta | Cherry Valley | Garnet | |
| Jurupa Valley | Temecula | East Hemet | Indian Wells | |
| Lakeview | Warm Springs | Green Acres | Indio | |
| Nuevo | Wildomar | Hemet | Indio Hills | |
| Lake Mathews | | Homeland | La Quinta | |
| March ARB | | Idyllwild-Pine Cove | Mecca | |
| Mead Valley | | Lake Riverside | North Shore | |
| Moreno Valley | | Mountain Center | Oasis | |
| Norco | | San Jacinto | Palm Desert | |
| Perris | | Valle Vista | Palm Springs | |
| Riverside | | Winchester | Rancho Mirage | |
| Romoland | | | Sky Valley | |
| Temescal Valley | | | Thermal | |
| Woodcrest | | | Thousand Palms | |
| | | | Vista Santa Rosa | |
| | | | Whitewater | |

Age

Participants ranged in age from 18 to 101 years old. The median age of residents was 65. See Figure 3 for age groups.

Figure 3. Age (Imputed) Categories

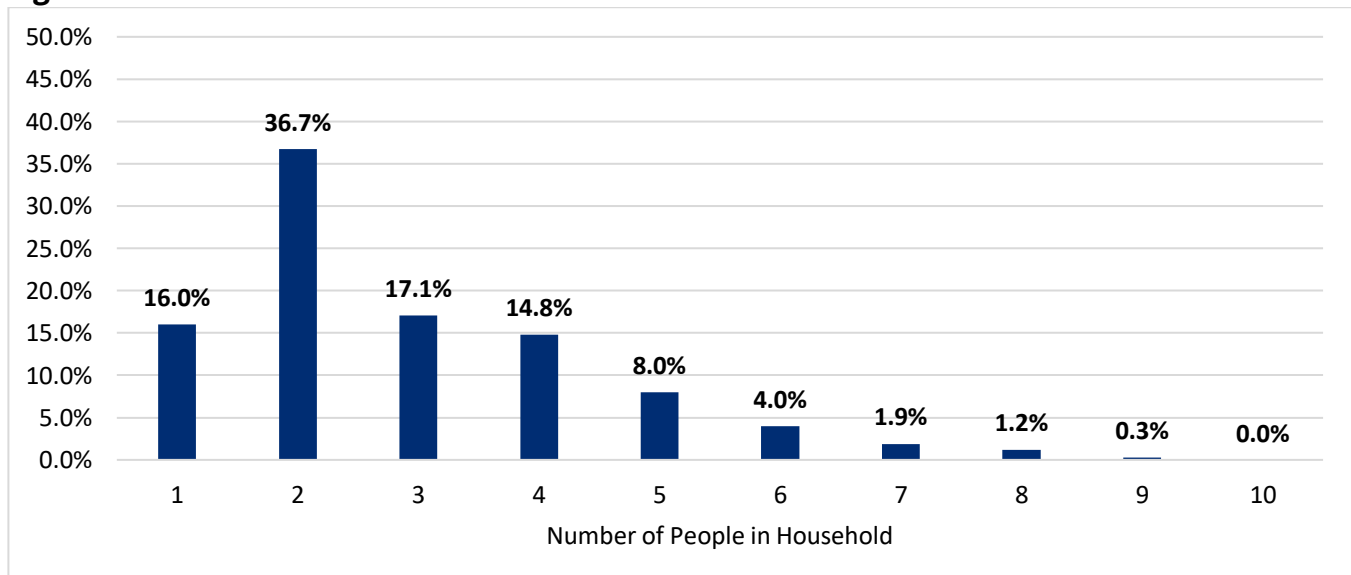


Note: $n = 1,853,876$.

Household Size

The median household size for Riverside County was two people. As illustrated in the figure below, most participants live in households with one resident (16.6%) or two residents (38.8%). See Figure 4 below for additional details.

Figure 4. Household Size

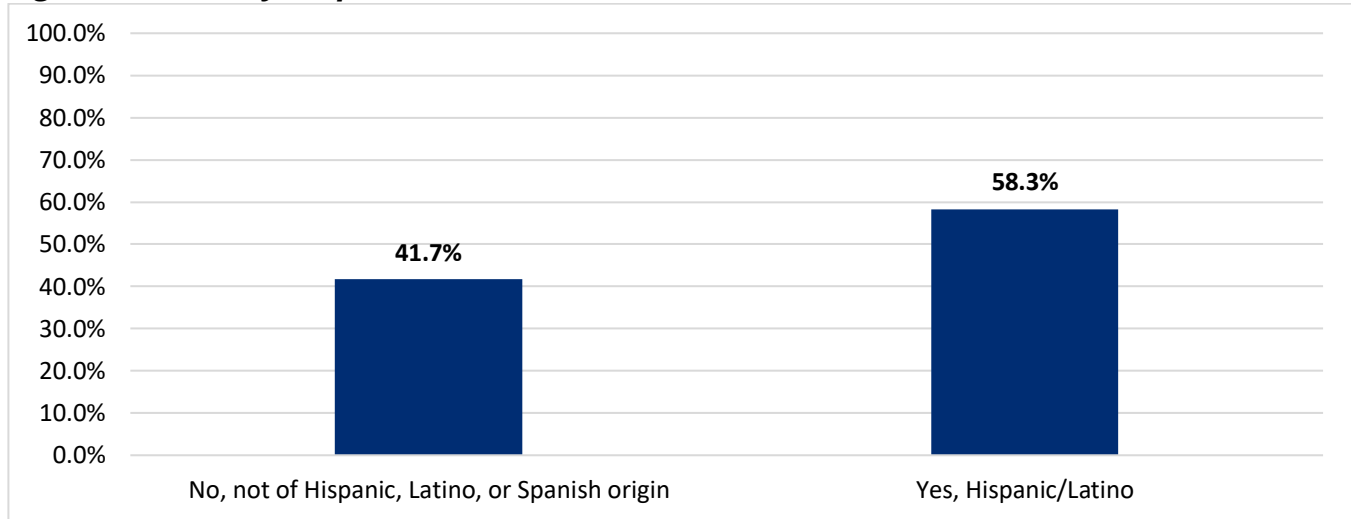


Note: $n = 1,782,500$.

Ethnicity

More than half the sample identified as Hispanic/Latino (58.3%), as illustrated below.

Figure 5. Ethnicity (Imputed)

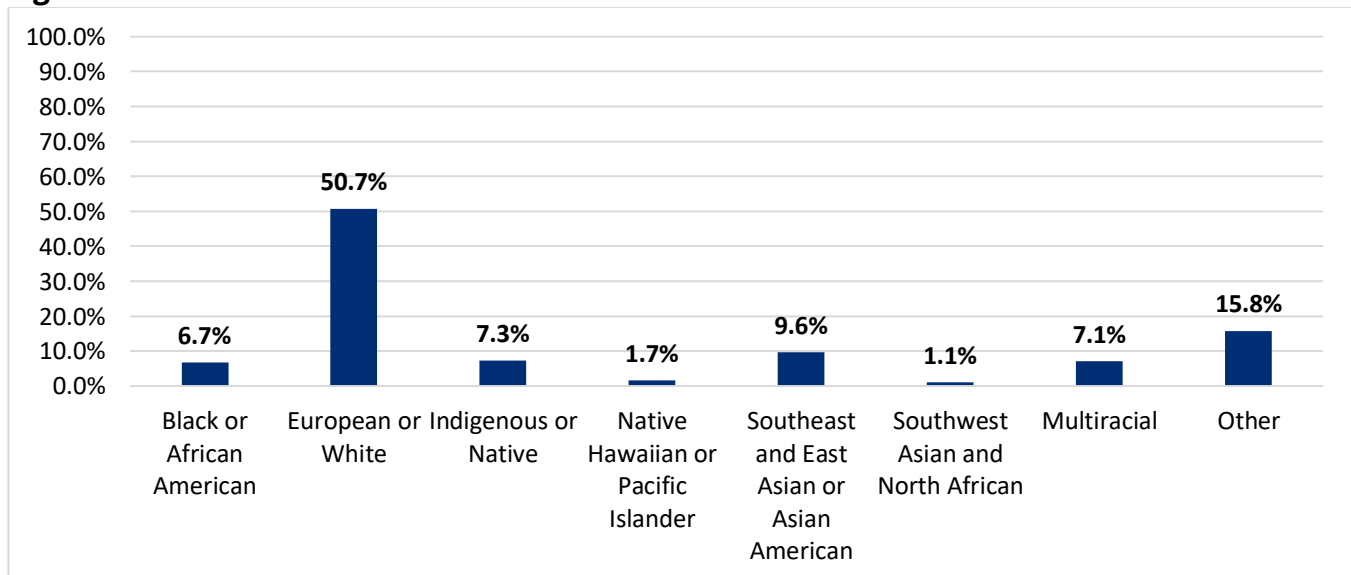


Note: $n = 1,853,876$.

Race

When measuring race per the Census Bureau (that is, where Hispanic/Latino³ is an ethnicity and not a race), slightly more than half of participants (50.7%) identify their race as European/White. See Figure 6 below for additional details.

Figure 6. Race



Note: $n = 1,572,951$.

³ Note that this is the procedure used by the U.S. Census for racial classification. Residents identifying as Hispanic/Latino typically select "Other" on this questioning.

Gender Identity

Two questions were utilized to measure gender identity, per best practices established in the field of survey research.⁴ Firstly, residents were asked, “What sex were you assigned at birth, on your original birth certificate?” As illustrated in Table 2, post-weighting, females are slightly more common (57.1%) in the sample than males (42.9%).

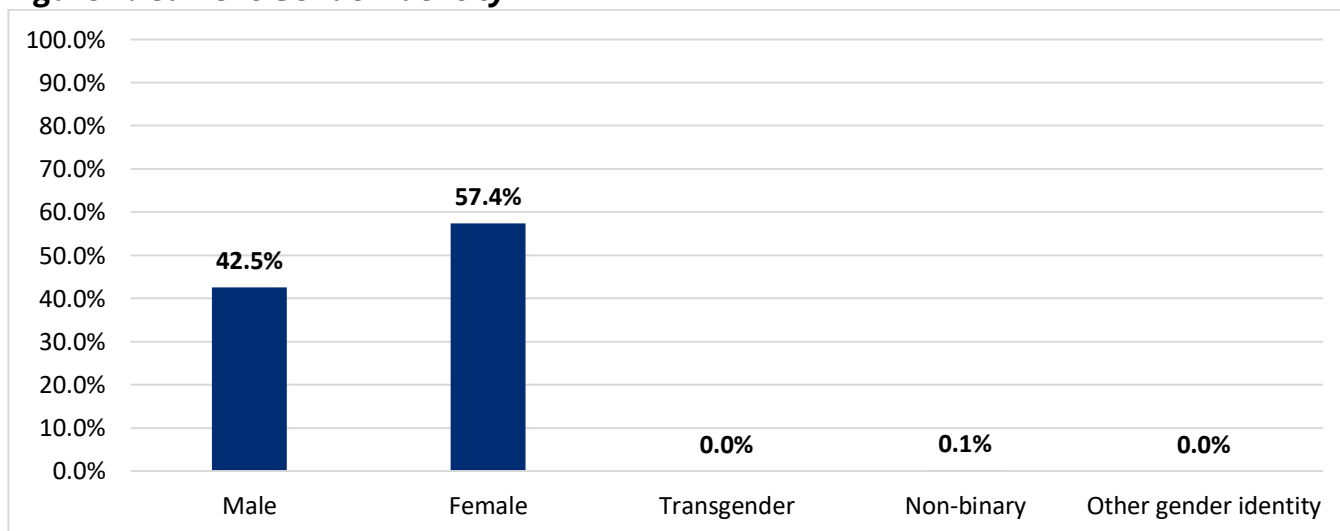
Table 2. Sex Assigned at Birth

| Sex Assigned at Birth | Study Sample |
|-----------------------|---------------|
| Male | 42.9% |
| Female | 57.1% |
| Total | 100.0% |

Note: $n = 1,817,377$.

Next, residents were asked about their current gender identity: “How do you describe yourself today?” Residents could indicate male, female, transgender, or “do not identify as female, male, or transgender.” As illustrated below, there were slightly more women (57.4%) than men (42.5%); some participants identified as transgender (0.0%, approximately 10 people) or nonbinary (0.1%, approximately 1,997 people), as illustrated in Figure 7 below. No respondents reported another gender identity.

