

Hawaii

Labor Market Dynamics



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Executive Summary

This report provides a current overview of the local labor market and economy to inform those developing workforce development policies and making workforce investment decisions. The following are some of the significant findings for 2013:

- Among the 50 states, Hawaii held onto its 42nd place ranking in terms of labor force size despite a slight dip to 648,850. Labor force participation fell for the fifth straight year to 60.6 percent.
- Hawaii's unemployment rate decreased by 0.9 percentage point to 4.8 percent, well below the U.S. rate of 7.4 percent, ranking the state 8th in the nation. Unemployment in all four counties also dropped - Honolulu MSA posted the lowest rate (4.3 percent), followed by Maui County (5.1 percent), Kauai County (5.7 percent), and Hawaii County (6.8 percent).
- Hawaii's non-farm job count improved by 1.9 percent to 617,600, the third consecutive year of increases following the recession. All four counties reported job gains. Overall, the economy has regained 30,700 of the 37,950 jobs lost during the recession.
- Eight out of ten major industries posted job gains following the recession. Four industries grew at faster than average rates in the post-recession period from 2010 to 2013: professional and business services; leisure and hospitality; natural resources, mining and construction; and trade, transportation, and utilities. Only government and information suffered a post-recession decline in jobs.
- According to the Local Employment Dynamics program's Quarterly Workforce Indicators (QWI) data, from the second quarter of 2003 to the second quarter of 2013, the number of hires was 2.7 percent lower, due to a significant dropoff during the recession, and separations were also down 2.6 percent.
- Average monthly earnings rose by 27.8 percent from 2003 to 2013, according to QWI data. Workers in some of Hawaii's key industries fared well as wages outpaced the state average in terms of percentage growth: construction wages rose 28.6 percent to \$5,273; health care and social assistance pay jumped 32.9 percent to \$4,185; educational services salaries increased 29.3 percent to \$3,303; and accommodation and food services improved 29.2 percent to \$2,497.
- The pace of job growth is expected to be better over the short-term with 2.0 percent average annual growth through 1st Quarter 2015 as the economy rebounds from the recession, compared to the long-term period with 1.0 percent average annual growth through 2020. Industries with the most job growth will be construction; professional and business services; education and health services; trade, transportation, and utilities; and leisure and hospitality.

Introduction

The Hawaii Labor Market Dynamics report focuses on significant labor market statistics and trends that affected Hawaii's economy in 2013. This report looks at the dynamics occurring in the labor force, employment, and earnings over the past ten years and provides both short-and long-term employment forecasts for the state.

Whenever feasible, comparisons are made between the state and the nation as a whole and the counties. 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.

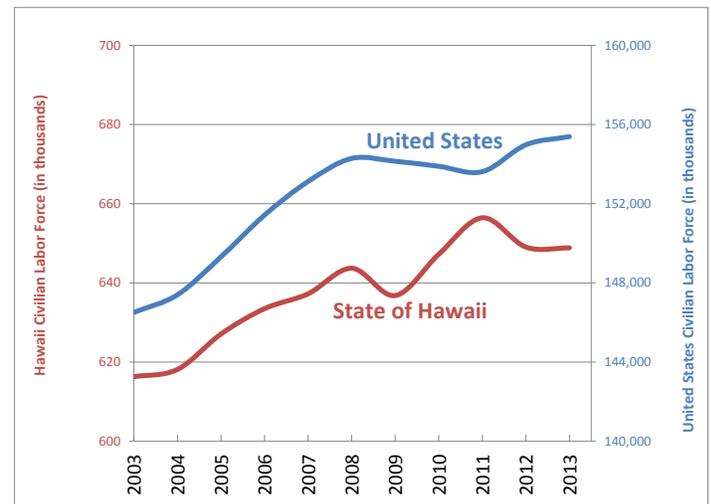
Hawaii's Labor Force Continues to Shrink

In 2013, Hawaii's civilian labor force decreased by 200 to 648,850, consisting of 617,850 employed and 30,950 unemployed. Meanwhile, the national labor force tally rose by 414,000 to 155,389,000 in 2013. Compared to other states, Hawaii maintained its 42nd place ranking despite the slight dip.

Over the past 10 years, Hawaii's labor force posted a net increase of about 32,550 for a gain of 5.3 percent. In comparison, the nation expanded its labor force by 6.1 percent during the same decade. From 2003 to 2008, Hawaii's economy expanded, increasing in every year during that five year span (Figure 1). Then, the Great Recession made an impact in 2009 and Hawaii's labor force plunged by 1.1 percent. This drop was fairly steep relative to the other states, accounting for the ninth largest percentage loss in the nation, and placing Hawaii tied for 42nd out of 50 in terms of over-the-year change. In 2010, the state's civilian labor force turned around and grew by the second fastest rate, with a gain of 1.6 percent, despite the continuing decline nationwide. This momentum continued into 2011 as Hawaii's labor force climbed by 1.4 percent, sixth fastest in the nation. Unfortunately, growth stalled in 2012 and Hawaii placed 48th among states in terms of over-the-year

change, dropping 1.1 percent. This downward trend was again reflected in 2013, as Hawaii's civilian labor force remained relatively stagnant, placing 26th among states in terms of yearly change.

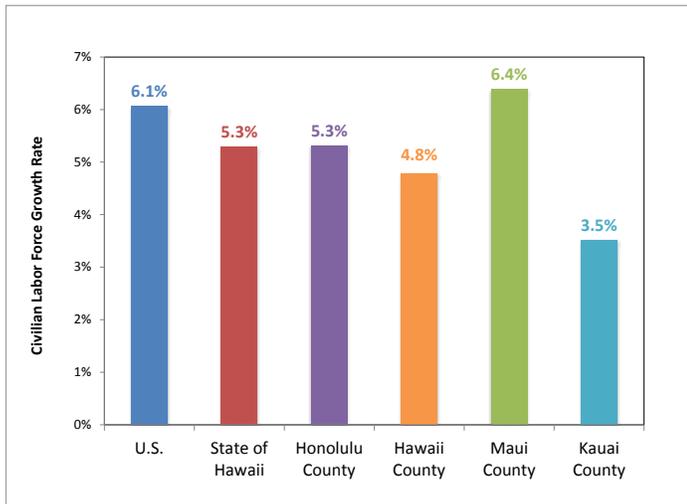
Figure 1. Civilian Labor Force, Hawaii vs. U.S., 2003-2013



Source: U.S. Bureau of Labor Statistics

Honolulu County equaled the state in terms of labor force expansion with 5.3 percent, but Maui County ended up with the greatest increase of 6.4 percent over the decade (Figure 2). Hawaii County's labor force grew at a slower pace than the state with 4.8 percent, while Kauai County lagged behind with just 3.5 percent growth over the ten-year period.

