

The following findings is from data collected during November of 2020. This research was lead by Dr. Roseann Jones, Professor of Economics at the University of Guam, with support from MR&D. Funding support was provided by Governor Lou Leon Guerrero with Cares Act Funds.



INTRODUCTION

Over a year ago, COVID-19 infected Guam. Now, because of quick and decisive action taken by the administration, the island is emerging a year later with one of the fastest and most complete pandemic recovery records in the United States. Guam's vaccination program has placed it among the top five U.S. jurisdictions; infection rates have nearly gone to zero. Though what has been done to protect the health of our community has been impressive, it was not easy. It required leadership and sacrifices from large numbers of both residents and businesses.

When COVID-19 really started to take hold last March (2020), a group of businesspeople came together to discuss what could be done to supplement what the administration was doing to protect the island. They were from a variety of industries, but all realized that the frustrating truth that in order to save lives, commerce needed to be curtailed. The pause in trade impacted jobs and shut down the livelihoods of business owners and residents alike. Instead of grousing about the effects of what was necessary, the business owners decided that they wanted to try and supplement what the government was doing. They realized that information was key in determining what could be done to address economic and social effects of COVID-19. Information would also allow them to come up with proposals for mitigating the negative effects of the pandemic and help the community rebound faster and more completely. This data—evidence—would help guide the kinds of actions they felt would best assist the administration, their fellow businesspeople, and their employees.

Taking the first step, they decided to approach the University of Guam (UOG), seeking a private and public partnership, to discuss the tangible and useful ways in which this information to assist residents and businesses could be found. The result was a plan called the "Guam Recovery Project". This plan would require university expertise to develop ways to advise local businesses. The advisement would help businesses understand how best to assure their customers and their employees that it would be safe to return once the virus began to abate. The business owners also wanted to know more than what could be reported through government programs, regarding the impact that COVID-19 has had on families and on Guam businesses.

The next step was taken by reaching out to the Guam Visitors Bureau (GVB) to see if it would be possible to survey its membership. The survey would take stock of the effects that COVID-19 had had on its members. The results were completed in June and were included in a report prepared for the administration. While the discoveries were interesting, the administration called for a more holistic view—one that provided evidence of how the entire community was affected and not, simply, the member companies of GVB.

As a result, the university was provided a funding to expand the research and to create a way to offer a "Guam Safe Certification" for businesses that would assure customers and employees that it was safe to return when the economy opened up again. This report presents some of the findings of the research that was conducted among all residents and all businesses on Guam and contains real evidence about how residents and businesses were impacted. The following information was generated through island-wide surveys and is part of a more extensive set of findings. What is presented here are a few of the highlights.

WHAT WE EXAMINED

The research conducted looked at three things: residents, PUA applicants, and businesses. The first component of the research examined COVID-19 impact on residents. This study identified the profile of residents who were most affected and those who were least affected. Patterns of how



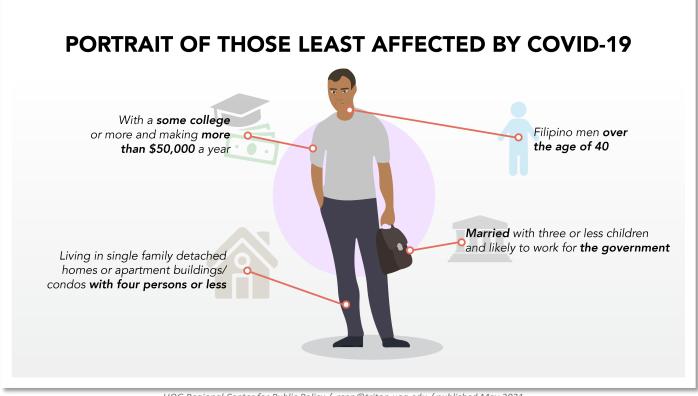
COVID-19 affected employment, forced families into situations where they had too little to eat or could not settle their household expenses, were identified, as well as the profile and proportion of those that were forced to seek public and community assistance. At the same time, the study also identified residents who were not affected. and also, the few who benefitted from the circumstances created by COVID-19.

The second component of the research looked at applied for PUA assistance in residents who 2020. In addition to profiling their demographic and economic characteristics, the PUA study determines what these residents experienced in their households and identifies some of the challenges they faced.

