

Top Occupations in Hawai'i 2016 to 2023











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Executive Summary

This report analyzes Hawai'i's occupations, over the 2016 to 2023 period, by number of jobs, fastest growing by jobs, largest growing by jobs, and highest paying median hourly earnings. This report also covers the status of Science, Technology, Engineering, and Mathematics (STEM) occupations. This report considers 95 civilian occupations at the 3-digit level and 94 STEM occupations at the 5-digit level. The data source for this report was the 2024, 4th quarter estimates from LightcastTM.

In 2023, there were 732,952 civilian jobs in Hawai'i across 95 occupations, which was 2.4 percent fewer jobs than in 2016, contrasting the nation's civilian job growth of 7.5 percent. In 2023, the top 20 largest occupations in Hawai'i held 433,247, or 59.1 percent, of civilian jobs. Of these occupations, 12 showed job increases over the 2016 to 2023 period. In aggregate, jobs in the top 20 largest Hawai'i occupations decreased by 1.3 percent over the period, performing better than the 2.4 percent decrease in all civilian jobs in Hawai'i.

Food and Beverage Serving Workers topped the job count with 44,415 jobs in 2023, or 6.1 percent of total civilian jobs, followed by Retail Sales Workers (33,634 jobs or 4.6 percent) and Construction Trades Workers (30,653 jobs or 4.2 percent).

Looking at worker age composition in Hawai'i's top 20 largest occupations, young workers aged 18 to 24 held their highest share in Food and Beverage Serving Workers, at 23.5 percent, and Other Food Preparation and Retail Sales Workers, at 19.7 percent, while the over-65 age group held their highest share in Other Protective Service Workers, at 15.1 percent, and a low share in Construction Trades Workers, at 5.6 percent. As for the gender composition in the top 20 largest occupations, females had their highest shares in Other Office and Administrative Support Workers, at 81.7 percent, and their lowest share in Other Installation, Maintenance, and Repair Occupations, at 4.6 percent.

Over the 2016 to 2023 period, 41 of 95 occupations showed positive job growth in Hawai'i. Job growth in about half of the 41 occupations was less than 7 percent over the period, but three occupations showed exceptional job growth, including one of which more than doubled over the period; Other Healthcare Practitioners and Technical Occupations had growth at 125.0 percent, Supervisors of Transportation and Material Moving Workers at 58.5 percent, and Entertainment Attendants and Related occupations at 45.8 percent.

The occupations in Hawai'i that gained the most jobs over the 2016 to 2023 period include Computer Occupations, with a 2,626 gain, and Supervisors of Office and Administrative Support Workers, with a 2,519 gain.

In 2023, 58 of 95 occupations had higher median hourly earnings in Hawai'i than the nation and the earnings difference ranged from \$0.16 to \$15.71. For the 37 occupations with Hawai'i earnings below the nation, the difference ranged from \$0.18 to \$16.63.

In 2023, the top 20 highest paying occupations in Hawai'i had median hourly earnings over \$38.00. Of these 20 occupations, 13 had median hourly earnings higher in Hawai'i than in the nation. Air Transportation Workers had the highest median hourly earnings in Hawai'i, at \$65.22, well above the national level at \$50.53, followed by Healthcare Diagnosing or Treating Practitioners at \$61.85 and Operations Specialties Managers at \$56.35.

Over the 2016 to 2023 period, 52 occupations in Hawai'i had median earnings growth above the Hawai'i consumer price index growth. In comparison, 39 occupations in the nation had median earnings growth above the nation's consumer price index growth.

In 2023, there were 35,169 STEM jobs in Hawai'i, representing 4.8 percent of total civilian jobs, compared to 6.2 percent for the nation. Over the 2016 to 2023 period, while Hawai'i non-STEM jobs declined at an average annual growth rate of -0.4 percent, Hawai'i STEM jobs increased at 1.0 percent, less than the nation's 2.0 percent. The Professional, Scientific, and Technical Services and Public Administration were the two sectors that held most of the top 20 largest Hawai'i STEM occupations, in Hawai'i and the nation.

Among STEM occupations, Software Developers topped the list in 2023 with 3,026 jobs in Hawai'i, accounting for 0.4 percent of total civilian jobs, a share that was low compared to 1.0 percent for the nation.

Of the top 20 largest STEM occupations, Information Security Analysts was the fastest growing STEM occupation, with an average annual growth rate of 8.6 percent over the 2016 to 2023 period, just shy of the nation's rate of 9.1 percent.

The highest paying STEM occupations among the top 20 largest, measured by median hourly earnings in 2023, were Architectural and Engineering Managers at \$63.97 and Computer and Information Systems Managers at \$63.57. However, their median earnings in Hawai'i were still significantly lower than \$79.42 and \$81.24 for the nation, respectively.

Introduction

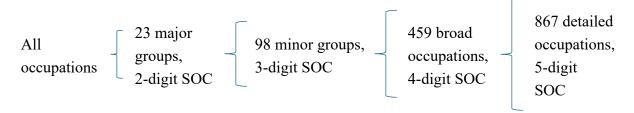
Hawai'i has always been rated as one of the most expensive U.S. states to live in. Occupation choice can affect the ability to live well in Hawai'i. Stakeholders attempt to understand occupations that are more suited for Hawai'i's government and business climate, natural environment, and geographic location.

This report studies Hawai'i's occupation changes over a 2016 to 2023 period. To do so, it first identifies the top 20 largest occupations in Hawai'i and examines how they changed over time and how they differ from the nation. Growing occupations are also identified to show the occupations with the most potential. Secondly, the top occupations are examined by their demographic and industry distribution characteristics. Thirdly, it focuses on Science, Technology, Engineering, and Mathematics (STEM) occupations and compares their characteristics with non-STEM occupations.

Data Source and Methodology

Data are from LightcastTM, formerly Economic Modeling Services, Inc. (EMSI).

Occupations are categorized according to the U.S. Bureau of Labor Statistics (BLS)'s Standard Occupational Classification (SOC) system which is updated every ten years. This report uses the 2018 SOC system¹. As in the 2000 and 2010 SOC systems, the 2018 SOC system contains 23 major groups (2-digit) which are further broken down as follows:



This analysis uses a similar structure to the 2018 *Top 20 Occupations in Hawai'i* report², specifically the use of 3-digit SOCs for general occupation analysis, 5-digit SOCs for STEM analysis, and 2-digit NAICS codes for industry sector analysis.

¹ See "2018 Standard Occupation Classification System", available at https://www.bls.gov/soc/2018/home.htm.

² Department of Business, Economic Development & Tourism Research and Economic Analysis Division. (2018). *Top 20 Occupations in Hawaii*, 2018. https://files.Hawaii.gov/dbedt/economic/reports/Top20 Occupations Hawaii 2018.pdf

Since our main interest is in civilian occupations, the three military occupations at the 3-digit level (SOC 55-1000, SOC 55-2000, and SOC 55-3000) are excluded from the analysis, resulting in a total of 95 occupations at the 3-digit level (minor groups) for this report.

STEM SOC codes are taken from the 105 (5-digit) STEM occupations that BLS defined based on the 867 detailed occupations group. LightcastTM data contain job and wage information about each of these STEM occupations, except for 11 postsecondary math and science teacher occupations, which are included in a broader category - postsecondary teachers (25-1000). Without a breakdown of postsecondary teachers in the LightcastTM data, these 11 occupations are excluded from the STEM analysis. The result was a list of 94 STEM occupations for this report.

Industry codes and definitions are taken from the 2022 North American Industry Classification System (NAICS Coding System) at the Sector (2-digit) level.

Top 20 Largest Occupations in Hawai'i

In 2023, there were 732,952 civilian jobs in Hawai'i, which was 2.4 percent *less* than in 2016, contrasting the nation's civilian job growth of 7.5 percent over the 2016 to 2023 period. As shown in Table 1 (following page), in 2023, the top 20 largest occupations, at the 3-digit level, in Hawai'i held 433,247, or 59.1 percent, of civilian jobs, compared to 57.8 percent in the nation for the same occupations; 12 of these occupations showed job increases in Hawai'i compared to 15 in the nation.

Compared with the top 20 largest occupations in 2016, three occupations dropped off the top 20 list in 2023: Secretaries and Administrative Assistants; Financial Clerks; and Other Teachers and Instructors. Three occupations joined the top 20 list: Computer Occupations; Other Food Preparation and Serving Related Workers; and Counselors, Social Workers, and Other Community and Social Service Specialists. See Appendix Table A-5 for the 2016 and 2023 rankings, by number of jobs, for all occupations.

Size of the top 20 largest occupations

In Hawai'i, Food and Beverage Serving Workers topped the job count with 44,415 jobs in 2023, or 6.1 percent of total civilian jobs, followed by Retail Sales Workers (33,634 jobs or 4.6 percent) and Construction Trades Workers (30,653 jobs or 4.2 percent). Previously in 2016, Retail Sales Workers held the top largest occupation, followed by Food and Beverage Serving Workers and Construction Trades Workers, but the Retail Sales Workers job count declined 28.1 percent over the 2016 to 2023 period. Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides and Building Cleaning and Pest Control Workers also declined substantially during the period.