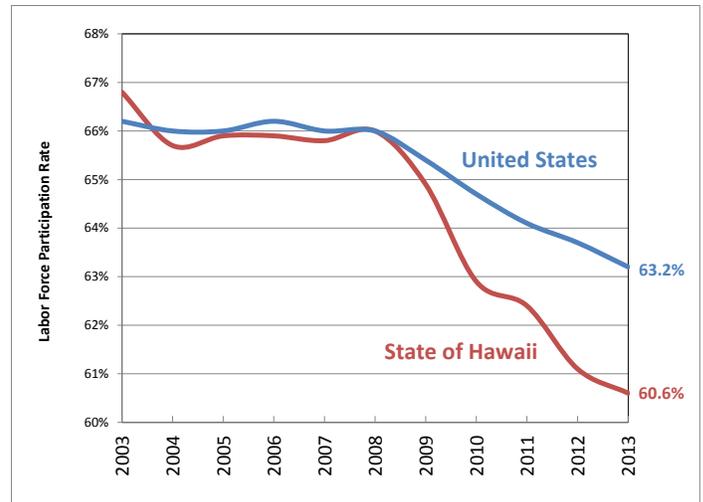
Figure 2. Civilian Labor Force Growth Rate, 2003-2013



Source: U.S. Bureau of Labor Statistics.

Dividing the civilian labor force by the civilian noninstitutional population 16 years and older determines the labor participation rate. For the State of Hawaii, the labor force participation ratio continued to fall for the fifth

Figure 3. Labor Force Participation Rates, Hawaii vs. U.S., 2003-2013



Source: U.S. Bureau of Labor Statistics.

straight year, dropping to 60.6 percent in 2013 (Figure 3). In 2008, Hawaii had the same participation rate as the nation, but persistent decreases put Hawaii noticeably below the U.S. rate of 63.2 percent in 2013.

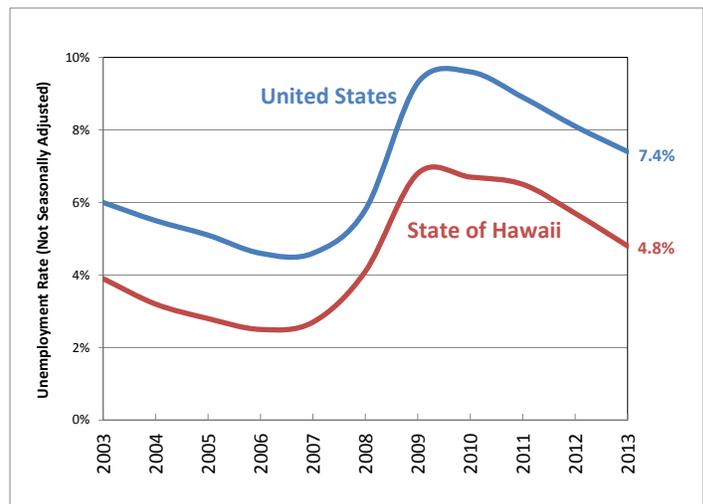
Unemployment Rate Goes Down

In 2013, Hawaii’s unemployment rate averaged 4.8 percent, improving by 0.9 percentage point from the 2012 average of 5.7 percent. This was also 2.6 percentage points below the nation’s unemployment rate of 7.4 percent. After ranking 11th in 2012, Hawaii moved up to 8th lowest among the 50 states in 2013. Generally speaking, the top 20 states with the lowest unemployment rates also tended to be among the smaller populated states.

Over the past ten years, Hawaii’s unemployment rate has remained consistently lower than the national rate (Figure 4). The gap has ranged from at least 1.7 percentage points (in 2008) up to 2.9 percentage points (in 2010) below the national rate. As a result, between the years 2003 to 2010, Hawaii was among the 10 states with the lowest unemployment ratio. In fact, from

2004 to 2006 Hawaii ranked number one. However, in 2011-2012, Hawaii was nudged out of the Top 10, until returning in 2013.

Figure 4. Unemployment Rate, Hawaii vs. U.S., 2003-2013



Source: U.S. Bureau of Labor Statistics

Among the counties, unemployment rates have been uneven. Since more opportunities normally exist in urban areas, the unemployment rates in these areas generally tend to be lower than those of more rural regions.

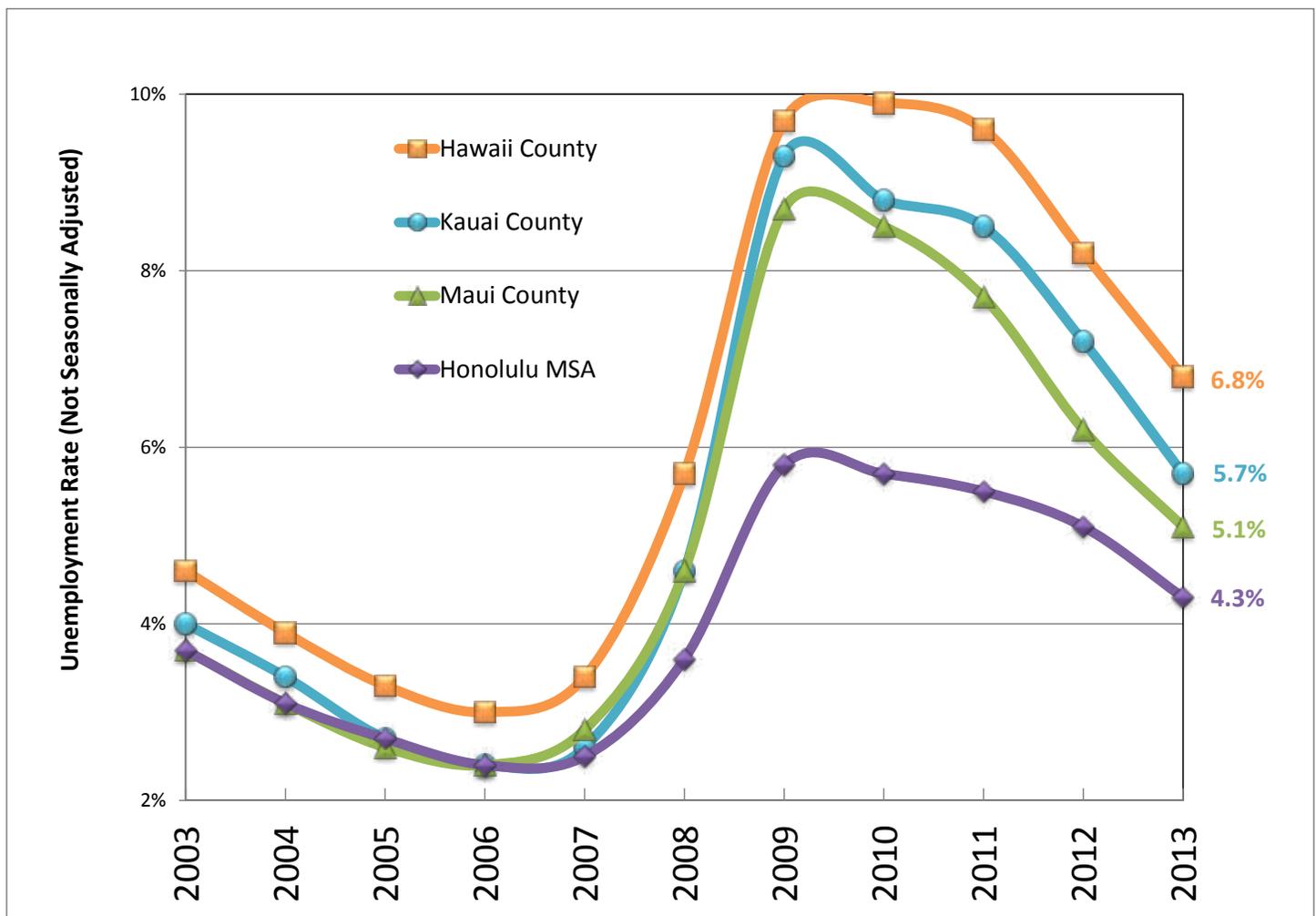
In 2013, the unemployment rates for all counties continued on a downward trend for the third consecutive year (Figure 5). Honolulu MSA had the lowest jobless rate of 4.3 percent, followed by Maui County at 5.1 percent, Kauai County at 5.7 percent, and Hawaii County reported the highest rate of 6.8 percent.