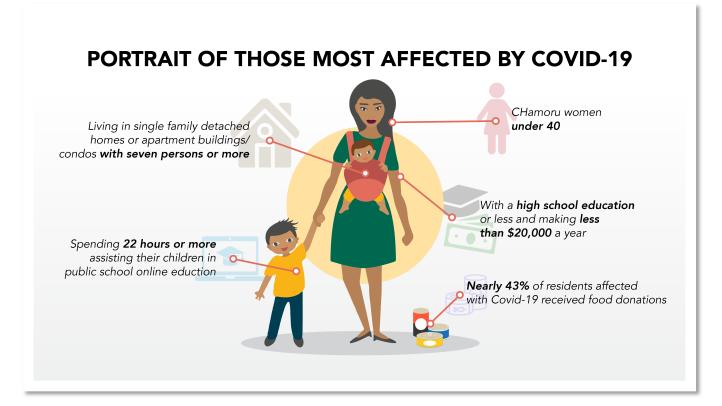
The third component of the research looked at businesses. A listing of all business licenses in 2020 was obtained with the help of the Department of Revenue and Taxation. Accordingly, businesses were chosen to participate from a random sample of local businesses included in the listing. The same guidelines followed the U.S. Census were used to

develop this sample, which can be compared to data collected in 2017 the U.S. Economic Census the last time an economic census has been conducted. Comparisons in business performance between 2017 and 2020 have been identified.

Next, the data was segmented into the three sectors that have attracted the most attention over the last four years. The first sector identified was construction. This portion of the study examined how construction contractors performed in 2020 compared to 2017 and how their experience in 2020 compared to the overall economy of the year prior. The next sector identified was tourism. This portion of the study looked specifically at the performances of small, locally owned tourismbased businesses, as well as what they did to adapt to COVID-19. The last sector identified included businesses that depend primarily on local customers—excluding businesses in the construction or tourism sectors. This portion examined how the "bread-and-butter" small businesses that drive Guam's economy performed







and adapted to the changes presented by COVID-19 in 2020.

Like the residential study, a profile was created identifying the businesses that were been negatively affected, as well as those that avoided impacts and performed better in 2020 than in 2019. This research provides insight into the microeconomic effects of COVID-19 and how it has shaped how the behaviors and outlook for businesses.

WHAT WE FOUND OUT

WHO WERE THE AFFECTED AND NON-AFFECTED **RESIDENTS?**

While about one in five residents had their lives disrupted by COVID-19, seventy-seven percent (77%) did not. Residents that avoided the impact of COVID-19 were more likely to be male (52%) and tended to be Filipino (28%) when compared to those that were impacted (19%). Those that were not affected also were older. Forty-seven percent (47%) were forty years or older compared to just forty percent (40%) of those that were affected by COVID-19. Those that avoided the effects of the virus were also more likely to have higher incomes. Twenty-nine percent (29%) of those that least affected earned \$50,000 or more a year compared to only eight percent (8%) of those who were affected.

Similarly, those that were not affected had higher levels of education. Fifty-eight percent (58%) had gone to college compared to forty percent (40%) of than those that were affected. Those not affected also lived in households with fewer members. Only about seven percent (7%) lived in households with seven or more members, compared to twenty-one (21%) of those that were affected by COVID-19. Those not affected also had fewer children living at home. Twelve percent (12%) had three or more children living at home compared to twenty-six percent (26%) of those that were affected.

The residents least affected by COVID-19 were more likely to work in the government. Thirty-eight percent (38%) work for the Government of Guam, the federal government, or are currently serving in



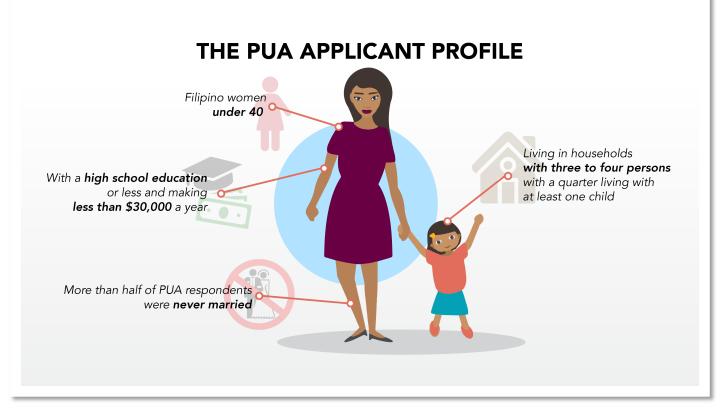
the military. Only fourteen percent (14%) of those impacted by COVID-19 are government workers.

The effects of COVID-19 were not evenly distributed in the community. Those that were directly affected tended to be women—sixty-three percent (63%) were women. Those most affected were also likely to be CHamoru (39%) and under the age of 40 (53%). More than half (57%) had a high school education or less, and forty-seven percent (47%) had household incomes of less than \$50,000 per year. Three quarters (75%) worked in the private sector, mainly in food and beverage (25%), hospitality (14%), and retail (14%) occupations.