Figure 7. Current Gender Identity



Note: $n = 1,813,563$.

A total of 0.5% or 9,689 residents identified with a gender that does not match their birth certificate (e.g., assigned male at birth but identify as a female now, etc.).

⁴ Williams Institute (2009). Best practices for asking questions about sexual orientation on surveys (SMART). Available online at <https://williamsinstitute.law.ucla.edu/publications/smart-so-survey/>

Sexual Orientation

To measure sexual orientation, participants were asked, “Do you consider yourself to be...” Participants could check multiple orientations if that suited their identity. Results showed that the majority of residents (84.0%) identify as heterosexual, as illustrated in Table 3 below.

Table 3. Sexual Orientation

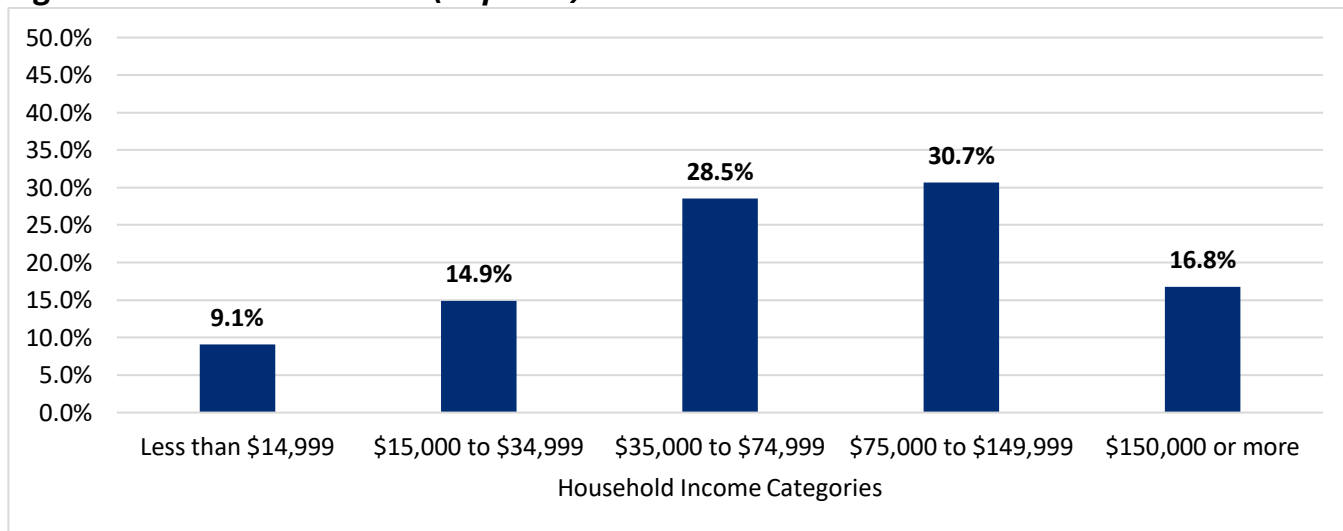
| Sexual Orientation | Weighted Percent | Population Estimate |
|----------------------------|-------------------------|----------------------------|
| Straight/Heterosexual | 85.8% | 1,495,967 |
| Gay | 4.9% | 85,266 |
| Lesbian | 0.8% | 13,764 |
| Bisexual | 2.1% | 36,029 |
| Asexual | 0.1% | 1,930 |
| Queer | 0.3% | 5,789 |
| Questioning | 0.1% | 1,930 |
| Choose not to respond | 5.5% | 95,566 |
| Another sexual orientation | 2.1% | 35,852 |

Those who reported “another sexual orientation” (2.1%) were asked to specify the details in an open-ended format. These responses were grouped into themes post-data-collection. Other responses included being celibate by choice after widowed, demisexual, pansexual, and being a “swinger.”

Income and Poverty

Participants were asked, “Last year, what was your household income from all sources before taxes?” and “Last year, what was the specific household income from all sources before taxes?” The two questions were combined to approximate income. For this study sample, the median income was \$85,000 and most participants live in households that fall in the \$35,000 to \$149,999 categories.

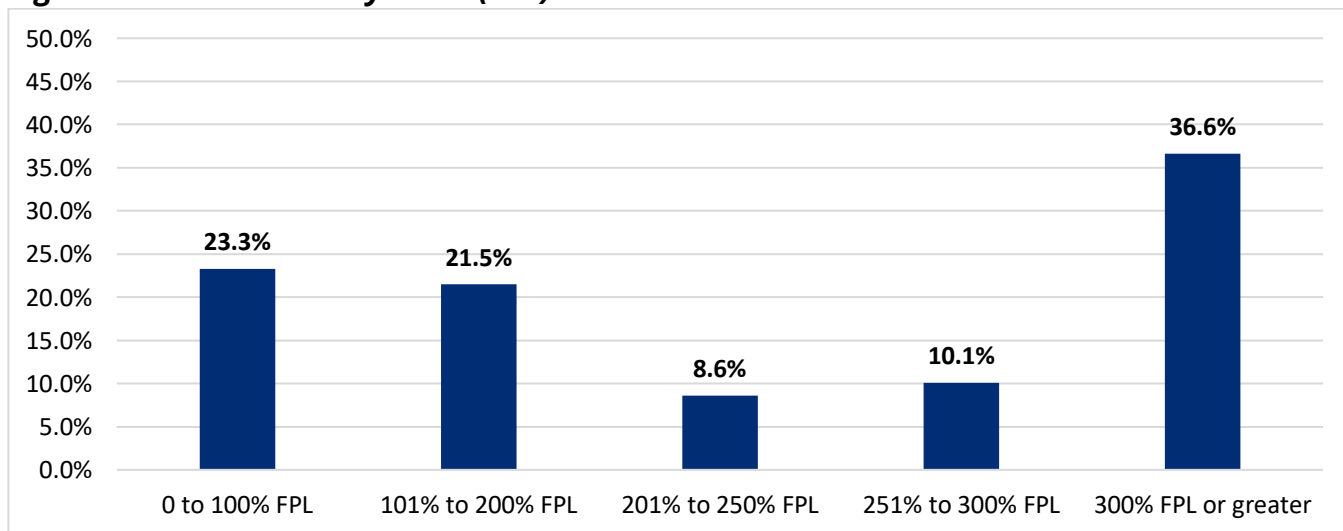
Figure 8. Household Income (Imputed)



Note: $n = 1,853,876$.

Using household income and the number of people within the household, the Federal Poverty Level (FPL) was calculated using the Department of Health and Human Service’s guidelines for poverty in 2021. As illustrated in Figure 9 below, 23.3% of participants are living below the poverty line (0 to 100% FPL).

Figure 9. Federal Poverty Level (FPL)

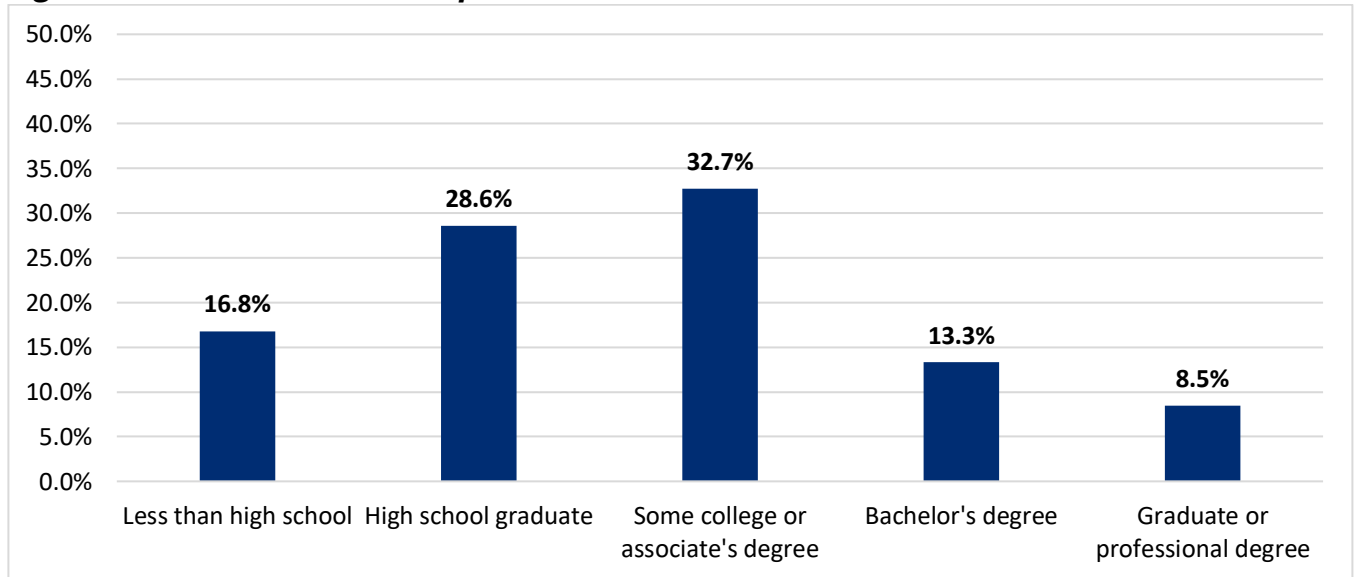


Note: $n = 817,122$

Education

Participants were asked, "What is your highest level of education?" As illustrated in Figure 10, 16.8% have not completed high school or equivalency. About one in three adults (32.7%) have some college or an associate degree.

Figure 10. Education Level (Imputed)

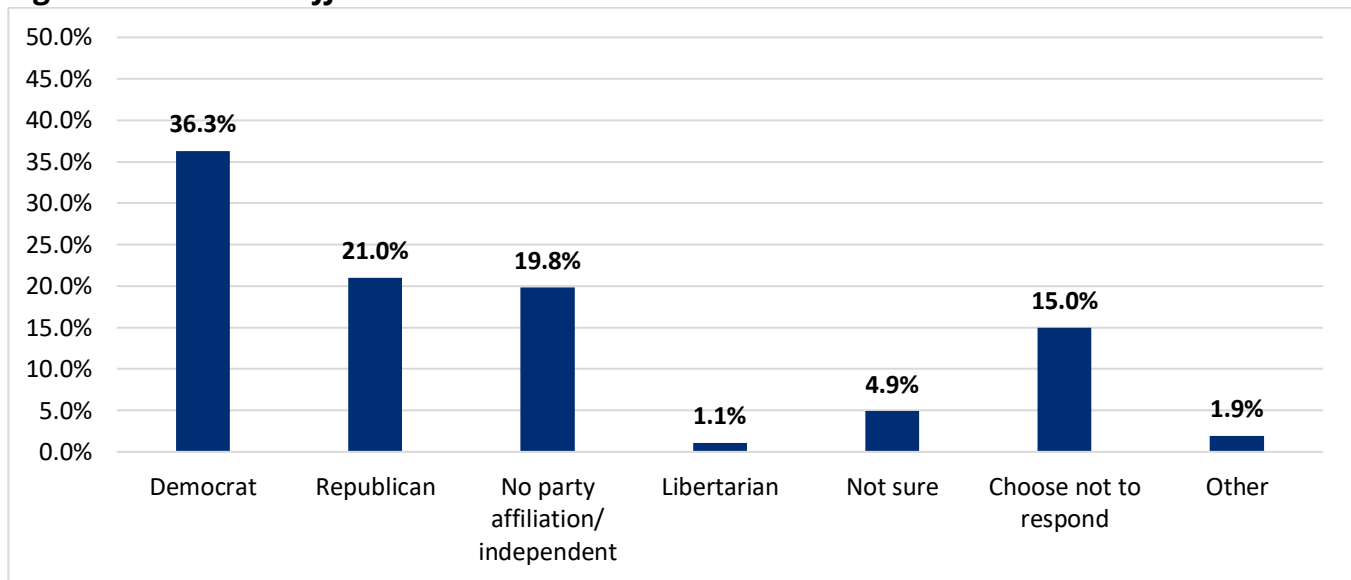


Note: $n = 1,853,876$.

Political Affiliation

Participants were asked, “Generally speaking, do you think of yourself as a...?” and could then select from a range of options. About a third of residents identified as Democrat (36.3%), 21.0% identified as Republican, and 19.8% stated that they had no party affiliation. See Figure 11 below for additional details.

Figure 11. Political Affiliation



Note: $n = 1,774,857$.

Those who reported an “other” political affiliation (1.9%) were asked to specify the details in an open-ended format. These responses were grouped into themes post-data-collection.

