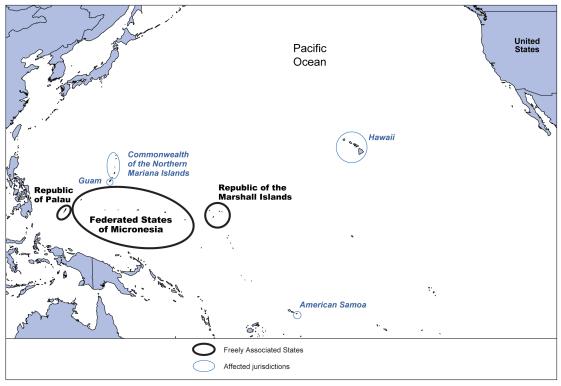


### COFA Migrants in Hawaii



Source: Map Resources



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Department of Business, Economic Development & Tourism Research and Economic Analysis Division

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#### **Executive Summary**

In order to compensate the three Micronesian nations (the Micronesians) of the negative impacts caused by the military use of the Micronesians' land and ocean, the Compacts of Free Association (COFA) treaties provided the Micronesian people with the right to live, work, and receive some public welfare benefits in the United States (U.S.).

The COFA population is an important part of Hawaii's economy. During the 2013-2017 period, an average of 18,504 COFA residents lived in Hawaii, accounting for 1.3 percent of the state total population. The COFA population not only brings in federal dollars to Hawaii, but COFA migrants also participate in economic activities by providing labor, consuming goods and services, and paying fees and taxes to the government. According to the estimates in this report, the COFA population contributed \$336.2 million to the Hawaii gross domestic product (GDP) in 2017, accounting for 0.4 percent of the state total GDP that year.

From the State government financial perspective, the COFA population contributed \$50.5 million to state revenues in 2017 in the form of federal transfer, state taxes, and fees. The state government spent an additional \$246 million on behalf of the COFA population for education, social welfare, and other government services during the same year. The Hawaii State government would need an additional \$195.6 million from the Federal government to be financially balanced.

The COFA population in Hawaii tends to be younger, less-educated, and have lower income compared to the general population. The COFA population also has the largest average household size, fewer home-owners, and is more likely live below the poverty line than the non-COFA population. Special education, social welfare, and housing programs are needed to help this population.

#### I. Introduction

The Compacts of Free Association (COFA) are treaties establishing and governing the relationships between the U.S. and three Micronesian nations: the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia (Halliday et al., 2019). Collectively, citizens of these nations are often referred to as "Micronesians." The Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau are collectively referred to as the Freely Associated States (FAS). The FAS islands are isolated and low-lying. They remain vulnerable to transnational threats and the effects from natural and manmade disasters. Climate change is exacerbating the already-present problems of shoreline erosion, saltwater intrusion, contamination of the water table, and worsening droughts.

During the 1940's and 50's, the U.S. conducted underwater, surface, and atmospheric nuclear tests in this region; these tests were equivalent to 7,200 Hiroshima-sized bombs (McElfish et al., 2015). Residents subsequently consumed contaminated water, plants, seafood, and reef resources (Barker, 2013). These atolls remain contaminated, and the traditional lifestyle and diet have been altered. The radioactive nature of these tests caused health problems, including cancer and other diseases, leading to chronic illness and death.

The COFA agreement calls for the U.S. to address past, present, and future consequences of the nuclear testing within the FAS. The agreement guarantees COFA migrants free entry and right to live, work, and access to health care in the U.S. legally. The main migration to the U.S. occurred following the signing of the treaties in the 1980's by the Federated States of Micronesia and the Marshall Islands, and in the 1990's when the Republic of Palau signed onto the treaty (Hagiwara et al., 2016). Most COFA migrants reside in Hawaii, Arkansas, Washington, Oklahoma, Oregon, New Mexico, and California.

The COFA agreement provides the U.S. with strategic control of over more than a million square miles of the Western Pacific Ocean and land (Hofschneider, 2019). The U.S. maintains a military installation on Kwajalein Atoll in the Republic of the Marshall Islands, the Ronald Reagan Ballistic Missile Defense Test Site, and leases 11 of the 97 islands for military activity (McElfish et al., 2015).

