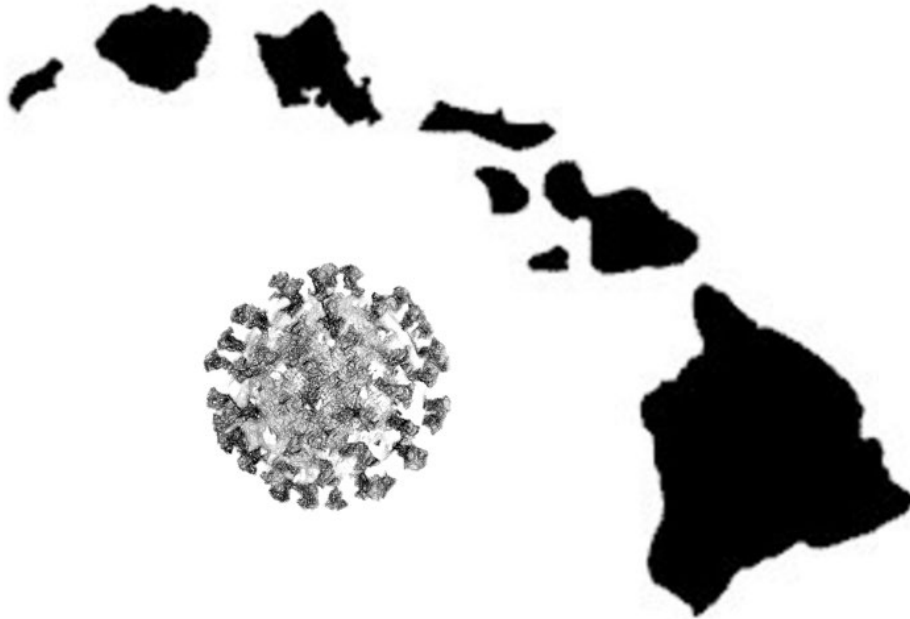




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# Hawaii's Labor Market Impact During COVID-19

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April 2021  
Department of Business,  
Economic Development & Tourism

This report is prepared by Dr. Wayne Liou, Economist, under the direction of Dr. Eugene Tian, Division Administrator. Dr. Joseph Roos reviewed the report and provided valuable recommendations.

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## Introduction

With the shutdown and restrictions on travel to the state, Hawaii has had among the highest unemployment rates in the nation after years of having one of the lowest unemployment rates. The job loss was not distributed evenly across workers, however. Certain demographics were more likely to be affected, either due to the industry they worked in or the types of occupations they filled. This report examines how the labor market changed in 2020 with the onset of the COVID pandemic, breaking down the analysis by various demographics to see which populations' employment were particularly affected by the pandemic.

## Data and Methodology

Using the Current Population Survey (CPS) monthly responses for Hawaii, this report analyzes employment status from January 2020 to February 2021 for civilians aged 15 and older, in particular unemployment rate, labor force participation rate, and differences in usual hours worked and actual hours worked in a week. The CPS is sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS).

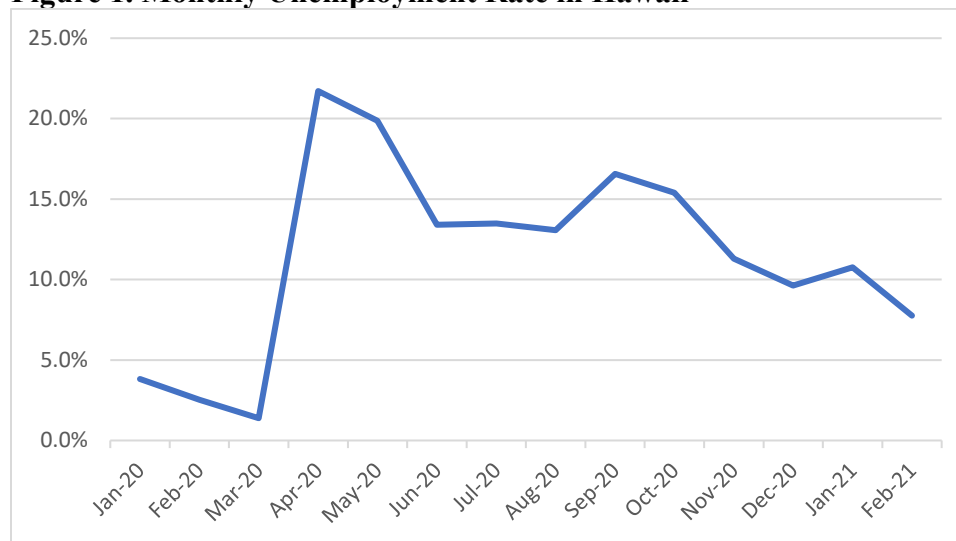
## Labor Market Impacts by Characteristics

