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Executive Summary

• This report provides an overview of Hawaii’s economy and labor market to inform those developing workforce development policies and making workforce investment decisions. The following are some of the significant findings for 2018:

Gross Domestic Product

• According to data from the U.S. Bureau of Economic Analysis, Hawaii’s real gross domestic product (GDP) rose by 1.0 percent to 80.8 billion in 2018. The top five industries contributing the most towards the state’s economy include: real estate and rental and leasing; government; accommodation and food services; retail trade; and healthcare and social assistance.

Population

• For the second year in a row, Hawaii’s population count declined, dropping 0.32 percent to 1.42 million in 2018. The oldest age group, those 65 years and older was the only cohort that increased for both Hawaii and the nation.
• Honolulu accounts for the largest share of the state’s population at 69 percent, and is the only county that declined from 2017 to 2018. Hawaii County increased by 0.7 percent, while Maui County and Kauai County both grew by 0.5 percent.

Civilian Labor Force

• After trending upward over the past five years, Hawaii’s civilian labor force fell by 0.7 percent to 678,750 in 2018.
• Hawaii’s labor force participation rate was 62.1 percent in 2018, lower than the national rate of 62.9 percent. The percentage of older workers was the only group that expanded. In terms of education, workers at all age levels have become more well-educated which bodes well for the future since the percentage of jobs requiring postsecondary education is projected to grow faster than jobs requiring a high school diploma or less.
• Based on U.S. Census Bureau data, Maui County had the highest labor force participation rate of 67.4 percent. Both Kauai and Honolulu County’s participation rates totaled 66.1 percent, while Hawaii County reported the lowest rate of 57.9 percent.
• The state’s unemployment rate remained at a historic low of 2.4 percent in 2018, 1.5 percentage points lower than the nation’s rate of 3.9 percent. Adding in alternative measures of labor underutilization which includes discouraged workers; marginally attached workers; and involuntary part-time workers raises the rate to 6.1 percent. The number of individuals filing unemployment insurance claims in 2018 totaled 6,686.
• Among the four counties, Honolulu County posted the lowest unemployment rate (2.3 percent), followed by Maui County (2.4 percent), Kauai County (2.5 percent), and Hawaii County (3.0 percent).
Industry Employment

- Non-farm jobs in Hawaii rose by 0.5 percent to 656,600 from 2017 to 2018, well below the advance of 1.7 percent posted nationally. From 2008 to 2018, the utilities industry with an increase of 22.6 percent and the management of companies and enterprises, up by 21.6 percent, registered the largest percentage growth. Healthcare and social assistance (+12,050) and food services and drinking places (+11,400) added the most jobs.
- Among the counties, four of the top five largest industries are the same in each county. These include: government; healthcare and social assistance; retail trade; and food services and drinking places.

Occupation Employment

- Based on the May 2018 Occupational Employment Statistics (OES) breakout, office and administrative support occupations employed the largest percentage of the workforce (14 percent), followed by food preparation and serving related workers (13 percent). Rounding out the top five largest groups are: sales and related (10 percent); education, training, and library (7 percent); and transportation and material moving occupations (7 percent).
- The top three largest occupational groups for each county are: office and administrative support; food preparation and serving related; and sales and related workers.

Income

- In 2017, Hawaii’s real per capita personal income at $42,263 was 13 percent lower than the U.S. real per capita income of $48,769, according to the latest U.S. Bureau of Economic Analysis data.
- Honolulu generated the highest per capita personal income of $56,728 in 2017, Maui County was next with income of $47,226, followed closely by Kauai County at $46,596. Hawaii County trailed all counties with per capita personal income of $40,188.

Job Outlook

- From 2018 to 2020, Hawaii’s employment was predicted to grow to 728,760 with the addition of 11,710 jobs. Industries with the most job growth are expected to be: healthcare and social assistance; food services and drinking places; educational services; and retail trade. Also important to the state’s economy, accommodations will rise by 2.5 percent.
- Hawaii County, with a forecasted growth rate of 9.1 percent from 2016 to 2026, will increase the fastest, followed by Kauai County at 8.8 percent, Maui County with growth of 7.3 percent, and Honolulu with modest growth of 5.9 percent.
Introduction

The Hawaii Labor Market Dynamics report focuses on significant labor market statistics and trends that affected Hawaii’s economy in 2018. This report looks at the dynamics occurring in the economy and workforce over the past ten years and employment outlook for the state. Whenever feasible, comparisons are made between the state and the nation. This year, the report contains infographic County profiles. The workforce and economic analyses provided in this report supports Hawaii’s workforce information system as directed by the U.S. Department of Labor’s Employment and Training Administration.