Citizens from FAS are known as COFA migrants to distinguish them from immigrant's subject to U.S. Citizenship and Immigration Services. COFA migrants are legally considered "nonimmigrants without visas." Unlike U.S. citizens, refugees, those in the U.S. on asylum, or green card holders in the U.S. for more than five years, who are eligible for federal programs, COFA migrants living in the U.S. are noncitizens, and their status limits their access to many public benefits. While their parents may not be eligible for some programs, U.S.-born children of COFA migrants are eligible as citizens for the benefits available to them as U.S. citizens. While COFA citizens may serve in the U.S. armed forces, they are not able to vote in U.S. elections.

COFA citizens immigrate to the U.S. for access to work, education, health care, and to be close to family members already residing in the U.S. The family structure is based on matrilineal

kinship structure (McClain et al., 2019). Women often raise their children collectively across multiple households and males take a role in raising their sisters' children (McClain et al., 2019). Minimum wage in FAS countries is between \$2.00 to \$4.00 per hour, and improving livelihoods is a main reason for migration (RMI, 2016).

In 2003, Congress authorized and appropriated \$30 million annually for 20 years of grants to Hawaii, Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa (GAO, 2016). The U.S. Department of the Interior's Office of Insular Affairs conducts an enumeration of COFA migrants to these regions no more than once every five years (DOI, 2019). This enumeration is used to proportionally split the \$30 million in federal funding annually as a result of the in-migration of COFA migrants (DOI, 2019). Hawaii's share of federal compact funding was \$14,038,262 in 2016, \$13,886,392 in 2017, and \$12,762,262 in 2018 (DOI, 2019). This appropriation is to aid in defraying costs incurred by COFA migrants as a result of increased demand for health, education, social, or public safety services, or for infrastructure related to such services (GAO, 2016).

Data Sources. In order to estimates the impacts associated with COFA immigrants, data were obtained from various sources including:

- Education and welfare spending data from the Hawaii State Department of Human Services (DHS);
- U.S. Census Bureau population and demographic data from the 2013-2017 5-year American Community Survey (ACS), tabulated from Public Use Microdata Sample (PUMS); and
- U.S. Census Bureau 2017 ACS 1-year estimates.

The type II final demand multiplier from *The Hawaii State Input-Output (I-O) Study: 2012 Benchmark Report* (DBEDT, 2016) was used to estimate state tax generated by the COFA population is. The report is mainly based on data from the 2013-2017 ACS. Sample sizes for COFA population are small for most of the categories. Most of the figures and tables show characteristics of the COFA population compared to the "Other" population, defined as the remaining, non-COFA Hawaii population.

## II. Contributions of COFA migrants to the Hawaii Economy and the Impact on State Government Finance

#### **Economy-wide Contribution**

COFA migrants are important members of the Hawaii 'ohana. According to the American Community Survey data from the U.S. Census Bureau, the average population size during the 2013-2017 period was 18,504, accounting for 1.3 percent of the state's total population. As indicated in Table 2.1, COFA migrants earned a total of \$118 million in household income a year, of which \$103 million were spent. The federal government contributed \$13.9 million to support COFA migrants in 2017 (Table 2.2)., and the state government spent an additional \$246 million on behalf of the COFA population for education, social welfare, and infrastructure (Table 2.3). Combining the above spending figures, the total COFA-related spending in Hawaii was \$363 million in 2017. Most of this spending stayed in the state of Hawaii and generated \$336.2 million in gross domestic products (GDP), nearly 0.4 percent of the Hawaii GDP in 2017.

The COFA population provided 5,130 workers in various industries in the state, about 0.8 percent of total state employment during the 2013-2017 period. There were also 5,948 COFA students enrolled in Hawaii schools and colleges during the 2013-2017 period.