Most responses indicated a **mix of multiple affiliations:**

- Democrat for human issues, Republican for fiscal
- Democrat [sic] with financial conservative hint
- Green, as to political philosophy, democrat (Liberal) as to vote
- Registered Democrat but have several Republican Views
- Registered republican but have been voting democrat

Similarly, many individuals responded that “**it depends**” on the candidate or that they **cannot vote**.

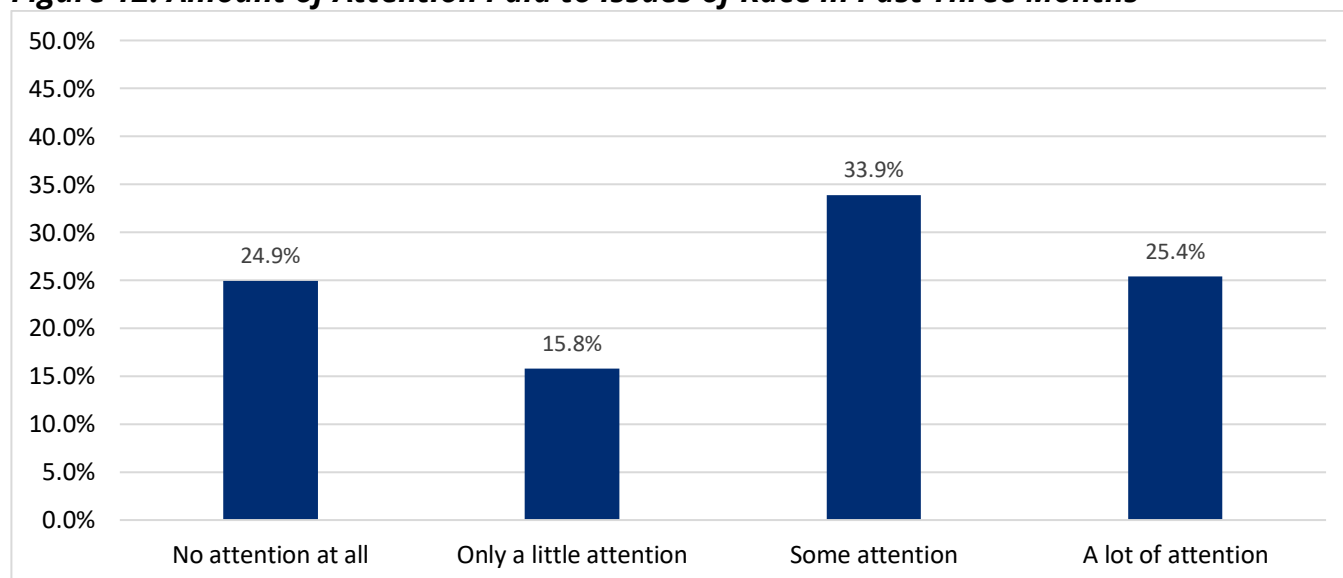
Racial Inequality

Racism has detrimentally impacted many individuals' lives physically, financially, and mentally for centuries. To combat racism, the Riverside County Board of Supervisors collectively agreed to take action against racism by declaring it a public health crisis in August of 2020. The Supervisors agreed to take steps to increase diversity in the county's workforce and improve public education to raise awareness of systemic inequality and its effects.⁵

Participants were asked, "In the past three months, how much attention have you been paying to issues of race and racial inequality?"

As illustrated in Figure 12, over half of adults have been paying "some attention" or "a lot of attention" to the issues of race and racial inequality over the course of the past three months.

Figure 12. Amount of Attention Paid to Issues of Race in Past Three Months



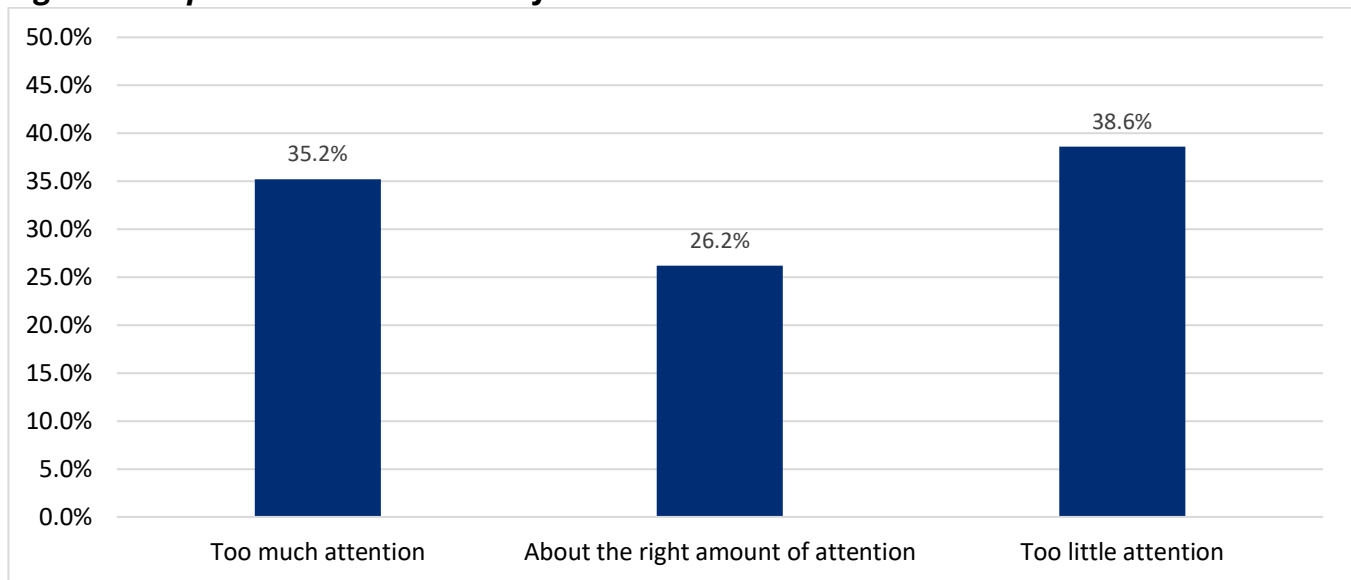
Note: $n = 1,798,316$.

⁵ Board of Supervisors vote 5-0 to declare racism as a public health crisis (2022). RivCoNow. <https://rivco.org/news/board-supervisors-vote-5-0-declare-racism-public-health-crisis>

Participants were asked, "In general, do you think there is too much, too little, or about the right amount of attention paid to race and racial issues in our country these days?"

As illustrated in Figure 13, opinions about the appropriateness of the level of attention that is being paid to race and racial issues in the country are split fairly evenly.

Figure 13. Opinion About Amount of Attention Paid to Racial Issues in the U.S.

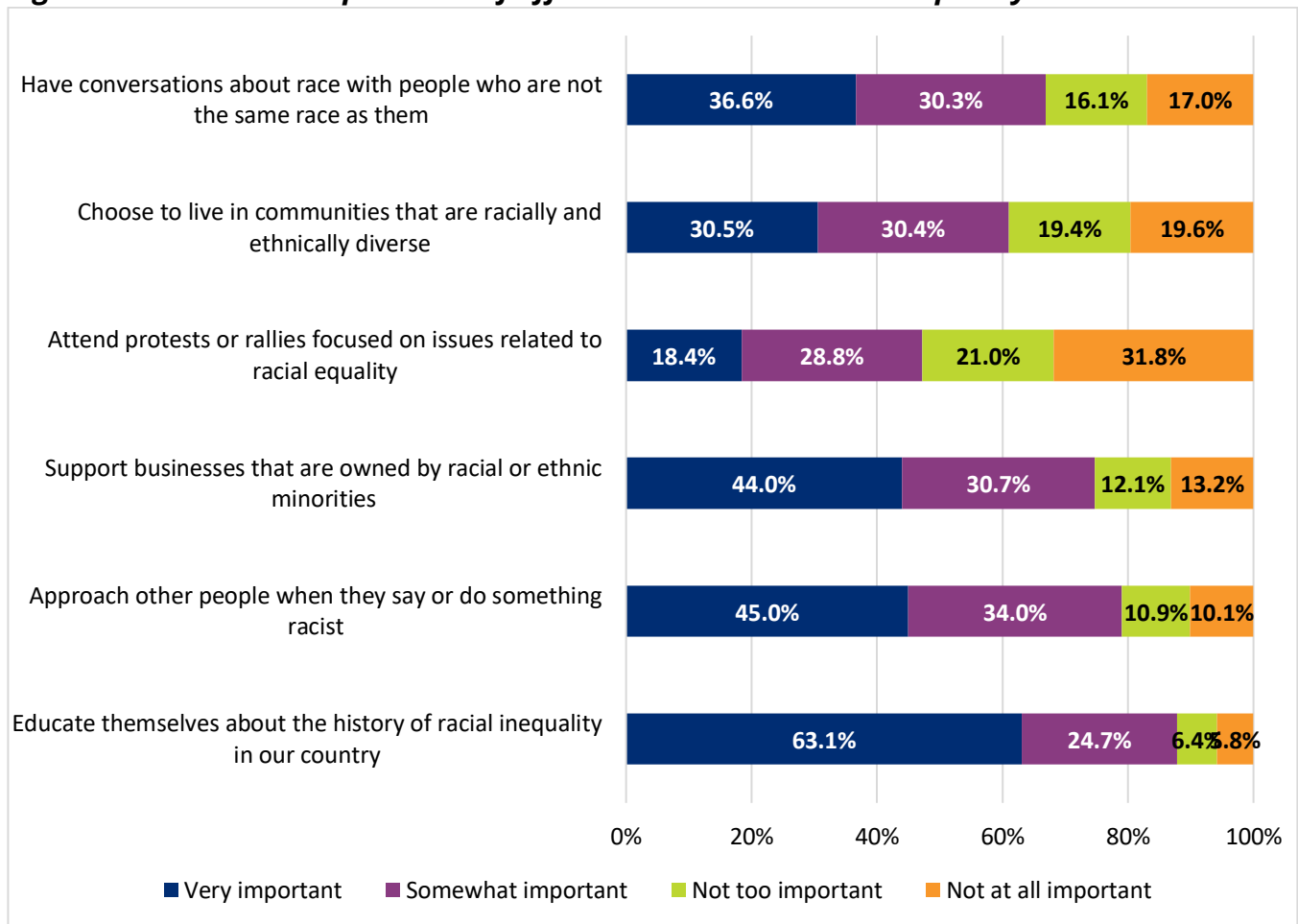


Note: $n = 1,748,491$.

Participants were asked, “How important, if at all, do you think it is for people in our country to do each of the following?” with a scale that ranged from “very important” to “not at all important”.

As illustrated in Figure 14, the majority of residents (63.1%) agree that it is “very important” to educate themselves about the history of racial inequality in our country. In contrast, very few people felt that it was “very important” to attend protests or rallies focused on issues related to racial equality.

Figure 14. Perceived Importance of Efforts to Address Racial Inequality



Note: Conversations $n = 1,698,289$. Diverse communities $n = 1,691,590$. Attend protests $n = 1,685,227$. Support businesses $n = 1,696,124$. Confront racism $n = 1,679,017$. Educate themselves $n = 1,735,967$.

Impact of Inflation

The rate of price growth during a specific period is known as inflation.⁶ Between 1914 and 2023, the United States inflation rate averaged 3.3% per year.⁷ Low inflation rates (at or below 2%) can drive economic growth.⁸ In contrast, high inflation levels hurt the economy, but also disproportionately impact low-income individuals due to the necessity of spending more on basic necessities.⁹ In 2022, inflation hit 9.1%, the highest rate in over 25 years.¹⁰

Participants were asked the following open-ended question: “COVID-19 has also affected the economy in various ways. How has inflation impacted you, or your household?”

Most responses to this question (over 3,000 comments) simply described the **definition of inflation** and how it had impacted their life.

- Increased cost of goods/services without a commensurate increase in pay
- Our income went down and our household expenses went up. Too many expenses, not enough money
- Mucho aumento en precio de alimentos básicos y servicios de gas y electricidad [Much increase in the price of basic food and gas and electricity services]

Some respondents reported that **inflation did not impact them**.