Indicative of a large tourism industry and the climate in Hawai'i, these occupations had a higher share of civilian jobs in Hawai'i than the nation in 2023: Food and Beverage Serving Workers, Building Cleaning and Pest Control Workers, Cooks and Food Preparation Workers, Other Food Preparation and Serving Related Workers. Before the COVID-19 pandemic, Retail Sales Workers, another tourism-related occupation, held a higher share of civilian jobs in Hawai'i compared to the nation, but in 2023 stood near the national level as e-commerce infiltrated retail industries.

Table 1. Top 20 largest occupations in Hawai'i, 2023

	Occupation	HI Jobs (2023)	% of		Rate, 2	2016 to
			HI	U.S.	HI	U.S.
1	Food and Beverage Serving Workers (35-3000)	44,415	6.1	4.1	1.9	-5.4
2	Retail Sales Workers (41-2000)	33,634	4.6		-28.1	-12.0
3	Construction Trades Workers (47-2000)	30,653	4.2	3.4	-4.6	6.5
4	Healthcare Diagnosing or Treating Practitioners (29-1000)	26,782	3.7	3.9	6.1	15.6
5	Building Cleaning and Pest Control Workers (37-2000)	25,745	3.5	2.4	-11.5	-4.0
6	Material Moving Workers (53-7000)	25,357	3.5	4.8	10.5	21.1
7	Business Operations Specialists (13-1000)	24,824	3.4	4.5	7.0	47.5
8	Other Management Occupations (11-9000)	24,817	3.4	2.9	6.7	29.7
9	Information and Record Clerks (43-4000)	23,451	3.2	3.4	-1.3	-1.7
10	Other Office and Administrative Support Workers (43-9000)	21,502	2.9	2.1	10.0	-16.6
11	Cooks and Food Preparation Workers (35-2000)	20,592	2.8	2.2	1.4	11.3
12	Preschool, Elementary, Middle, Secondary, and Special Education Teachers (25-2000)	19,581	2.7	2.6	6.5	4.6
13	Motor Vehicle Operators (53-3000)	17,025	2.3	2.9	-1.2	11.9
	Computer Occupations (15-1200)	15,005	2.0	3.0	21.2	17.0
15	Top Executives (11-1000)	14,741	2.0	2.3	15.6	49.1
	Other Installation, Maintenance, and Repair Occupations (49-9000)	14,330	2.0	2.1	-6.5	11.9
17	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides (31-1100)	13,886	1.9	3.4	-17.5	17.3
18	Other Protective Service Workers (33-9000)	12,547	1.7	1.0	-0.8	8.5
	Other Food Preparation and Serving Related Workers (35-9000)	12,187	1.7	0.9	5.1	6.2
20	Counselors, Social Workers, and Other Community and Social Service Specialists (21-1000)	12,174	1.7	1.5	4.0	17.7
	Top 20 Largest Occupations	433,247	59.1	57.8	-1.3	9.8
	All Civilian Occupations	732,952		100.0	-2.4	7.5

Source: LightcastTM Q4 2024, calculations by DBEDT

Growth of the top 20 largest occupations

As shown in Table 1 (above), over the 2016 to 2023 period, jobs in the top 20 largest Hawai'i occupations increased 9.8 percent in the nation and *decreased* 1.3 percent in Hawai'i, indicative of a continuing recovery period from the COVID-19 pandemic for Hawai'i.

Business-related occupations achieved higher job growth in the nation than in Hawai'i. Over the 2016 to 2023 period, Business Operations Specialists grew 40.5 percentage points more than Hawai'i; Other Management Occupations grew 23.0 percentage points more than Hawai'i; and Top Executives grew 33.5 percentage points more than Hawai'i.

Other Office and Administrative Support Workers was the only occupation that showed much higher job growth in Hawai'i than the nation, a difference of 26.6 percentage points. Among the top 20 largest occupations in Hawai'i, occupations with slightly higher growth in Hawai'i than the nation over the 2016 to 2023 period include Computer Occupations (21.2 percent growth) and Preschool, Elementary, Middle, Secondary, and Special Education Teachers (6.5 percent growth).

Of the top 20 largest occupations in Hawai'i, most exhibited positive job growth over the 2016 and 2019 period. All exhibited job declines in 2020 due to the COVID-19 pandemic. From 2020 to 2023, eight occupations recovered all jobs or were above their 2019 job levels; 12 were recovering but below their 2019 job levels, and two did not recover and declined further below their 2019 job levels. All the top 20 largest occupations exhibited a positive trend in median hourly earnings over the 2016 to 2023 period. Appendix Figure A-2 illustrates job and wage growth trends for the top 20 largest occupations over the 2016 to 2023 period.

Industry distributions of the top 20 largest occupations

Jobs in the top 20 largest occupations were distributed among the 20 industry sectors in Hawai'i. True to Hawai'i's economy, these sectors held over 60 percent of the jobs in the top 20 occupations: Accommodation and Food Service sector, Public Administration sector, Health Care and Social Assistance, and Retail Trade sector.

The concentration of an occupation's jobs in sectors is defined as follows. High concentration is when the jobs for a single occupation are over 65 percent concentrated in a single sector; medium concentration is when the jobs for a single occupation are between 35 percent and 65 percent concentrated in a single sector; and low concentration is when the jobs for a single occupation are less than 35 percent concentrated in a single sector.

Many of the jobs in the top largest 20 occupations had high concentrations. For example, 85.1 percent of the jobs in the Construction Trades Workers occupation were in the Construction sector. A few other highly concentrated occupations were Food and Beverage Serving Workers and Retail Sales Workers.

Jobs in the Top Executives occupation, on the other hand, were distributed throughout the 20 sectors, with distributions ranging from 0.1 percent to 12.5 percent. A few other occupations with low concentration include Other Management Occupations, Computer Occupations, and Information and Record Clerks.

For full distribution and concentration tables for Hawai'i, see Tables A-1 and A-2 in the Appendix.

Demographic characteristics of the top 20 largest occupations

Age and gender demographic characteristics tell us how diversified occupation workforces were at points in time. Table 2 (next page) illustrates these characteristics for the top 20 largest Hawai'i civilian occupations in 2023.

For example, young workers aged 18 to 24 had their highest shares in Food and Beverage Serving Workers, at 23.5 percent, and Other Food Preparation and Retail Sales Workers, at 19.7 percent. The over-65 age group had their highest share in Other Protective Service Workers, at 15.1 percent, and their lowest share in Construction Trades Workers, at 5.6 percent. Age groups 25 to 44 and 45 to 64 each held at least a third of most occupations.

Female workers had their highest shares in Other Office and Administrative Support Workers, at 81.7 percent, and their lowest share in Other Installation, Maintenance, and Repair Occupations, at 4.6 percent.

Table 2. Top 20 largest occupations in Hawai'i by age group and sex, 2023

Occupation	S	hare by	Age 20	231	Female Share ²
	18-24	25-44	45-64	Over 65	2023
Food and Beverage Serving Workers	23.5	44.0	26.3	6.2	63.5
Retail Sales Workers	19.7	35.1	32.9	12.3	65.6
Construction Trades Workers	9.2	47.9	37.3	5.6	4.7
Healthcare Diagnosing or Treating Practitioners	1.9	49.1	39.9	9.2	67.3
Building Cleaning and Pest Control Workers	5.1	36.3	47.4	11.3	57.9
Material Moving Workers	15.5	42.3	34.8	7.4	32.4
Business Operations Specialists	4.7	48.6	37.8	8.9	51.8
Other Management Occupations	2.7	37.4	46.3	13.6	40.1
Information and Record Clerks	10.9	43.9	36.1	9.1	73.9
Other Office and Administrative Support Workers	10.1	37.1	39.7	13.2	81.7
Cooks and Food Preparation Workers	13.0	43.9	36.1	7.0	43.1
Preschool, Elementary, Middle, Secondary, and Special Education Teachers	3.0	43.4	45.3	8.3	71.1
Motor Vehicle Operators	4.7	37.8	43.3	14.2	17.5
Computer Occupations	5.8	53.3	36.5	4.4	26.1
Top Executives	1.5	43.5	47.1	7.9	33.4
Other Installation, Maintenance, and Repair Occupations	7.0	39.6	44.4	9.0	4.6
Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	8.5	41.6	38.5	11.4	81.2
Other Protective Service Workers	10.2	38.2	36.5	15.1	25.5
Other Food Preparation and Serving Related Workers	18.0	35.4	35.3	11.3	44.1
Counselors, Social Workers, and Other Community and Social Service Specialists	4.7	47.8	38.0	9.5	73.2

¹ Percentage excludes under 18 ² Percentage includes under 18 Source: LightcastTM Q4 2024, calculations by DBEDT

Fastest Growing Occupations in Hawai'i

Occupation growth was measured by growth in jobs as a percentage and change in jobs as a number. Among the 95 civilian occupations based on 3-digit classification, 41 occupations showed job growth in Hawai'i compared to 60 occupations in the nation over the 2016 to 2023 period.

Top 20 fastest growing occupations

Of the 41 occupations in Hawai'i with positive job growth over the 2016 to 2023 period, 20 occupations had growth over 7.0 percent, and in 2023, represented 178,027 jobs, or about 24.3 percent, of civilian jobs.