Table 2.1. COFA Population and Economic Contribution in Hawaii: 2013-2017 Average

Category	COFA	State Total	% of COFA
Population	18,504	1,421,658	1.3%
Number of Households	3,452	470,748	0.7%
Average Income per Household (in \$)	34,121	95,446	35.8%
Total household Income (in \$M)	118	44,931	0.7%
Total household consumption (in \$M)	103	39,126	0.3%
Total GDP generated (in \$M)	336.2	89,429	0.4%
Employed Workers	5,130	671,787	0.8%
Owner-Occupied Housing Units	250	261,807	0.1%
Take Car, Truck or Van to Work	3,211	562,067	0.6%
With Health Insurance	16,710	1,356,482	1.2%
Student in Higher Education	362	95,125	0.4%
Students in Lower Education	5,586	232,437	2.4%

Source: DBEDT based on U.S. Census Bureau 2013-2017 ACS, PUMS.

#### State Government Benefits

COFA household spending (\$103 million) and government spending for COFA migrants (\$13.9 million from federal government and \$246 million from the state government) generated tax revenues for the state government. Using the Hawaii State Input-Output (I-O) model, COFA household spending generated \$7.8 million dollars of taxes including individual income tax, general excise tax, and other taxes. Government spending generated \$19.4 million of state taxes.

Beyond the taxes generated, the State also received fees on services, which are called current charges in accounting terms. Current charge revenues were estimated by applying the shares of COFA migrants using each of the spending categories, such as education, hospitals, and transportation. Miscellaneous revenues were estimated by applying the share of COFA household consumption to the state's total household consumption.

As shown in Table 2.2, the total benefit generated by COFA migrants for the state government was \$50.5 million. For further detail on the categories of current charges and miscellaneous general revenues see Appendix.

Table 2.2. Benefits of the COFA Population to the Hawaii State Government (\$M): 2017

Total Benefit	50.5
Federal Contribution	13.9
State Tax generated from household spending	7.8
State Tax generated from government spending	19.4
Current Charges	4.8
Miscellaneous general revenue	4.6

Source: DBEDT based on U.S. Census Bureau 2013-2017 ACS, PUMS, Department of Human Services Data, 2019, and DOI, 2019.

#### State Government Costs

Table 2.3 presents the cost of the COFA population to the state government by category. The education expenditure was from the DHS-reported data. For cash assistance payments and other public welfare, the expenditures for the COFA population were allocated based on the share of the COFA population below the poverty line. Public welfare was also calculated net of the federal contribution of \$13.9 million. For all others, the costs of the COFA population were allocated based on the share of the COFA population (1.3% of the total population). The total state government costs allocated to the COFA population in Hawaii for 2017 was estimated to be about \$246 million.

Table 2.3. Cost of COFA Population to Hawaii State Government (\$M): 2017

Category	State	COFA	% of COFA
Education	3,410	117.9	3.5%
Public welfare	2,984	46.7	1.6%
Cash assistance payments	4	0.2	6.5%
Vendor payments	2,562	33.2	1.3%
Other public welfare net Federal contribution	418	13.3	6.5%
Hospitals	619	8.0	1.3%
Health	550	7.1	1.3%
Highways	318	4.1	1.3%
Police protection	45	0.6	1.3%
Correction	229	3.0	1.3%
Natural resources	162	2.1	1.3%
Parks and recreation	84	1.1	1.3%
Governmental administration	595	7.7	1.3%
Interest on general debt	114	1.5	1.3%
Other and unallocable	2,082	27.0	1.3%
Insurance trust expenditure	1,489	19.3	1.3%
Total Cost	12,681	246.1	
% of COFA Population to Total Hawaii Population	·		1.3%

Source: DBEDT based on U.S. Census Bureau 2013-2017 ACS, PUMS, Department of Human Services Data, 2019, and DOI, 2019.

#### Summary of the Benefit and Cost of the COFA Population to State Government

Table 2.4 is the summary of the benefit and cost to the Hawaii government. The state government gained \$50.5 million in 2017 in the form of federal transfer, and taxes and fees from the COFA population or on behalf of the COFA population. The state government incurred a total cost of \$246 million in the same year by providing assistances to the COFA population. From the state government financial perspective, the state government would need an additional \$196 million from the federal government to close the deficit.