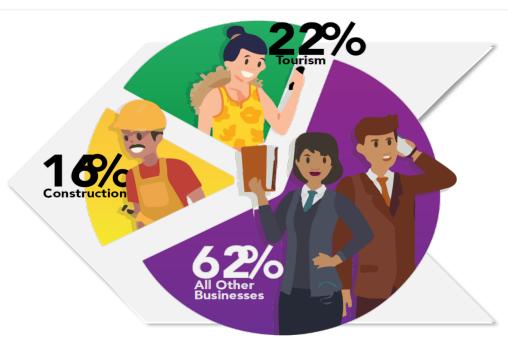
WHO WERE THE PUA **APPLICANTS?**

The second component of the research looked at PUA applicants. Residents who applied for PUA were workers of the private sector. They were more likely to be female (52%) and tended to be of a younger demographic of individuals below the

age of 40 (59%). Those who applied for unemployment assistance during the pandemic were most likely to be Filipino (30%). PUA applicants generally made less than \$20,000 in household income (29%) and had high school education (47%) or less (5%). In terms of household size, those who applied for PUA came from households with three to four people (44%). Nearly half of these households (46%) did not have children residing in the house, which was most likely a single family detached house (38%). Majority of PUA applicants had jobs in servicerelated industries. Nearly a quarter (23%) work in food and beverage, followed by retail (17%), and accommodations (16%). These private sector workers work in management (19%) and food preparation and serving positions (19%). Due to COVID-19, many **PUA** applicants (85%)experienced at least some difficulty paying for household expenses, such as food, medical expenses, and housing payments.







WHO WERE THE PRIVATE **BUSINESSES?**

WHO WE TALKED TO

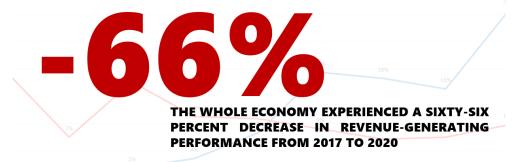
The third component of the research examined the impact of COVID-19 on businesses in the private sector. Those who responded to the survey were likely to be the chief executives, owners, and presidents of the company (68%). A total of 413 businesses were surveyed.

To ensure all industries were represented, businesses holding licenses in 2020 were sampled using the same industrial classification utilized by the 2017 U.S. Economic Census. The survey auestions derived were also from the questionnaire that was used to gather the U.S. Economic Census data. Using similar questions would allow the comparison of business performance between 2017 and 2020. In addition to asking the questions posed by the Economic Census, additional questions pertaining to COVID-19's impact on business operations were asked. The questions were derived from other business surveys conducted around the world by groups, such as PricewaterhouseCoopers (PwC), The Wall Street Journal, etc. The purpose of including these added questions was to obtain a broader, in-depth understanding of the challenges that COVID-19 created for businesses on Guam in 2020.

WHAT WE DISCOVERED

WHAT CHANGED?

Private businesses and their contribution to the economy dropped dramatically. The revenue generating performance of the private industry dropped by sixty-six percent (66%) between 2017 and 2020. At the same time, business expenses fell





even more dramatically (81%). These findings prompted the question of whether or not these drops were evenly shared by all sectors. When examining three sectors—the construction industry, the tourism industry, and all other local business-it was found that they all experienced separate and different experiences.

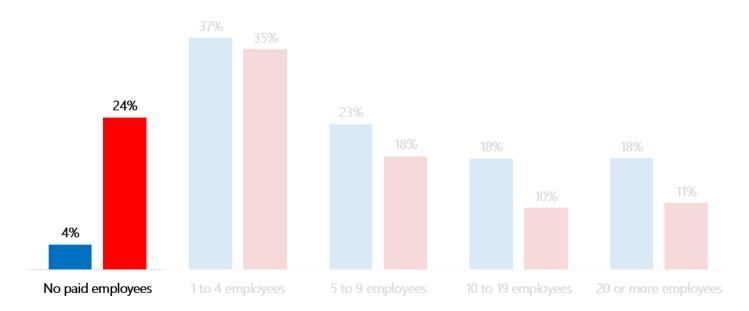
HOW WERE THEY AFFECTED?

performance of The revenue generating construction companies declined by 47% between 2017 and 2020—a much less dramatic amount. The slightly less amount in decline may be due to the fact that most construction companies remained operational during the COVID-19 pandemic. companies Construction were considered "essential" businesses and therefore, were allowed to operate for most of 2020. However, despite the opportunity to remain operating, there were other factors that may have hampered growth in this sector.