Figure 1 (next page) illustrates the top 20 fastest growing occupations in Hawai'i compared to the nation over the 2016 to 2023 period. Other Healthcare Practitioners and Technical Occupations topped the Hawai'i list with a growth rate of 125.0 percent over the period. This growth rate is exceptional compared to the national rate of 73.1 percent.

Hawai'i showed high job growth, above the national growth, for: Supervisors of Transportation and Material Moving; Entertainment Attendants and Related; Supervisors of Office and Administrative Support; Personal Appearance; Computer Occupations; Art and Design; Lawyers, Judges, and Related; and Entertainers and Performers, Sports and Related.

Two occupations in Hawai'i, Supervisors of Personal Care and Service Workers and Other Office and Administrative Support Workers, posted growth rates at 16.0 percent and 10.0 percent respectively, despite negative nationwide growth rates.

Although these occupations in Hawai'i had job growth above 7.0 percent, they didn't grow as fast as the nation: Top Executives; Supervisors of Construction and Extraction; Occupational Health and Safety Specialists and Technicians; Supervisors of Food Preparation and Serving; Operations Specialties Managers; Material Moving; Other Healthcare Support Occupations; Supervisors of Building and Grounds Cleaning and Maintenance; and Business Operations Specialists.

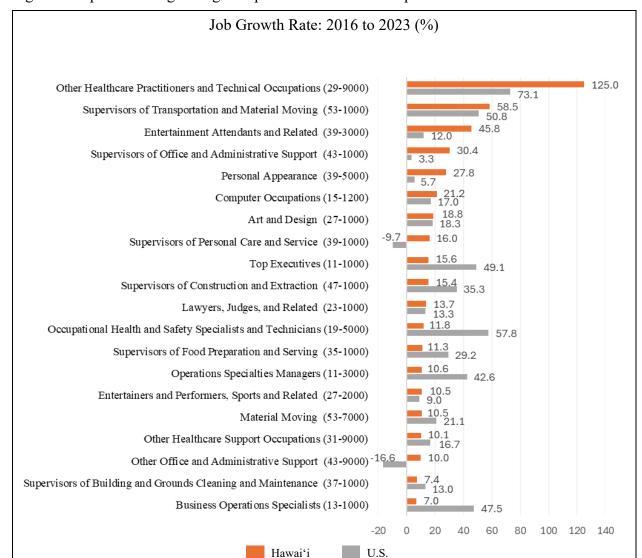


Figure 1. Top 20 fastest growing occupations in Hawai'i compared to the nation: 2016 to 2023

Source: LightcastTM Q4 2024, calculations by DBEDT

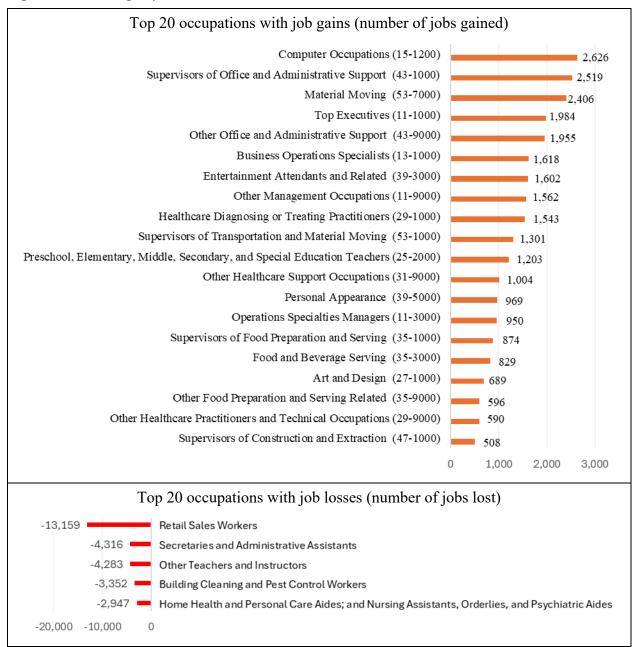
Of the 95 civilian occupations based on 3-digit classification, 68 occupations grew faster in the nation than in Hawai'i over the 2016 to 2023 period. Seven occupations in the nation had job growth exceeding Hawai'i by over 40.0 percentage points, such as Mathematical Science Occupations (difference of 64.6 percentage points); Advertising, Marketing, Promotions, Public Relations, and Sales Managers; Occupational Health and Safety Specialists and Technicians; Fishing and Hunting Workers; Animal Care and Service Workers; Rail Transportation Workers; and Business Operations Specialists (difference of 40.5 percentage points). Lastly, 54 occupations had negative job growth in Hawai'i, compared to 35 in the nation. For the full table see Table A-6 in the Appendix.

Top 20 occupations with the most job gains

As shown in Figure 2 (next page), over the 2016 to 2023 period in Hawai'i, jobs in Computer Occupations increased the most by 2,626, followed by Supervisors of Office and Administrative Support Workers by 2,519. Comparatively for the nation, Computer Occupations was the eighth top job adder and Supervisors of Office and Administrative Support Workers was the 48th; Material Moving Workers added the greatest number of jobs in the nation, followed by Business Operations Specialists.

Also shown are the top 5 occupations with the most job losses: Retail Sales Workers (jobs declined by 13,159), followed by Secretaries and Administrative Assistants, Other Teachers and Instructors, Building Cleaning and Pest Control Workers, and Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides. For the nation, all these occupations also had job declines, except for Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides which had a large increase in jobs.

Figure 2. Job change by numbers, Hawai'i: 2016 to 2023



Source: LightcastTM Q4 2024, calculations by DBEDT

Earnings by Occupation in Hawai'i

Hawai'i is ranked one of the nation's most expensive states to live in and occupation choice affects earnings potential and standard of living. In 2023, out of the 95 civilian occupations (3-digit level), 48 had median hourly earnings between \$14.00 and \$26.00, 27 were between \$26.00 and \$38.00, 14 were between \$38.00 and \$50.00, and 6 were between \$50.00 and \$66.00.

In 2023, 58 of the 95 occupations had higher median hourly earnings in Hawai'i than the nation; the earnings difference ranged from \$0.16 to \$15.71. For the 37 occupations with Hawai'i earnings below the nation, the difference ranged from \$0.18 to \$16.63.

Top 20 highest paying occupations

In 2023, the top 20 highest paying occupations in Hawai'i had median hourly earnings over \$38.00. As shown in Figure 3 (next page), Air Transportation Workers had the highest median hourly earnings in Hawai'i, at \$65.22, well above the national level at \$50.53. Followed were Healthcare Diagnosing or Treating Practitioners at \$61.85 and Operations Specialties Managers at \$56.35. The 20th highest paying occupation in Hawai'i was Plant and Systems Operators, at \$38.23. Of these 20 occupations, 13 had median hourly earnings higher in Hawai'i than in the nation.

In 2023, for these 20 occupations, the difference in median earnings between Hawai'i and the nation ranged from \$15.71 in favor of Hawai'i to \$16.63 in favor of the nation. The nation's occupation with the highest median hourly earnings, at \$67.12, was Advertising, Marketing, Promotions, Public Relations, and Sales Managers, which was substantially higher than \$55.20 in Hawai'i (a \$11.91 difference). Also showing noticeably higher earnings in the nation than in Hawai'i were Operations Specialties Managers (a \$9.86 difference), Lawyers, Judges, and Related (a \$16.63 difference), and Computer Occupations (a \$6.65 difference).

³ The use of median earnings provides a general metric for comparing occupations, but it does not guarantee an individual's earnings in an occupation.

Median Hourly Earnings (\$) Air Transportation (53-2000) 61.85 Healthcare Diagnosing or Treating Practitioners (29-1000) 46.14 Operations Specialties Managers (11-3000) 66.20 55.20 Advertising, Marketing, Promotions, Public Relations, and Sales Managers (11-2000) 53.80 Supervisors of Protective Service (33-1000) 50.93 Top Executives (11-1000) 49.70 Lawyers, Judges, and Related (23-1000) 66.32 49.06 Mathematical Science Occupations (15-2000) Engineers (17-2000) Supervisors of Construction and Extraction (47-1000) Computer Occupations (15-1200) Other Management Occupations (11-9000) Law Enforcement (33-3000) Social Scientists and Related (19-3000) Rail Transportation (53-4000) Supervisors of Installation, Maintenance, and Repair (49-1000) Physical Scientists (19-2000) Architects, Surveyors, and Cartographers (17-1000) Occupational Health and Safety Specialists and Technicians (19-5000) 38.23 Plant and System Operators (51-8000) 0.00 25.00 50.00 75.00 Hawai'i U.S.

Figure 3. Top 20 highest paying occupations in Hawai'i: 2023

Source: LightcastTM Q4 2024, calculations by DBEDT

Earnings growth by occupation

Median earnings growth for occupations in Hawai'i over the 2016 to 2023 period ranged from a negative 1.4 percent for Librarians, Curators, and Archivists to a positive 63.6 percent for Water Transportation Workers; the growth in the nation ranged from 2.1 percent for Top Executives to 52.1 percent for Food and Beverage Serving Workers.

The consumer price indexes (CPI) are useful in determining if earnings have increased or decreased relative to consumer prices over time. From 2016 to 2023, the Honolulu CPI increased by 22.9 percent and the nation's CPI increased by 27.0 percent. Over the same period, 52 out of 95 civilian occupations in Hawai'i had median earnings growth above the Honolulu CPI; 39 civilian occupations in the nation had median earnings growth above the nation's CPI.