Table 2.4. Summary of Benefit and Cost to Hawaii State Government (\$M): 2017

Category	2017
Benefit	50.5
Cost	246.1
Net Benefit	-195.6

Source: DBEDT based on U.S. Census Bureau 2013-2017 ACS, PUMS, Department of Human Services Data, 2019, and DOI, 2019.

#### III. Characteristics of the COFA Population in Hawaii

There are three estimates on the COFA population in Hawaii. The U.S. Department of Interior's *Final Report on 2018 Estimates of COFA Migrants* reported Hawaii to have 16,680 COFA migrants with a margin of error +/- 2,196 (2019). The University of Hawaii Economic Research Organization (UHERO) estimated 28,000 COFA migrants (Halliday, et al., 2019). For the purpose of this report, the estimates for the COFA population are based on the U.S. Census Bureau 2013 through 2017 American Community Survey (ACS) data, which estimates the COFA population to be 18,504.

Characteristics of the COFA population are presented below by comparing the COFA population to the Other population by age, education, percentage of students, language barriers, health care coverage, median household income, employment status, types of commuting to work, industry employment structure, occupational employment structure, percentage of people under poverty, average household size, and by owner-renter occupied housing.

#### Population by Age

The largest portion of COFA migrants are working age, with 51.0% between the ages of 18 and 64. The second largest portion at 45.3% of the COFA population are under 17 years of age. The smallest portion of the COFA population are those 65 years and over, only 3.7% of the population.

The COFA population tends to be younger and have less elders than the Other population. In Table 3.1, comparing the COFA population to the Other population, the share of the COFA population who are ages 5 to 17 years is 15.4 percentage points above that of the Other population in Hawaii, and the share of population under 5 years of age is 8.5 percentage points higher for COFA population compared to the Other population. Conversely, the share of the COFA population 65 years and over is 13.2 percentage points below that of the Other population, and the share of COFA population aged 55 to 64 years is 10.0 percentage points below that of the Other population.

Table 3.1. Population by Age Groups

% of Population		COFA	
COFA	Other	above Other	
14.9%	6.3%	8.5%	
30.4%	15.0%	15.4%	
8.0%	9.1%	-1.1%	
19.3%	14.3%	5.0%	
20.6%	25.3%	-4.6%	
3.1%	13.0%	-10.0%	
3.7%	16.9%	-13.2%	
100.0%	100.0%	0.0%	
	COFA 14.9% 30.4% 8.0% 19.3% 20.6% 3.1% 3.7% 100.0%	COFA         Other           14.9%         6.3%           30.4%         15.0%           8.0%         9.1%           19.3%         14.3%           20.6%         25.3%           3.1%         13.0%           3.7%         16.9%	

Source: U.S. Census Bureau 2013-2017 ACS, PUMS

#### **Educational Attainment**

The education level of the COFA immigrants tends to be below that of the Other population. Table 3.2 shows 30.0% of COFA immigrants over 25 years old in Hawaii have less than a high school diploma. The remaining COFA population consists of 45.6% with a high school diploma and 25.4% with some college, an associate degree, or a bachelor's degree. In Table 3.2, it can be clearly seen that the COFA population over 25 years of age has mostly lower education attainment compared with the Other population. The shares of the COFA population with high school or lower education levels are higher than that of the Other population, while the shares of the COFA population with education above high school are all lower than that of the Other population. For example, the share of the COFA population with a high school education is 16.8 percentage points above that of the Other population. The share of the COFA population with 9<sup>th</sup> to 12<sup>th</sup> grade education and no degree is 16.0 percentage points above that of the Other population. Conversely, the share of the COFA population with a bachelor's degree is 19.3 percentage points below that of the Other population. The share of the COFA population with a graduate or professional degree is 10.8 percentage points below that of the Other population.

