

# **COVID-19 PANDEMIC EMPLOYMENT IMPACTS ON ASIAN AMERICANS**

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## DISCLAIMER

The views expressed herein are those of the authors and not necessarily those of the University of California, Los Angeles. The authors alone are responsible for the content of this report.

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## EXECUTIVE SUMMARY

This report examines employment impacts of the COVID-19 pandemic on Asian Americans in California. The COVID-19 public health crisis disrupted the economy, displacing nearly three and a half million workers during the first few months. Previous research indicates that Asian Americans were hard hit, particularly those in the lower rungs of the labor market. This report provides additional insights by analyzing micro-level data (individual records of those between the ages of twenty-five to sixty-four) from two surveys conducted by the United States (U.S.) Census Bureau. The American Community Survey (ACS) provides estimates of the early impacts by comparing employment outcomes in 2020 to the previous five years (2015 - 2019). Using a modified unemployment measure that takes into account those on unpaid temporary layoffs, we find that Asian Americans were displaced at rates roughly comparable to non-Hispanic Whites (NHWs) and Others (those neither NHW nor Asian American). When disaggregating by educational attainment, we find that less educated Asian Americans (those with no college schooling) had the biggest increase in the revised unemployment metrics. The analysis also shows considerable disparities among Asian ethnic groups, and immigrants with limited English language ability suffered the most.

The Household Pulse Survey provides estimates of the impacts from early 2020 to mid-2022. We use the

ratio of those with paid work to the base population to examine outcomes. The results show that Asian Americans experienced a greater drop than non-Hispanic Whites, although Others experienced the most dramatic decline. Among Asian Americans, those with less education experienced significant job losses, far greater than for less educated NHWs and on par with less educated Others. Employment recovery has been slow, and Asian American employment is still below the pre-pandemic period. We recommend the following: eliminate information, language, cultural and trust barriers to accessing unemployment assistance; develop re-employment and training programs to help displaced Asian Americans; and form university-government partnership to conduct future research to disaggregate the Asian American population by ethnicity, language ability, and economic class.

## KEY FINDINGS

### Part I, Early Pandemic Impacts:

1. The pandemic-induced increase in unemployment for Asian Americans was **roughly comparable** to the increases for non-Hispanic Whites (NHWs) and Others (those neither NHW nor Asian).
2. The early increase in unemployment was particularly pronounced for those who had **lower educational attainment**, affecting over one in ten workers.

3. There were **significant ethnic variations**, with Vietnamese Americans suffering the largest displacement.
4. One sixth of Asian Americans with **limited English language ability** were displaced.

**Part II, During Pandemic Impacts:**

1. Compared with NHWs, Asian Americans experienced a **small but relatively larger drop in paid employment**.
2. The drop was particularly significant for **less educated Asian Americans**, and those with no college schooling had a decline far greater than NHWs and comparable to Others.
3. Overall, the results from the analyses of ACS and PULSE show similar findings, indicating that Asian American workers **fared worse than NHW workers**. This is particularly true for less educated Asian Americans.

## RECOMMENDATIONS

1. There should be programs to ensure that all Asian Americans have **fair access to unemployment assistance** by eliminating information, language, cultural, and trust barriers.
2. There should be **re-employment and training programs** to help Asian Americans who are permanently displaced.
3. Future research should **disaggregate the Asian American population** by ethnicity and economic class, which enables state agencies to better develop more effective policies, programs, and outreach to the most adversely affected.
4. Disaggregation would require state agencies to **collect more detailed information**, such as ethnicity and language ability.

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## INTRODUCTION

The purpose of this analytical report is to examine the impact of COVID-19 on the labor market as it affected Asian Americans in California. As of late October, over ten million Californians were infected with COVID-19, with nearly ninety-four thousand dying from COVID-19-related causes (State of California, n.d.). Along with the public health crisis, the pandemic massively disrupted the economy: the magnitude and timing of this impact can be seen in **Figure 1**, which reports those with jobs as a proportion of California's adult population. (U.S. Bureau of Labor Statistics, 2022). Nearly three and a half million workers (about 18% of all workers) lost their jobs between February 2020 and May 2020, with the U.S. employment-to-population (E/P) ratio dropping by eleven percentage points. This statistic likely underestimates the decrease because those considered employed included workers on unpaid furlough or temporary layoff. Moreover, the U.S. Census Bureau had difficulties conducting the survey during the public health crisis, with relatively lower responses from marginalized populations (Rothbaum & Bee, 2021; Shin, 2021).

The economic effects fell harder on people of color (Park, 2021), and low-wage Asian Americans were among the most affected (Mar

& Ong, 2020). The government response to the economic disruption was to expand the unemployment insurance program (Acs & Karpman, 2020); while this was a welcome action, unemployment insurance only partially offset the losses in earnings, and many did not qualify (Mar et al., forthcoming; California Rural Legal Assistance, 2022).

This analytical report presents empirical findings to better understand how pandemic employment problems have affected Asian American adults aged twenty-five to sixty-four years in California compared with non-Hispanic Whites (NHWs) and Others (those neither NHW nor Asian American).