From 2003-2013, Honolulu MSA had the lowest rate or shared the spot with Maui and Kauai counties except in 2005 when Maui County took its place. Even through-

out the economic slowdown from 2008 to 2010, the rate increase of 2.1 percentage points was the smallest among the counties. The annual unemployment rate of 4.3 percent in 2013, while below the other counties, was still 1.8 percentage point higher than the 2007 pre-recession unemployment rate.

Prior to 2007, Maui County's unemployment ratio was at the same level as Honolulu MSA or even lower. However, during the recession, the unemployment rate nearly doubled, jumping to 4.6 percent in 2008 and went as high as 8.7 percent in 2009. The unemployment ratio finally eased a bit in 2010 and has continued to improve from 2011 to 2013.

Figure 5. Unemployment Rates, Counties of Hawaii, 2003-2013



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, LAUS program.

Overall, Kauai County's unemployment rate posted the largest over-the-year decline of 1.5 percentage point to 5.7 percent in 2013. During the 2008 to 2010 period, Kauai County's unemployment rate surged by 4.2 percentage points, climbing from 4.6 percent to 8.8 percent in 2010. After peaking at 9.3 percent in 2009, the ratio has improved steadily over the last three years.

Hawaii County posted the highest unemployment rate of all the counties during the recession period. In fact, over the past 10 years, Hawaii County's ratio has exceeded the other counties in every year. After four years

of increases, beginning in 2007, the ratio finally edged downward slightly by 0.3 percentage points to 9.6 percent in 2011. This momentum continued in 2012 with a larger drop of 1.4 percentage point, bringing the county rate down to 8.2 percent. This trend continued in 2013, with another 1.4 percentage decrease to 6.8 percent.

For all counties, further improvement appears to be the trend in 2014. So far the unemployment rates for January through June 2014 are lower than the 2013 rates across all of the counties.

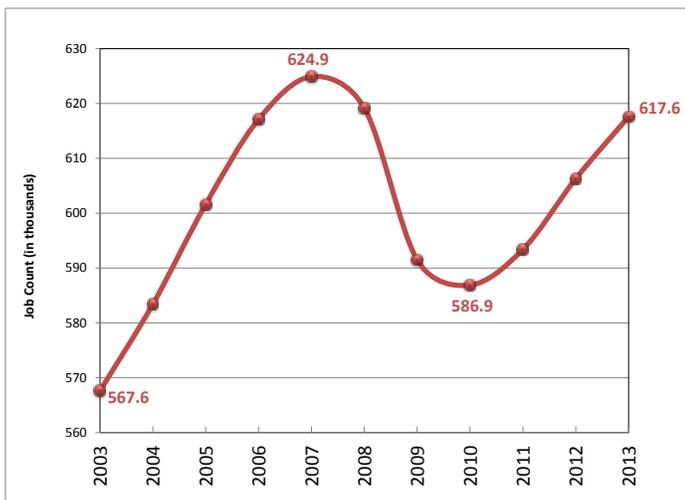
Job Count Still Recovering from Recession

Hawaii's non-farm job count, which is based on the monthly payroll survey of business establishments, continued to make strides in 2013, increasing by 11,300 jobs over 2012 (Figure 6). This marked the third consecutive year of job gains since the economic slowdown ended in 2010. Compared to the rest of the nation, Hawaii's over-the year increase of 1.9 percent has been

faster than the majority of the 50 states, boosting its rank to 16th fastest tied with two other states.

Over the past 10 years, the state's job count, grew by 49,950 jobs for an increase of 8.8 percent. During this time period, jobs peaked at 624,900 in 2007, following a succession of widespread gains. Hawaii's economy, along with the rest of the nation, suffered a major setback over the next three years as the recession deeply impacted the job market. A slight decline in 2008 was followed by a large drop of 4.5 percent in 2009. Non-farm employment bottomed out in 2010 at 586,900. In 2011, the state's economy began to recover but more growth is needed to reach the 2007 pre-recession employment of 624,900. Based on 2013 figures, only seventeen states in the nation had surpassed their 2007 employment levels.

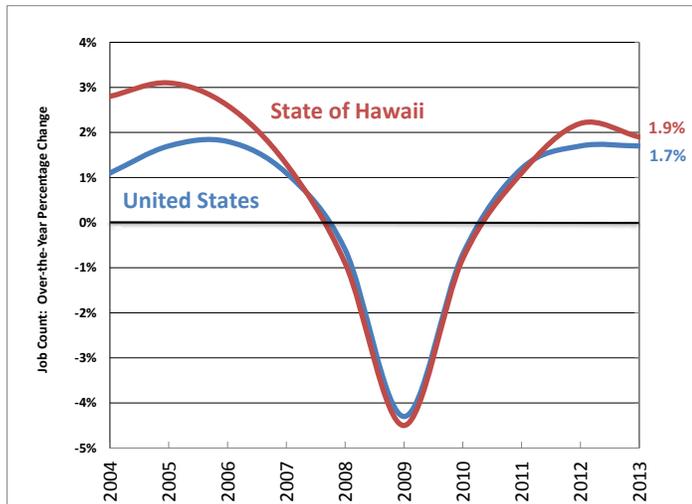
Figure 6. Non-Farm Job Count, Hawaii, 2003-2013



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, CES program.