Table 3.2. Educational Attainment

	% of Population		COFA
Education level	COFA	Other	above Other
Population 25 years and over			
Less than 9 <sup>th</sup> grade	9.6%	3.8%	5.8%
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	20.4%	4.4%	16.0%
High school graduate (includes equivalency)	44.6%	27.7%	16.8%
Some college, no degree	16.1%	21.3%	-5.2%
Associate degree	7.0%	10.3%	-3.4%
Bachelor's degree	2.3%	21.6%	-19.3%
Graduate or professional degree	0.0%	10.8%	-10.8%

Source: U.S. Census Bureau 2013-2017 ACS, PUMS

#### School Enrollment

While children of COFA migrants utilizing public education adds to state costs, this expense could be offset in the future as the children become taxpaying adults, contributing to the state's economy. Also, while these children are in public school, their English language skills will develop, minimizing the likelihood of having language barriers their parents might have.

In comparing the COFA to the Other population, the COFA population share attending schools is higher than that of the Other population in Hawaii, in part due to a higher percentage of the COFA population being age 17 or under (45.3% compared to 21.3% for the Other population). Table 3.3 shows more of the COFA population are attending primary and secondary education, while less are attending higher education. Overall, about 34.7% of the COFA population aged 3 years and over are attending school. The share of the COFA population 3 years and over attending school is 10.8 percentage point above that of the Other population.

Table 3.3. School Attending Population 3 Years and Over

Grade	% of P	% of Population	
Grade	COFA	Other	above Other
Total Attending School	34.7%	23.8%	10.8%
Nursery, Preschool or Kindergarten	5.4%	2.8%	2.7%
Grade 1-5	12.6%	5.8%	6.8%
Grade 6-8	8.2%	3.6%	4.7%
Grade 9-12	6.3%	4.7%	1.6%
Undergraduate	2.0%	5.7%	-3.7%
Graduate	0.1%	1.3%	-1.2%
Has not attended in the last 3 months	65.3%	76.2%	-10.8%

#### Language Barriers

COFA immigrants tend to have lower levels of formal education than the general population and do not possess strong English skills. As shown in the Table 3.4, COFA residents in Hawaii do not report strong English language skills, with most reporting speaking a language other than English at home and 69.0% reporting they speak English less than very well. The share of the COFA population that speak only English is 11.8%, 63.4 percentage points below that of the Other population. In addition, among the population who speak a language other than English at home, the share of the COFA population who can speak English very well is 21.7 percentage points below that of the Other population.

Table 3.4. Ability to Speak English

Language other than English spoken at home	% of Population		COFA
Language other than English spoken at nome	COFA	Other	above Other
Population 5 years and over			
English only	11.8%	75.2%	-63.4%
Language other than English	88.2%	24.8%	63.4%
	% of Population		COFA
Ability to speak English	COFA	Other	above Other
Population of language other than English			
Ability to speak English very well	31.0%	52.7%	-21.7%
Ability to speak English less than very well	69.0%	47.3%	21.7%

Source: U.S. Census Bureau 2013-2017 ACS, PUMS

#### Health Insurance Coverage

Health costs account for the second largest expenditure by the State of Hawaii for the COFA population. COFA migrants living in Hawaii tend to be sicker than other local ethnic groups. For example, Micronesians tend to be hospitalized at significantly younger ages than other racial/ethnic groups across all group categories (Hagiwara et. al., 2016). Some of their illnesses may be associated with U.S. nuclear testing in the Pacific. Medical practitioners have noted impacts of nuclear testing within the Pacific Proving Grounds, showing a prevalence for

radiogenic diseases, heart disease, diabetes, and obesity associated with forced changes in dietary patterns and lifestyle resulting from the testing (S. HRG., 2005). COFA migrants are not eligible for federal programs such as Medicaid, except for pregnant mothers and their children; therefore, a large share of the health costs is absorbed by the state. Hawaii covers elderly, blind, or disabled COFA citizens through state-funded Medicaid program.