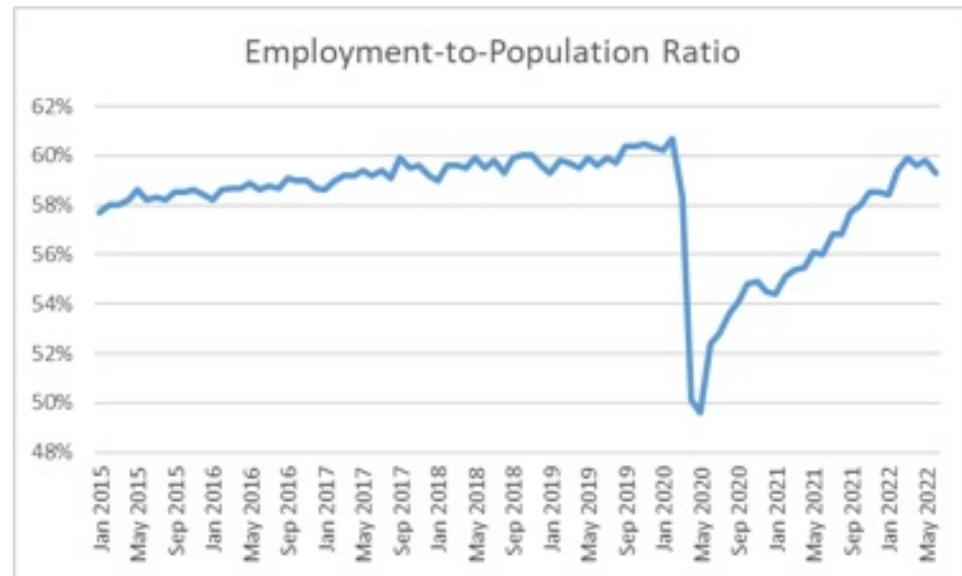
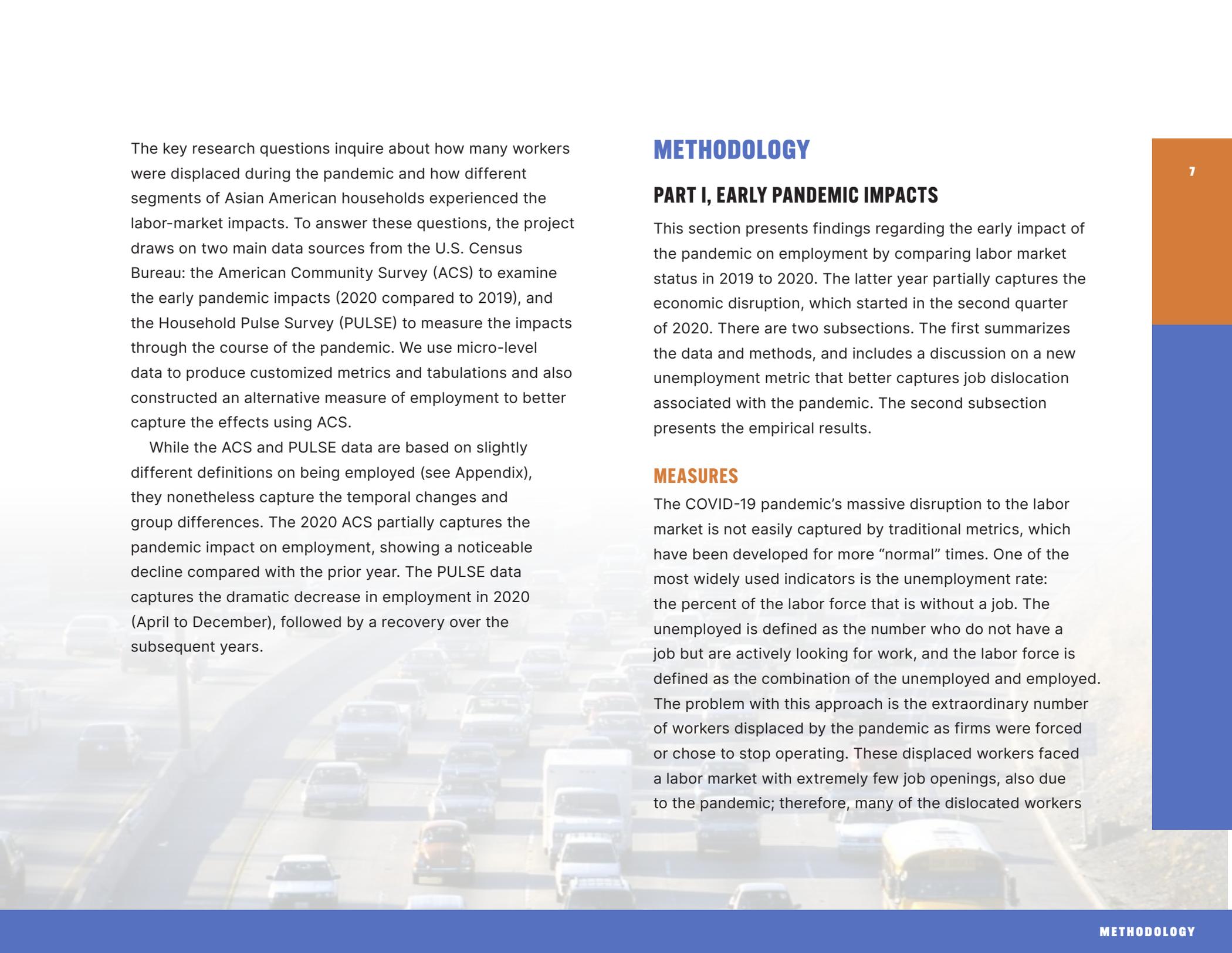


Figure 1: Employment-to-Population Ratio (Source: 2015-2022 CPS)



The key research questions inquire about how many workers were displaced during the pandemic and how different segments of Asian American households experienced the labor-market impacts. To answer these questions, the project draws on two main data sources from the U.S. Census Bureau: the American Community Survey (ACS) to examine the early pandemic impacts (2020 compared to 2019), and the Household Pulse Survey (PULSE) to measure the impacts through the course of the pandemic. We use micro-level data to produce customized metrics and tabulations and also constructed an alternative measure of employment to better capture the effects using ACS.