### Unemployment

Below are graphs of monthly unemployment rates by characteristic. Note that some of the sample sizes were small, such as for certain family income categories and for the tourism industry, so some results should be viewed with caution.

The first shutdown in March 2020 led to high unemployment in April, and the second shutdown in late August to September 2020 for Honolulu also led to an upward rebound of the unemployment rate. There was marked improvement by December 2020 relative to the high in April 2020.

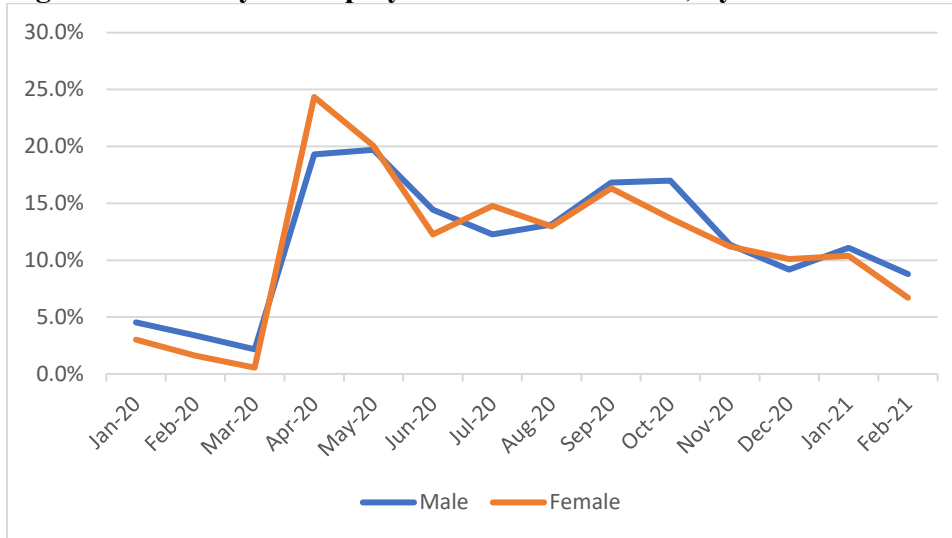
**Figure 1. Monthly Unemployment Rate in Hawaii**



Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

Some research has suggested that female employment has been affected more than male employment, but outside of a large difference in April 2020, that doesn't appear to be the case in Hawaii, at least with respect to the unemployment rate.

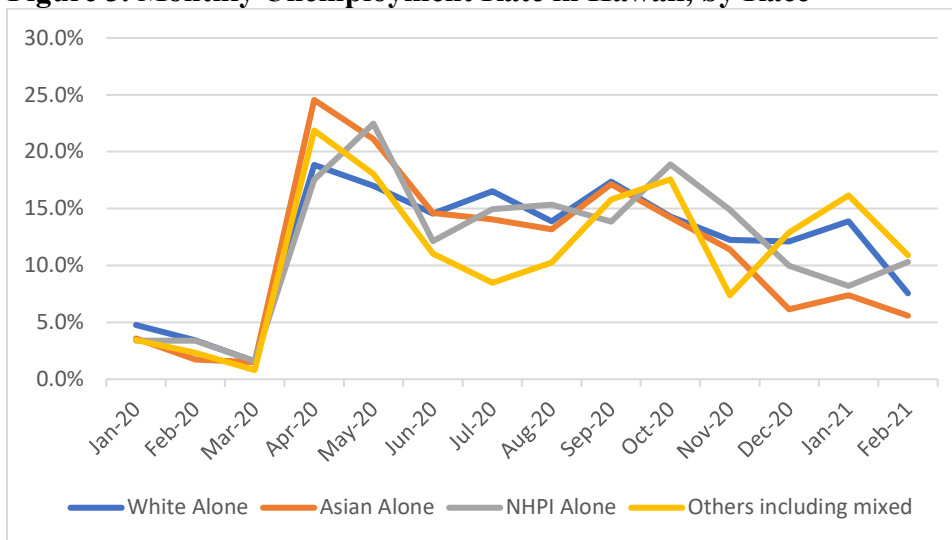
**Figure 2. Monthly Unemployment Rate in Hawaii, by Gender**



Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

Some unexpected trends appear when looking at unemployment rates by race. Asians alone are most affected at first but have recovered relatively well. Whites alone are affected less at the beginning of the shut down, but their unemployment rate has plateaued. Native Hawaiians and Pacific Islanders are affected similar to other races, it appears, though unemployment peaks might have occurred a month after other races.

**Figure 3. Monthly Unemployment Rate in Hawaii, by Race**

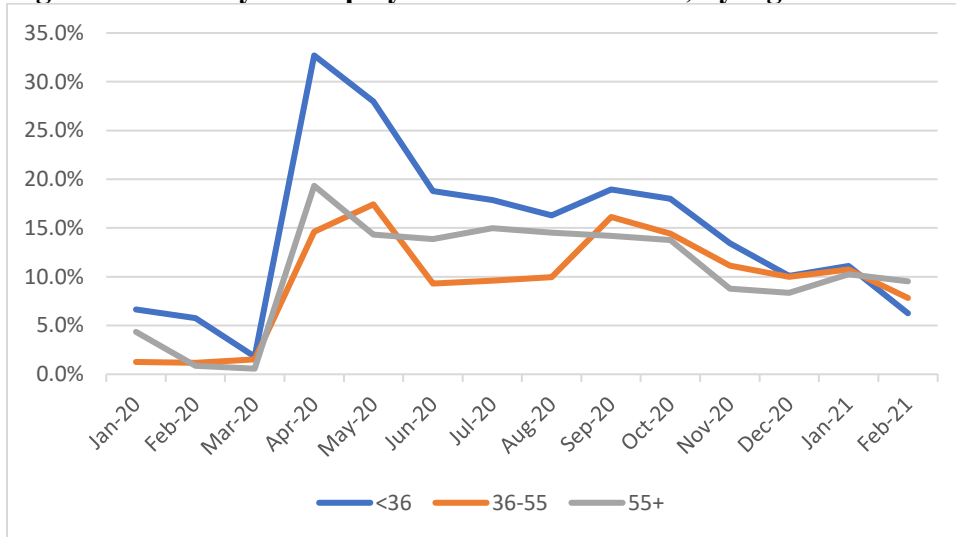


Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

According to a study by DBEDT, Hawaii’s Working Population Analysis by Industry 2015-2019, Asian workers were more concentrated in the hospitality sector (Accommodation and Food services, Art, Entertainment & Recreation) than workers of other major races. This may explain why Asian workers are impacted more at the beginning of the pandemic, when Hawaii tourism decreased 99.5% in April 2020.

Looking at unemployment rates by age, younger workers are the most affected, especially at the beginning of the pandemic. Those aged 36-55 and those older than 55 are similarly affected throughout. By the end of 2020 and into February 2021, the unemployment rates across the various age groups are more or less the same.

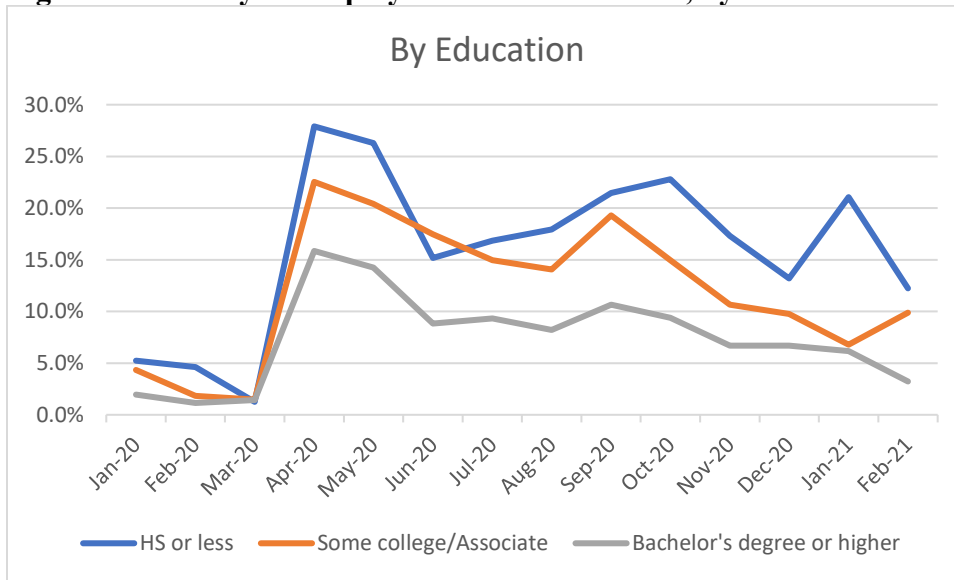
**Figure 4. Monthly Unemployment Rate in Hawaii, by Age**



Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

When comparing labor market outcomes based on educational attainment, those with less levels of education attainment are clearly most affected throughout. In April 2020, unemployment rates were the highest among those without any college education. There has been limited improvements for these workers, but it has not been steady. In contrast, workers with at least some college education have had improvements throughout the pandemic. Workers with some college or an associate degree are more affected than those with a bachelor’s degree or higher at the beginning of the shutdown, but the unemployment rates for these two categories of workers were rather similar as of January 2021.

**Figure 5. Monthly Unemployment Rate in Hawaii, by Education**

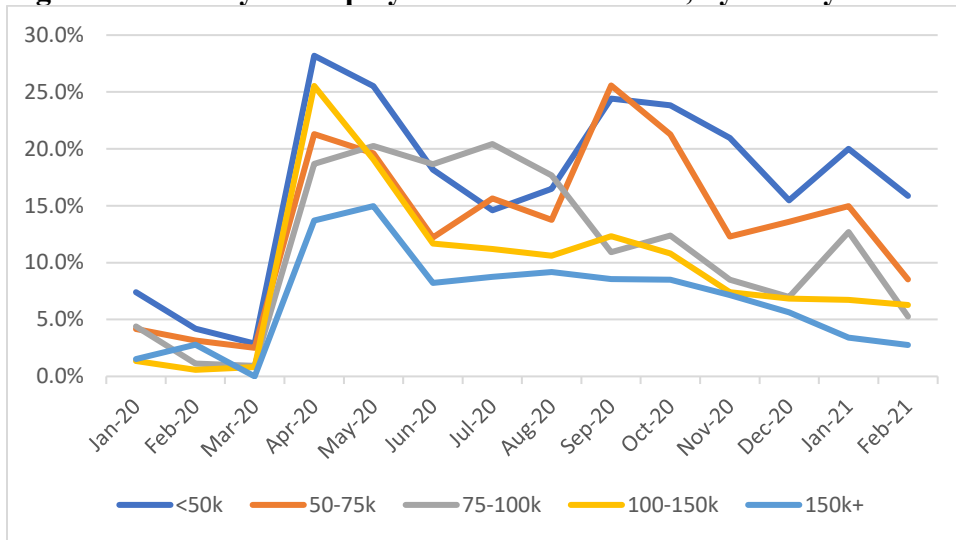


Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

There is not a cohesive story when looking at unemployment rates across family income categories. Initially, those with the lowest family incomes and those with higher family incomes (but not the highest earners) had the highest unemployment rates, but only the latter has recovered. Workers with family incomes in between \$50,000 and \$100,000 did not see the highest unemployment rates in April 2020, but have not recovered as much as those with family incomes of \$100,000-150,000, outside of some similarities between \$75,000-100,000 and \$100,000-150,000 in late 2020 (only for there to be a divergence in January 2021). Workers with family income over \$150,000 are much less affected, and have a much more normal-looking unemployment rate of less than 4% in January and February 2021.

Most of the workers in the low-income class (under \$50,000) are workers in the hospitality sector. The average labor earnings of workers in the hospitality sector are the lowest among industries in Hawaii and those workers are impacted the most and the unemployment rates remain higher than other income classes.