Back in 2015, Hawaii moved more than 7,600 COFA migrants between the ages of 18 and 64 off state-funded Medicaid and onto private insurance through health care exchanges set up by the Affordable Care Act (Hofschneider, 2019). As a result, net inpatient admissions and emergency visits declined since the 2015 period (Halliday et al., 2019). One result was that many of COFA low-income patients strayed from going to the doctor to avoid co-payments. This could be a positive trend if the transition to private insurance increased the use of preventative services that reduced the need for ER visits and hospitalizations. However, it is also possible that this avoidance is increasing the risk of long-term conditions. Table 3.5 shows 90.3% of the COFA population has insurance, with 61.9% using public insurance and 24.9% with private insurance.

In comparing the COFA population with the Other population, Table 3.5 shows the share of the COFA population with health insurance is 5.2 percentage points below that of the Other population. The share of COFA population that has only private insurance is 38.2 percentage points below that of the Other population. Conversely, the share of COFA population with only public insurance is 43.9 percentage points above that of the Other population.

Table 3.5. Health Insurance Coverage

Tuno	% of Population		COFA
Type -	COFA	Other	above Other
Total with Health Insurance	90.3%	95.5%	-5.2%
Covered by both Private and Public	3.5%	14.4%	-10.9%
Private only	24.9%	63.1%	-38.2%
Public only	61.9%	18.0%	43.9%
No insurance	9.7%	4.5%	5.2%

Source: U.S. Census Bureau 2013-2017 ACS, PUMS

#### Median Household Income

The COFA population living in Hawaii tends to be in the lower income segments compared to other ethnic groups. Figure 3.1 shows the COFA population earning the least amount of median household income compared to other racial/ethnic categories. The median household income of the COFA population is only about 33.3% of the median household income of Hawaii's total population.

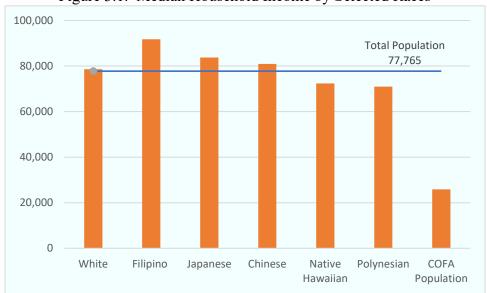


Figure 3.1. Median Household Income by Selected Races

Source: U.S. Census Bureau 2017 ACS 1-Year Estimates for White, Filipino, Japanese, Chinese, Native American, Polynesian alone or in combo and COFA U.S. Census Bureau 2013-2017 ACS, PUMS

#### **Employment Status**

Wage and employment outcomes resulting from immigration are closely tied to the extent to which new arrivals complement or substitute for workers already established in the labor market. Immigrants tend to add to employment activities as they unlock innovation and fill critical labor shortages.

Generally, COFA migrants face language barriers, tend to be younger, have lower educational attainment, and have higher rates of poverty. They work mostly in services occupations, such as food preparation, cleaning, maintenance, personal care, and service occupations.

Of the COFA population aged 16 years and over, 56.8% participate in the labor force. Table 3.6 shows this participation is 8.3 percentage points lower than the Other population. The COFA labor force consists of 0.3% serving in the Armed Forces and 8.2% unemployed. The COFA portion of its population that is unemployed is 5.4 percentage points higher than for the Other population. The COFA population has a large portion who are not in the labor force, 43.2%, which is 8.3 percentage points more than the Other population.

Table 3.6. Employment Status

Catagory	% of Po	opulation	COFA
Category	COFA	Other	above Other
Population 16 years and over			
Labor Force	56.8%	65.1%	-8.3%
Civilian Labor Force	56.5%	61.5%	-5.0%
Civilian employed	48.3%	58.7%	-10.4%
Unemployed	8.2%	2.8%	5.4%
Armed forces	0.3%	3.6%	-3.3%
Not in labor force	43.2%	34.9%	8.3%

#### Types of Commuting to Work

The COFA population is more likely to use public transportation to get to work. As shown in Table 3.7, about 21.5% of COFA workers 16 years and over, use public transportation to get to work, about 15.1 percentage points above that of the Other population. In addition, the COFA population is more likely to carpool and walk to work than the Other population.