While the ACS and PULSE data are based on slightly different definitions on being employed (see Appendix), they nonetheless capture the temporal changes and group differences. The 2020 ACS partially captures the pandemic impact on employment, showing a noticeable decline compared with the prior year. The PULSE data captures the dramatic decrease in employment in 2020 (April to December), followed by a recovery over the subsequent years.

## METHODOLOGY

### PART I, EARLY PANDEMIC IMPACTS

This section presents findings regarding the early impact of the pandemic on employment by comparing labor market status in 2019 to 2020. The latter year partially captures the economic disruption, which started in the second quarter of 2020. There are two subsections. The first summarizes the data and methods, and includes a discussion on a new unemployment metric that better captures job dislocation associated with the pandemic. The second subsection presents the empirical results.

### MEASURES

The COVID-19 pandemic's massive disruption to the labor market is not easily captured by traditional metrics, which have been developed for more "normal" times. One of the most widely used indicators is the unemployment rate: the percent of the labor force that is without a job. The unemployed is defined as the number who do not have a job but are actively looking for work, and the labor force is defined as the combination of the unemployed and employed. The problem with this approach is the extraordinary number of workers displaced by the pandemic as firms were forced or chose to stop operating. These displaced workers faced a labor market with extremely few job openings, also due to the pandemic; therefore, many of the dislocated workers

made a rational choice of not actively seeking employment. Even if they wanted to look, the pandemic put up enormous barriers to applying to the rare number of potential employers. Consequently, the official unemployment rate can significantly underestimate the pandemic impact on the labor market.

An alternative labor-market measure that captures the disruption is what we label as the Unemployment-Displacement Rate (UDR). That metrics includes those who fall into the following categories: the unemployed, laid off due to economic reasons, furloughed, and employed but not at work. This represents a count of the unemployed and the displaced (UD count), which should not include double counting those who are in both states. Of course, many workers fell into these categories prior to the pandemic. It is the change in these counts from before and during the pandemic which captures the economic impacts of COVID-19. We normalize the information by including those employed into a UDR. We also use the temporal difference in UDR in combination with differences across populations to estimate variations in the pandemic effects, a method called the difference-in-differences method.

The project draws on the American Community Survey (ACS) to examine the UDR. ACS is a continuous survey conducted by the U.S. Census Bureau to collect demographic, economic and housing data. We use individual-level data from the public-use micro samples (PUMS), which allows us to produce customized estimates. PUMS

contains roughly a 1% sample of the population per year. The questionnaire is available in both English and Spanish, and telephone assistance is available in several Asian languages.

The ACS does not directly ask questions about the impact of the pandemic on households, but instead is a continuous effort by the U.S. Census Bureau to collect social, economic, and housing data. With the ACS, however, we can measure changes in employment-related measures prior to the COVID-19 pandemic and the first year into the pandemic. We use the 2019 ACS as the pre-pandemic base and the 2020 ACS to measure the early pandemic effects; at the time of this study, the 2020 ACS is the latest ACS available to analyze. It should be noted that the 2020 ACS underestimates the pandemic impact because it includes information collected two and a half months prior to the lockdowns (January to mid-March 2020).

## ANALYSES

To examine racial/ethnic disparities in the COVID-19 pandemic's early labor-market impacts, we use a difference-in-differences approach widely used by economists to analyze the effects of a natural experiment. In an ideal world, the best approach to detecting the effects of a treatment or intervention is to randomly assign people to a group that receives the treatment or intervention and to a comparison group that does not. This is impossible for events such as the COVID-19 pandemic, where everyone is exposed to the disruptions.

Under these circumstances, difference-in-differences is useful to test for and estimate the size of possible racial/ethnic disparities in the pandemic's impacts. This approach relies on first establishing differences among the groups prior to the event, capturing many of the unobserved factors that generate disparities during "normal" times. To capture the effect of the event, we examine changes from the first period; in other words, we use differences between groups and between time periods. We ask, for example, if the increase (the delta) from the baseline for Asian people is smaller, equal to, or greater than that for non-Hispanic White people.

We employ disaggregation to assess whether there are noticeable disparities in the pandemic impact on Asians. We conduct four levels of disaggregation. The first is by broad racial/ethnic categories. We focus on three, Asian Americans, non-Hispanic Whites (NH White), and all other racial and ethnic groups combined ("Other"). NH Whites are used as the primary benchmark because they are considered to be the most privileged societal segment. Given its ethnic diversity, the second analysis disaggregates Asian Americans into eight subgroups. The level of disaggregation is determined in part to maintain reasonable sample sizes, and in part based on commonalities. The eight subgroups include: Asian Indian, Filipino, Japanese, Korean, Vietnamese, Chinese (including Taiwanese), and CHL, which includes Cambodian, Hmong, and Laotian, as well as a final residual category that includes all other Asian subgroups ("Other Asians"). Cambodian, Hmong, and Laotians are grouped together because these

groups are amongst the most economically disadvantaged within the Asian American community, and many share a similar history as political refugees to the U.S. Individually separated, they also have a small sample size.

The third analysis disaggregates broad racial/ethnic categories by educational attainment levels. We use four categories for the educational attainment of the reference person: (1) those with no more than a high school education, also known as those with no college schooling; (2) those with some college education but without a bachelor's degree, a category that includes those with an associate in art degree; (3) those with only a bachelor's degree; and (4) those with a graduate degree—master's or higher. The final disaggregation is of Asian Americans by their ability to speak English.