Overall, Hawaii’s economy continued to move in a positive direction in 2018, though at a slower pace than in prior years. The state’s real Gross Domestic Product (GDP), which provides a good gauge of the economy, rose by 1.0 percent in 2018, slightly down from an increase of 1.6 percent in 2017. For the second year in a row, Hawaii posted the lowest unemployment rate in the nation, averaging 2.4 percent in both 2017 and 2018. The unemployment rates for all counties ranged from 2.3 percent for Honolulu County to 3.0 percent for Hawaii County, much improved from the high unemployment in 2009, during the last recession. Although construction employment edged downward for the second straight year, ongoing projects such as the Honolulu rail transit system, and airport modernization projects taking place on all islands helped to stabilize employment. One especially bright spot was tourism. Despite setbacks on each of the islands, a record 9.9 million tourists visited the state in 2018, eclipsing last year’s figure of 9.4 million visitors.
Gross Domestic Product

Hawaii’s real gross domestic product (GDP) grew 12.7 percent from 2008 to reach $80.8 billion in 2018. Real GDP takes out the effect of inflation. In calculating the growth rate, the U.S. Department of Commerce, Bureau of Economic Analysis annualizes quarterly data to remove seasonality. This makes it easy to compare growth to the previous year. The GDP growth rate is an important indicator of economic health because it changes during the business cycle. Between 2008 and 2018, Hawaii’s growth rate for real GDP ranged from a low of 0.3 percent in 2014 to a high of 3.4 percent in 2015 and was 1.0 percent in 2018. Although Hawaii’s GDP continued to increase from 2016 to 2018, the rate of growth shrank. In contrast, GDP growth for the U.S. moved in a more positive direction over the last two years.

Figure 1. Real Gross Domestic Product, Hawaii, 2008-2018

Figure 2. Real GDP Percent Growth, Hawaii vs U.S., 2008-2018

Source: U.S. Bureau of Economic Analysis
The top two industries that contributed the most toward the state’s economy, real estate and rental and leasing, and government, accounted for over 40 percent of total GDP. Both industries have been the largest contributors throughout the 2008 to 2018 period. Rounding out the top five industries, accommodation and food services ranked third, followed by retail trade, and health care and social assistance. These five sectors have consistently been among the top contributors to Hawaii’s GDP throughout the last 10 years.

Although real estate and rental and leasing contributed the most in terms of monetary value towards Hawaii’s economy, according to Current Employment Statistics (CES) data, the percentage of jobs generated by this industry make up less than 2 percent of all jobs statewide. The percentages for government on the other hand, matched more closely. This industry contributes almost 20 percent to GDP, and accounts for 19 percent of employment. The other three industries (accommodation and food services; retail trade; and health care and social assistance) provide more jobs than they do financial contribution to the GDP.

**Figure 3. Five Largest Industries by GDP vs. Employment, State of Hawaii, 2008-2018 (millions of chained dollars)**

Source: U.S. Bureau of Economic Analysis (GDP)  
Hawaii State Dept. of Labor and Industrial Relations, Research and Statistics, CES program (employment).
In 2018, Hawaii’s population was 1.42 million, down 0.3 percent from 2017. This is the second consecutive year that Hawaii’s population declined. Going back to 2008, the population steadily increased until it reached 1.43 million in 2016, but the state lost over 7,000 residents in the last two years, mainly due to net migration out of Honolulu County. Military deployment, high cost of living, and better career opportunities on the mainland are all likely causes of this out-migration. Hawaii was among nine states that incurred a drop in population. The U.S. population count, on the other hand, expanded by 0.6 percent in 2018, and has grown consistently throughout the last 10 years.

**Figure 4. Population, Hawaii, 2008-2018**

**Figure 5. Over-the-year Percent Change in Population, Hawaii vs U.S., 2009-2018**

*Source: U.S. Census Bureau*
As reflected in population data from 2010 to 2018, Hawaii’s shifting demographics have mirrored the national trend. In terms of the aging population, the segment of the population aged 65 and older was the only age group that grew larger for both the U.S. and Hawaii. This is expected to continue as the youngest members of the baby boom continue to age and move into the older age cohort. As a result, the median age of the population has risen slightly from 38.6 to 39.2 years old in Hawaii and from 37.2 to 38.2 years old for the nation. The proportion of males slightly outnumbers females in Hawaii (50.1 percent males vs. 49.9 percent females). Nationally, females outnumber males by a wider margin, 50.8 percent to 49.2 percent. In both cases, females are about three years older than males. Females in Hawaii recorded an average age of 40.8 years, exactly three years older than the average age for males at 37.8 years. In the U.S., the average female is 39.5 years old compared to 36.9 years old for males.