Table 3.7. Types of Commuting to Work

Tuno	% of Population		COFA
Туре	COFA	Other	above Other
Workers 16 years and over	100.0%	100.0%	0.0%
Car, truck, or van drove alone	46.7%	67.8%	-21.1%
Car, truck, or van carpooled	16.0%	13.2%	2.8%
Public transportation (excluding taxicab)	21.5%	6.4%	15.1%
Walked	7.2%	4.6%	2.6%
Worked at home	0.8%	4.6%	-3.8%
Other means	7.9%	3.5%	4.4%

Source: U.S. Census Bureau 2013-2017 ACS, PUMS

#### Industrial Employment by Industry

The COFA employed population is more concentrated in accommodations and food services, administrative/support/waste management, and in retail trade. Table 3.8 presents characteristics based on the industry structures of the civilian employed population 16 years of age and over. This table shows 29.4% of employed COFA civilians work in accommodation and food services, 15.4 percentage points more than that of the Other population. The share of COFA population working in administration/support/waste management industry is 9.7 percentage points higher than the Other population.

Table 3.8. Civilian Employment of Population 16 Years and Over

	% of Total Civilian Employed		
Industry	COFA	Other HI	COFA above Other
Accommodation and Food Services	29.4%	14.0%	15.4%
Administrative and Support and Waste Management	14.3%	4.7%	9.7%
Wholesale Trade	7.9%	2.3%	5.6%
Retail Trade	14.5%	11.5%	3.0%
Real Estate and Rental and Leasing	6.0%	3.3%	2.7%
Agriculture, Forestry, Fishing and Hunting	2.7%	1.3%	1.4%
Information	1.9%	1.6%	0.4%
Mining, Quarrying, and Oil and Gas Extraction	0.0%	0.0%	0.0%
Management of Companies and Enterprises	0.0%	0.0%	0.0%
Other Services (except Public Administration)	4.2%	4.3%	-0.1%
Utilities	0.0%	0.9%	-0.9%
Manufacturing	1.8%	3.0%	-1.1%
Transportation and Warehousing	3.3%	4.9%	-1.6%
Arts, Entertainment, and Recreation	0.1%	2.5%	-2.4%
Finance and Insurance	0.9%	3.5%	-2.5%
Construction	4.6%	7.3%	-2.7%
Professional, Scientific, and Technical Services	0.3%	5.3%	-5.0%
Educational Services	2.6%	8.9%	-6.3%
Health Care and Social Assistance	4.4%	11.6%	-7.2%
Public Administration	0.9%	9.1%	-8.2%
Total	100.0%	100.0%	

#### Occupational Structure

The COFA population in Hawaii is mostly employed in food preparation and serving related, building/grounds cleaning and maintenance, transportation and material moving, and sales/related occupations. As shown in Table 3.9, food preparation and serving related occupations accounted for 24.8 percent of jobs among the employed COFA population, 17.1 percentage points above that of the Other population. Building/grounds cleaning and maintenance accounted for 15.3 percent of jobs among COFA workers, 9.6 percentage points more than the Other population.

Table 3.9. Occupation of Employed Population 16 Years and Over

	% of Tota		
Occupation	COFA	Other HI	COFA above Other
Food Preparation and Serving Related	24.8%	7.6%	17.1%
Building and Grounds Cleaning and Maintenance	15.3%	5.7%	9.6%
Transportation and Material Moving	14.5%	5.1%	9.5%
Production	5.7%	2.6%	3.0%
Farming, Fishing, and Forestry	2.4%	0.7%	1.7%
Sales and Related	11.9%	10.6%	1.3%
Community and Social Service	2.6%	1.6%	1.0%
Protective Service	3.4%	2.8%	0.6%
Construction and Extraction	4.7%	5.5%	-0.8%
Life, Physical, and Social Science	0.0%	0.8%	-0.8%
Legal Occupations	0.0%	0.9%	-0.9%
Installation, Maintenance, and Repair	1.5%	3.0%	-1.5%
Personal Care and Service	1.5%	3.1%	-1.6%
Architecture and Engineering	0.0%	1.6%	-1.6%
Arts, Design, Entertainment, Sports, and Media	0.0%	1.8%	-1.8%
Computer and Mathematical	0.0%	1.8%	-1.8%
Healthcare Support	0.0%	2.0%	-2.0%
Business and Financial Operations	0.4%	4.1%	-3.7%
Education, Training, and Library	1.6%	6.0%	-4.4%
Healthcare Practitioners and Technical	0.3%	5.1%	-4.8%
Military-only	0.6%	5.8%	-5.2%
Office and Administrative Support	6.9%	12.7%	-5.8%
Management	1.8%	8.8%	-7.0%
Total	100.0%	100.0%	