In interviews with construction companies, several factors were suspected that may have led to the decline. One factor relates to a backlog in military and private sector construction contracts. There was an estimated \$2 billion in delayed and backlogged construction contracts awarded for Guam that have not yet been initiated.

Three reasons appear to be possible explanations for the delay. The first reason regards a reallocation of money. The U.S. Department of Defense had previously detoured money allocated for the military realignment in Guam to other federal projects, such as the border wall. The second reason references the scarcity of labor, caused by the denial of H-2B labor visas for contractors in Guam. The third reason—and most frequently mentioned reason—concerns recent changes made to the permitting process. In the interviews conducted with construction companies, respondents indicated that because of COVID-19, the permitting process had slowed down. Once a land-use construction permit and review committee was implemented, the review process system seemed to slow down as more agencies began coordinating. In addition, staffing problems were created due to mandated shutdowns, and the appointment of board and agency personnel was delayed. Regardless, when compared to rest of

WORKERS (2017 VS. 2020)





Guam's private sector (excluding the tourism industry), the construction sector outperformed by forty-five percent (45%).

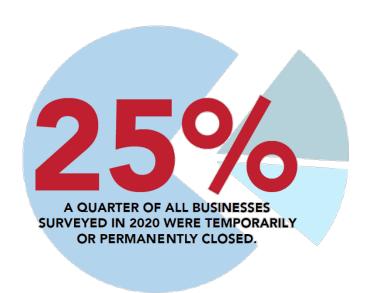
At the same time, local "bread and butter" businesses—those that are not dependent on the tourism industry or the construction industryperformed as well as the overall economy in 2020. There was no discernable difference between how the mainstay of Guam's business community performed and how the overall private sector performed in generating revenue. While local businesses were not as successful as the construction industry, they performed no worse than the average for the entire economy.

The sector that had the most difficulty was the tourism sector. This group included several businesses across multiple industries, such as retail, accommodations, food and beverage, transportation, support services, and financial services. The businesses that were part of this sector, which depend primarily on the tourism industry for revenue, underperformed by thirtytwo percent (32%) in revenue generating performance when compared to the rest of private businesses on Guam.

The changes in revenue generating performance also resulted in changes in employment. Between 2017 and 2020, there was a twenty percent increase (20%) in the proportion of firms that had no paid employees, reflecting an increase in furloughs and permanent layoffs of employees.

Considering the difficulties private businesses faced in 2020, only four percent (4%) were forced to close permanently. Within the tourism sector, seven percent (7%) of businesses permanently closed, compared to three percent (3%) among construction related enterprises and only two percent (2%) of those businesses that rely on local patrons.

One plausible explanation for the relatively low rate of closure overall was that half (50%) of all businesses took advantage of financial assistance provided by government programs, such as the Small Business Administration (SBA) and Guam Economic Development Authority (GEDA). These programs were well received, and for many, they were important to their survival in 2020. It is also true that more assistance is needed. More than a third (36%) of all businesses do not believe their revenues will return to 2019 levels until 2022. Twelve percent (12%) believe that they will have to close if they do not receive additional assistance this year.





Four percent of businesses had to permanently close in 2020 due to COVID-19.



CONCLUSION

The year 2020 will be remembered as one of the most challenging years in Guam's history. Yet, the determination to make eradicating COVID-19 the community's highest priority is the reason why Guam is recovering quicker and more completely than most communities in the United States. It will also be the reason why our island will be able to experience economic recovery faster than we would have otherwise. The intention of this project was to provide a means to better inform the community about the impacts felt throughout our island in 2020. It was also intended to provide a baseline to measure how well our people and our businesses recover over the next two years.

The data collected helps identify those residents who have been most affected and are most in need of assistance. It will provide insight into the type of assistance that would be most helpful. Similarly, this information identifies those businesses that are most in need and will assist with devising ways to stimulate revenue growth and employment.

Throughout this project, one thing has been proven true, time and time again: Guam's community is resilient. Our island's businesses have adapted and changed in ways that has improved innovation, improved efficiency, and helped to better meet the needs of their customers. The government has also responded by improving the technology it uses, changing the way it provides services, and effectively delivering much needed aid to residents and businesses alike.

This project provides a demonstration of how the private and public sectors can work together to create a better understanding of how economic and social conditions affect our island. It is important that this work continue to add to what has been learned so that it can be used to make better informed decisions on our island's road to recovery.