Figure 6. Population Breakout by Age, State of Hawaii vs U.S., 2010 and 2018

Source: U.S. Census Bureau
Civilian Labor Force

Following five years of expansion, Hawaii’s civilian labor force reversed course in 2018 with a drop of 4,850 or 0.7 percent to 678,750. While the unemployed count remained fixed at 16,600, the number of employed persons experienced a reduction of 4,850 persons, possibly the result of an overall drop in the state’s civilian non-institutional population. Only nine other states besides Hawaii reported a decline in their labor force, which contrasted to the U.S. increase of 1.1 percent from 2017 to 2018.

Figure 7. Over-the-Year Percent Change in Civilian Labor Force, Hawaii vs U.S., 2008-2018

The declining labor force participation rate

The changing demographics have contributed to the general decline in labor force participation for Hawaii as well as for the nation. As a result, over the past 10 years, labor force participation has gone from 65.6 percent in 2008 down to 62.1 percent in 2018. During this period, Hawaii’s rate dropped as low as 60.7 percent in 2012 and 2013 but edged back upward and has remained near 62 percent over the last four years. The U.S. labor force participation rate, which registered a ratio of 66.0 percent in 2008, ended 2018 at 62.9 percent. Although Hawaii and the U.S. began and ended with similar ratios during this 10-year period, the rate of decline for the nation has followed a straighter line, whereas Hawaii suffered a more drastic decline, especially during the middle years.
The aging labor force

By 2018, nearly all the baby boomers fell in the 55 years and older category which explains the increase of older workers from 2008. This was the only age group that expanded, totaling a little over one-fourth of the labor force. Those in the prime working-age group, 25 to 54 years old, fell from 66 to 62 percent, while a reduction of 3 percent lowered the shares of the 16 to 24 year old group to 11 percent from 14 percent in 2008.

Figure 9. Labor Force Participation by Age, Hawaii, 2008 and 2018

Source: U.S. Bureau of Labor Statistics
The increasing education of labor force

When analyzing the data on educational attainment, it was very evident that Hawaii’s civilian labor force from 2008 to 2018 has become increasingly well-educated. The percentage of workers with the highest level of education (bachelor’s or higher degree) rose by 11 percentage points and included 40 percent of all workers in 2018. Those with some college and an Associate’s degree diminished as did those with just a high school education or less.

When broken out by age and education level, the data reveals that all age groups experienced an increasing proportion of workers with a bachelor’s degree or higher.

Fig. 10. Labor Force by Educational Attainment, State of Hawaii, 2008 and 2018

2008 2018

<table>
<thead>
<tr>
<th>Education Level</th>
<th>2008</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>No HS diploma</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>HS or equivalent</td>
<td>32%</td>
<td>27%</td>
</tr>
<tr>
<td>Some college, less than 4-year degree</td>
<td>33%</td>
<td>28%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>29%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, Current Population Survey

Among the 16 to 24 years olds, both postsecondary education categories improved over the decade, while the two categories that don’t include any postsecondary education declined.

The prime working-age group, those 25 to 54 years old, generated the most dramatic increase for workers with at least a bachelor’s degree. By 2018, 43 percent were classified in this category, up sharply from 30 percent in 2008.

As for the oldest workers, 55 years and older, the data also shows that labor force participants with at least a 4-year degree remained in the workforce longer. This segment of workers dominated the other education levels with a participation rate of 43 percent.
Better educated labor force will be needed to meet increased demand for jobs requiring higher education

A better educated civilian labor force is good news because the projected growth rate for occupations requiring postsecondary education is faster than the average for all occupations. Jobs requiring a master’s degree will rise the fastest in comparison to the other education levels. Although the projected rate of 12.9 percent is almost twice the overall rate of 6.5 percent, the employment count for this education level is the smallest. Meanwhile, occupations requiring a high school diploma and less are expected to grow slower than the average.
Unemployment

Hawaii’s unemployment rate averaged 2.4 percent in 2018, holding steady from the year before. After peaking at 7.2 percent in 2009 because of the Great Recession, the rate of jobless people declined steadily by 4.8 percentage points since then. Compared to the nation’s 3.9 percent rate in 2018, Hawaii’s unemployment rate was 1.5 percentage points lower. Among the 50 states, Hawaii had the lowest jobless ratio for the past two years and it has never been lower than 2.4 percent since 1976 when the US Department of Labor, Bureau of Labor Statistics (BLS) started the Local Area Unemployment Statistics program.