## **PART II, DURING PANDEMIC IMPACTS**

This section examines the labor market impact of pandemic using a modified employment-to-population (E/P) ratio, which only includes those with paid work during the week of the survey. The data comes from PULSE, which is described in the next subsection. The analysis also compares the patterns from PULSE with those from ACS.

### **MEASURES**

The analysis of the pandemic period relies on estimates using the HPS (Household Pulse Survey, or PULSE), an experimental U.S. Census Bureau product, which track disruptions to

employment, spending patterns, food security, housing, health, and education that are related to the COVID-19 pandemic (United States Census Bureau, 2022). The survey was conducted in phases, and this project uses the results for weeks one to forty-seven, covering early 2020 to mid-2022. The survey was not conducted weekly, and a given week number refers to the dates when the survey was conducted. The questionnaire is available in English and Spanish but not in any Asian language. The latter limitation probably means that Limited-English-language Asian immigrants are underrepresented in the sample. We use the public-use micro sample (also known as the public-use file), which allows us to produce customized estimates. For statistics reported by year, the 2020 PULSE data covers April to December, the 2021 covers the whole year, and the 2022 covers January to July.

Our employment-to-population ratio is based on the following question: “Now we are going to ask about your employment. In the last 7 days, did you do ANY work for either pay or profit?” A person giving an affirmative response (“Yes”) is classified as being employed, while those giving a negative response (“No”) is classified as not being employed. It should be noted this definition for PULSE does not perfectly align with ACS definition of being employed, which includes those with a job but not at work. The latter could include being employed (holding a job with an employer) but not being paid for the week (e.g., being on temporary leave). So, PULSE estimates can be slightly biased downward compared with ACS estimates.

## ANALYSIS

We created demographic and geographic categories that are fairly consistent with those used to analyze ACS data. There are three race/ethnic categories: NH Whites, Asians, and all others. There are four educational-attainment categories: those with no more than a high school education, those with some college education but without a bachelor’s degree, those with only a bachelor’s degree; and those with a graduate degree. We report statistics for three MSAs: LA-Orange; Riverside, SF-Oakland. Unfortunately, PULSE does not have information on nativity nor on Asian ethnicity.

## DATA & FINDINGS

### PART I, EARLY PANDEMIC IMPACTS

As mentioned earlier, the ACS can provide some insights into the impact of the pandemic on employment by examining changes in the unemployment-displacement rate prior to the pandemic and the start of the pandemic. The ACS further allows us to disaggregate information by ethnic groups and other socio-demographic characteristics.

**Figure 2** compares the UDR from 2016 to 2020 for the three broad racial/ethnic categories used in this study. The UDR increased for all groups from 2019 to 2020, ranging from an increase of five percentage points for Asian Americans to six percentage points for NH whites and other racial groups. While we may not see much differences for Asian Americans

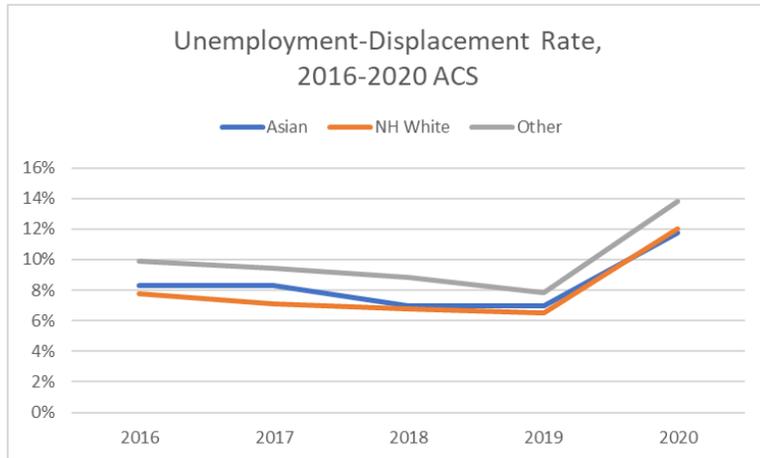


Figure 2: Unemployment-Displace Rate by Race/Ethnicity (Source: 2019 and 2020 ACS PUMS)

and NHWs as a whole (as shown in **Figure 2**), there are still differences when we account for educational attainment and by racial/ethnic groups.

**Figure 3** further disaggregates the racial/ethnic groups by their educational attainment level and compares the changes in the UDR from 2019 and 2020. All educational levels experienced an increase in the UDR, with those with less than a college degree most impacted. Asian Americans with a high school diploma or less were the most impacted, with their UDR increasing over ten percentage points. Many Asian Americans with a high school diploma or less tend to be concentrated in service and hospitality sectors, which were highly impacted by the pandemic.

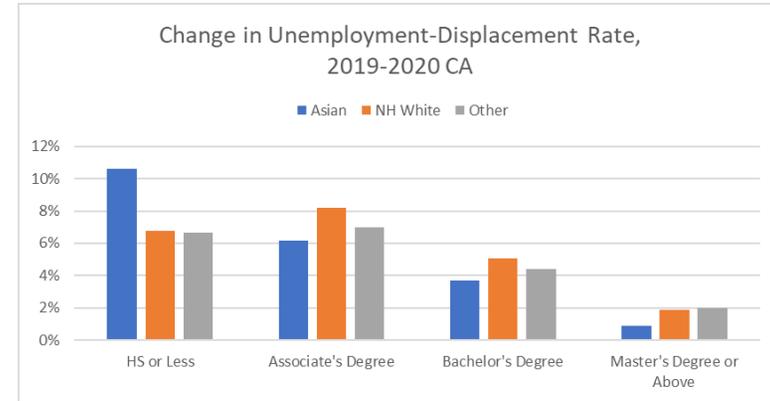


Figure 3: Change in Unemployment-Displace Rate by Race and Educational Attainment (Source: 2019 and 2020 ACS PUMS)