- Aware of it but am financially healthy!
- Blessed we/I have not been impacted other than the cost of fuel and some food items
- EVERYTHING is more expensive, but I have not “done without”
- Fortunately not at all. We are both retired and have a good retirement income. We are frugal people and invested wisely.
- No me afectó de ninguna manera [It did not affect me in any way]

⁶ Inflation: What it is, How It Can Be Controlled, and Extreme Examples (2023). Investopedia.

<https://www.investopedia.com/terms/i/inflation.asp#:~:text=Inflation%20is%20the%20rate%20at,and%20the%20Wholesale%20Price%20Index.>

⁷ Untied States Inflation Rate. Trade Economics.

<https://tradingeconomics.com/united-states/inflation-cpi>

⁸ What is an acceptable level of inflation? (2011). Governors of the Federal Reserve System.

<https://www.federalreserve.gov/faqs/5D58E72F066A4DBDA80BBA659C55F774.htm#:~:text=The%20Federal%20Reserve%20has%20not,percent%20or%20a%20bit%20below.>

⁹ How inflation disproportionately hurts low-income households (2023). Federal Reserve Bank of Dallas.

<https://www.dallasfed.org/research/economics/2023/0110#:~:text=Low%20Income%20households%20most%20stressed,few%20ways%20to%20reduce%20spending%20.>

¹⁰ Untied States Inflation Rate. Trade Economics.

<https://tradingeconomics.com/united-states/inflation-cpi>

Some people coped with inflation by **working more**, delaying retirement, or going back to work after retiring.

- Absolutely - I will now have to delay my retirement
- Because of inflation and high taxes I have to use my savings and drive for Uber just to live and pay my property taxes
- Cost of food, gas, utilities made me go back to work part time after retiring in 2020
- Needs to continue working post retirement age to make ends meet
- Yes, it has impacted us a lot. I had to do 2 jobs to make ends meet

Others coped with inflation by **minimizing spending** and tightening their budgets.

- Can not afford same amounts \$ in groceries etc. Limited social life. Forced to cut down on expenses overall.
- Limited travel due to gas prices. changed eating habits due to cost of groceries.
- Impacted the amount of spending done on non essential items to minimal spending

Several mentioned **how stressful living on a tight budget can be.**

- We can no longer afford to do anything fun as a family and can only afford the bare necessities to get by. It has created an enormous amount of stress.
- Retirement income does not cover cost for food, vehicle, repairs, gasoline. Extremely stressful on limited budget.
- We can't afford the "fun extras" grocery shopping makes me feel stressed & sad. We can't afford trips because of gas cost & hotel increases, etc.
- It has gotten crazy. I have to be careful in spending. Our savings are almost gone despite being careful. It's depressing

Many were **forced to dip into their savings** in order to make ends meet.

- Dip into savings
- Have to use 401k for food & bills
- We have had to dip into our savings to keep up with our monthly expenses

Others **went into debt** in order to deal with inflation.

- Due to loss of income, I have used up all of my savings and maxed out my credit cards
- Hard to pay all household bills. Ended up using credit cards and went into debt
- Can be very difficult at times to make ends meet. Credit card bill is high as a result.
- Gasoline and food costs have limited travel and work opportunities we are having to utilize credit cards more

Some described **relying on family (or providing support for family) as a safety net.**

- All 3 children were unable to live on own & moved back home (my house) which in turn has made all my utilities/water & cost of living much higher
- Affected my retirement savings and I've had to help family members with finances
- It has caused my family to lose their home and move in with me and my wife
- We combined households & moved in with family

Several participants listed ways that they have **changed their behavior** to save money.

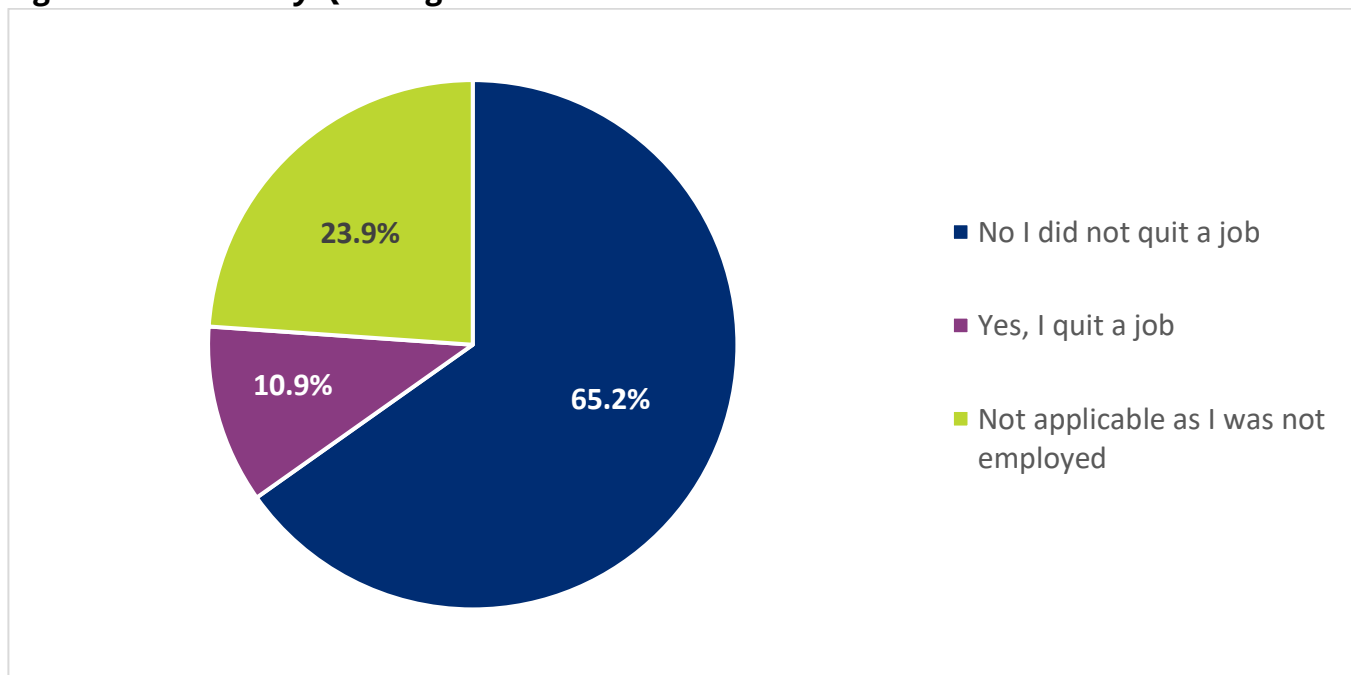
- Common things like eggs and even food has increased in price. I learned to cook for myself rather than going out to eat, also fix things rather than replace for example
- Gas & food mostly - I used to buy whatever I wanted now I look at prices also I bought a hybrid due to gas
- Makes me eat less, with prices going up on food grow my own, raise animals
- Yes. I exist on Social Security. I coped by getting a roommate.

Great Resignation

In 2021, more than 47 million American workers chose to quit their jobs, representing a remarkable mass exodus from the labor force now being called “The Great Resignation”.¹¹ This has led to labor shortages and a shift in the power dynamic between employers and employees.¹²

To assess resignations locally, participants were asked, “Did you quit a job at any point in 2021 or 2022? By this we mean you left a job by choice and not because you were fired or laid off or because a temporary job ended.” As illustrated in Figure 15, approximately 10.9% voluntarily quit during 2021 or 2022; this equates to 172,112 adults.

Figure 15. Voluntary Quitting in 2021 or 2022



Note: $n = 1,583,686$.

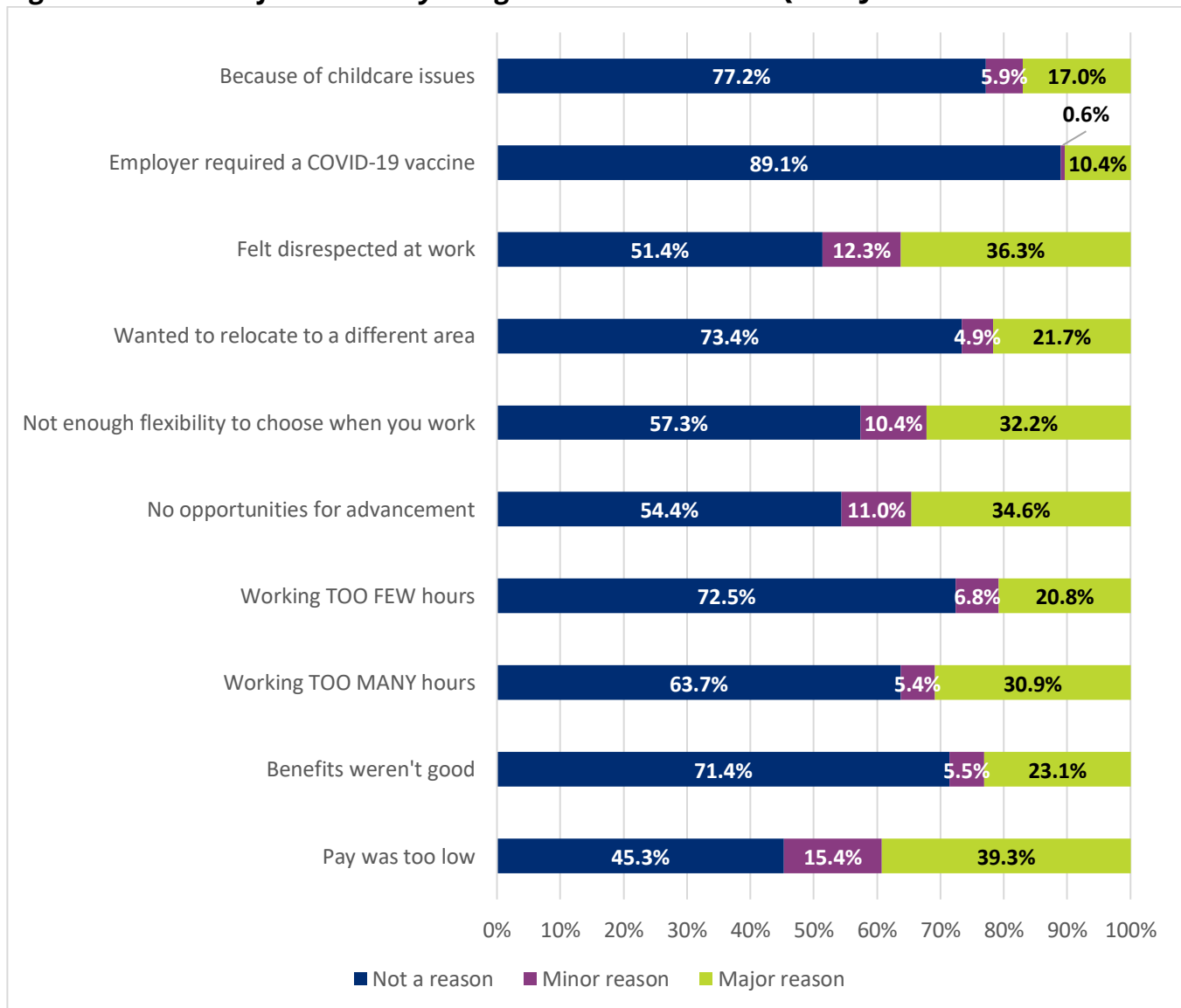
¹¹ Fuller, J. & Kerr, W. (2022). The Great Resignation didn't start with the pandemic. Harvard Business Review, <https://hbr.org/2022/03/the-great-resignation-didnt-start-with-the-pandemic>

¹² Ibid.

Those who quit a job voluntarily in 2021 or 2022 were then asked to “Indicate which of the following is a reason why you quit a job in 2021 or 2022” with the response options of “a major reason”, “a minor reason”, and “not a reason”.

As illustrated in Figure 16, the most common reason for quitting was because the pay was too low (39.3% major reason, 15.4% a minor reason). Other common reasons for quitting include feeling disrespected at work, no opportunities for advancement, and not enough flexibility to choose when to put in hours.