From these 52 occupations in Hawai'i, the top seven had median earnings growth over 50.0 percent, as shown in Table 3 below. Water Transportation Workers had the highest growth at 63.6 percent in Hawai'i. In comparison, the nation had 2 occupations that exhibited a median earnings growth of over 50.0 percent.

Table 3. Occupations with high earnings growth, Hawai'i and the United States: 2016 to 2023

Occupation	Median Ea Growth	_
	HI	U.S.
Water Transportation Workers	63.6	18.4
Mathematical Science Occupations	62.4	29.1
Entertainment Attendants and Related Workers	59.8	48.5
Other Food Preparation and Serving Related Workers	55.4	51.4
Other Transportation Workers	54.9	47.8
Advertising, Marketing, Promotions, Public Relations, and Sales Managers	53.4	18.2
Air Transportation Workers	51.4	35.4
Additional occupations with earnings growth over 50% for the nation		
Food and Beverage Serving Workers	30.3	52.1

Source: Lightcast™ Q4 2024, calculations by DBEDT

The ten occupations in Hawai'i with the lowest median earnings growth over the 2016 to 2023 period are shown in Table 4 (following page). There was a mix of very positive and very negative job growth rates associated with these occupations. Librarians, Curators, and Archivists was the only occupation in Hawai'i that had a decline in jobs and median earnings over the period. The median earnings growth for these occupations fared better in the nation than in Hawai'i.

Table 4. Occupations with low earnings growth, Hawai'i and the United States: 2016 to 2023

Occupation	Jobs 2023	Job Growth (%)	Median Earn Growth (
	HI	HI	HI	U.S.
Librarians, Curators, and Archivists	760	-10.2	-1.4	17.7
Personal Appearance Workers	4,456	27.8	1.4	38.6
Extraction Workers	639	-29.9	3.8	20.2
Other Healthcare Practitioners and Technical Occupations	1,063	125.0	4.5	28.2
Life Scientists	1,434	0.0	5.9	24.0
Helpers, Construction Trades	504	-51.9	7.7	33.0
Other Teachers and Instructors	8,424	-33.7	9.3	29.2
Art and Design Workers	4,356	18.8	9.5	13.9
Preschool, Elementary, Middle, Secondary, and Special Education Teachers	19,581	6.5	10.5	14.0
Religious Workers	1,703	-4.7	10.8	29.4

Source: LightcastTM Q4 2024, calculations by DBEDT

STEM Occupations in Hawai'i

Science, Technology, Engineering, and Mathematics (STEM) occupations have long been considered to drive a state's competitiveness. It is reported that STEM employment grew faster than non-STEM jobs in the nation and is expected to continue growing⁴.

STEM occupations: size and growth

As shown in Table 5 (next page), in 2023, there were 35,169 total STEM occupation jobs in Hawai'i, representing 4.8 percent of total civilian jobs, compared to 6.2 percent for the nation. Over the 2016 to 2023 period, while Hawai'i non-STEM jobs *declined* at an average annual growth rate of 0.4 percent, Hawai'i STEM jobs increased at 1.0 percent, less than the nation's 2.0 percent.

Top 20 largest STEM occupations

Over the 2016 to 2023 period, the top 20 largest Hawai'i STEM occupations grew at an average annual growth rate of 2.0 percent to 25,500 jobs, representing 3.5 percent of total civilian jobs in 2023, compared to an average annual growth rate of 2.9 percent and 4.4 percent of civilian jobs for the nation.

For Hawai'i, Software Developers (15-1252) topped the list in 2023 with 3,026 jobs, accounting for 0.4 percent of total civilian jobs, a share that was low compared to 1.0 percent for the nation. Previously, Civil Engineers (17-2051) held the top spot in 2016 and is now the second largest at 2,820 jobs.

Of the top 20, Information Security Analysts (15-1212) was the fastest growing STEM occupation, with an average annual growth rate of 8.6 percent over the 2016 to 2023 period, just shy of the nation's rate of 9.1 percent.

Of the top 20, the highest paying STEM occupations in Hawai'i, measured by median hourly earnings in 2023, were Computer and Information Systems Managers (11-3021) at \$63.57 and Architectural and Engineering Managers (11-9041) at \$63.97, which were significantly lower than \$81.24 and \$79.42 for the nation, respectively.

⁴ STEM Jobs: 2023 Update. The U.S. Department of Commerce Economics and Statistics Administration, 2023.

Table 5. Top 20 largest STEM occupations in Hawai'i: 2016 to 2023

				Hawai'i	į		U.S.
	STEM Occupation	Jobs (2023)	% of All Civilian Jobs	Jobs (2016)	Average Annual Growth Rate (%)	Median Hourly Earnings (2023, \$)	
1	Software Developers (15-1252)	3,026	0.41	1,805	7.66	50.03	63.39
2	Civil Engineers (17-2051)	2,820	0.38	2,459	1.98	40.62	46.04
3	Network and Computer Systems Administrators (15-1244)	2,546	0.35	1,533	7.52	46.79	45.71
4	Computer Occupations, All Other (15-1299)	2,518	0.34	2,125	2.46	50.34	49.63
5	Computer User Support Specialists (15-1232)	2,148	0.29	1,880	1.92	28.54	28.47
6	Computer Systems Analysts (15-1211)	1,637	0.22	1,913	-2.21	42.17	49.79
7	Computer and Information Systems Managers (11-3021)	1,236	0.17	1,104	1.63	63.57	81.24
8	Architectural and Engineering Managers (11-9041)	1,187	0.16	1,018	2.22	63.97	79.42
9	Engineers, All Other (17-2199)	916	0.13	841	1.23	57.20	53.66
	Electrical Engineers (17-2071)	902	0.12	1,095	-2.73	53.01	51.37
11	Biological Technicians (19-4021)	788	0.11	785	0.06	18.53	24.73
12	Architects, Except Landscape and Naval (17-1011)	761	0.10	795	-0.61	44.05	43.72
13	Life, Physical, and Social Science Technicians, All Other (19-4099)	753	0.10	775	-0.42	24.97	28.01
14	Architectural and Civil Drafters (17-3011)	679	0.09	457	5.84	30.02	29.63
15	Electrical and Electronic Engineering Technologists and Technicians (17-3023)	653	0.09	537	2.83	39.55	34.91
16	Information Security Analysts (15-1212)	612	0.08	343	8.61	51.37	57.80
17	Mechanical Engineers (17-2141)	589	0.08	770	-3.74	46.69	47.85
18	Computer Network Architects (15-1241)	588	0.08	453	3.80	50.01	62.30
19	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)	571	0.08	931	-6.75	52.43	47.74
20	Environmental Scientists and Specialists, Including Health (19-2041)	568	0.08	585	-0.42	34.27	37.97
	Top 20 STEM total	25,500	3.5	22,204	2.00		
	STEM total	35,169	4.8	32,704	1.04		
	Non-STEM total	697,783	95.2	718,388	-0.41		
	All Civilian Occupations	732,952	100.0	751,092	-0.35		

Source: Lightcast™ Q4 2024, calculations by DBEDT

Industry distributions of the top 20 largest STEM occupations

In 2023, the Professional, Scientific, and Technical Services and Public Administration were the two industry sectors that held most of the jobs for the top 20 largest Hawai'i STEM occupations, in both Hawai'i and the nation.

For the top 20 largest STEM occupations, Sales Representatives for Wholesale and Manufacturing of Technical and Scientific Products jobs were highly concentrated in the Wholesale Trade sector, All Other Computer Occupations jobs were highly concentrated in the Public Administration sector and Architects, Except Landscape and Naval jobs were highly concentrated in Professional, Scientific, and Technical Services.

For full distribution and concentration tables for Hawai'i's top 20 largest STEM occupations, see Tables A-3 and A-4 in the Appendix.



Table A-1. Top 20 largest occupations in Hawai'i by industry sector: 2023

Occupation	NAICS11	NAICS21	NAICS22	NAICS23	NAICS31	NAICS42	NAICS44	NAICS48	NAICS51	NAICS52
Occupation	Agr.	Mining	Utilities	Cons.	Manuf.	W. Trade	R. Trade	Trans.	Info.	Finance
Total (# of jobs)	3,976	131	1,548	36,794	5,637	9,116	49,536	17,756	3,610	6,949
Food and Beverage Serving Workers	0	0	0	5	603	49	1,847	134	168	0
Retail Sales Workers	23	0	2	26	433	413	27,642	125	82	39
Construction Trades Workers	22	52	281	25,943	349	72	206	53	30	0
Healthcare Diagnosing or Treating Practitioners	1	0	0	0	1	21	820	1	1	233
Building Cleaning and Pest Control Workers	50	0	1	91	145	76	450	84	14	12
Material Moving Workers	329	10	56	350	1,566	2,969	9,138	4,066	53	3
Business Operations Specialists	46	0	153	1,306	214	627	592	345	371	1,453
Other Management Occupations	2,975	3	96	4,132	219	79	54	119	150	199
Information and Record Clerks	33	0	128	203	159	573	2,154	2,574	389	2,345
Other Office and Administrative Support Workers	61	16	90	1,573	301	718	1,039	667	284	936
Cooks and Food Preparation Workers	2	0	0	2	210	24	1,493	87	7	1
Preschool, Elementary, Middle, Secondary, and Special Education Teachers	0	0	0	0	0	0	1	0	0	0
Motor Vehicle Operators	228	25	6	352	325	1,855	1,144	8,414	26	3
Computer Occupations	11	0	121	66	72	356	136	124	1,316	1,025
Top Executives	101	12	107	1,058	373	782	1,773	553	312	575
Other Installation, Maintenance, and Repair Occupations	86	13	495	1,661	573	488	480	252	385	21
Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	1	0	0	0	0	1	5	1	0	3
Other Protective Service Workers	7	0	10	26		9	497	101	15	17
Other Food Preparation and Serving Related Workers	0	0	0	0	87	2	60	57	7	0
Counselors, Social Workers, and Other Community and Social Service Specialists	0	0	0	0	0	0	5	0	0	82

Table A-1. Top 20 largest occupations in Hawai'i by industry sector: 2023 (Cont.)