Alternative Measures of Labor Underutilization

The unemployment rate only includes jobless persons who are available to and have actively sought work in the past four weeks. To incorporate a

<table>
<thead>
<tr>
<th>Definitions of Alternative Measures of Labor Underutilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>U-1: Unemployed 15 weeks or longer</td>
</tr>
<tr>
<td>U-2: Job losers and people who completed temporary jobs</td>
</tr>
<tr>
<td>U-3: Total unemployed (the official unemployment rate)</td>
</tr>
<tr>
<td>U-4: Discouraged workers, plus total unemployed.</td>
</tr>
<tr>
<td>Discouraged workers are not in the labor force, but want and are available for work, and did look for work sometime in the prior year. They are not counted as unemployed because they didn’t look for work in the prior four weeks due to reasons such as: the belief that there were no jobs available for them in their line of work; the lack of necessary education, experience, or training; or they experienced age discrimination from employers.</td>
</tr>
<tr>
<td>U-5: Marginally attached workers, plus discouraged workers, and total unemployed.</td>
</tr>
<tr>
<td>Marginally attached workers are similar to discouraged workers except that any reason can be cited for the lack of job search in the prior four weeks. Various reasons include: lack of childcare or transportation; family obligations; or other temporary problems.</td>
</tr>
<tr>
<td>U-6: Involuntary part-time workers, plus marginally attached workers, discouraged workers, and total unemployed.</td>
</tr>
<tr>
<td>Involuntary part-time workers are available to and want to work full-time, but are working part-time due to economic reasons such as their hours were cut back or they couldn’t find a full-time job.</td>
</tr>
</tbody>
</table>
broader group of individuals who are not technically “unemployed” but supplement the available labor pool, BLS defines alternative measures of labor underutilization for states on a four-quarter moving average basis which removes seasonality.

The U-4 rate which includes discouraged workers was 2.8 percent in 2018. This was two-tenths of a percentage point above the U-3 rate of 2.6 percent which is the published unemployment rate. The number of discouraged workers was 1,300, compared to the 17,700 officially unemployed count.

Hawaii’s U-5 rate of 3.5 percent adds in all marginally attached workers which includes the discouraged workers. There were 6,100 marginally attached workers, compared to the 17,700 officially unemployed.

The U-6 rate was 6.1 percent and this adds involuntary part-time workers to the group of all marginally attached workers. The count of these people was 18,200 in 2018, a pretty sizeable amount of people who have not been able to find full-time jobs and are forced to take part-time work.
Unemployment Insurance Claimants

There were 6,686 people in Hawaii who filed unemployment insurance (UI) claims during 2018. According to characteristics collected by the Research and Statistics Office of the State Department of Labor and Industrial Relations, about 22 percent were unemployed for 15 weeks or longer. Another 36 percent were jobless for 5 to 14 weeks, and the remaining 42 percent were of work for only 1 to 4 weeks.

In terms of industry, 35 percent of claimants were laid off from construction companies as is the case when a building project ends and employers tend to layoff workers temporarily until the next job begins. About 13 percent of claimants came from the administrative and support and waste management and remediation services industry, which accounts for the staffing agencies that companies utilize to hire temporary help. Another 11 percent of claimants lost their jobs at accommodations and food services companies, most of which were food preparation and serving related workers.

Among the age groups for UI claimants, the middle-aged 35 to 44 year old group accounted for 23 percent of the total unemployed. The next older group of 45 to 54 year olds represented 22 percent of the total, as did the next younger group of 25 to 34 year olds. They were closely followed by the age group of 55 to 64 year olds who are approaching retirement with 20 percent.

Figure 16. Unemployment Insurance Claimant Characteristics, Hawaii, 2018

Source: Hawaii DLIR R&S Office, UI Research
Industry Employment

The state’s non-farm job count rose to a new high of 656,600 in 2018. However, the annual increase of 0.5 percent over the previous year represented the smallest percentage gain since the job count began recovering in 2011. Nationally, U.S. jobs advanced by 1.7 percent from 2017 to 2018, well above the pace of Hawaii’s job growth. Although Hawaii has generally followed the national trend over the last 10 years, 2018 produced the largest divergence in the rates.

While total job growth rose by 6.0 percent with the addition of 37,400 jobs from 2008 to 2018, examining job data by industry over this period reveals different movement among the industries.