#### **Poverty Status**

The COFA population has a higher percentage below the poverty level compared to the rest of Hawaii. About 52.4% of the COFA population is under the poverty level, while only 9.9% of the Other population is below the poverty level. This means the share of COFA population under the poverty level is 42.5 percentage points above that of the Other population in Hawaii. In 2015, DHS reported 1,150 COFA migrants as homeless.

60.0% 52.4% 50.0% 40.0% 30.0% 20.0% 9.9% 10.0% 0.0% **COFA** Population Other Population

Figure 3.2. Proportion of Population Below Poverty Level

#### Average Household Size

The COFA population has, on average, between 2 to 3 additional persons in each household compared to the Other population. The Other population averages 3.0 persons per household, while the COFA population averages 5.4 persons per household.

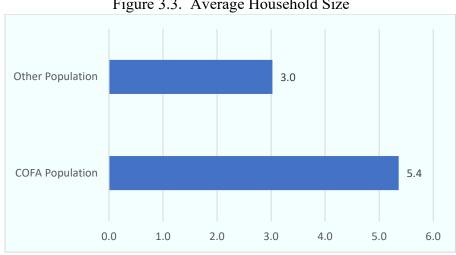


Figure 3.3. Average Household Size

Source: U.S. Census Bureau 2013-2017 ACS, PUMS

#### Homeownership

COFA migrants impact local housing markets by contributing to the demand for apartments and single-family homes. This can result in increased home prices, adding to home equity values to current homeowners. Conversely, higher prices reduce housing affordability for renters and potential home buyers.

The COFA population is far more likely to rent than own the residence they live in. Table 3.10 shows that owner-occupied housing units accounted for only 7.9% of COFA occupied housing units. The share of owner-occupied housing units of the COFA population is 49.9 percentage points below that of the Other population.

Table 3.10. Homeownership

Tuno	% of Po	oulation	COFA	
Туре	COFA		above Other	
Owner-Occupied	7.9%	57.8%	-49.9%	
Renter-Occupied	92.1%	42.2%	49.9%	

Source: U.S. Census Bureau 2013-2017 ACS, PUMS

# Appendix I: Current Charges and Miscellaneous General Revenues of COFA Population in Hawaii

Table A1. State Revenue Allocations (\$1,000)

Category	State Total	COFA*	% of COFA
Charges and miscellaneous general revenue	3,635,198		
Current charges	1,896,868	4,785	0.3%
Education	442,576		
Institutions of higher education	410,171	1,561	0.4%
School lunch sales (gross)	23,671	569	2.4%
Hospitals	685,952	1,798	0.3%
Highways	0	0	
Air transportation (airports)	430,141	0	0.0%
Parking facilities	2,510	14	0.6%
Sea and inland port facilities	136,317	357	0.3%
Natural resources	22,819	60	0.3%
Parks and recreation	11,938	31	0.3%
Housing and community development	22,226	21	0.1%
Sewerage	0	0	
Solid waste management	0	0	
Other charges	142,389	373	0.3%
Miscellaneous general revenue	1,738,330	4,557	0.3%
Interest earnings	108,503		
Special assessments	16,253		
Sale of property	123		
Other general revenue	1,613,451		

<sup>\*</sup>Percentage shares are from Table 2.1 and are used to allocate the state revenues to the COFA Population. Source: U.S. Census Bureau 2013-2017 ACS, PUMS

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