Prior to 2008, Hawaii's job growth had outpaced the nation, but over the last five years, it has paralleled the national trend (Figure 7).

Figure 7. Job Count Over-the-Year Percent Change, Hawaii, vs. U.S., 2003-2013

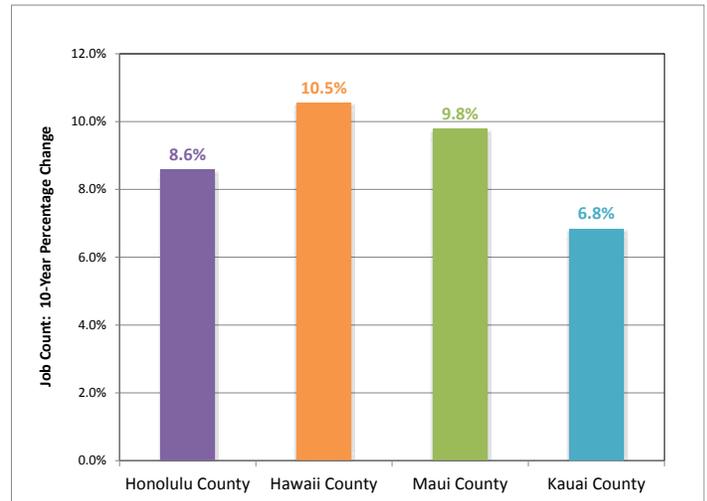


Source: U.S. Bureau of Labor Statistics; Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, CES program.

So far, given the available data for January through June 2014, Hawaii’s monthly job count is 1.1 percent higher than it was for the same 6-month period in the prior year. Meanwhile, the nation is averaging a 1.7 percent increase over a similar six month comparison between 2013 and 2014.

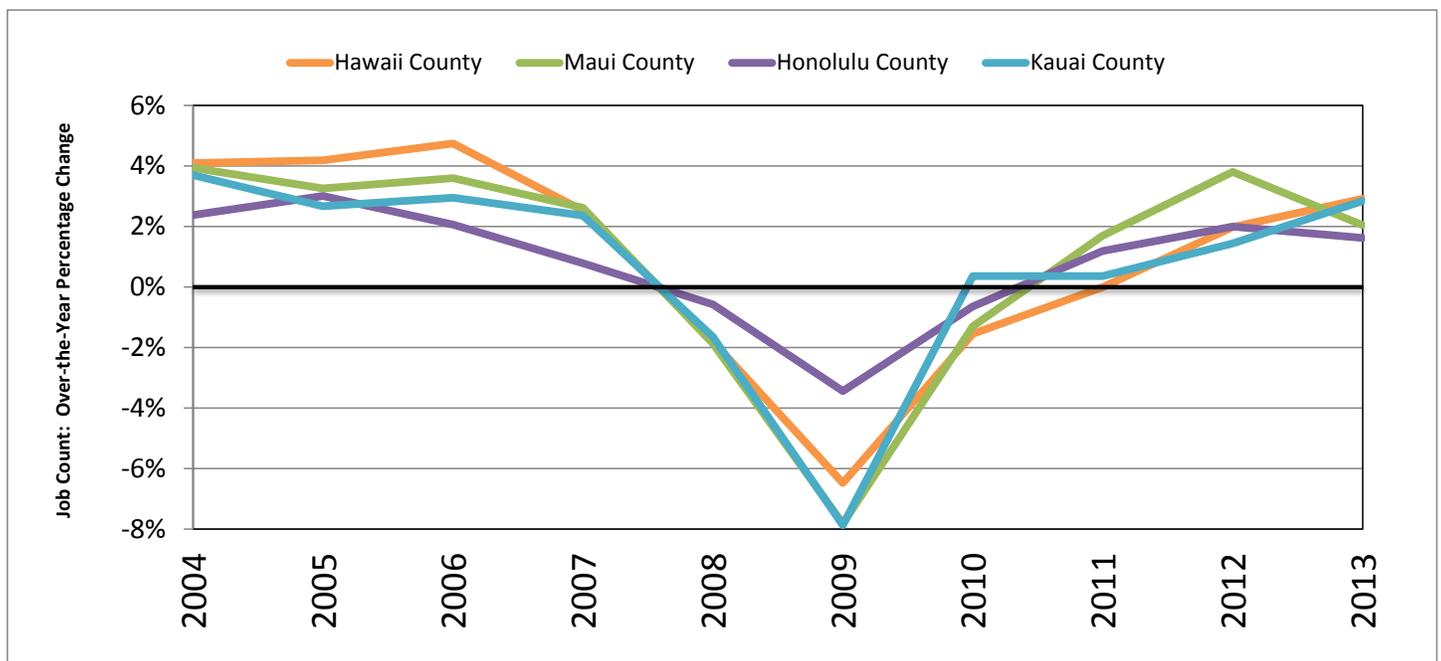
While the state’s job count expanded by 8.8 percent from 2003 to 2013, only two of the four counties generated gains in non-farm payroll jobs that exceeded the statewide growth rate (Figure 8). Hawaii County advanced the fastest with growth of 10.5 percent. Maui

Figure 8. Job Count 10-Year Percent Change, Counties of Hawaii, 2003-2013



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, CES program.

Figure 9. Job Count Over-the-Year Percent Change, Counties of Hawaii, 2003-2013



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, CES program.

County followed with a gain of 9.8 percent. Honolulu County ranked third, with a 8.6 percent growth rate in the number of jobs. Kauai County was up by 6.8 percent, ranking last among the counties in percentage growth.

Between 2003 and 2013, over-the-year growth rates for the Counties followed the same trend as the nation and the state - a big drop in 2009 and rebounding since then

(Figure 9). Honolulu County posted the smallest growth rates, in general, but also experienced the smallest declines.

Based on the data for January through June, the job count looks promising for the rest of 2014. The 6-month average for 2014 is ahead of 2013 for all four counties. Hawaii County is making the strongest showing mid-way through 2014.