Of the state’s 19 major industries analyzed, 12 reported positive job gains. Two of the smallest industries, utilities and the management of companies and enterprises, expanded by the largest percentage. The total job tally within the utilities industry climbed by 22.6 percent, boosting the job count by 700. Increased hiring within the management of companies and enterprises sector resulted in a gain of 21.6 percent, equivalent to 1,600 positions. Although the percentage increase for both industries was well above the statewide average, the number of positions totaled only 2,300 between the two industries, or six percent of the 37,400 jobs added in the last decade. Among the larger industries, healthcare and social assistance experienced a hike of 20.3 percent and added the most jobs, advancing from 59,450 to 71,500. Food services and drinking places, which increased by 19.8 percent, followed with the second largest numerical gain of 11,400 as consumers continued to dine out. Growth from these two industries accounted for over 62 percent of the overall job expansion.

In terms of job losses, the employment levels for six of the seven industries that posted a decline from 2008 to 2018, have remained below the 2008...
employment level every year from 2009 through 2018. These industries include: natural resources and mining (-1,750); information (-950); wholesale trade (-900); finance and insurance (-700); manufacturing (-650); and professional and scientific technical services (-500). Only employment within education services bypassed the pre-recession employment of 14,700, climbing to 15,000 in 2015. However, the 2018 job count remained lower than the 2008 figure by 300 positions.

**Figure 18. Industry Employment and Growth, State of Hawaii, 2008-2018**

<table>
<thead>
<tr>
<th>Industry</th>
<th>2018 Industry Employment</th>
<th>Growth Rate</th>
<th>Jobs Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>125,600</td>
<td>0.5%</td>
<td>600</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>71,500</td>
<td>20.3%</td>
<td>12,050</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>71,400</td>
<td>2.3%</td>
<td>1,600</td>
</tr>
<tr>
<td>Food Services &amp; Drinking Places</td>
<td>69,100</td>
<td>19.8%</td>
<td>11,400</td>
</tr>
<tr>
<td>Admin/Sppt/Wste Mgmt/Rem Svc</td>
<td>48,900</td>
<td>13.7%</td>
<td>5,900</td>
</tr>
<tr>
<td>Accommodation</td>
<td>41,900</td>
<td>10.8%</td>
<td>4,100</td>
</tr>
<tr>
<td>Nat. Resources &amp; Mining &amp; Constrn</td>
<td>36,100</td>
<td>-4.6%</td>
<td>-1,750</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>29,500</td>
<td>11.7%</td>
<td>3,100</td>
</tr>
<tr>
<td>Other Services</td>
<td>28,000</td>
<td>2.9%</td>
<td>800</td>
</tr>
<tr>
<td>Professional, Sci. &amp; Tech. Svs.</td>
<td>24,600</td>
<td>-2.0%</td>
<td>-500</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>17,900</td>
<td>-4.8%</td>
<td>-900</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>16,000</td>
<td>-4.2%</td>
<td>-700</td>
</tr>
<tr>
<td>Education Services</td>
<td>14,400</td>
<td>-2.0%</td>
<td>-300</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14,200</td>
<td>-4.4%</td>
<td>-650</td>
</tr>
<tr>
<td>Arts, Entertainment, &amp; Recreation</td>
<td>12,900</td>
<td>11.2%</td>
<td>1,300</td>
</tr>
<tr>
<td>Real Estate &amp; Rental &amp; Leasing</td>
<td>12,800</td>
<td>0.8%</td>
<td>100</td>
</tr>
<tr>
<td>Information</td>
<td>9,100</td>
<td>-9.5%</td>
<td>-950</td>
</tr>
<tr>
<td>Mgmt of Companies &amp; Enterprises</td>
<td>9,000</td>
<td>21.6%</td>
<td>1,600</td>
</tr>
<tr>
<td>Utilities</td>
<td>3,800</td>
<td>22.6%</td>
<td>700</td>
</tr>
</tbody>
</table>

Source: Hawaii DLIR, R&S, Current Employment Statistics program
Occupational Employment

Along with industry employment, occupational analysis provides valuable insight into the structure of the labor market. The Occupational Employment Statistics (OES) program produces employment and wage estimates for over 800 occupations, which is further classified into 22 major occupational groups. Statewide OES employment data as of May 2018 totaled 641,790.

According to the breakout by major occupational groups, the five largest groups accounted for about half of the statewide occupation tally in 2018. The 89,730 office and administrative support occupations account for the greatest share of the workforce at 14 percent. The most common occupations within this group include: general office clerks; secretaries and administrative assistants; stock clerks and order fillers; and customer service representatives. The second largest, with 13 percent of the labor force, food preparation and serving related workers provided 85,770 jobs in 2018. Three of the