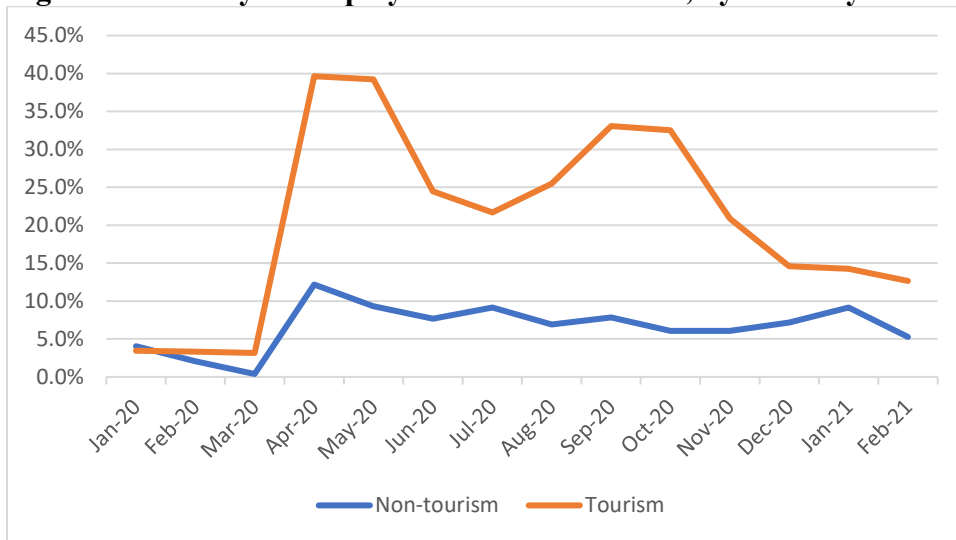
**Figure 6. Monthly Unemployment Rate in Hawaii, by Family Income**



Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

Looking at the effect of the shutdown by industry, and grouping industries into tourism and non-tourism industries, tourism industries were significantly affected compared to non-tourism industries. Tourism industries are defined as Retail; Transportation and Warehousing; Real Estate and Rental and Leasing; Arts, Entertainment and Recreation; and Accommodation and Food Services. Importantly, while both tourism and non-tourism industry were both affected in April 2020, only tourism industry workers experienced a significant uptick in unemployment around Honolulu’s second shutdown in August and September 2020. Non-tourism industries had modest improvements through the end of the year, only to have a slight worsening in December 2020 and January 2021.

**Figure 7. Monthly Unemployment Rate in Hawaii, by Industry**

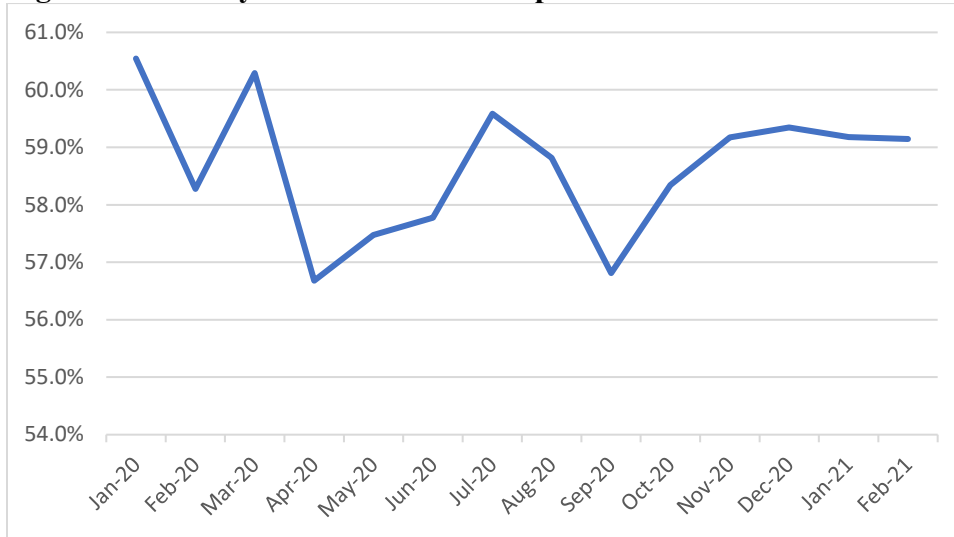


Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

## Labor Force Participation Rate

The labor force participation rate indicates the percentage of all people of working age who are employed or are actively seeking work. Looking at the labor force participation rate in Hawaii, it decreases significantly in April 2020 and in September 2020, with some recovery in the summer and winter months.