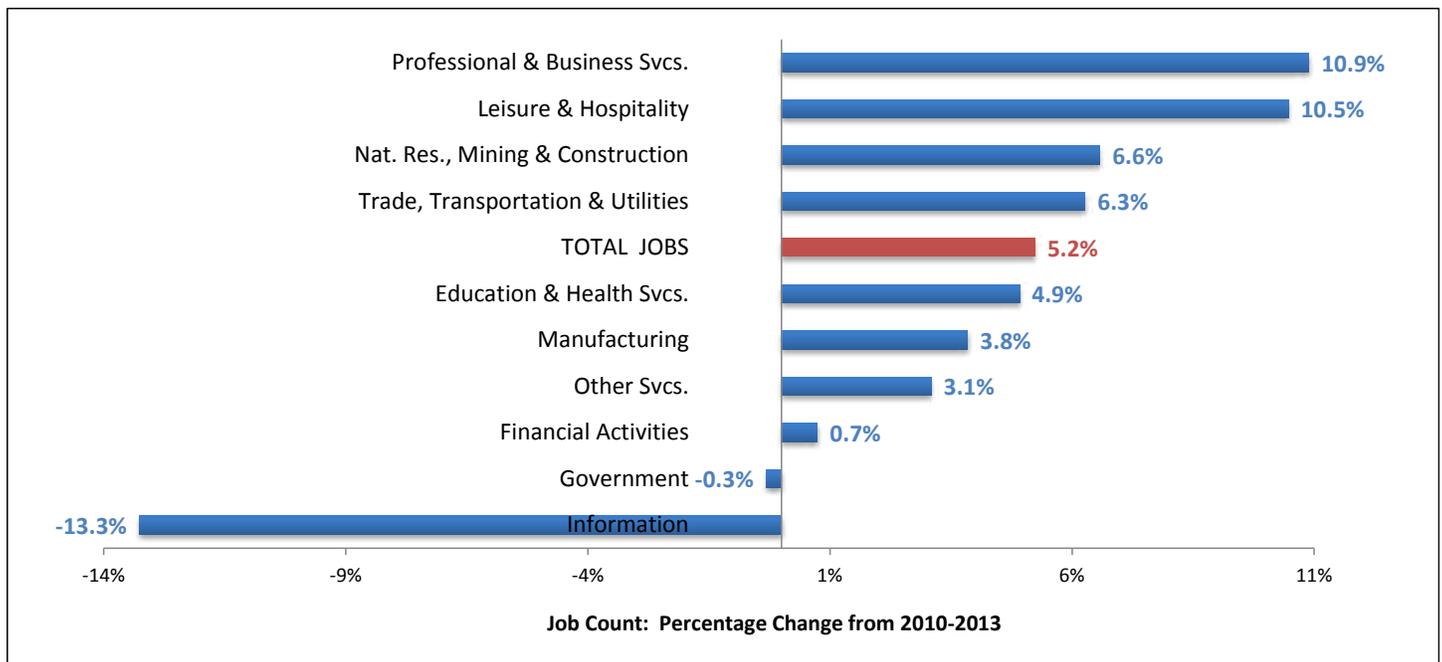
Jobs Recovering in All But Two Industries

Hawaii and the rest of the nation was hit hard by the Great Recession that began in December 2007 and officially ended in June 2009. Hawaii's job count peaked in 2007 at 624,900, hit bottom in 2010 at 586,900, relinquishing 38,000 jobs. Over the last three years, the job count has rebounded to 617,600 in 2013. However, only 30,700 jobs have been regained since 2010, which

means about 7,300 jobs need to be added to return to the 2007 pre-recession employment level.

Eight out of ten major industries created jobs after the recession ended (Figure 10). Only government and information actually saw a further decline after 2010 that still persisted until 2013. Information is the small-

Figure 10. Industry Job Count Percent Change, State of Hawaii, 2010-2013



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, CES program.

est industry sector with only 8,500 jobs in 2013. Due to its relatively small numbers, a decrease can register a high percentage drop. The loss of 1,300 jobs from 2010 to 2013 resulted in a decline of 13.3 percent, mainly in the motion picture and video industries but also due to some job losses at newspaper, book, and directory publishers. Meanwhile, the 400 job losses in government, Hawaii's largest industry, registered only a 0.3 percent dip post-recession. Although there were job gains in State government, the Federal branch's cuts offset those gains. Local government remained stable between 2010 and 2013.

Statewide, the job recovery after the recession stood at 5.2 percent. Four industries exceeded this growth rate and rebounded strongly after the trough in 2010.

Professional and business services expanded at the fastest pace after the recession with 10.9 percent growth, adding 7,800 new jobs from 2010 to 2013. The administrative, support, waste management, and remediation services sub-sector was responsible for 6,200 new jobs. Another 5,100 jobs were created in the employment services area. Management of companies and enterprises contributed about 1,500 and the remaining 200 occurred in the professional, scientific, and technical services sub-sector.

The second fastest growing industry in the post-recession period was leisure and hospitality with 10.5 percent and posting the greatest amount of new jobs with 10,500. As tourism rebounded and reached record levels in terms of visitor counts and spending, the ac-

commodations and food services sub-sector expanded by 9,100 positions.

The natural resources, mining, and construction sector also showed strength with 6.6 percent growth and 1,900 new jobs. The special trades created two-thirds of the jobs, while 900 were in building construction.

Trade, transportation, and utilities benefitted from a 6.3 percent hike, adding 6,900 jobs. More than half of the new jobs occurred in retail trade, which makes up more than half of this industry. Transportation, including airlines, also performed well.

The education and health services industry, though an important and sizable industry, did not grow at a particularly fast rate after bottoming out in 2010. However, the 4.9 percent growth rate did translate into 3,700 new jobs. Education provided only 700 of these positions and the rest were due to hiring in health care and social services. Sixty percent of the new healthcare jobs were in the ambulatory health care services sub-sector.

There is reason for continued optimism that Hawaii's non-farm employment will improve further in 2014. In fact, looking at the 6-month average for January to June 2014, jobs are 1.1 percent higher than a year ago. With the exception of natural resources, mining, and construction, all industries show positive trends. This may be just a blip because construction is forecasted as one of the bright spots in Hawaii's economy with the building of rail transit, urban condominiums, and more retail in Hawaii.