Figure 19. Employment by Major Occupational Group, State of Hawaii, May 2018

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office &amp; Administrative Support</td>
<td>89,730</td>
</tr>
<tr>
<td>Food Preparation &amp; Serving Related</td>
<td>85,770</td>
</tr>
<tr>
<td>Sales &amp; Related</td>
<td>63,240</td>
</tr>
<tr>
<td>Education, Training, &amp; Library</td>
<td>43,370</td>
</tr>
<tr>
<td>Transportation &amp; Material Moving</td>
<td>42,020</td>
</tr>
<tr>
<td>Bldg &amp; Grounds Cleaning &amp; Maintenance</td>
<td>37,720</td>
</tr>
<tr>
<td>Management</td>
<td>34,040</td>
</tr>
<tr>
<td>Construction &amp; Extraction</td>
<td>31,940</td>
</tr>
<tr>
<td>Healthcare Practitioners &amp; Technical</td>
<td>31,660</td>
</tr>
<tr>
<td>Business &amp; Financial Operations</td>
<td>28,450</td>
</tr>
<tr>
<td>Installation, Maintenance, &amp; Repair</td>
<td>25,220</td>
</tr>
<tr>
<td>Personal Care &amp; Service</td>
<td>23,390</td>
</tr>
<tr>
<td>Protective Service</td>
<td>20,380</td>
</tr>
<tr>
<td>Healthcare Support</td>
<td>19,630</td>
</tr>
<tr>
<td>Production Occupations</td>
<td>15,100</td>
</tr>
<tr>
<td>Community &amp; Social Service</td>
<td>10,550</td>
</tr>
<tr>
<td>Computer &amp; Mathematical</td>
<td>10,030</td>
</tr>
<tr>
<td>Architecture &amp; Engineering</td>
<td>9,250</td>
</tr>
<tr>
<td>Arts, Design, Entertnmnt, Sports, &amp; Media</td>
<td>9,100</td>
</tr>
<tr>
<td>Life, Physical, &amp; Social Science</td>
<td>6,280</td>
</tr>
<tr>
<td>Legal</td>
<td>3,920</td>
</tr>
<tr>
<td>Farming, Fishing, &amp; Forestry</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Source: DLIR R&S, Occupational Employment Statistics Program
larger-sized occupations, waiters and waitresses, combined food preparation and serving workers, and restaurant cooks accounted for about half of this group. Employment in sales and related occupations totaled 63,240, the third largest occupational group. More than 60 percent of the positions consist of retail salespersons and cashiers, two occupations that employ a sizable share of workers in the state. Both the education, training, and library group, with employment of 43,370, and transportation and material moving occupations with 42,020 workers, contributed seven percent of total jobs each. Teachers at all levels, and their support staff, dominate the education, training and library sector. Within transportation and material moving occupations, two positions that provided the most employment include hand laborers and freight and stock, and material movers, and light truck or delivery services drivers.

The data on the educational requirements for the five largest occupational groups discussed in the previous section reveal the varying education levels associated with each group. Since the three largest groups, the office and administrative support group, food preparation and serving related occupations, and sales and related occupations contain many larger-sized jobs that may be considered entry level, it is not surprising that lower education levels figured more prominently in those jobs. However, a large majority of employees in education, training, and library jobs have obtained at least a bachelor’s degree. The transportation and material moving group offers positions for all education levels, though it is mainly split between jobs needing a high school diploma and those with no formal educational credential requirement.

**Figure 20. Education Requirements for the Five Largest Occupational Groups, Hawaii, May 2018**

![Bar chart showing education requirements for five largest occupational groups.](chart.png)

*Source: DLIR R&S, Occupational Employment Statistics program*
Real per capita personal income in Hawaii was $42,263 in 2017, which was the most current data available from the U.S. Bureau of Economic Analysis and was last updated on May 16, 2019. Comparatively, the national real per capita income was $48,769, more than 13 percent higher than Hawaii. The gap over the last decade peaked at around 15 percent in 2015 and got as small as 9 percent in 2009.

Over-the-year growth for Hawaii income was 2.3 percent in 2017, slightly better than the U.S. growth rate of 1.9 percent. In the past nine years, Hawaii’s annual income growth rate was slower than the U.S. in five of those years. Despite annual growth of between two and four percent during the past four years, Hawaii’s real income remained well below the national average. The nation out-gained Hawaii during the nine year period from 2009 to 2017 with a 12.3 percent increase, compared to Hawaii’s 11.2 percent.

**Figure 21. Real per capita personal income, Hawaii vs. US, 2008-2017**

Source: U.S. Bureau of Economic Analysis
Outlook

Hawaii produces industry and occupational employment projections for both the short-term (two years) and the long-term (ten years). This report focuses on short-term forecasts which are revised annually and provides the latest projections data available for the state.

From 2018 to 2020, Hawaii’s employment was projected to expand to 728,760 with the addition of 11,710 jobs. About half of the new jobs will be attributed to four of the five largest industry sectors: healthcare and social assistance; food services and drinking places; educational services; and retail trade.