	NAICS53	NAICS54	NAICS55	NAICS56	NAICS61	NAICS62	NAICS71	NAICS72	NAICS81	NAICS90
Occupation	Real	Prof., Sci.	Mgmt.	Admin.	Edu.	Health	Arts &	Accom. &	Other	Pub.
	Estate	& Tech.				Care	Ent.	Food Ser.		Adm.
Total (# of jobs)	9,096	12,536	4,260	26,825	9,485	51,088	4,613	89,515	14,248	73,596
Food and Beverage Serving Workers	67	6	46	196	60	538	928	38,623	355	533
Retail Sales Workers	1,142	58	35	226	23	138	485	1,698	465	293
Construction Trades Workers	179	86	25	854	21	49	41	114	59	2,060
Healthcare Diagnosing or Treating Practitioners	9	308	101	380	175	18,390	6	29	71	6,042
Building Cleaning and Pest Control Workers	492	56	22	7,835	244	1,384	201	10,102	1,819	2,569
Material Moving Workers	766	154	101	2,838	13	218	144	175	770	1,348
Business Operations Specialists	244	2,958	1,009	1,264	383	1,015	250	514	1,715	10,142
Other Management Occupations	2,262	1,206	369	371	1,111	2,829	203	2,076	753	5,514
Information and Record Clerks	363	1,004	537	1,585	252	2,888	349	3,153	956	3,625
Other Office and Administrative Support Workers	812	1,155	286	1,418	587	2,225	228	414	1,323	7,271
Cooks and Food Preparation Workers	17	0	15	95	68	651	422	16,390	205	777
Preschool, Elementary, Middle, Secondary, and Special Education Teachers	1	0	3	5	5,139	1,006	8	0	241	13,149
Motor Vehicle Operators	451	60	46	580	49	311	20	649	317	2,016
Computer Occupations	79	4,063	997	665	282	423	35	79	337	4,657
Top Executives	500	1,228	419	973	218	789	357	1,225	1,426	1,823
Other Installation, Maintenance, and Repair Occupations	1,514	102	101	708	138	571	269	2,194	1,057	3,117
Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	6	6	17	193	18	11,292	0	4	1,120	1,030
Other Protective Service Workers	154	43	47	6,518	133	380	381	1,010	424	2,716
Other Food Preparation and Serving Related Workers	24	0	2	78	38	191	277	11,061	65	182
Counselors, Social Workers, and Other Community and Social Service Specialists	14	41	82	47	533	5,800	8	3	772	4,732

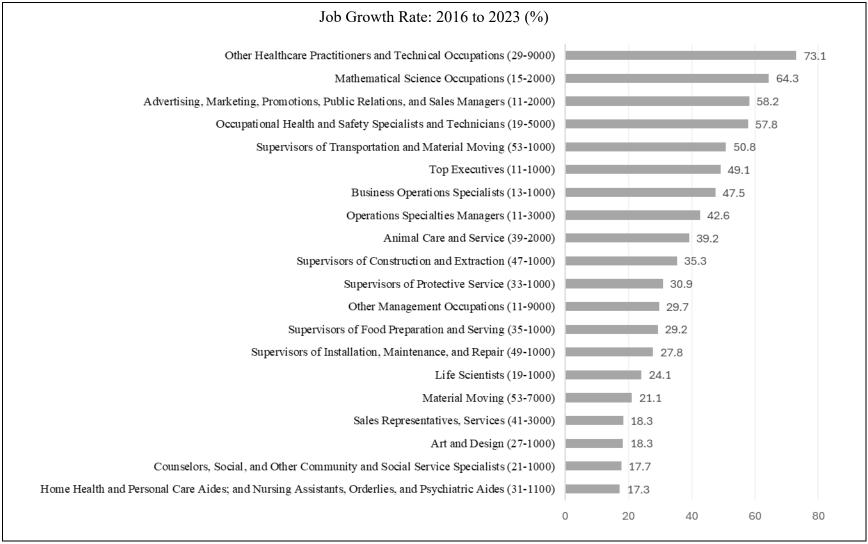
Source: LightcastTM Inverse Staffing Patterns Q4 2024, calculations by DBEDT

Table A-2. Top 20 largest occupations in Hawai'i by industry sector, as a percentage of sector jobs: 2023

Occumention			Industry Sector (%)																		
Occupation					R.			Real Prof., Sci.						Arts &			Pu				
	Agr.	Mining U	Jtilities	Cons.	Manuf.	Trade	Trade '	Trans. I	nfo.	Finance I	Estate &	& Tech.	Mgmt.	Admin.	Edu.	Care	Ent.	&	Othe	r Ad	lm. Level
Food and Beverage Serving Workers	0.0	0.0	0.0	0.0	1.4	0.1	4.2	0.3	0.4	0.0	0.2	0.	0.1	0.4	0.1	1.2	2 2.	1 87	7.5 0	.8	1.2
Retail Sales Workers	0.1	0.0	0.0	0.1	1.3			0.4	0.2	0.1	3.4	0		0.7	0.1						0.9
Construction Trades Workers	0.1	0.2	0.9	85.1	1.1	0.2	0.7	0.2	0.1	0.0	0.6	0.	3 0.1	2.8	0.1	0.2	2 0.	1 (0.4	.2	6.8
Healthcare Diagnosing or Treating Practitioners	0.0	0.0	0.0	0.0	0.0	0.1	3.1	0.0	0.0	0.9	0.0	1.3	2 0.4	1.4	0.7	69.2	2 0.0	0 (0.1 0	.3 2	22.7
Building Cleaning and Pest Control Workers	0.2	0.0	0.0	0.4	0.6	0.3	1.8	0.3	0.1	0.0	1.9	0.3	2 0.1	30.5	0.9	5.4	1 0.	8 39	9.4 7	.1 1	10.0
Material Moving Workers	1.3	0.0	0.2	1.4	6.2	11.8	36.5	16.2	0.2	0.0	3.1	0.	6 0.4	11.3	0.1	0.9	0.0	6 ().7 3	.1	5.4
Business Operations Specialists	0.2	0.0	0.6	5.3	0.9	2.5	2.4	1.4	1.5	5.9	1.0	12.) 4.1	5.1	1.6	4.	1.0	0 2	2.1 7	.0 4	41.2
Other Management Occupations	12.0	0.0	0.4	16.7	0.9	0.3	0.2	0.5	0.6	0.8	9.1	4.	9 1.5	1.5	4.5	11.4	1 0.	8 8	3.4	.0 2	22.3
Information and Record Clerks	0.1	0.0	0.6	0.9	0.7	2.5	9.3	11.1	1.7	10.1	1.6	4.	3 2.3	6.8	1.1	12.4	1 1.:	5 13	3.5 4	.1 1	15.6
Other Office and Administrative Support Workers	0.3	0.1	0.4	7.3	1.4	3.4	4.9	3.1	1.3	4.4	3.8	5.	4 1.3	6.6	2.7	10.4	1.	1 1	.9 6	.2 3	34.0
Cooks and Food Preparation Workers	0.0	0.0	0.0	0.0	1.0	0.1	7.3	0.4	0.0	0.0	0.1	0.	0.1	0.5	0.3	3.2	2 2.	1 80).1 1	.0	3.8
Preschool, Elementary, Middle,																					
Secondary, and Special Education Teachers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	26.3	5.	0.0	0 (0.0 1	.2	67.2
Motor Vehicle Operators	1.4	0.1	0.0	2.1	1.9	11.0	6.8	49.9	0.2	0.0	2.7	0.	4 0.3	3.4	0.3	1.8	3 0.	1 3	3.8 1	.9	11.9
Computer Occupations	0.1	0.0	0.8	0.4	0.5	2.4	0.9	0.8	8.9	6.9	0.5	27.	4 6.7	4.5	1.9	2.8	3 0.3	2 ().5 2	.3 3	31.4
Top Executives	0.7	0.1	0.7	7.2	2.6	5.4	12.1	3.8	2.1	3.9	3.4	8.	4 2.9	6.7	1.5	5.4	1 2.	4 8	3.4 9	.8 1	12.5
Other Installation, Maintenance, and Repair Occupations	0.6	0.1	3.5	11.7	4.0	3.4	3.4	1.8	2.7	0.1	10.6	0.	7 0.7	5.0	1.0	4.0) 1.5	9 15	5.4 7	.4 2	21.9
Home Health and Personal Care																					
Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4	0.1	82.4	1 0.0	0 (0.0 8	.2	7.5
Other Protective Service Workers	0.1	0.0	0.1	0.2	0.1	0.1	4.0	0.8	0.1	0.1	1.2	0.	3 0.4	52.2	1.1	3.0) 3.0	0 8	3.1 3	.4 2	21.7
Other Food Preparation and Serving Related Workers	0.0	0.0	0.0	0.0	0.7	0.0	0.5	0.5	0.1	0.0	0.2	0.	0.0	0.6	0.3	1.0	5 2	3 91	1.2 0	.5	1.5
Counselors, Social Workers, and Other Community and Social Service Specialists	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.1	0	3 0.7	0.4	4.4	47.9	0.	1 (0.0 6	.4 3	39.0
High concentrate	ion, >	> 65%				Med	ium c	oncer	ıtrati	on, > 3	35% a	and < 6	5%			Lo	w con	centra	ation,	< 3	5 %