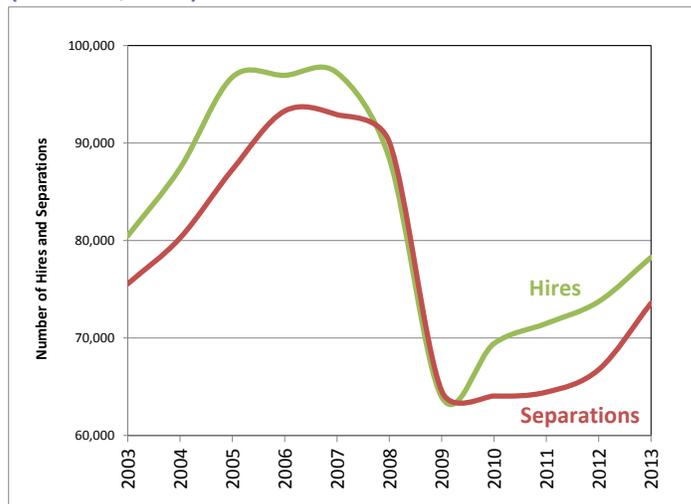
Dynamics Evident in Hires and Separations

The U.S. Census Bureau's Local Employment Dynamic (LED) program produces Quarterly Workforce Indicators (QWI) that gives an overview of the State's workforce. The latest data available is for the second quarter of 2013 and comparisons against the same quarter ten years prior illustrate some of the dynamics happening within the workforce. For the scope of this report, public administration was not included because the QWI data currently does not have a comprehensive set of government data. "Hires" are defined as the estimated number of workers who started a new job in the specified quarter - it is the sum of new hires and recalled hires. "Separations" are the estimated number of workers whose job with a given employer ended in the specified quarter.

In the second quarter of 2003, hires outnumbered separations and this continued through the second quarter of 2007, where hires reached its peak of 97,204 (Figure 11). In the second quarter of 2008, hires declined as the recession took hold and it reached its trough of 63,944 in 2009. During the downturn, separations slightly outnumbered hires in the second quarters of 2008 and 2009. However, since then hires have rebounded as Hawaii entered its recovery phase. In the second quarter of 2013, the number of hires are about 2.7 percent lower than they were in the same quarter ten years ago.

Separations in the second quarter of 2013 were also down by 2.6 percent from second quarter 2003. This is interesting in that even during the recession period, there was a drop in separations. Perhaps it indicates that people hung onto their jobs during lean times, whereas during boom years, more people left their positions seeking to change, upgrade, or retire from their jobs.

Figure 11. Hires vs. Separations, State of Hawaii, 2003-2013 (Second Quarter)



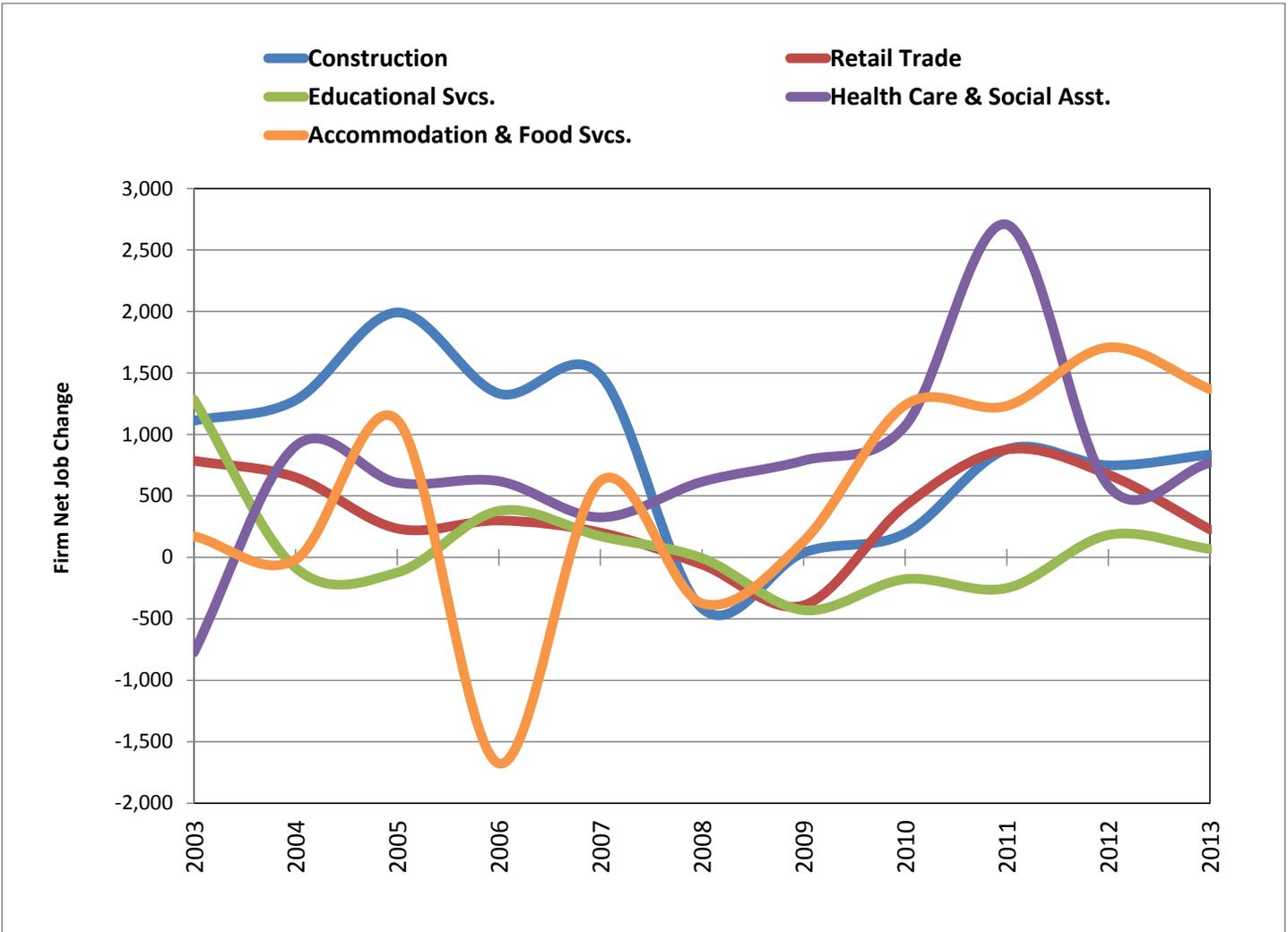
Source: U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators, LED Extraction tool, data as of 7/24/14.

Overall, Hawaii's economy performed favorably as hires outnumbered separations in the second quarter of all but two years during the last decade. Which industries fared better than others?

In the LED program, there are many indicators that involve *firms* and not just *individuals* as was just previously addressed with the hires and separations.

Job creation is defined as the estimated number of jobs gained at firms throughout the quarter - a measure that counts total employment increase at firms that grew over the course of the quarter. Job destruction, on the other hand, is the estimated number of jobs lost at firms throughout the quarter - counts of employment decrease at firms that shrank over the course of the quarter. The difference between job creation and job destruction is the firm net job change, which can illustrate which industries moved in a positive direction over the last decade.

Figure 12. Firm Net Job Change by Industry, State of Hawaii, 2003-2013 (Second Quarter)



Source: U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators, LED Extraction tool, data as of 7/24/14.