Figure 22. Short Term Industry Projections, State of Hawaii, 2018-2020

<table>
<thead>
<tr>
<th>Industry</th>
<th>2018 Employment</th>
<th>Jobs Created</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>74,400</td>
<td>2,130</td>
<td>2.9%</td>
</tr>
<tr>
<td>Government</td>
<td>74,050</td>
<td>400</td>
<td>0.5%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>71,210</td>
<td>1,130</td>
<td>1.6%</td>
</tr>
<tr>
<td>Food Svc &amp; Drinking Places</td>
<td>68,480</td>
<td>1,340</td>
<td>2.0%</td>
</tr>
<tr>
<td>Educational Services</td>
<td>66,170</td>
<td>1,290</td>
<td>2.0%</td>
</tr>
<tr>
<td>Self Employed</td>
<td>56,910</td>
<td>720</td>
<td>1.3%</td>
</tr>
<tr>
<td>Admin/Wste Mgmt/Rem Svc</td>
<td>48,080</td>
<td>420</td>
<td>0.9%</td>
</tr>
<tr>
<td>Accommodation</td>
<td>42,030</td>
<td>1,060</td>
<td>2.5%</td>
</tr>
<tr>
<td>Construction</td>
<td>34,770</td>
<td>510</td>
<td>1.5%</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>29,230</td>
<td>750</td>
<td>2.6%</td>
</tr>
<tr>
<td>Other Services</td>
<td>26,450</td>
<td>490</td>
<td>1.9%</td>
</tr>
<tr>
<td>Professional, Sci, &amp; Tech Svcs</td>
<td>24,710</td>
<td>360</td>
<td>1.5%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>17,710</td>
<td>280</td>
<td>1.6%</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>15,520</td>
<td>70</td>
<td>0.5%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14,400</td>
<td>80</td>
<td>0.5%</td>
</tr>
<tr>
<td>Arts/Entert/Recreation</td>
<td>13,040</td>
<td>360</td>
<td>2.8%</td>
</tr>
<tr>
<td>Real Estate &amp; Rental &amp; Leasing</td>
<td>12,680</td>
<td>230</td>
<td>1.8%</td>
</tr>
<tr>
<td>Information</td>
<td>8,740</td>
<td>-110</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Mgmt of Co. &amp; Enterprises</td>
<td>8,710</td>
<td>260</td>
<td>3.0%</td>
</tr>
<tr>
<td>Agric/Forestry/Fishing/Hunting</td>
<td>5,770</td>
<td>-110</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Utilities</td>
<td>3,790</td>
<td>70</td>
<td>1.8%</td>
</tr>
<tr>
<td>Mining</td>
<td>220</td>
<td>-10</td>
<td>-5.9%</td>
</tr>
</tbody>
</table>

Source: DLIR R&S, Projections program, ShortTerm Projections 2018-2020
Leading all industries with a projected gain of 2,130 jobs, healthcare and social assistance will account for 18 percent of the total statewide increase and will be among the top growing industries. Much of the hike in demand can be attributed to an aging and growing population which will stimulate a rise in ambulatory health care services. Registered nurses, home health aides, personal care aides, and medical assistants will generate the most jobs.

Driven by increasing population, consumer spending, and tourism, the food services and drinking places industry is anticipated to produce the second largest gain of 1,340 new jobs. The total job count will reach 69,820 in 2020, advancing by 2.0 percent from 2018. Openings for food preparation and serving workers, waiters and waitresses, and restaurant cooks will represent 60 percent of the projected advance.

Employment in educational services is predicted to expand by 1,290, equivalent to an expansion rate of 2.0 percent. Numerous job openings will consist of a wide range of teaching positions including substitute, elementary and secondary school teachers, and teacher assistants.

Another major contributor to the economy, the retail trade sector is projected to create 1,130 new jobs, advancing by 1.6 percent. Within this industry, retail salespersons and their supervisors, stock clerks and order fillers, and cashiers will spark most of the growth.

Although not among the largest industries but still important to job expansion, the accommodations industry will register growth of 2.5 percent, leading to the addition of 1,060 new positions. Maids and housekeeping cleaners will be in most demand, followed by waiters and waitresses, hotel, motel, and resort desk clerks, and general maintenance and repair workers.