Source: Lightcast™ Q4 2024, calculations by DBEDT

Figure A-1. Top 20 fastest growing occupations in the United States: 2016 to 2023



LightcastTM Q4 2024, calculations by DBEDT

Table A-3. Top 20 largest STEM occupations in Hawai'i by industry sector: 2023

Occupation	NAICS11	NAICS21	NAICS22	NAICS23	NAICS31	NAICS42	NAICS44	NAICS48	NAICS51	NAICS52
Occupation	Agr.	Mining	Utilities	Cons.	Manuf.	W. Trade	R. Trade	Trans.	Info.	Finance
Total (# of jobs)	24	0	520	575	233	806	129	151	1,295	1,027
Software Developers (15-1252)	4	0	10	7	36	90	31	42	392	300
Civil Engineers (17-2051)	0	0	17	288	1	0	0	1	6	2
Network and Computer Systems Administrators (15-1244)	0	0	35	25	19	77	29	30	200	179
Computer Occupations, All Other (15-1299)	6	0	9	4	6	22	15	11	78	66
Computer User Support Specialists (15-1232)	1	0	10	18	6	85	27	15	135	93
Computer Systems Analysts (15-1211)	0	0	30	4	3	27	1	13	97	174
Computer and Information Systems Managers (11-3021)	3	0	5	6	5	33	10	19	112	107
Architectural and Engineering Managers (11-9041)	0	0	48	26	43	25	0	9	20	3
Engineers, All Other (17-2199)	1	0	8	7	8	8	1	0	4	1
Electrical Engineers (17-2071)	0	0	241	47	28	15	0	0	8	0
Biological Technicians (19-4021)	0	0	0	0	5	0	2	0	0	0
Architects, Except Landscape and Naval (17-1011)	0	0	0	26	0	0	0	0	0	0
Life, Physical, and Social Science Technicians, All Other (19-4099)	0	0	0	0	3	4	0	0	0	3
Architectural and Civil Drafters (17-3011)	0	0	0	78	17	2	0	0	0	0
Electrical and Electronic Engineering Technologists and Technicians (17-3023)	0	0	71	18	19	10	1	3	13	0
Information Security Analysts (15-1212)	0	0	11	0	0	5	0	3	31	58
Mechanical Engineers (17-2141)	0	0	4	15	31	21	0	1	1	0
Computer Network Architects (15-1241)	0	0	10	1	0	12	3	2	152	38
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)	8	0	2	6	5	371	10	2	47	0
Environmental Scientists and Specialists, Including Health (19-2041)	0	0	9	0	0	0	0	0	0	0

Table A-3. Top 20 largest STEM occupations in Hawai'i by industry sector: 2023 (Cont.)

	NAICS53	NAICS54	NAICS55	NAICS56	NAICS61	NAICS62	NAICS71	NAICS72	NAICS81	NAICS90
Occupation	Real	Prof., Sci.	Mgmt.	Admin.	Edu.	Health		Accom. &	Other	Pub.
5 5 5 5 7 11 15 15	Estate	& Tech.	8			Care	Ent.	Food Ser.		Adm.
Total (# of jobs)	106	7,836	1,263	747	308	541	44	116	338	9,221
Software Developers (15-1252)	13	1,387	220	161	34	33	2	3	41	160
Civil Engineers (17-2051)	11	1,129	15	13	0	0	0	21	3	1,303
Network and Computer Systems Administrators (15-1244)	23	541	187	117	77	118	13	36	95	735
Computer Occupations, All Other (15-1299)	9	318	71	64	31	25	2	5	35	1,731
Computer User Support Specialists (15-1232)	21	489	110	124	75	106	6	22	51	731
Computer Systems Analysts (15-1211)	6	428	192	63	14		2	8	18	449
Computer and Information Systems Managers (11-3021)	9	303	131	43	26	33	3	9	36	323
Architectural and Engineering Managers (11-9041)	2	499	79	7	0	0	0	10	2	408
Engineers, All Other (17-2199)	1	154	20	15	1	0	1	0	0	682
Electrical Engineers (17-2071)	0	299	48	13	0	0	0	1	7	188
Biological Technicians (19-4021)	0	130	2	0	24	81	4	0	4	534
Architects, Except Landscape and Naval (17-1011)	4	670	3	1	0	0	0	0	2	50
Life, Physical, and Social Science Technicians, All Other (19-4099)	2	100	10	47	18	33	8	0	8	516
Architectural and Civil Drafters (17-3011)	0	555	6	1	0	0	0	0	0	16
Electrical and Electronic Engineering Technologists and Technicians (17-3023)	0	99	10	8	0	0	3	1	1	393
Information Security Analysts (15-1212)	0	166	50	26	3	4	0	0	5	243
Mechanical Engineers (17-2141)	3	228	23	11	0	0	0	0	2	239
Computer Network Architects (15-1241)	0	163	66	24	4	11	0	0	6	89
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)	3	83	13	5	0	4	0	0	1	0
Environmental Scientists and Specialists, Including Health (19-2041)	0	94	6	6	0	0	0	0	20	431

Source: Lightcast™ Inverse Staffing Patterns Q4 2024, calculations by DBEDT

Table A-4. Top 20 largest STEM occupations in Hawai'i by industry sector, as a percentage of sector jobs: 2023

0									In	dustry	Sect	or (%)								
Occupation						W.	R.	· ·		F	Real	Prof., Sci.				Health	Arts &	Accom		Pub.
	Agr.	Mining	Utilities	Cons.	Manuf.	Trade	Trade 7	Trans. 1	nfo.	Finance I	Estate	& Tech.	Mgmt.	Admin.	Edu.	Care	Ent.	&	Other	Adm. Level
Software Developers	0.1	0.0	0.3	0.2	1.2		1.0	1.4	13.2	10.1	0.4	46.	8 7.4	5.4	1.1	1.1	0.1	1 0.1	1 1.4	5.4
Civil Engineers		0.0	0.6	10.3	0.0	0.0	0.0	0.0	0.2	0.1	0.4	40.2	2 0.6	0.4	0.0	0.0	0.0	0.0	8 0.1	46.4
Network and Computer Systems Administrators	0.0	0.0	1.4	1.0	0.8	3.0	1.1	1.2	7.9	7.1	0.9	21.	3 7.4	4.6	3.0) 4.7	7 0.5	5 1.4	4 3.8	3 29.0
Computer Occupations, All Other	0.3	0.0	0.3	0.2	0.2	0.9	0.6	0.4	3.1	2.6	0.3	12.	7 2.9	2.5	1.2	2 1.0	0.1	1 0.2	2 1.4	69.1
Computer User Support Specialists	0.0	0.0	0.5	0.8	0.3	4.0	1.3	0.7	6.4	4.4	1.0	23.0	0 5.2	5.9	3.5	5.0	0.3	3 1.0	0 2.4	34.4
Computer Systems Analysts	0.0	0.0	1.9	0.2	0.2	1.7	0.1	0.8	6.0	10.8	0.3	26.4	4 11.9	3.9	0.9	5.7	7 0.1	1 0.5	5 1.1	27.7
Computer and Information Systems Managers	0.3	0.0	0.4	0.5	0.4	2.7	0.8	1.5	9.2	8.8	0.8	24.9	9 10.8	3.5	2.2	2 2.8	3 0.3	3 0.7	7 3.0	26.6
Architectural and Engineering Managers	0.0	0.0	4.0	2.2	3.6	2.1	0.0	0.8	1.7	0.3	0.2	42.	3 6.7	0.6	0.0	0.0	0.0	0.0	8 0.2	2 34.6
Engineers, All Other	0.1	0.0	0.9	0.7	0.9	0.8	0.2	0.0	0.5	0.1	0.1	16.9	9 2.2	1.6	0.1	0.0	0.1	1 0.0	0.0	74.8
Electrical Engineers	0.0	0.0	26.9	5.3	3.1	1.7	0.0	0.0	0.9	0.0	0.0	33.4	4 5.3	1.5	0.0	0.0	0.0	0.1	1 0.7	20.9
Biological Technicians	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.0	0.0	0.0	0.0	16.0	6 0.3	0.0	3.1	10.3	3 0.5	5 0.0	0.5	68.0
Architects, Except Landscape and Naval	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	88.:	5 0.5	0.1	0.0	0.0	0.0	0.0	0.3	6.7
Life, Physical, and Social Science Technicians, All Other	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.4	0.2	13	3 1.3	6.3	2.4	4.4	1.1	1 0.0	0 1.0	68.6
Architectural and Civil Drafters	0.0	0.0	0.0	11.5	2.4	0.3	0.0	0.0	0.0	0.0	0.0	82.2	2 0.9	0.2	0.0	0.0	0.0	0.0	0.0	2.4
Electrical and Electronic																				
Engineering Technologists and Technicians	0.0	0.0	11.0	2.8	2.8	1.5	0.1	0.4	2.0	0.0	0.0	15	3 1.6	1.2	0.0	0.0	0.4	4 0.2	2 0.2	2 60.5
Information Security Analysts	0.0	0.0	1.8	0.0	0.0	0.8	0.0	0.5	5.1	9.6	0.0	27.	4 8.3	4.2	0.5	0.7	7 0.0	0.0	0.9	40.1
Mechanical Engineers	0.0	0.0	0.7	2.6	5.3	3.6	0.1	0.2	0.1	0.1	0.4	39	3 3.9	1.9	0.0	0.0	0.0	0.0	0.4	41.2
Computer Network Architects	0.0	0.0	1.7	0.2	0.0	2.0	0.5	0.4	26.1	6.6	0.0	28.	1 11.3	4.1	0.7	7 1.8	3 0.0	0.0	0 1.0	15.3
Sales Representatives, Wholesale																				
and Manufacturing, Technical and Scientific Products	1.4	0.0	0.3	1.0	0.9	66.4	1.7	0.3	8.3	0.0	0.6	14.9	9 2.4	0.9	0.0	0.7	7 0.0	0.0	0.3	0.0
Environmental Scientists and Specialists, Including Health	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.:	5 1.1	1.1	0.0	0.0	0.0	0.0	0 3.5	76.1
High concentration, > 65%					Medium concentration, > 35% and < 65%							Low concentration, < 35 %								