Looking at five of Hawaii’s major industries, there is evidence that firm net job change fluctuates differently for various industries (Figure 12). It didn’t always follow the job trend of the economic recession.

Construction displayed a positive trend for most of the decade, with net change running above 1,000 between 2003 and 2007. Then came a small dip below zero in 2008, followed by a recovery of sorts with positive outcomes ranging from 39 to 879 between 2009 and 2013.

Educational services, on the other hand, exhibited a positive net change only half of the time, hovering

near zero for most years, except in 2003 when it was at 1,283. In subsequent years, the highest point was 378 in 2006 and the lowest point was -429 in 2009.

Firm net job change in accommodation and food services was much more volatile, with a deep plunge to -1,676 in 2006, then escalating to a high point of 1,708 in 2012.

Surprisingly, the trend in retail trade was relatively stable for a high-turnover industry and mostly positive except for 2008 and 2009, when it negatively fell to -58 and -390, respectively. It peaked at 877 in 2011.

Health care and social assistance also had large swings, most of it in the positive range with a sharp peak in 2011 at 2,707. Since then it settled down to a more moderate range of 581 in 2012 and 769 in 2013. The only negative net change came in 2003 at -773.

The point to note here is that, there is a lot of churning that goes on inside of companies that are not visible in other data sets dealing with employment. While overall jobs could appear to be stable, on the contrary, the dynamics within may be very active.

Earnings Show Growth Despite Recession

Although Hawaii's workforce endured a significant amount of job losses during the recession, the good news is that average monthly earnings rose by 27.8 percent from 2003 to \$3,527 in 2013 (Figure 13) based on second quarter data from the Local Employment Dy-

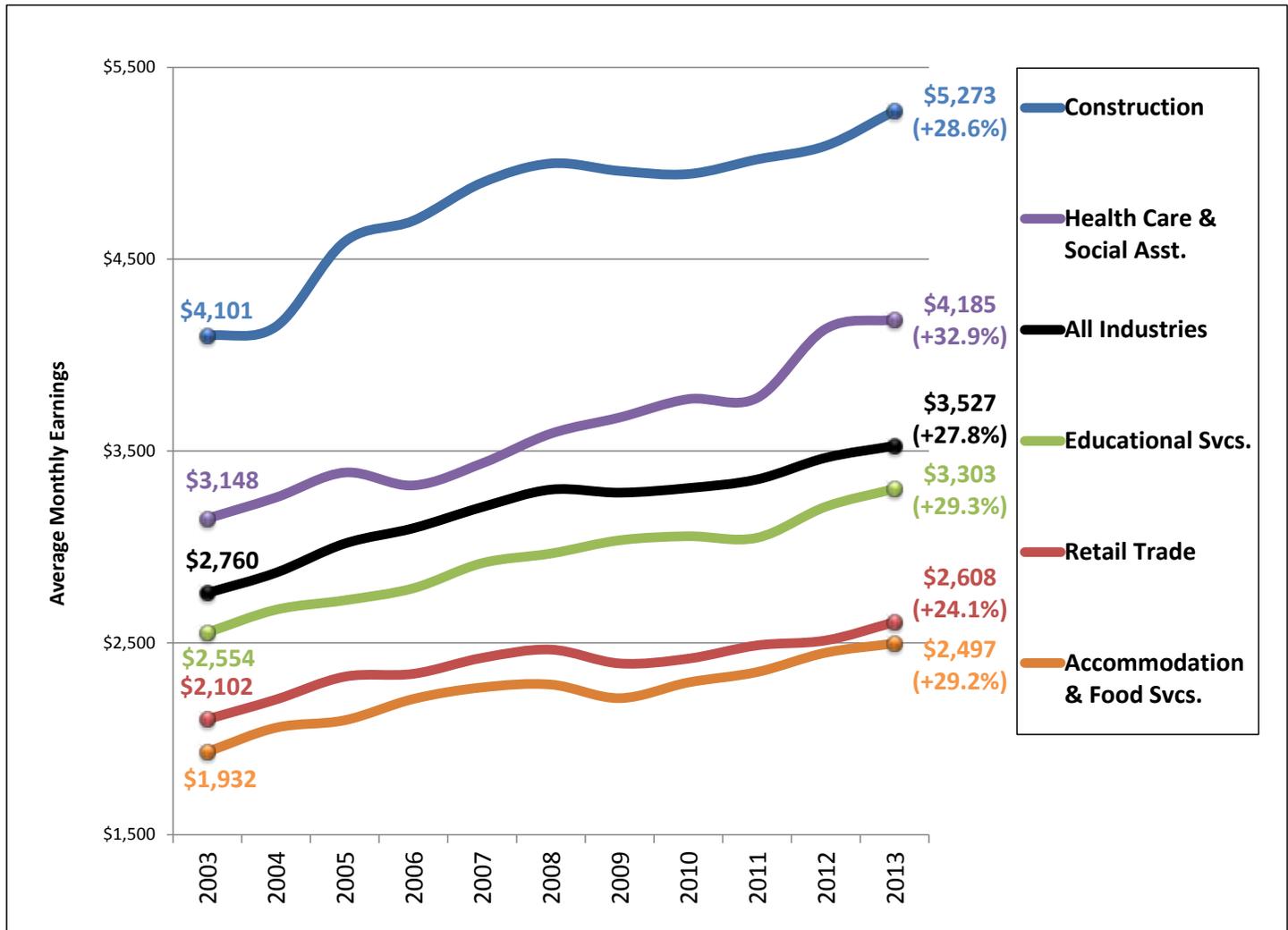
namics program. Average monthly earnings by industry discussed here include only employees with stable jobs (those that worked with the same firm throughout the quarter). Many of Hawaii's key industries fared well in this respect (Figure 14).

Figure 13. Average Monthly Earnings and Growth by Industry, State of Hawaii, 2003 and 2013 (Second Quarter)

Ranked by 2013 earnings	2003	2013	Percent Growth
Utilities	\$4,976	\$6,795	36.6%
Mining, Quarrying, and Oil and Gas Extraction	\$5,867	\$6,693	14.1%
Professional, Scientific, and Technical Services	\$4,057	\$5,291	30.4%
Construction	\$4,101	\$5,273	28.6%
Finance and Insurance	\$4,306	\$5,270	22.4%
Management of Companies and Enterprises	\$3,674	\$5,011	36.4%
Public Administration	\$3,735	\$4,851	29.9%
Wholesale Trade	\$3,350	\$4,255	27.0%
Health Care and Social Assistance	\$3,148	\$4,185	32.9%
Information	\$3,472	\$4,021	15.8%
Real Estate and Rental and Leasing	\$2,809	\$3,757	33.7%
Transportation and Warehousing	\$3,157	\$3,743	18.6%
All Industries	\$2,760	\$3,527	27.8%
Manufacturing	\$2,634	\$3,352	27.3%
Educational Services	\$2,554	\$3,303	29.3%
Agriculture, Forestry, Fishing and Hunting	\$2,119	\$2,869	35.4%
Administration and Support and Waste Management and Remediation Services	\$2,217	\$2,812	26.8%
Other Services (except Public Administration)	\$2,053	\$2,619	27.6%
Retail Trade	\$2,102	\$2,608	24.1%
Accommodation and Food Services	\$1,932	\$2,497	29.2%
Arts, Entertainment, and Recreation	\$1,930	\$2,460	27.5%

Source: U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators, QWI Explorer, data as of 7/31/14.