In terms of percentage gains, one of the smaller industry sectors, the management of companies and enterprises will expand by the fastest rate of 3.0 percent over the two-year period. Healthcare and social assistance will grow by the second fastest rate of 2.9 percent, followed closely by and the arts, entertainment, and recreation industry which will rise by 2.8 percent. Also important to job expansion, the accommodation industry will register growth of 2.5 percent.
**County Profile**

**HONOLULU**

**POPULATION**

980,100
2018 Population

69% of State’s population
-0.6% from 2017

**LABOR FORCE**

2.3%
2018 Unemployment Rate

Labor force participation rate 66.1%
Number of employed 454,350
Number of unemployed 10,850

**INDUSTRY**

477,700
2018 CES Employment

**OCCUPATION**

466,310
May 2018 OES Employment

**INCOME**

$56,728
2017 Per Capita Personal Income

107.5% of State’s per capita income
3.7% from 2016

**JOB OUTLOOK**

+5.9%
Projected Employment Growth, 2016-26

2026 projected employment 544,420
New jobs forecasted (annual) 3,020
Jobs due to separations (annual) 58,130

County Profile

MAUI

**POPULATION**

167,300

2018 Population

12% of State’s population

0.5% from 2017

**LABOR FORCE**

2.4%

2018 Unemployment Rate

Labor force participation rate 67.4%

Number of employed 84,050

Number of unemployed 2,100

**INCOME**

$47,226

2017 Per Capita Personal Income

89.5% of State’s per capita income

4.8% from 2016

**INDUSTRY**

77,400

2018 CES Employment

**OCCUPATION**

73,350

May 2018 OES Employment

**5 Largest Industries**

- Accommodation 12,500
- Food Services & Drinking Places 10,300
- Retail Trade 9,800
- Government 8,500
- Health Care & Social Assistance 7,600

**5 Largest Occupational Groups**

- Food Prep & Serving Related 14,150
- Office & Admin Support 9,540
- Sales & Related 9,440
- Bldg & Grounds Cleaning & Maint 6,820
- Transp & Material Moving 4,820

**JOB OUTLOOK**

+7.3%

Projected Employment Growth, 2016-26

2026 projected employment 90,310

New jobs forecasted (annual) 610

Jobs due to separations (annual) 10,410

county profile

hawaii

population

201,000
2018 Population

14% of State’s population
0.7% from 2017

INCOME

$40,188
2017 Per Capita Personal Income

76.1% of State’s per capita income
4.0% from 2016

industrial

69,300
2018 CES Employment

occupation

71,010
May 2018 OES Employment

5 Largest Industries

- Government: 13,500
- Retail Trade: 9,600
- Health Care & Social Assistance: 7,600
- Food Services & Drinking Places: 6,800
- Accommodation: 6,200

5 Largest Occupational Groups

- Office & Admin Support: 11,070
- Food Prep & Serving Related: 10,950
- Sales & Related: 6,490
- Building & Grounds Cleaning & Maintenance: 5,730
- Education, Training, and Library: 4,820

labor force

3.0%
2018 Unemployment Rate

Labor force participation rate: 57.9%
Number of employed: 88,600
Number of unemployed: 2,750

job outlook

+9.1%
Projected Employment Growth, 2016-26

2026 projected employment: 85,010
New jobs forecasted (annual): 710
Jobs due to separations (annual): 9,230

County Profile

KAUAI

**INCOME**

- **72,133**
  - 2018 Population
  - 5% of State’s population
  - **2017 Per Capita Personal Income**
    - $46,596
    - 88.3% of State’s per capita income
    - 4.9% from 2016

**LABOR FORCE**

- **31,700**
  - 2018 CES Employment
  - **29,120**
    - May 2018 OES Employment
  - **2.5%**
    - 2018 Unemployment Rate
  - Labor force participation rate **66.1%**
  - Number of employed **35,200**
  - Number of unemployed **900**

**INDUSTRY**

- **5 Largest Industries**
  - Government: 4,700
  - Accommodation: 4,500
  - Food Services & Drinking Places: 4,400
  - Retail Trade: 4,000
  - Health Care & Social Assistance: 2,700

**OCCUPATION**

- **5 Largest Occupational Groups**
  - Food Prep & Serving Related: 4,610
  - Office & Admin Support: 3,670
  - Sales & Related: 3,300
  - Building & Grounds Cleaning & Maintenance: 2,520
  - Transportation & Material Moving: 1,910

**JOB OUTLOOK**

- **+8.8%**
  - Projected Employment Growth, 2016-26
  - 2026 projected employment **37,150**
  - New jobs forecasted (annual) **300**
  - Jobs due to separations (annual) **4,190**

Source:
- Population: U.S. Census Bureau
- Labor force participation rate: U.S. Census Bureau, 2013-2017 American Community Survey
- Income data: U.S. Bureau of Economic Analysis
- Job outlook, Industry, and Occupation data: State of Hawaii, Research and Statistics Office