**Figure 4** further disaggregates Asian Americans by ethnic subgroups and compares their 2019 and 2020 UDR. Among the subgroups, Vietnamese Americans experienced

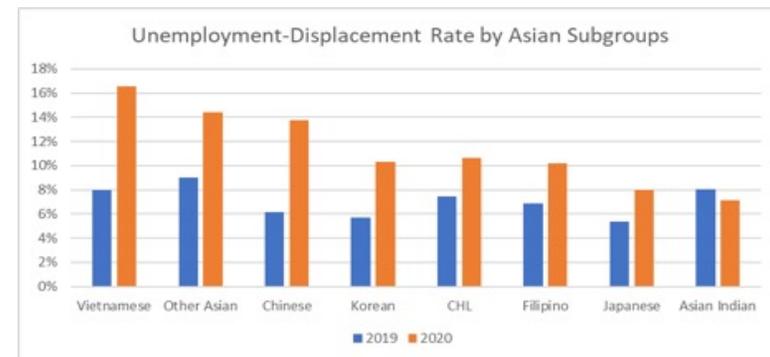


Figure 4: Unemployment Displacement Rate by Asian Subgroups (Source: 2019 and 2020 ACS PUMS)

the highest increase in their UDR—from 8% in 2019, to 17% in 2020—followed by Chinese Americans and Korean Americans. The residual group, “Other Asian,” had a similar increase in the UDR to Korean Americans at five percentage points.

Vietnamese Americans are highly concentrated in the service industry, with the majority in the nail salon industry. According to ACS estimates from AAPI Data, 12% of Vietnamese Americans in the labor force are manicurists and pedicurists (Nguyen Do and Phan, 2021). This industry was especially impacted by COVID-19 pandemic shut downs when Governor Newsom mistakenly identified nail salons as the source of the COVID-19 community spread in California (Feuer, 2020). Chinese and Korean Americans are largely concentrated in hospitality and, more particularly, restaurants, many of which closed down during this time period.

We also examine the COVID-19 pandemic’s impact among Asian Americans by their English language speaking ability. Roughly a third (33%) of all Asians are limited English proficient (speaks English less than very well) compared to 3% for Whites (estimates based on 2020 ACS PUMS). Given their significant limited English proficiency population, **Figure 5** only displays the UDR by English language speaking ability for Asian Americans. Asian Americans who have difficulty speaking English were more likely to be impacted by the pandemic as measured by the UDR rate.

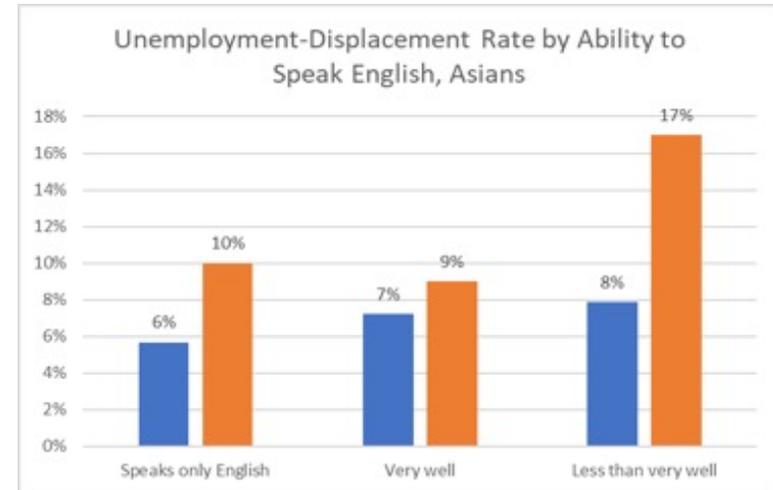


Figure 5: Unemployment-Displacement Rate by English Language Speaking Ability (Source: 2019 and 2020 ACS PUMS)

## PART II, DURING PANDEMIC IMPACTS

The COVID-19 pandemic impact did not affect segments of the population equally. **Figure 6** illustrates the E/P impacts on non-Hispanic whites, Asian Americans, and all others between the ages of twenty-five and sixty-four years old. To better see group differences, the bottom of the graph is truncated (i.e., the minimum level is 50%). All three groups suffered from the economic disruption, but there are noticeable differences. The other category (those not non-Hispanic White nor Asians), did not experience a continuous recovery, and in fact experienced a regression in early 2022.

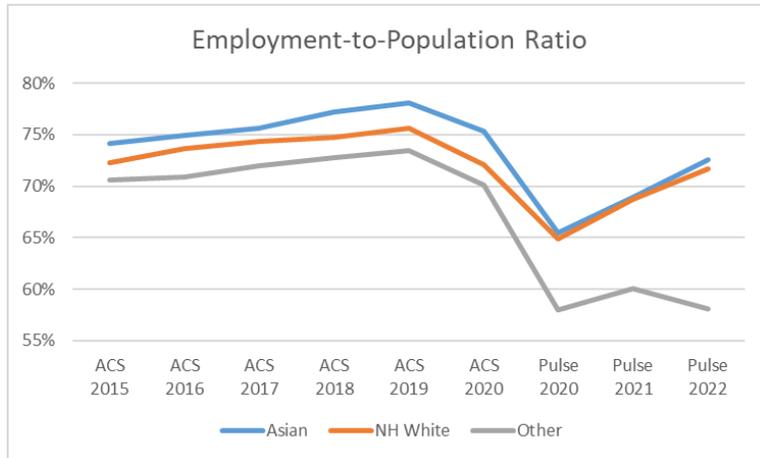


Figure 6: Employment-to-Population Ratio by Race (Source: 2015 - 2020 ACS and 2020 - 2022 PULSE)

Prior to the pandemic, Asian Americans had a higher E/P ratio than the other two groups, due in part to higher levels of education; however, during the pandemic, the Asian American E/P ratio fell more than that of NH Whites, which means that proportionally more Asian Americans lost jobs compared with NH Whites.