Figure 16. Reasons for Voluntary Resignation – Those Who Quit a Job



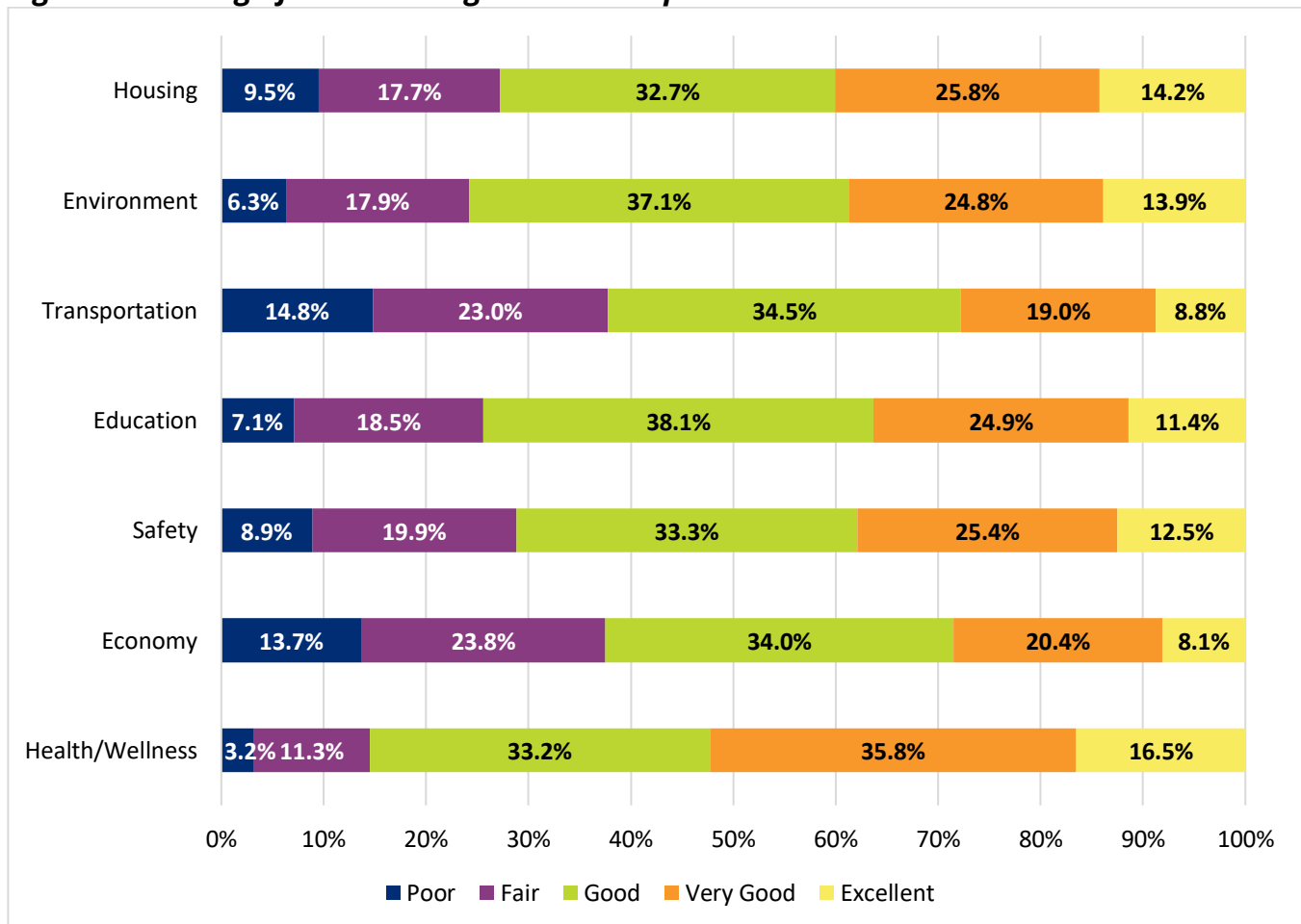
Note: This question was asked of everyone who voluntarily quit a job during 2021 or 2022.

Quality of Neighborhood

Participants were asked, “How would you rate the quality of _____ in your neighborhood?” Participants could check “don’t know or unsure”, which is excluded from Figure 17 below.

As illustrated in Figure 17 transportation and the economy have the lowest ratings overall; 14.8% rate the quality of transportation in their neighborhood as “poor”, and 13.7% rate the quality of the economy in their neighborhood as “poor”. In contrast, health/wellness, housing, and the environment are rated the most highly.

Figure 17. Rating of Various Neighborhood Aspects

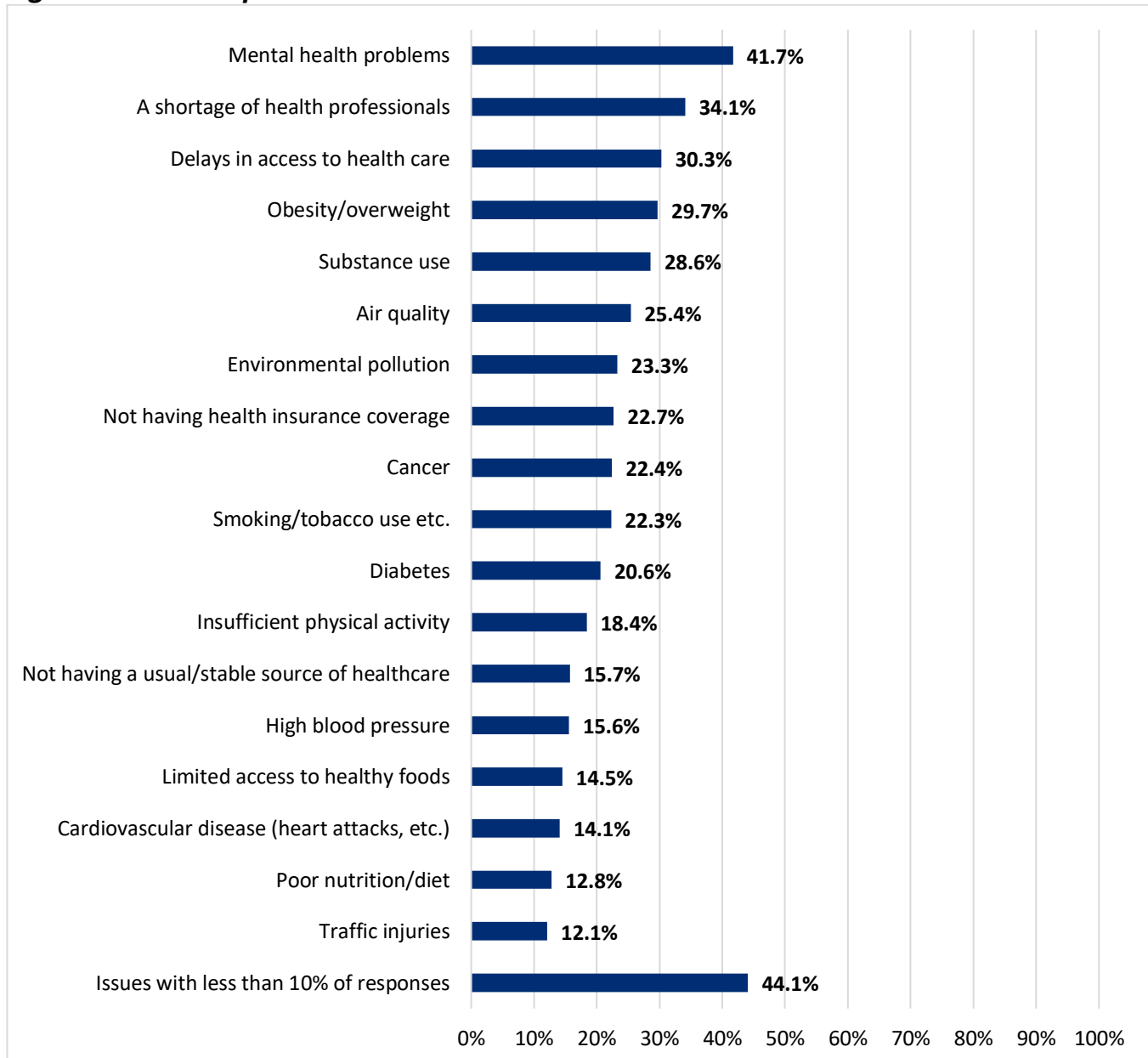


Note: Housing $n = 1,627,846$. Environment $n = 1,626,857$. Transportation $n = 1,556,611$. Education $n = 1,533,979$. Safety $n = 1,668,514$. Economy $n = 1,626,465$. Health/Wellness $n = 1,574,164$.

Most Important Health Problems

Participants were asked, “Please select the five most important health problems that need to be fixed in your community” with a list of options. As illustrated in Figure 18, the most commonly selected health needs include mental health problems (41.7%), a shortage of healthcare professionals (34.1%), and delays in access to healthcare (30.3%).

Figure 18. Most Important Health Problems



Note: Issues with less than 10% of responses include other (8.4%), suicide (7.3%), disabilities (6.3%), poor dental health (4.4%), stroke (4.1%), asthma (3.7%), respiratory disease (3.2%), teen pregnancy (3.1%), sexually transmitted diseases (2.8%), and infant mortality (0.8%).

Those who selected “other” were asked to specify in an open-ended format. Responses were then grouped into themes post-data-collection.

Among the responses, the most common theme was various mentions related to **health conditions or healthcare.**

- Health insurance
- Healthcare quality
- Healthcare costs
- Exercise
- Mental health
- Abortion

Another common theme was **none or all of the above.**

- Unknown
- Not sure
- No response
- All of these
- All important
- Too many to list

The next most common theme was related to **environment and infrastructure.**

- Freeway & street traffic
- Environmental sustainability awareness
- Climate crisis
- Transportation
- Weather fire?
- Global warming
- Drought

Another common theme was related to **housing.**

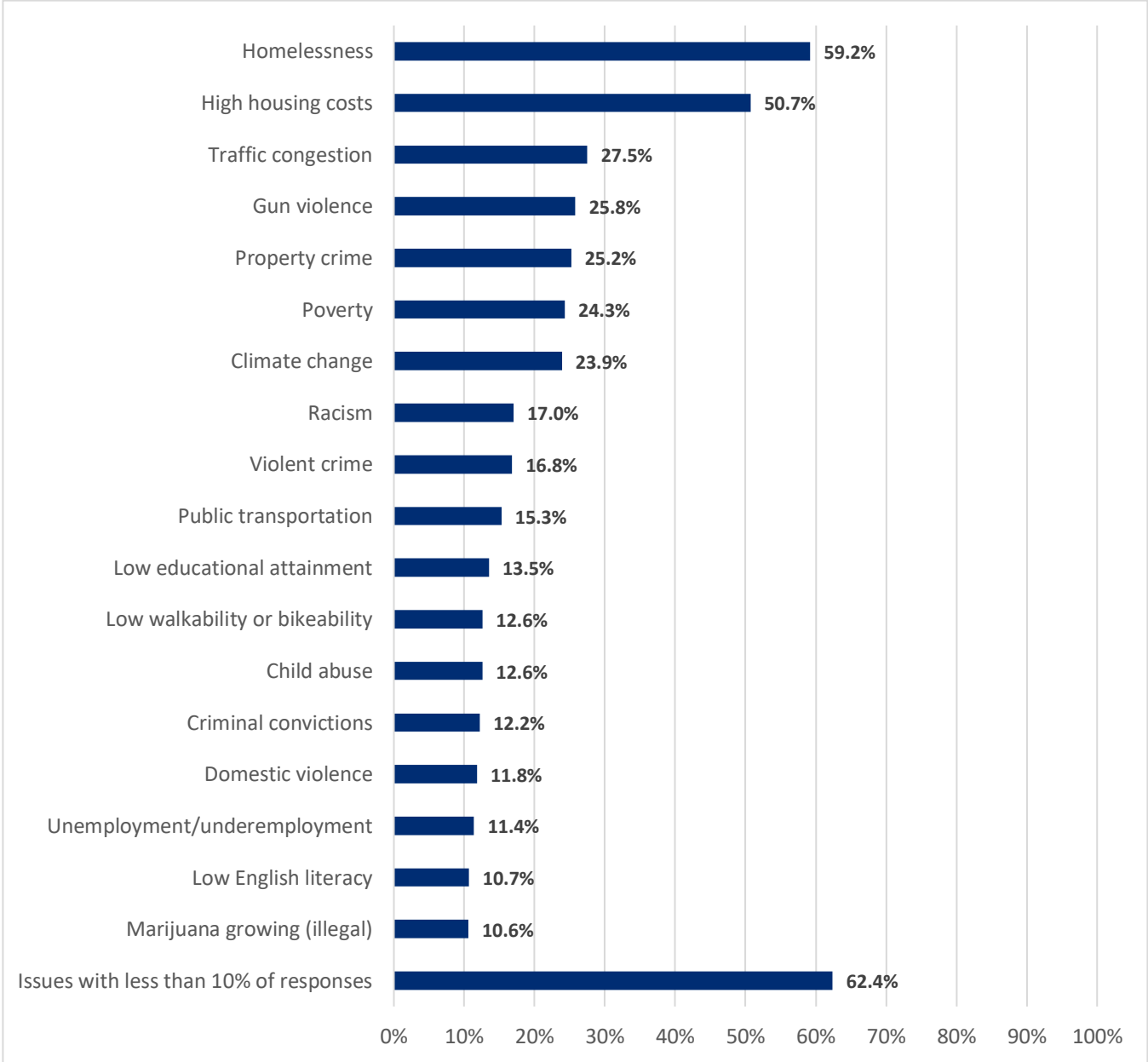
- Homelessness
- Unhoused
- Sick homeless
- Low-income housing
- Affordable housing
- Housing

Other common themes were **crime, education, and drugs and alcohol.**

Most Important Social Issues

Participants were asked, “Please select the five most important social problems that need to be fixed in your community” with a list of options. As illustrated in Figure 19, the most commonly selected social needs include homelessness (59.2%) and high housing cost (purchase or rental; 50.7%).