**Figure 8. Monthly Labor Force Participation in Hawaii**



Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

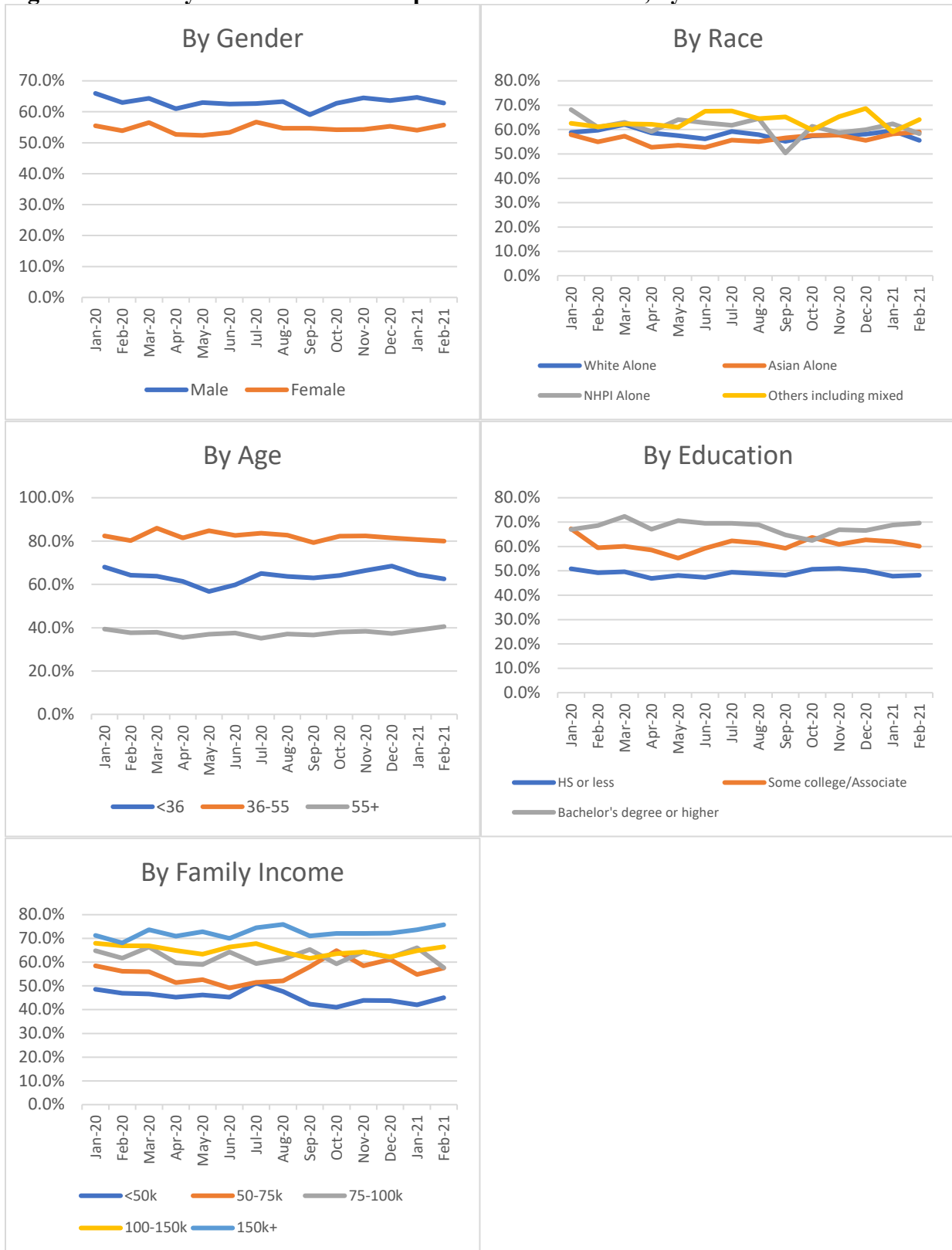
Breaking down by characteristics, it doesn't look like there are many major things to note aside from baseline differences; trends are generally similar across demographics. Notably, females do not have a significant decrease in labor force participation, suggesting that the story of the outsized effect of the pandemic on the female labor force does not appear to have happened in Hawaii.