Source: LightcastTM Q4 2024, calculations by DBEDT

Table A-5. Hawai'i 3-digit occupations, ranked by number of jobs: 2016 and 2023

soc	Description		2016 Rank
35-3000	Food and Beverage Serving Workers	1	2
	Retail Sales Workers	2	1
47-2000	Construction Trades Workers	3	3
29-1000	Healthcare Diagnosing or Treating Practitioners	4	5
	Building Cleaning and Pest Control Workers	5	4
	Material Moving Workers	6	9
	Business Operations Specialists	7	8
	Other Management Occupations	8	7
43-4000	Information and Record Clerks	9	6
43-9000	Other Office and Administrative Support Workers	10	11
35-2000	Cooks and Food Preparation Workers	11	10
25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	12	12
53-3000	Motor Vehicle Operators	13	13
15-1200	Computer Occupations	14	21
11-1000	Top Executives	15	18
	Other Installation, Maintenance, and Repair Occupations	16	16
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	17	14
33-9000	Other Protective Service Workers	18	20
	Other Food Preparation and Serving Related Workers	19	23
	Counselors, Social Workers, and Other Community and Social Service Specialists	20	22
43-6000	Secretaries and Administrative Assistants	21	15
29-2000	Health Technologists and Technicians	22	25
	Financial Specialists	23	24
	Financial Clerks	24	17
	Other Healthcare Support Occupations	25	29
	Supervisors of Office and Administrative Support Workers	26	33
	Operations Specialties Managers	27	32
	Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	28	27
	Grounds Maintenance Workers	29	26
	Supervisors of Sales Workers	30	30
43-5000	Material Recording, Scheduling, Dispatching, and Distributing Workers	31	34
	Supervisors of Food Preparation and Serving Workers	32	36
	Other Educational Instruction and Library Occupations	33	31
	Other Teachers and Instructors	34	19
	Postsecondary Teachers	35	35
	Other Personal Care and Service Workers	36	28
	Sales Representatives, Services	37	37
	Engineers	38	39
	Law Enforcement Workers	39	38
	Air Transportation Workers	40	41
	Entertainment Attendants and Related Workers	41	51
	Entertainers and Performers, Sports and Related Workers	42	45
	Agricultural Workers	43	40
	Other Sales and Related Workers	44	43
	Personal Appearance Workers	45	53
	Art and Design Workers	46	50
	Sales Representatives, Wholesale and Manufacturing	47	42
	Lawyers, Judges, and Related Workers	48	52
	Supervisors of Construction and Extraction Workers	49	54
	Media and Communication Workers	50	49
	Other Transportation Workers	51	48
	Supervisors of Transportation and Material Moving Workers	52	64
	Other Production Occupations	53	46
49-2000	Electrical and Electronic Equipment Mechanics, Installers, and Repairers	54	44

Table A-5. Hawai'i 3-digit occupations, ranked by number of jobs: 2016 and 2023 (Cont.)

SOC	Description	2023	2016
	Description	Rank	Rank
	Supervisors of Installation, Maintenance, and Repair Workers	55	55
	Food Processing Workers	56	47
	Advertising, Marketing, Promotions, Public Relations, and Sales Managers	57	56
	Drafters, Engineering Technicians, and Mapping Technicians	58	58
	Supervisors of Building and Grounds Cleaning and Maintenance Workers	59	60
51-6000	Textile, Apparel, and Furnishings Workers	60	57
	Media and Communication Equipment Workers	61	59
19-4000	Life, Physical, and Social Science Technicians	62	61
	Supervisors of Protective Service Workers	63	65
53-5000	Water Transportation Workers	64	62
47-4000	Other Construction and Related Workers	65	67
19-3000	Social Scientists and Related Workers	66	63
21-2000	Religious Workers	67	69
33-2000	Firefighting and Prevention Workers	68	66
23-2000	Legal Support Workers	69	72
39-1000	Supervisors of Personal Care and Service Workers	70	75
51-1000	Supervisors of Production Workers	71	71
39-6000	Baggage Porters, Bellhops, and Concierges	72	68
51-4000	Metal Workers and Plastic Workers	73	73
51-8000	Plant and System Operators	74	70
19-1000	Life Scientists	75	74
19-2000	Physical Scientists	76	76
39-2000	Animal Care and Service Workers	77	79
17-1000	Architects, Surveyors, and Cartographers	78	78
51-2000	Assemblers and Fabricators	79	77
39-7000	Tour and Travel Guides	80	80
29-9000	Other Healthcare Practitioners and Technical Occupations	81	90
	Mathematical Science Occupations	82	86
25-4000	Librarians, Curators, and Archivists	83	84
19-5000	Occupational Health and Safety Specialists and Technicians	84	87
43-2000	Communications Equipment Operators	85	85
47-5000	Extraction Workers	86	83
53-4000	Rail Transportation Workers	87	81
51-5100	Printing Workers	88	88
47-3000	Helpers, Construction Trades	89	82
31-2000	Occupational Therapy and Physical Therapist Assistants and Aides	90	91
	Woodworkers	91	89
	Supervisors of Farming, Fishing, and Forestry Workers	92	92
	Funeral Service Workers	93	94
45-4000	Forest, Conservation, and Logging Workers	94	95
	Fishing and Hunting Workers	95	93

Source: Lightcast™ Q4 2024, calculations by DBEDT

Table A-6. Occupation (3-digit) job growth in Hawai'i and USA: 2016 to 2023

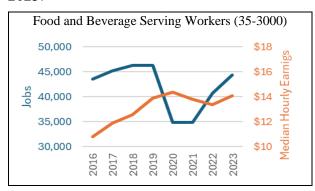
	Job (Job Growth Rate (%)				
Occupation	HI		Difference			
Other Healthcare Practitioners and Technical Occupations	125.0	73.1				
Entertainment Attendants and Related Workers	45.8	12.0				
Supervisors of Office and Administrative Support Workers	30.4	3.3	27.1			
Other Office and Administrative Support Workers	10.0	-16.6	26.6			
Supervisors of Personal Care and Service Workers	16.0	-9.7	25.7			
Personal Appearance Workers	27.8	5.7	22.1			
Printing Workers	3.0	-17.5	20.6			
Communications Equipment Operators	-20.1	-40.6				
Other Transportation Workers	-0.6	-10.4	9.9			
Supervisors of Transportation and Material Moving Workers	58.5	50.8				
Food and Beverage Serving Workers	1.9	-5.4	7.3			
Postsecondary Teachers	2.7	-2.4	5.0			
Textile, Apparel, and Furnishings Workers	-12.7	-17.5	4.8			
Computer Occupations	21.2	17.0	4.2			
Physical Scientists	4.1	0.0	4.1			
Supervisors of Sales Workers	-3.6	-7.3	3.7			
Religious Workers	-4.7	-7.6	2.9			
Drafters, Engineering Technicians, and Mapping Technicians	-2.9	-5.0	2.1			
Preschool, Elementary, Middle, Secondary, and Special Education Teachers	6.5	4.6	1.9			
Funeral Service Workers	0.7	-1.1	1.9			
Metal Workers and Plastic Workers	-4.4	-6.2				
Entertainers and Performers, Sports and Related Workers	10.5	9.0	1.5			
Art and Design Workers	18.8	18.3				
Lawyers, Judges, and Related Workers	13.7	13.3				
Information and Record Clerks	-1.3	-1.7				
Media and Communication Workers	1.4	1.2				
Forest, Conservation, and Logging Workers	2.7	2.7				
Other Food Preparation and Serving Related Workers	5.1	6.2				
Media and Communication Equipment Workers	1.6	3.4				
Other Sales and Related Workers	-0.6	2.5				
Law Enforcement Workers	-11.7	-8.3				
Health Technologists and Technicians	3.6	7.1				
Baggage Porters, Bellhops, and Concierges	-10.3	-6.6				
Life, Physical, and Social Science Technicians	-0.8	3.1				
Other Personal Care and Service Workers	-16.3	-12.1				
Librarians, Curators, and Archivists	-10.2	-5.7				
Occupational Therapy and Physical Therapist Assistants and Aides	6.6	11.5				
Supervisors of Farming, Fishing, and Forestry Workers	-8.8	-3.5				
Plant and System Operators	-12.3	-6.9				
Supervisors of Building and Grounds Cleaning and Maintenance Workers	7.4	13.0				
Financial Clerks	-18.0	-11.9				
Other Healthcare Support Occupations	10.1	16.7				
Engineers Engineers	-1.3	5.5				
Building Cleaning and Pest Control Workers	-11.5	-4.0				
Agricultural Workers	-15.6	-7.9				
Material Recording, Scheduling, Dispatching, and Distributing Workers	6.1					
Other Protective Service Workers	-0.8	8.5				
Healthcare Diagnosing or Treating Practitioners	6.1	15.6				
Cooks and Food Preparation Workers	1.4	11.3				
	4.8					
Air Transportation Workers		15.3				
Material Moving Workers	10.5	21.1				
Construction Trades Workers	-4.6	6.5				
Other Production Occupations	-17.1	-4.9				
Other Construction and Related Workers	0.8	13.1	-12.3			