**Figure 7** summarizes the employment-to population ratios during pre-pandemic and pandemic years (2015-2019 ACS and 2020-2022 PULSE). One measure of the impact of the pandemic on a group is the difference in the height of blue and orange bars. NH Whites experienced a decline of 6.1 percent points, while Asians experienced a decline of 7.4

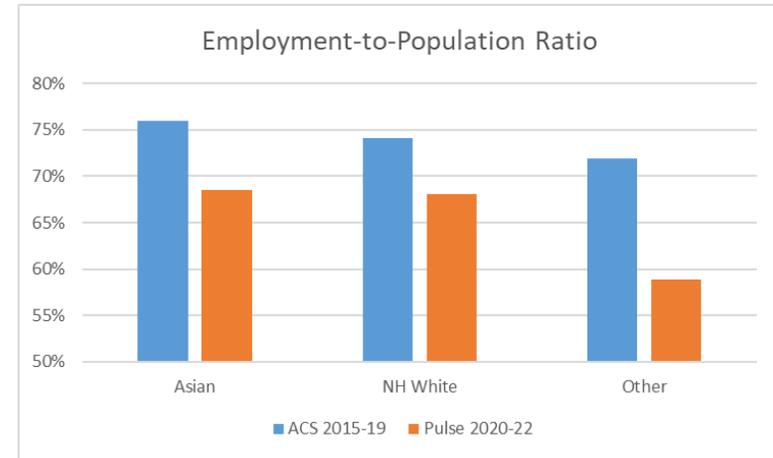


Figure 7: Employment-to-Population Ratio by Pre-pandemic and Pandemic Time Periods (Source: 2015 - 2019 ACS and 2020 - 2022 PULSE)

percentage points. The other racial category experienced a 13.0 percentage point decline.

The pandemic impact on employment differed significantly by educational attainment. For example, the decline in the E/P ratio from the pre-pandemic period was over thirteen percentage points for those with no college education (high school graduate or less) compared with less than three percentage points for those with a graduate degree (master's degree or higher). Those with higher educational attainment tend to work in industries that suffered less disruption and offered more opportunities for remote work relative to those with less educational attainment. Many Asians benefited

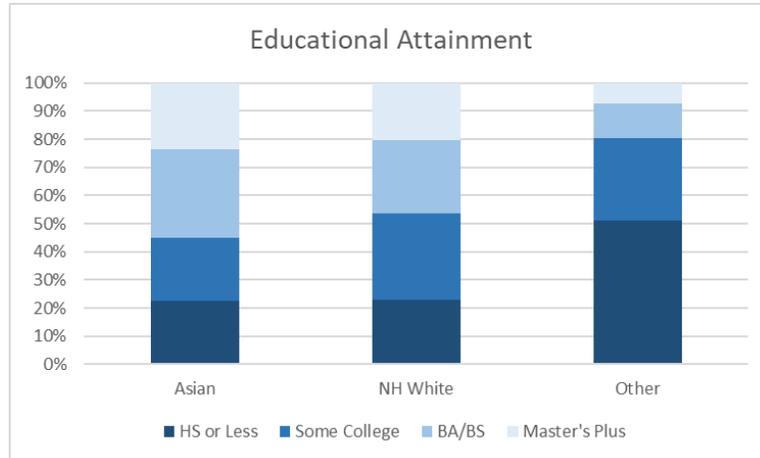


Figure 8: Educational Attainment by Race/Ethnicity (Source: 2020 - 2022 PULSE)

from this pattern because Asian Americans have higher levels of educational attainment, as summarized in **Figure 8**. Nonetheless, over one in five Asian Americans do not have any college education.

**Figure 9** shows the decline in the E/P ratio from pre-pandemic levels by the three racial/ethnic categories and educational attainment. For all groups, the impacts were inversely related to educational levels. What is interesting are the declines for Asian Americans relative to NH Whites. Among those with no more than a high school education, the decline for Asian Americans was twice as large as for NH Whites and comparable to the “other” category. For those