Figure 19. Most Important Social Problems



Note: Issues with less than 10% of responses include lack of citizenship (8.9%), poor student-teacher ratios (8.1%), traffic injuries (7.5%), other (7.5%), low college readiness (7.2%), police brutality (5.9%), poor high school graduation rates (5.9%), low reading proficiency (4.6%), rape/sexual assault (3.6%), and low school attendance (3.2%).

Those who selected “other” were asked to specify in an open-ended format.

These responses (about important social issues) varied slightly from those for the previous question (about important health problems). Among the responses, the most common theme was **infrastructure and utilities**.

- Internet access
- Fix roads
- Not enough Disable Parking space
- Proper city improvements
- Utility prices too high
- Poor road conditions

Another common theme was **crime and traffic violations**.

- Vehicle theft
- Trespassers
- Theft
- Gang crime
- Road racers & crazy truckers!
- Property crimes break ins etc.

Another common theme, as with the previous question, was **none or all of the above**.

- Nothing
- No problems
- No clue
- See above
- Too many to list
- I don't know!

Another common theme was related to **politics**.

- Political divide
- Political discourse
- Corrupt politicians
- Political rage/intolerance
- Liberal media bias
- Woke politicians

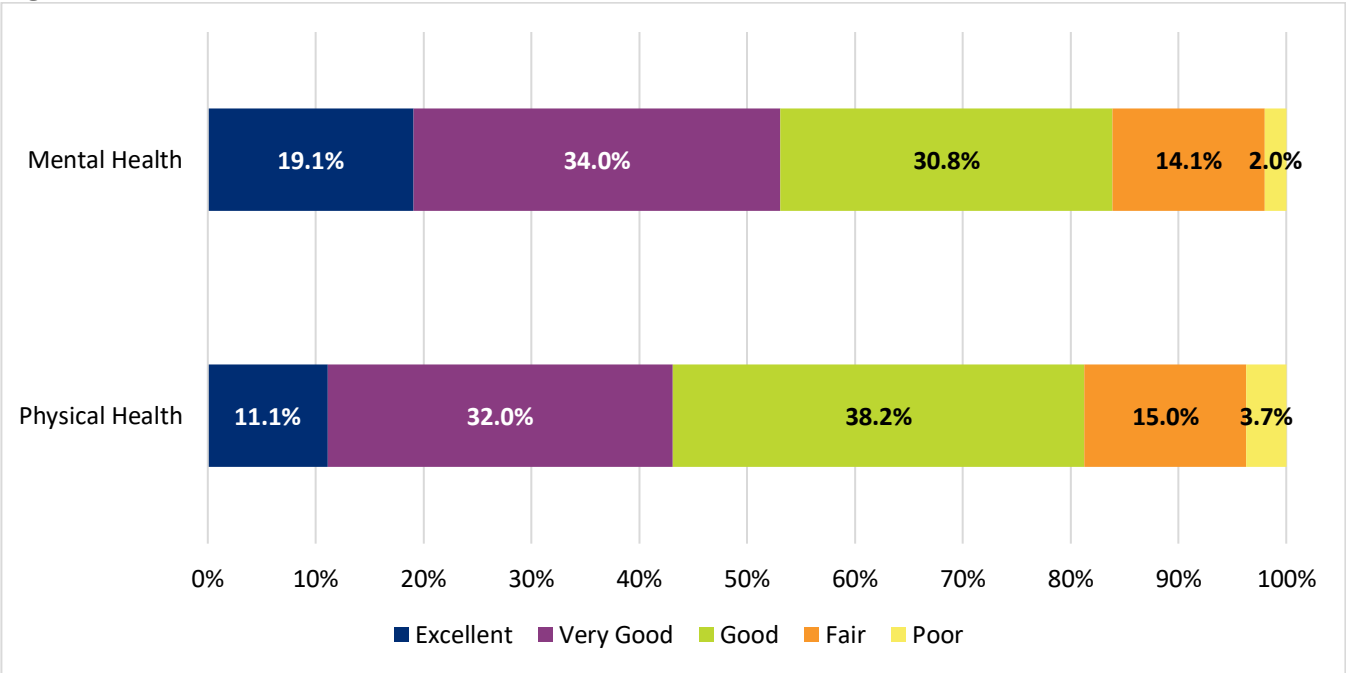
Other common themes were related to **education, environment, and health**.

General Health

Participants were asked “Would you say, in general, that your _____ is excellent, good, very good, fair, or poor?”

As illustrated in Figure 20, mental health is overall slightly better than physical health. However, less than 20.0% of people rate either mental health or physical health as “fair” or “poor.”

Figure 20. General Health



Note: Physical Health n = 1,766,622. Mental Health n = 1,744,442.

CONCLUSION

This report contains valuable information that can be used to pursue accreditation for RUHS – Public Health by contributing to the Community Health Assessment (CHA). Content from this report can be dropped into any documents pertaining to the CHA. Although it is likely that the lack of a post-incentive for participation made the survey less appealing to people with limited time (e.g., younger working adults vs. older retired adults), this report still closely matches the characteristics of the overall population.

APPENDICES

Appendix A: Artist Bio

Appendix B: Survey Instrument in English

Appendix C: Weighting Methodology



Appendix A: Artist Bio

This report represents the data collected throughout the study and is also supplemented by artwork by a Riverside County resident to illustrate the themes. The artwork in this report is created exclusively for Riverside University Health System – Public Health by Consuelo Marquez.



Consuelo Marquez (she/her) is a Mexican-American artist born and raised in the Eastern Coachella Valley. With themes such as environmental justice, public health, and the world around her, she creates art that shows how colorful and diverse her communities are through a blend of realistic and surrealist styles.

Consuelo's artwork is featured throughout this report and can be seen in person at RUHS – Public Health.

To see more of Consuelo's work, please visit her personal Instagram at:

https://instagram.com/risingtraaash?utm_medium=copy_link

Or visit the Instagram of the CEMPAZUCHITL Zine, an art zine:

https://instagram.com/cempa_zine?utm_medium=copy_link

Appendix B: English Version of the Survey

1. Have you ever tested positive for COVID-19?

- Yes (**Skip to #3**)
- No (**Skip to #2**)

2. How serious do you think it would be if you tested positive for COVID-19? *Select one response.* **After you answer this question, skip to #9 on the next page**

- Not at all serious
- A little
- Moderately
- Very serious

3. How many times have you tested positive for COVID-19?

- One time
- Two times
- Three or more times

4. How serious were your symptoms when you **first tested** positive for COVID-19?

- Not at all serious
- A little
- Moderately
- Very serious

5. For **any** positive COVID-19 test, did you have an overnight stay in a hospital for suspected or diagnosed COVID-19?

- Yes (**skip to #6**)
- No (**skip to #7**)

6. If yes, were you put into the ICU (intensive care unit) because of suspected or diagnosed COVID-19?

- Yes
- No

7. After you first tested positive for COVID-19, have you recovered to your usual state of health?

- No
- Yes: # of days it took to recover _____

8. For **any** positive COVID-19 test, did you have any symptoms lasting 3 months or longer that you did not have prior to having COVID-19?

Long term symptoms may include: Tiredness or fatigue, difficulty thinking, concentrating, forgetfulness, or memory problems (sometimes referred to as "brain fog"), difficulty breathing or shortness of breath, joint or muscle pain, fast-beating or pounding heart (also known as heart palpitations), chest pain, dizziness on standing, menstrual changes, changes to taste/smell, or inability to exercise.

- Yes
- No

9. How many times have you been tested for COVID-19, including at-home testing kits?

- None (**skip to #13**)
- 1 time (**skip to #10**)
- 2 times (**skip to #10**)
- 3 times (**skip to #10**)
- 4 times (**skip to #10**)
- 5 or more times (**skip to #10**)

10. Where did you get tested? *Select all that apply.*

- Pharmacy
- Urgent Care
- Hospital
- College campus
- Health clinic
- Testing site
- Doctor's office
- Another location (please specify): _____
- At home

11. If tested **at home**, what was the result?

- I never tested at home (**skip to #13**)
- I don't know (**skip to #13**)
- Negative test (**skip to #13**)
- Positive test (**skip to #12**)
- Tested more than once, and got both positive and negative results (**skip to #12**)

12. What actions did you take, immediately after your test? *Select all that apply.*

- Stayed home
- Isolated from others
- Wore a mask when around others
- Took another test
- Went to the doctor/healthcare provider
- Other (please specify): _____

13. Have you experienced any COVID-19 vaccine requirements? *Select all that apply.*

- Yes, there is a vaccine requirement at my work
- Yes, I have been required to get booster shots
- Yes, there is a vaccine requirement at my school
- Yes, family has required me to be vaccinated to visit them
- Yes, friends have required me to be vaccinated to visit them
- Yes, other (please specify):

- No, I have not experienced any vaccine requirements (**skip to #15 on the next page**)

14. If you answered, "yes" to any of the options in #13, how (if at all) did this/these requirement(s) change your behavior?

15. Have you had the COVID-19 vaccine?
*The definition of fully vaccinated does **not** include a booster. Everyone, except those who are moderately or severely immunocompromised, is still considered fully vaccinated two weeks after their second dose in a two-dose series, such as the Pfizer-BioNTech and Moderna vaccines, or two weeks after the single-dose J&J/Janssen vaccine.*

- | |
|--|
| <ul style="list-style-type: none"> <input type="radio"/> No, but I plan on getting vaccinated (skip to 20) <input type="radio"/> No, and I don't plan on getting vaccinated (skip to 20) |
| <ul style="list-style-type: none"> <input type="radio"/> Yes, I'm fully vaccinated (skip to 16) <input type="radio"/> Yes, but I'm not fully vaccinated (skip to 16) |

16. Have you received any boosters?

- Yes, I have had a booster
- Yes, I have had two or more boosters
- No, I have not had a booster

17. Did you have any side-effects or symptoms after receiving the COVID-19 vaccination?

- No
- I don't know
- Yes (please describe your side effects and/or symptoms _____)

18. Why did you choose to get vaccinated? Select all that apply.

- To protect myself
- To protect family/friends
- To protect others
- Age/health risk
- To prevent death/serious disease
- I believe in science/vaccines
- For the public good
- I had to for work
- Other (please specify): _____

19. In your opinion, how much **did** the COVID-19 vaccine protect you against getting COVID-19? *Select one response. **After answering, skip to #22 on the next page.***

- Not at all
- A little
- Moderately
- Very much

20. In your opinion, how much would the COVID-19 vaccine protect you against getting COVID-19? *Select one response.*

- Not at all
- A little
- Moderately
- Very much
- I'm not sure

21. **If you haven't been vaccinated against COVID-19**, what is/are the main reason(s) you have **not** taken the vaccine? *(Select all that apply).*

- In my view, the vaccine doesn't work
- I have concerns about it being a new type of vaccine (mRNA vaccine)
- I do not have time or time off work
- It does not affect me
- I have natural immunity
- I am worried about the side effects
- I have allergy concerns
- I want to wait longer and see what reactions others have
- I do not know if my health insurance covers it
- I do not trust the government
- Spiritual/religious reasons
- I am healthy, so I do not need the vaccine
- I heard it can affect my sexual health or fertility
- I am afraid of needles
- I do not have a car or bus I can take to get the vaccine
- I have a disability that worries me if I got the vaccine
- I do not believe that COVID-19 is real
- Other _____