A few other points stand out. There was a sharp decrease in Native Hawaiian and Pacific Islander labor force participation in September, while there was a modest, consistent decline in the labor force participation rate among younger workers through May. Workers with family incomes between \$50,000 and \$75,000 had marked improvement to labor force participation rates from August through October, recovering from the modest declines from January through June.

The by-industry graph is omitted, as those who report their industry are generally employed.



**Figure 9. Monthly Labor Force Participation Rate in Hawaii, by Characteristics**

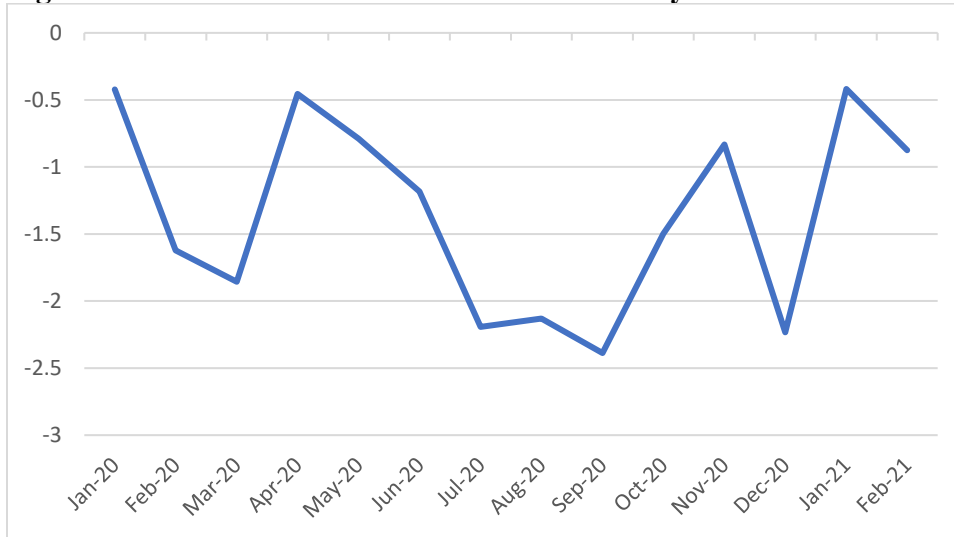


Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

## Changes in Weekly Hours Worked

Next, to see if those who remained employed saw a decrease in hours worked, the following analysis looks at differences in usual hours worked and actual hours worked each week. The following is the average difference for all workers and by characteristics. A negative number means the worker worked fewer hours during the previous week than they usually do. There's a decline in February and March 2020, but interestingly, there is not much difference in April 2020. There is a noticeable difference during the summer months of 2020.