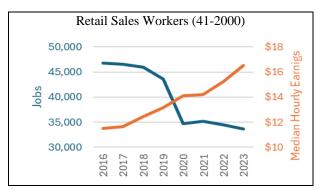
Table A-6. Occupation (3-digit) job growth in Hawai'i and USA: 2016 to 2023 (Cont.)

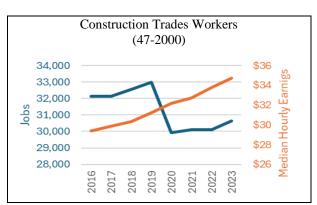
Occupation	Job (Job Growth Rate (%			
Оссирации	HI	U.S.	Difference		
Secretaries and Administrative Assistants	-26.4	-13.6			
Sales Representatives, Wholesale and Manufacturing	-20.6	-7.6			
Motor Vehicle Operators	-1.2	11.9			
Electrical and Electronic Equipment Mechanics, Installers, and Repairers	-28.0	-14.7	-13.4		
Counselors, Social Workers, and Other Community and Social Service Specialists	4.0	17.7			
Grounds Maintenance Workers	-15.1	-1.0			
Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	-8.0	6.8	-14.8		
Financial Specialists	-1.3	13.4			
Water Transportation Workers	-14.3	0.9			
Supervisors of Production Workers	-6.1	9.3			
Retail Sales Workers	-28.1	-12.0			
Extraction Workers	-29.9	-12.5			
Legal Support Workers	-2.2	15.4			
Woodworkers	-31.1	-13.4			
Supervisors of Food Preparation and Serving Workers	11.3	29.2			
Other Installation, Maintenance, and Repair Occupations	-6.5	11.9			
Other Educational Instruction and Library Occupations	-9.1	9.4	-18.4		
Architects, Surveyors, and Cartographers	-6.0	12.6			
Sales Representatives, Services	-1.0	18.3			
Supervisors of Construction and Extraction Workers	15.4	35.3			
Firefighting and Prevention Workers	-20.3	0.3			
Tour and Travel Guides	-15.0	5.8			
Other Management Occupations	6.7	29.7			
Assemblers and Fabricators	-15.8	7.9			
Other Teachers and Instructors	-33.7	-9.8			
Life Scientists	0.0	24.1	-24.1		
Food Processing Workers	-17.1	8.8			
Supervisors of Protective Service Workers	3.3	30.9			
Supervisors of Installation, Maintenance, and Repair Workers	-1.1	27.8			
Social Scientists and Related Workers	-14.2	16.0			
Operations Specialties Managers	10.6	42.6			
Top Executives	15.6	49.1			
Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	-17.5	17.3			
Helpers, Construction Trades	-51.9	-13.1	-38.8		
Business Operations Specialists	7.0	47.5			
Rail Transportation Workers	-39.8	0.7			
Animal Care and Service Workers	-1.9	39.2			
Fishing and Hunting Workers	-54.1	-9.9			
Occupational Health and Safety Specialists and Technicians	11.8	57.8			
Advertising, Marketing, Promotions, Public Relations, and Sales Managers	0.1	58.2			
Mathematical Science Occupations	-0.2	64.3	-64.6		

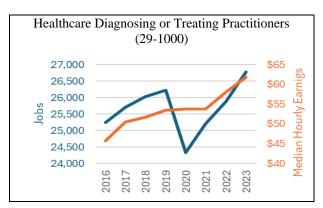
Source: Lightcast™ Q4 2024, calculations by DBEDT

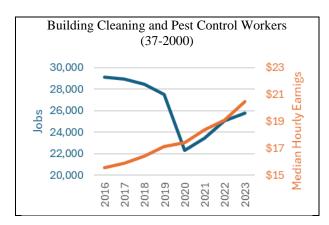
Figure A-2. Top 20 largest occupations in Hawai'i: Jobs and Median Hourly Earnings, 2016 to 2023.

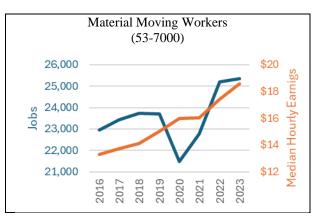












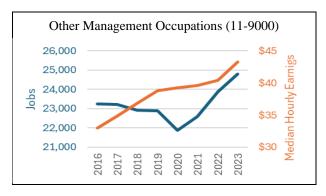
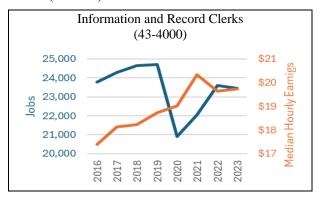
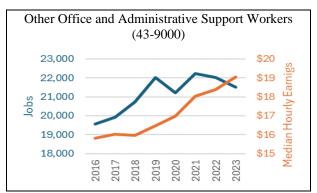
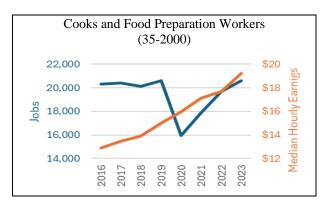


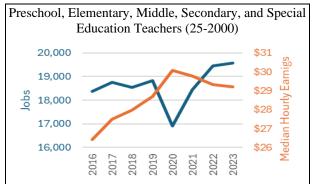


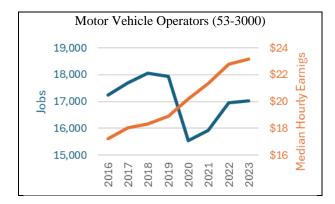
Figure A-2. Top 20 largest occupations in Hawai'i: Jobs and Median Hourly Earnings, 2016 to 2023. (Cont'd)

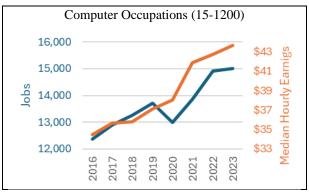


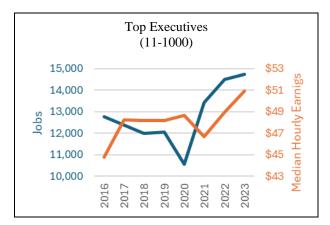












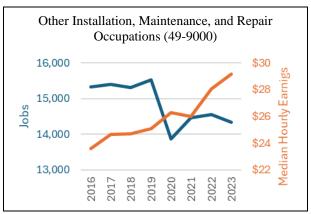
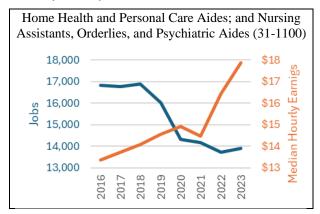
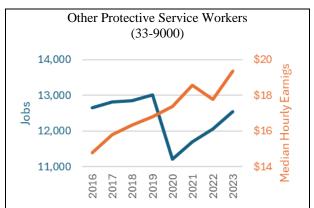
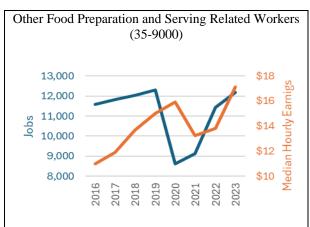
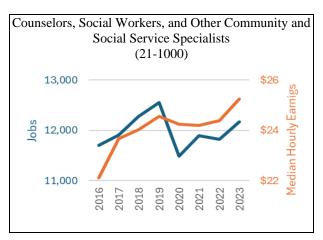


Figure A-2. Top 20 largest occupations in Hawai'i: Jobs and Median Hourly Earnings, 2016 to 2023. (Cont'd)









Source: LightcastTM Q4 2024, calculated by DBEDT