Answer #22-24 if you ARE vaccinated or PLAN to be vaccinated against COVID-19

Upon receiving the COVID-19 vaccine (if you have/if you choose to in the future), **do you plan to stop...**

| | Yes | No | I never did this |
|---|-----|----|------------------|
| 22. Social distancing (staying at home and avoiding others as much as possible) | | | |
| 23. Wearing a face mask in public | | | |
| 24. Frequently washing or sanitizing your hands | | | |

25. How likely are you to recommend the vaccine to someone else?

- Extremely Likely
- Likely
- Neutral
- Unlikely
- Extremely unlikely

26. Has your child/children received the COVID-19 vaccine?

- I don't have children (**skip to #29 on the next page**)
- No, I have NOT vaccinated them (**skip to #27**)

→27. If no, why did you **choose NOT to vaccinate** your child/children? *Select all that apply. After answering, skip to #29 on the next page.*

- In my view, the vaccine doesn't work
- I have concerns about it being a new type of vaccine (mRNA vaccine)
- I do not have time or time off work
- It does not affect my child/children
- My child/children have natural immunity
- I am worried about the side effects for my child/children
- I have allergy concerns for my child/children
- I want to wait longer and see what reactions others have
- I do not know if health insurance covers it
- I do not trust the government
- Spiritual/religious reasons
- My child/children are healthy, so they do not need the vaccine
- My child/children are afraid of needles
- I do not have a car or bus I can take to get my child/children the vaccine
- My child/children have a disability that worries me if they got the vaccine
- My child isn't old enough
- My child is immunocompromised
- Other _____

- Yes, I have one child and vaccinated that child (**skip to #28**)
- Yes, I have more than one child and vaccinated them all (**skip to #28**)
- Yes, I have more than one child, but only vaccinated some of them (**skip to #28**)

→28. If yes, why did you **choose to vaccinate** your child/children? *Select all that apply. After answering, skip to #29 on the next page.*

- To protect my child/children
- To protect family/friends
- To protect others
- Age/health risk
- To prevent death/serious disease
- I believe in science/vaccines
- For the public good
- I had to for their school
- I had to for their daycare
- Other (please specify): _____

29. Where did you learn about how to get a vaccine/ booster locally? _____

30. The biggest fear I have about COVID-19 is... *Select all that apply.*

- | | | |
|--|---|--|
| <input type="checkbox"/> Dying | <input type="checkbox"/> Spreading it to others | <input type="checkbox"/> Financial/economic concerns |
| <input type="checkbox"/> Getting infected or sick | <input type="checkbox"/> Concerns about children | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> No fear | <input type="checkbox"/> Long-term effects | • _____ |
| <input type="checkbox"/> Loved one getting sick or dying | <input type="checkbox"/> Those who are not vaccinated | • _____ |
| <input type="checkbox"/> Hospitalization | <input type="checkbox"/> Variants | |

| How is the COVID-19 pandemic currently impacting your personal daily life with regards to | To a great extent | Somewhat | Very little | Not at all |
|--|-------------------|----------|-------------|------------|
| 31. Work/school participation | | | | |
| 32. Economic situation | | | | |
| 33. Physical health | | | | |
| 34. Mental health | | | | |
| 35. Social life or relationships | | | | |

36. COVID-19 has also affected how people feel and act. Which of the following are you experiencing now due to COVID-19? *Please select all that apply.*

- | | | |
|--|---|---|
| <input type="checkbox"/> Anxiety | <input type="checkbox"/> Fear of getting sick | <input type="checkbox"/> Loss of hope |
| <input type="checkbox"/> Boredom | <input type="checkbox"/> Frustration | <input type="checkbox"/> Trouble sleeping |
| <input type="checkbox"/> Conflict in the home | <input type="checkbox"/> Increased alcohol or other substance use | <input type="checkbox"/> Worry about friends and family |
| <input type="checkbox"/> Confusion | <input type="checkbox"/> Increased eating | <input type="checkbox"/> None of these options |
| <input type="checkbox"/> Decreased exercise | <input type="checkbox"/> Increased sexual activity | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> Decreased sexual activity | <input type="checkbox"/> Loneliness | _____ |
| <input type="checkbox"/> Depression | | |

COVID-19 has impacted people's day-to-day life in many different ways. Have you experienced any of these difficulties due to COVID-19? *Select all that apply.* For example, if you quit your job in 2020 and 2021, place an X in each square.

| | Yes, I did in 2020 | Yes, I did in 2021 | Yes, I did in 2022 | No, not a problem any years |
|---|--------------------|--------------------|--------------------|-----------------------------|
| 37. Quit my job | | | | |
| 38. Reduced wages or work hours | | | | |
| 39. Job loss | | | | |
| 40. Loss of savings or retirement funds | | | | |
| 41. Problems with housing | | | | |
| 42. Childcare issues | | | | |
| 43. Problems getting food | | | | |
| 44. Problems getting cleaning supplies or other household items | | | | |
| 45. Problems getting medications | | | | |
| 46. Transportation issues | | | | |
| 47. Problems accessing healthcare | | | | |

48. Were there any other ways COVID-19 has impacted your day-to-day life that you'd like to share?

| Did you DELAY getting any of the following because of the COVID-19 pandemic? <i>Check all that apply. For example, if you delayed care in both 2020 and 2021, check both of these squares.</i> | Yes, in 2020 | Yes, in 2021 | Yes, in 2022 | No, none of these years |
|---|---------------------|---------------------|---------------------|-------------------------|
| 49. Medical care | | | | |
| 50. Mental healthcare | | | | |
| 51. Dental care | | | | |

| Did you need any of the following for reasons other than COVID-19, but DID NOT GET IT because of the COVID-19 pandemic? <i>Check all that apply. For example, if you did not get care in both 2020 and 2021, check both of these squares.</i> | Yes, in 2020 | Yes, in 2021 | Yes, in 2022 | No, none of these years |
|--|---------------------|---------------------|---------------------|-------------------------|
| 52. Medical care | | | | |
| 53. Mental healthcare | | | | |
| 54. Dental care | | | | |

55. COVID-19 has also affected the economy in various ways. How has inflation impacted you, or your household? *By inflation, we mean the increases in the costs of goods and services.*

56. Did you quit a job at any point in 2021 or 2022? By this we mean that **you left a job by choice** and not because you were fired or laid off or because a temporary job ended.
- No, I did not quit a job (**skip to #67 on the next page**)
 - Not applicable as I was not employed (**skip to #67 on the next page**)
 - Yes, I quit a job (**skip to #57**)

| Indicate which of the following is a reason why you quit a job in 2021 or 2022. | A major reason | A minor reason | Not a reason |
|---|----------------|----------------|--------------|
| 57. The pay was too low | | | |
| 58. The benefits – such as health insurance, paid time off wasn't good | | | |
| 59. Working TOO MANY hours | | | |
| 60. Working TOO FEW hours | | | |
| 61. No opportunities for advancement | | | |
| 62. Not enough flexibility to choose when you put in your hours | | | |
| 63. Wanted to relocate to a different area | | | |
| 64. Felt disrespected at work | | | |
| 65. Employer required a COVID-19 vaccine | | | |
| 66. Because of childcare issues | | | |

| Please rate how much you agree with the following statements. By people of color, we mean African American, Black, Indigenous, Southwest and East Asian, Latino/Latina/Latinx, etc. | Strongly agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Strongly disagree |
|--|----------------|----------------|----------------------------|-------------------|-------------------|
| 67. People of color are facing more of the health impact of COVID-19 than White people. | | | | | |
| 68. People of color are facing more of the financial/economic impact of COVID-19 than White people. | | | | | |

69. In the past three months, how much attention have you been paying to issues of race and racial inequality?

- A lot of attention
- Some attention
- Only a little attention
- No attention at all

70. In general, do you think there is too much, too little, or about the right amount of attention paid to race and racial issues in our country these days?

- Too much attention
- Too little attention
- About the right amount of attention

| How important, if at all, do you think it is for people in our country to do each of the following? | Very important | Somewhat important | Not too important | Not at all important |
|---|----------------|--------------------|-------------------|----------------------|
| 71. Educate themselves about the history of racial inequality in our country | | | | |
| 72. Approach other people when they say or do something racist | | | | |
| 73. Support businesses that are owned by racial or ethnic minorities | | | | |
| 74. Attend protests or rallies focused on issues related to racial equality | | | | |
| 75. Choose to live in communities that are racially and ethnically diverse | | | | |
| 76. Have conversations about race with people who are not the same race as them | | | | |

77. Where do you **usually get information on COVID-19?** Check all that apply, and then list the specific source.

| Source | Yes | What is the specific source? |
|--|--------------------------|------------------------------|
| Academic settings (e.g., class, lab, library) | <input type="checkbox"/> | |
| Friends and family | <input type="checkbox"/> | |
| Government (e.g., local, state, U.S.) | <input type="checkbox"/> | |
| Health organizations (CDC, WHO, etc.) | <input type="checkbox"/> | |
| Healthcare professionals (e.g., doctor, nurse, etc.) | <input type="checkbox"/> | |
| Online/internet sources | <input type="checkbox"/> | |
| Place of worship (e.g., church, temple, etc.) | <input type="checkbox"/> | |
| Print news (e.g., newspapers, magazines, etc.) | <input type="checkbox"/> | |
| Research articles (e.g., scientific findings, published articles, peer-reviewed) | <input type="checkbox"/> | |
| Social media | <input type="checkbox"/> | |
| Television news (e.g., CNN, FOX, MSNBC, etc.) | <input type="checkbox"/> | |
| Work | <input type="checkbox"/> | |
| Other (please specify) | <input type="checkbox"/> | |

78. What sources **do you trust** to give you accurate COVID-19 information? Check all that apply, and then list the specific source.

| Source | Yes | What is the specific source? |
|--|--------------------------|------------------------------|
| Academic settings (e.g., class, lab, library) | <input type="checkbox"/> | |
| Friends and family | <input type="checkbox"/> | |
| Government (e.g., local, state, U.S.) | <input type="checkbox"/> | |
| Health organizations (CDC, WHO, etc.) | <input type="checkbox"/> | |
| Healthcare professionals (e.g., doctor, nurse, etc.) | <input type="checkbox"/> | |
| Online/internet sources | <input type="checkbox"/> | |
| Place of worship (e.g., church, temple, etc.) | <input type="checkbox"/> | |
| Print news (e.g., newspapers, magazines, etc.) | <input type="checkbox"/> | |
| Research articles (e.g., scientific findings, published articles, peer-reviewed) | <input type="checkbox"/> | |
| Social media | <input type="checkbox"/> | |
| Television news (e.g., CNN, FOX, MSNBC, etc.) | <input type="checkbox"/> | |
| Work | <input type="checkbox"/> | |
| Other (please specify) | <input type="checkbox"/> | |

| How would you rate the quality of _____ in your neighborhood? | Excellent | Very good | Good | Fair | Poor | Don't know or unsure |
|---|-----------|-----------|------|------|------|----------------------|
| 79. Health and wellness | | | | | | |
| 80. The economy | | | | | | |
| 81. Safety | | | | | | |
| 82. Education | | | | | | |
| 83. Transportation | | | | | | |
| 84. Environment | | | | | | |
| 85. Housing | | | | | | |

86. Please select the **five** most important **health problems** that need to be fixed in your community.

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> A shortage of health professionals | <input type="checkbox"/> Environmental pollution | <input type="checkbox"/> Not having a usual/stable source of health care | <input type="checkbox"/> Smoking/tobacco use/vaping/e-cigarette access & use |
| <input type="checkbox"/> Air quality | <input type="checkbox"/> High blood pressure | <input type="checkbox"/> Not having health insurance coverage | <input type="checkbox"/> Stroke |
| <input type="checkbox"/> Asthma | <input type="checkbox"/> Infant mortality | <input type="checkbox"/> Obesity/overweight | <input type="checkbox"/> Substance use |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Insufficient physical activity | <input type="checkbox"/> Poor dental hygiene | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Cardiovascular disease (heart attacks, etc.) | <input type="checkbox"/> Limited access to healthy foods | <input type="checkbox"/> Poor nutrition/diet | <input type="checkbox"/> Teen pregnancy |
| <input type="checkbox"/> Delays in access to health care | <input type="checkbox"/> Mental health problems (anxiety, depression, etc.) | <input type="checkbox"/> Respiratory/lung disease | <input type="checkbox"/> Traffic injuries |
| <input type="checkbox"/> Diabetes | | <input type="checkbox"/> Sexually transmitted diseases (STDs) | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Disabilities (hearing loss, blindness, etc.) | | | |