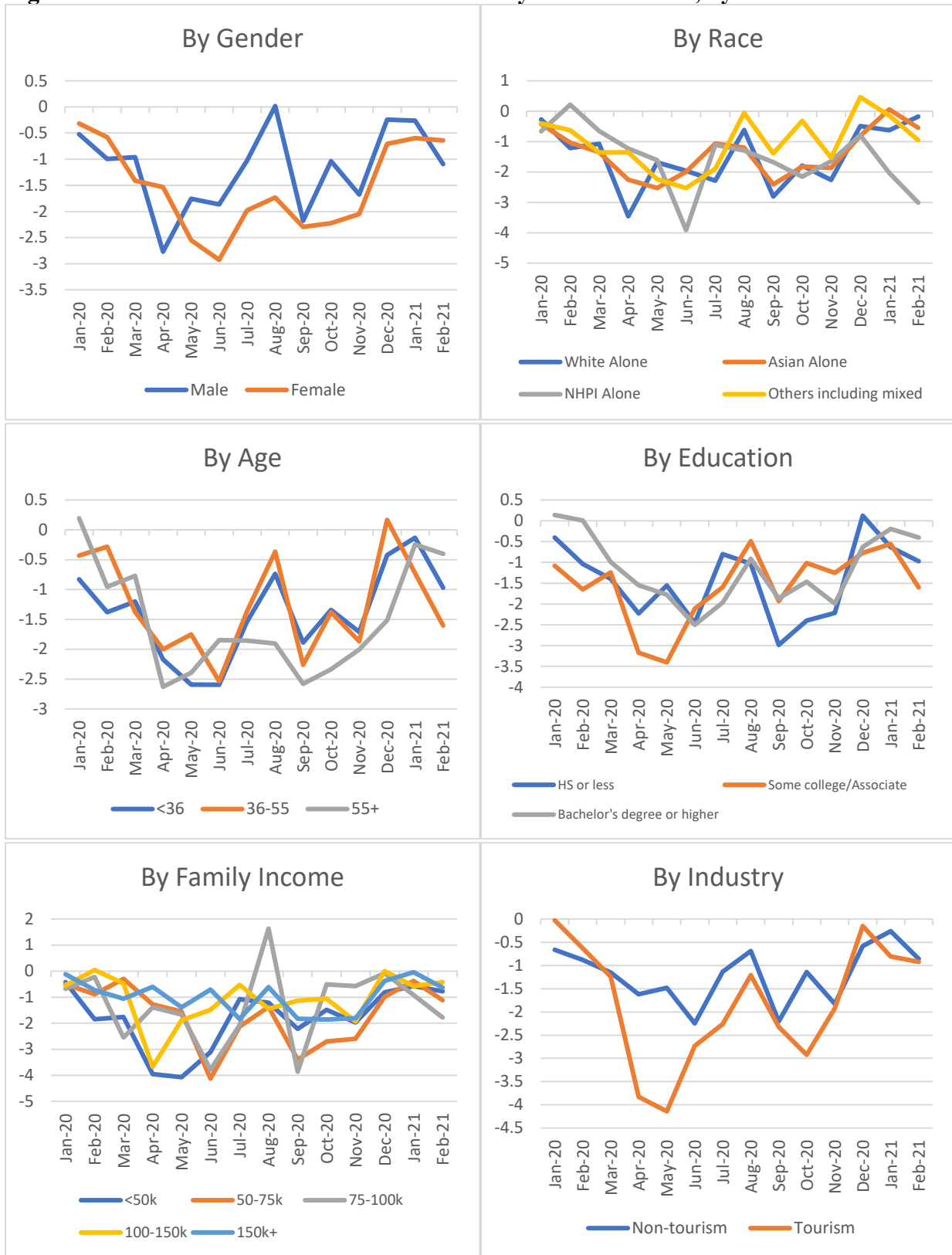
**Figure 10. Difference in Actual and Usual Weekly Hours Worked in Hawaii**



Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

Similar to the labor force participation rate analysis, there do not appear to be many significant, consistent stories when analyzing by different demographics. Workers with higher family incomes tended to have actual hours worked closest to usual hours worked, and workers in the tourism industry saw a significant drop in actual hours worked compared to non-tourism industry workers, even with the large number of workers who lost their jobs. Older workers more consistently worked less throughout 2020, unlike workers younger than 36 and between 36-55, whose actual hours worked were similar to their usual hours worked in July and August 2020.

**Figure 11. Difference in Actual and Usual Weekly Hours Worked, by Characteristics**



Source: Current Population Survey from the Integrated Public Use Microdata Series; calculations by DBEDT

## Conclusions

In late 2019 and early 2020, Hawaii's unemployment rate was among the lowest in the nation, sitting at just over 2%. The pandemic and subsequent shutdowns and travel restrictions had large, negative impacts, as numerous businesses had to close at least temporarily, leading to an increase in the unemployment rate by 10-fold, to over 20%. As case counts have decreased in the state, restrictions have slowly been lifted, and coupled with federal assistance, the economy has recovered slightly. This report looked at how the labor market has changed over the pandemic, looking at monthly changes in unemployment rates, labor force participation rates, and changes in weekly hours worked across different demographics.

Younger workers, workers with less education, and low wage workers were the most affected populations, with higher unemployment rates. There were some noticeable differences in labor force participation rates, but there were no consistent stories. With regards to differences in usual and actual hours worked, there were significant change in hours worked in tourism industry at the beginning of the pandemic, even with the large job losses in the tourism industry. Other research finding employment differences between males and females showed up in Hawaii as differences in usual versus actual hours worked per week, as opposed to differences in unemployment rate or labor force participation rate.