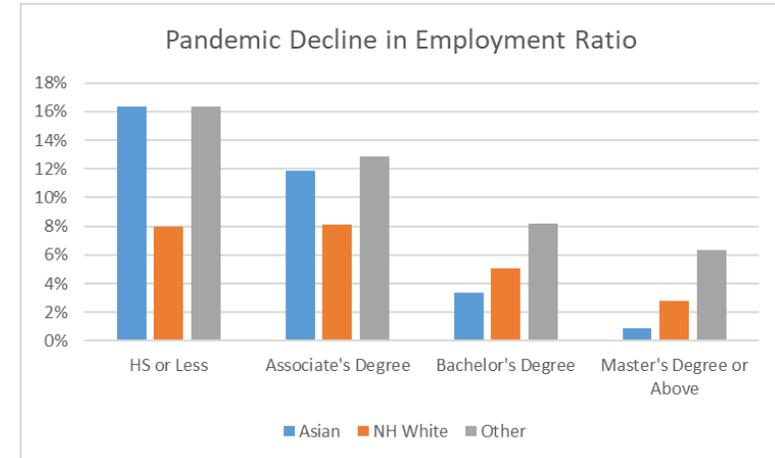
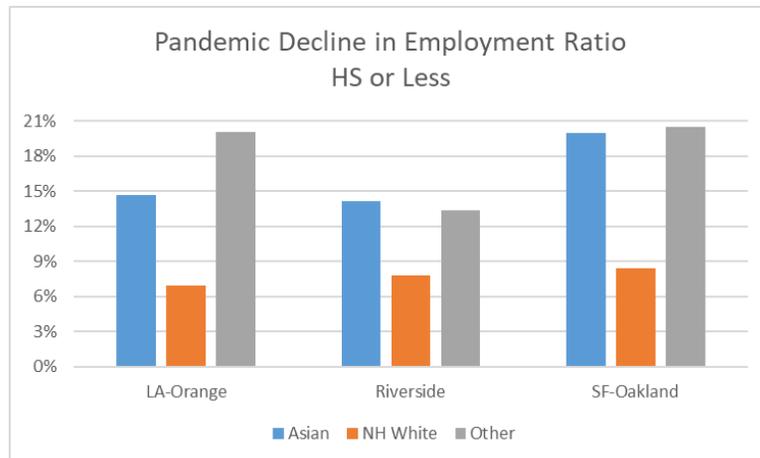


Figure 9: Pandemic Decline in Employment-to-Population Ratio (Source: 2015 - 2020 ACS and 2020 - 2022 PULSE)

with some college education but no bachelor’s degree, the decline for Asian Americans was over three percentage points higher than for NH Whites, and about one percentage point lower than for “others”. At the higher end of the educational ladder, Asian Americans with at least a bachelor’s degree had the lowest decline.

**Figure 10** shows the decline in the E/P ratio by regions for those with a high school education or less by the three racial/ethnic categories. For all metropolitan areas, Asian Americans fared worse than NH Whites. Asian Americans fared better than Others in LA-Orange and were comparable in the other two regions.



**Figure 10: Decline in Employment-to-Population Ratio for those with High School Education or Less**

Unfortunately, PULSE does not provide information on an Asian respondent's ethnicity nor nativity. However, analysis of the ACS finds that Asians without a college education are predominantly immigrants, with about a third not yet naturalized (see Appendix).

## CONCLUSIONS & RECOMMENDATIONS

The above analyses provide new insights into how the pandemic has affected Asian American workers (25-64) in California, along with comparisons with non-Hispanic Whites and others. The project utilizes individual-level information from two data sources from the U.S. Census Bureau: the

American Community Survey to examine the early pandemic impacts, and the Household Pulse Survey to estimate the impacts through the course of the pandemic. The ACS and PULSE employment indicators are based on different definitions; nonetheless, they capture the temporal changes and group differences. The major limitations are a lack of detailed information or small sample size to fully disaggregate the findings by ethnicity and economic class.

Overall, results from the analyses of ACS and PULSE show similar findings: economic disruption was greater for Asian American workers than for NHW workers, and Asian Americans occupied a middle position between NHWs and Others. Additionally, there were substantial disparities in the impacts among Asian American subgroups: Asian Americans with high levels of education fared significantly better than Asian Americans with less schooling and also fared better than NHWs with similar education. At the other end, less educated Asian Americans were among those most hurt by the pandemic-induced shock to the labor market. This group is predominantly immigrant, many of whom have limited English language ability.

Based on our findings and those from previous studies, we recommend the following:

1. Create programs to ensure that Asian Americans most impacted by disasters like the COVID-19 pandemic are able to access unemployment assistance to relieve their financial burden. This would require eliminating information, language, cultural and trust barriers. It is

critical to have these programs in place so that the state will be in a better position in the future to help the most needy workers.

2. Although the economy has been slowly recovering, it is likely that many Asian Americans will be permanently displaced because of changes in demand for services and goods, and because of permanent business closure. There is a critical need to help these affected workers to find new employment, and to gain new skills to find better jobs.
3. To implement both of the above recommendations, it is important for future research to disaggregate the extremely diverse Asian American population. This would enable state agencies to better understand how labor-market disruptions affect different segments along ethnic and economic class lines. The new insights would help design more effective policies, programs and outreach.
4. Disaggregation would require state agencies to collect more detailed information, such as ethnicity and language ability.

To implement the proposed future research, state and federal agencies should work collaboratively with Asian American researchers who are experts in the academic field. This would require greater access to non-public data and program information to enhance basic research and program evaluation.

## APPENDIX: PROFILES OF LESS EDUCATED POPULATION

Unlike the other two groups, Asian Americans with no college education are overwhelmingly immigrants, with about a third being non-citizens.

Asian Americans with no college education are ethnically diverse. The following chart reports the ethnic composition of those with a high school degree or less schooling. Chinese, Vietnamese, and Filipino Americans comprise about two thirds of the population.