87. Please select the **five** most important **social problems** that need to be fixed in your community.

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Child abuse | <input type="checkbox"/> Low educational attainment | <input type="checkbox"/> Police brutality | <input type="checkbox"/> Racism |
| <input type="checkbox"/> Climate change | <input type="checkbox"/> Low English literacy | <input type="checkbox"/> Poor high school graduation rates | <input type="checkbox"/> Rape/sexual assault |
| <input type="checkbox"/> Criminal convictions | <input type="checkbox"/> Low reading proficiency | <input type="checkbox"/> Poor student-teacher ratios | <input type="checkbox"/> Traffic congestion |
| <input type="checkbox"/> Domestic violence | <input type="checkbox"/> Low school attendance | <input type="checkbox"/> Poverty | <input type="checkbox"/> Traffic injuries |
| <input type="checkbox"/> Gun violence | <input type="checkbox"/> Low walkability or bikeability | <input type="checkbox"/> Property crime | <input type="checkbox"/> Unemployment/underemployment |
| <input type="checkbox"/> High housing costs (purchase or rental) | <input type="checkbox"/> Low college readiness | <input type="checkbox"/> Public transportation (e.g., not being able to get enough/any transportation) | <input type="checkbox"/> Violent crime |
| <input type="checkbox"/> Homelessness | <input type="checkbox"/> Marijuana growing (illegal) | | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Lack of citizenship | | | |
| <input type="checkbox"/> Low college readiness | | | |

| Would you say, in general, that your _____ is excellent, good, very good, fair, or poor? | Excellent | Very good | Good | Fair | Poor |
|--|-----------|-----------|------|------|------|
| 88. Physical health | | | | | |
| 89. Mental health | | | | | |

90. Do you have any children under the age of 18?

- No (**skip to #92**)
- Yes (**skip to #91**)

91. In what ways has COVID-19 impacted you as a parent?

The Department of Public Health within Riverside County has worked to reduce the impact of COVID-19 throughout the community. **Please indicate whether you were aware of Public Health’s following activities:**

| | Knew about it | Knew and used it | Unaware and didn't need it | Unaware and would have liked to know about this |
|--|---------------|------------------|----------------------------|---|
| 92. Mask distribution | | | | |
| 93. Food assistance/Great Plates Program | | | | |
| 94. Childcare assistance | | | | |
| 95. Educational information and videos | | | | |
| 96. Opened vaccine sites | | | | |
| 97. Opened testing sites | | | | |
| 98. Provided data to the community | | | | |
| 99. Gave information to support small businesses | | | | |

100. If you did not know about the services provided above and needed them, where would you look for these services (e.g., social media, internet, schools, healthcare settings, etc.)?

101. How much do you trust the Riverside County Public Health Department?

- A lot
- A moderate amount
- A little
- None at all

102. Please explain why you chose your above response.

103. Are you of Hispanic, Latino, or Spanish origin?

- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, Other Hispanic, Latino, or Spanish origin (specify): _____

104. Which one of these groups would you say best represents your race? For the purposes of this survey, Hispanic is not a race.

- Black/African American (**skip to #106**)
- European/White (**skip to #106**)
- Indigenous/Native (original peoples of North, Central, South America with active tribal or community affiliation) (**skip to #106**)
- Native Hawaiian/Pacific Islander (**skip to #106**)
- Southeast and East Asian/Asian American (**skip to #106**)
- Southwest Asian and North African (**skip to #106**)
- Other (specify): _____ (**skip to #106**)

- Multiracial/more than one race (**skip to #105**)

→ 105. Please specify the races you identify with: _____

→ 106. Last year, what was your household income?

- Less than \$10,000
- \$10,000 to \$14,999
- \$15,000 to \$24,999
- \$25,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 to \$199,999
- \$200,000 or more

107. Last year, what was the *specific* household income from all sources before taxes? _____

108. How many people, **including you**, live in your household? **Please include adults and children.**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 or more

109. What is your highest level of education?

- Less than high school
- High school graduate
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Graduate or professional degree

110. What sex were you assigned at birth, on your original birth certificate?

- Male
- Female

111. How do you describe yourself today? *Select all that apply.*

- Male
- Female
- Transgender
- Nonbinary
- Another option (please specify) _____

112. Do you consider yourself to be... *Select all that apply.*

- Straight
- Gay
- Lesbian
- Bisexual
- Asexual
- Queer
- Questioning
- Choose not to respond
- Not listed (please specify) _____

113. Generally speaking, do you think of yourself as a _____? *Select one response.*

- Democrat
- Republican
- No party affiliation/independent
- Libertarian
- Not sure
- Choose not to respond
- Other (please specify) _____

114. What is your age, in years? _____

115. About how tall are you without shoes? Please answer in feet/inches. _____

116. How much do you weigh, in pounds, without shoes? _____

That concludes the survey!

Thank you so much for your time and responses. We truly appreciate it. If your household is chosen to receive the \$100 Visa gift card, the gift card will be mailed within one month of receiving your survey.

Appendix C: Weighting Methodology

This is a brief report on the weighting procedure and outcome for the CHA (community health assessment) and COVID-19 needs assessment survey. The report is paraphrased from the work of Brian Kriz, a statistician who performed the weighting procedure. A total of 4,804 cases were provided in a .sav file. Missing data were imputed using a hotdeck method. Weighting targets such as age, sex, race by ethnicity, and education were used for the dataset. Weights were scaled to sum to 1,853,876 - the size of the 18+ population according to 2021 1-year ACS (American Community Survey) point estimates.

Crosscheck coding

First, the statistician conducted a check to confirm all variable recodes used for weighting were properly recoded. Codes were confirmed as accurate.

Missingness

About 72.8% of cases are complete, and about 27.4% cases have at least one missing variable. Race and ethnicity have the most missing information. A total of 1.0% of cases have missing information for all weighting variables.

Imputation

Imputation using a hotdeck method was performed. Data were verified for no missing values after the imputation procedure so that the targets could be weighted on all variables.

Weighting diagnostics

The data were weighted using an iterative proportional fitting (i.e., raking or rim weighting) algorithm. The weighting procedure converged after 200 iterations. Below are diagnostics of the original weights and winsorized weights at the 0.01 and 0.99 percentile.

In this final configuration, the design effect is 3.28 for the trimmed and untrimmed set of weights. The max ratio of max to min weights is 444 and 1358, respectively.

There appears to be a large under-representation of young respondents relative to the population targets that are likely creating large weights. Possibly better diagnostics could be achieved by collapsing young adults (i.e., combining those who are 18, 19, in their 20s and in their 30s to 18-39).

Table 4. Comparison of Weighting Metrics with and without Winsorizing

| Weight | Population Estimate | Minimum Weight | Mean Weight | Median Weight | Max Weight | Ratio | Deff |
|-------------------|---------------------|----------------|-------------|---------------|------------|----------|------|
| Weight | 1,853,876 | 1.42 | 385.9 | 103.19 | 1,929.52 | 1,358.04 | 3.28 |
| Winsorized Weight | 1,853,876 | 4.34 | 385.9 | 103.19 | 1,929.42 | 444.76 | 3.28 |

Check Targets and Weight

Unweighted, some distributions are off by as much as 27 percentage points. The largest difference was with young adults (underrepresented by 19 percentage points), older adults (overrepresented by 24 percentage points), Hispanics/Latinos (underrepresented by 25 percentage points), and White, Non-Hispanic (over represented by 27 percentage points). After weighting, we still see some large discrepancies with young adults (10 percentage point difference from the target). As mentioned above, we could get closer if we further collapse age into 18-39.

Table 5. Comparison of Weighted and Unweighted Estimates Against Weighting Targets

| Demographics | | Unweighted Estimates | | Weighted Estimates | | Targets | | Delta Unweighted | | Delta Weighted | |
|------------------|------------------------------------|----------------------|--------|--------------------|--------|---------|-------|------------------|------|----------------|--------|
| Target | Label | Count | % | Count | % | Count | % | Count | % | Count | % |
| Household Income | Less than 14,999 | 359 | 7.50% | 139,043 | 7.50% | 139,041 | 7.5% | -138,682 | 0% | 2 | 0.00% |
| | 15,000 to 34,999) | 697 | 14.50% | 248,493 | 13.40% | 248,419 | 13.4% | -247,722 | 1% | 74 | 0.00% |
| | 35,000 to 74,999 | 1,244 | 25.90% | 500,521 | 27.00% | 500,547 | 27.0% | -499,303 | -1% | -26 | 0.00% |
| | 75,000 to 149,999 | 1,484 | 30.90% | 617,309 | 33.30% | 617,341 | 33.3% | -615,857 | -2% | -32 | 0.00% |
| | 150,000 or more | 1,020 | 21.20% | 348,511 | 18.80% | 348,529 | 18.8% | -347,509 | 2% | -18 | 0.00% |
| Age | 18 to 29 | 112 | 2.30% | 216,095 | 11.70% | 398,583 | 21.5% | -398,471 | -19% | -182,488 | -9.80% |
| | 30s | 361 | 7.50% | 383,865 | 20.70% | 341,113 | 18.4% | -340,752 | -11% | 42,752 | 2.30% |
| | 40s | 528 | 11.00% | 348,399 | 18.80% | 309,597 | 16.7% | -309,069 | -6% | 38,802 | 2.10% |
| | 50s | 768 | 16.00% | 333,798 | 18.00% | 296,620 | 16.0% | -295,852 | 0% | 37,178 | 2.00% |
| | 60s | 1,222 | 25.40% | 292,101 | 15.80% | 259,543 | 14.0% | -258,321 | 11% | 32,558 | 1.80% |
| | 70s and up | 1,813 | 37.70% | 279,617 | 15.10% | 248,419 | 13.4% | -246,606 | 24% | 31,198 | 1.70% |
| Sex | Male | 2,087 | 43.40% | 972,538 | 52.50% | 925,084 | 49.9% | -922,997 | -6% | 47,454 | 2.60% |
| | Female | 2,717 | 56.60% | 881,338 | 47.50% | 928,792 | 50.1% | -926,075 | 6% | -47,454 | -2.60% |
| Race Ethnicity | Hispanic | 1,280 | 26.60% | 951,977 | 51.40% | 956,600 | 51.6% | -955,320 | -25% | -4,623 | -0.20% |
| | NH, White | 2,804 | 58.40% | 572,111 | 30.90% | 576,555 | 31.1% | -573,751 | 27% | -4,444 | -0.20% |
| | NH, Black | 228 | 4.70% | 121,033 | 6.50% | 113,086 | 6.1% | -112,858 | -1% | 7,947 | 0.40% |
| | NH, Asian | 240 | 5.00% | 125,238 | 6.80% | 122,356 | 6.6% | -122,116 | -2% | 2,882 | 0.20% |
| | NH, Other | 252 | 5.20% | 83,516 | 4.50% | 85,278 | 4.6% | -85,026 | 1% | -1,762 | -0.10% |
| Education | Less than HS | 254 | 5.30% | 315,085 | 17.00% | 291,059 | 15.7% | -290,805 | -10% | 24,026 | 1.30% |
| | High school graduate | 583 | 12.10% | 571,820 | 30.80% | 541,332 | 29.2% | -540,749 | -17% | 30,488 | 1.60% |
| | Some college or associate's degree | 1,660 | 34.60% | 601,298 | 32.40% | 613,633 | 33.1% | -611,973 | 1% | -12,335 | -0.70% |

| Demographics | | Unweighted Estimates | | Weighted Estimates | | Targets | | Delta Unweighted | | Delta Weighted | |
|--------------|---------------------------------|----------------------|--------|--------------------|--------|---------|-------|------------------|-----|----------------|--------|
| Target | Label | Count | % | Count | % | Count | % | Count | % | Count | % |
| | Bachelor's degree | 1,047 | 21.80% | 248,542 | 13.40% | 268,812 | 14.5% | -267,765 | 7% | -20,270 | -1.10% |
| | Graduate or professional degree | 1,260 | 26.20% | 117,130 | 6.30% | 139,041 | 7.5% | -137,781 | 19% | -21,911 | -1.20% |

Final Data Set

The final data set was provided back to HARC with original weights (recommended for use, used by HARC) as well as winsorized weights (not recommended for use, not used by HARC).