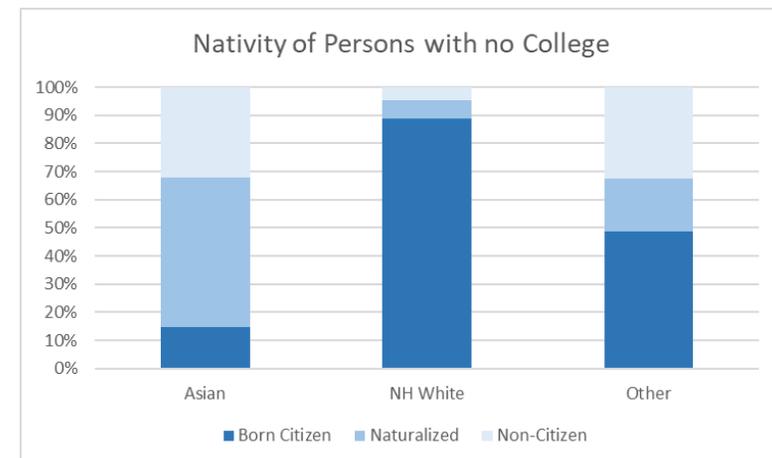
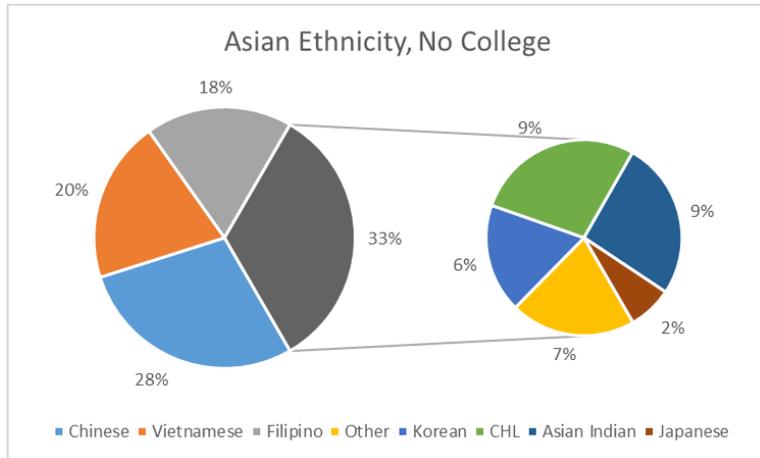
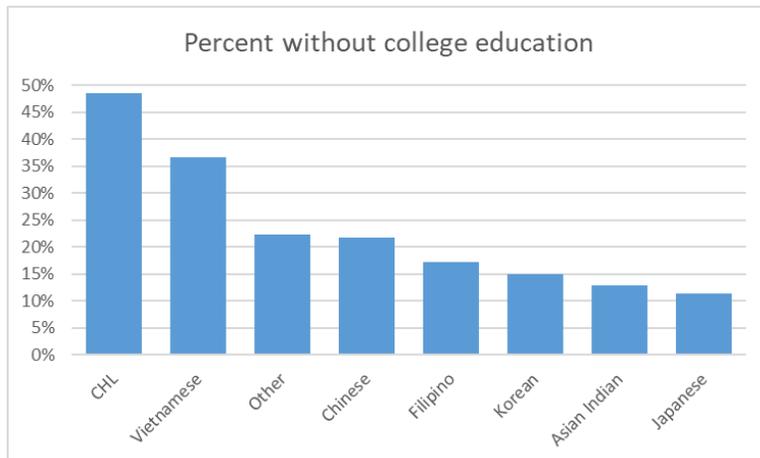


Figure A1: Nativity of Persons with no College Degree by Race (Source: 2015 – 2019 ACS PUMS)



**Figure A2: No College Degree by Asian Subgroups (Source: 2015 - 2019 ACS PUMS)**



**Figure A3: Percent with No College Education by Asian American Subgroups (Source: 2015 - 2019 ACS PUMS)**

There are, however, large differences among Asian American ethnic groups in the proportion of those without any college schooling. Nearly half of the CHL population (Cambodians, Hmong, and Laotian Americans) have no more than a high school education, while less than an eighth of Japanese Americans fall into this category.

### ABOUT THE AUTHORS

**Paul Ong, MUP, PhD**, is Research Professor at UCLA Luskin School of Public Affairs and the Director of the Center for Neighborhood Knowledge. He has a master’s in urban planning and a doctorate in economics, and his research focuses on the urban spatial structure, race and economic inequality, environmental justice, and urban labor market disparities. Throughout his academic career, he has been committed to engaged scholarship. He has served on advisory committees or as a technical advisor for numerous federal agencies, including the U.S Census Bureau, National Research Council, Department of Justice, National Cancer Institute, and Small Business Administration. Additionally, he has conducted empirical research for several California agencies, including the Employment Development Department on displaced workers, Department of Social Services to assess the employment impact of welfare reform, and Department of Housing and Community Development on fair housing. Over the last decade, he has worked with

dozens of community-based organizations to advocate for social and environmental justice. He currently works with the Air Resource Board to develop neighborhood-level indicators related to sustainability and transportation. He is one of the 2021 recipients of the Haagen-Smit Clean Air Award from the California Air Resource Board for his work on environmental justice and community service.

**Chhandara Pech, MUP**, is Assistant Director and researcher at the UCLA Center for Neighborhood Knowledge. He holds a master's degree in urban planning from UCLA and specializes in the application of quantitative methods and geographic information systems to analyze patterns of inequity across neighborhoods. Chhandara has conducted research and published on housing and transportation inequality, neighborhood change and gentrification, wealth/income disparity, and land-use developments. He is currently conducting research around the economic impacts of COVID-19 on disadvantaged neighborhoods and communities of color. Chhandara has extensive experience working with community organizations and public agencies. This includes providing technical assistance to members of The California Endowment's Building Healthy Community, the Chan Zuckerberg Initiative funded project to assist community stakeholders and local jurisdictions addressing

the pandemic housing crisis, and state agencies (California Air Resource Board and Department of Transportation) working on sustainability and climate justice. His background provides him with personal insights and a lived understanding of the barriers and challenges faced by people of color, working class individuals, and other groups who face similar effects due to their marginalized positions in society. Chhandara is Cambodian American and is a son of immigrant parents who arrived in the United States as refugees.

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