Figure 14. Average Monthly Earnings for Key Industries, State of Hawaii, 2003-2013 (Second Quarter)



Source: U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators, QWI Explorer tool, data as of 7/31/14.

Construction industry average monthly earnings rose 28.6 percent in the ten year period from 2003 to 2013. With \$5,273 monthly earnings in 2013, construction workers have higher average wages than many other types of workers.

Workers in the health care and social assistance industry benefited from a wage increase of 32.9 percent between 2003 and 2013, better than the average worker. Wages in this field, \$4,185 in 2013, are also higher than the average pay for all industries.

Educational services employees earn lower pay than the average worker with \$3,303 in 2013, but it outpaced the

overall average gain with 29.3 percent growth over the last decade.

Retail trade employees realized an increase of 24.1 percent from 2003 to 2013, growing slower than the overall average. Wages in this industry, \$2,608 in 2013, are also lower than the all-industry average.

Workers in the accommodations and food services industry enjoyed earnings growth of 29.2 percent growth between 2003 and 2013. This faster than average growth rate will help raise the average monthly earnings for this industry, which had relatively low monthly pay of \$2,497 in 2013.

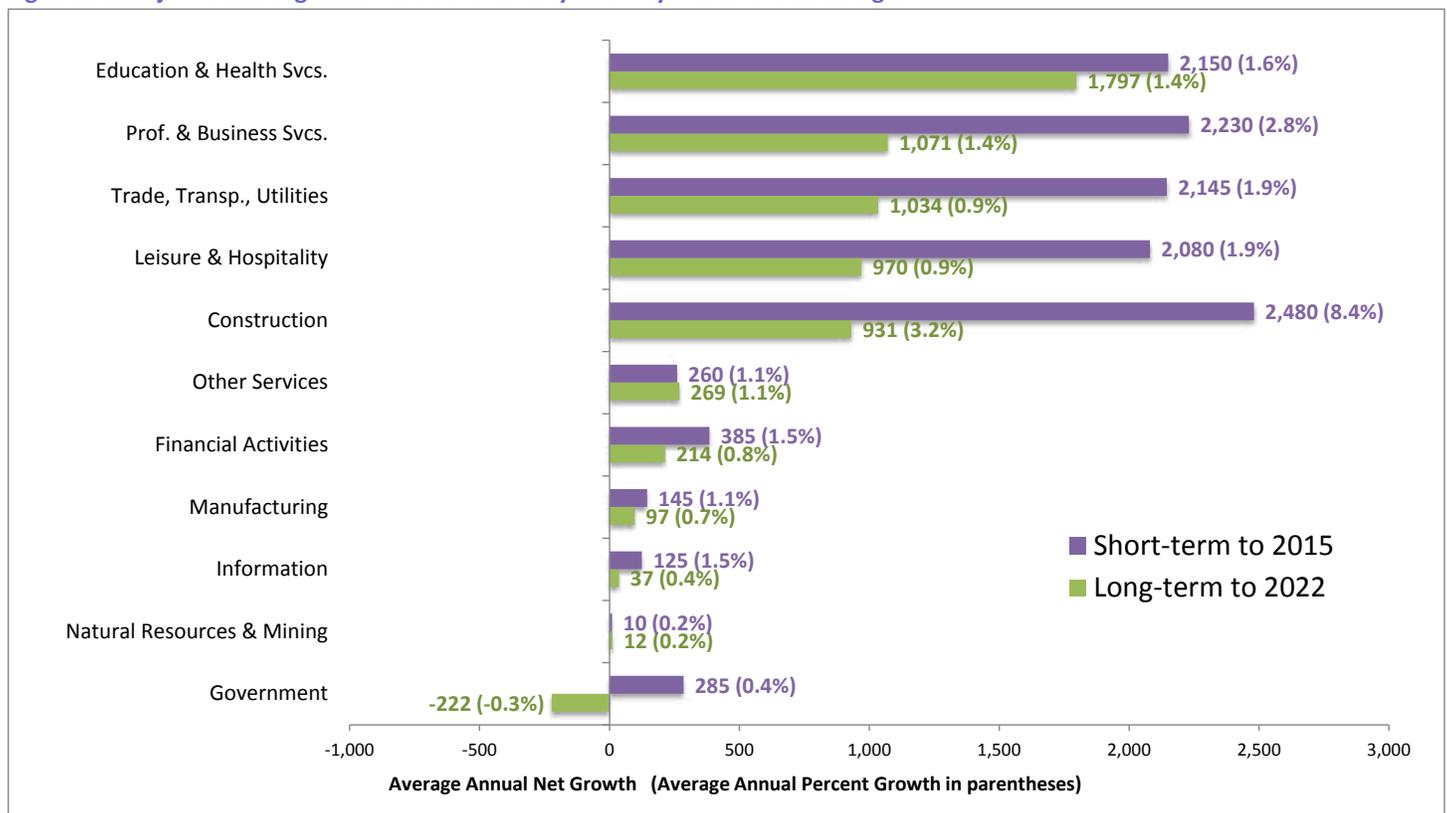
Short- and Long-Term Job Forecast is Positive

Future job growth in Hawaii for both the short-term and the long-term remains positive. The short-term forecast from 2013 to 2015 points to a rebounding economy with 2.0 percent average annual growth. Growth over the longer term will average a more modest rate of increase at 1.0 percent annually from 2012 to 2022. Short- and long-term projections are done independently using different starting and ending periods, making direct comparisons difficult. In addition, the methodology for the short-term forecast attempts to incorporate the current business cycle, whereas the long-term projections assumes structural stability in the economy. This explains why growth rates may be higher in the short-term as Hawaii rebounds from the recession

compared to the long-term which assumes full employment. Therefore, to lessen the impact of the differences between short- and long-term methodologies, average growth is presented on an annual basis.

In the near future, most of the job gains will be in the following major industries (Figure 15): construction; professional and business services; education and health services; trade, transportation, and utilities; and leisure and hospitality. These are the largest industries, with the exception of construction, and therefore, it is not surprising that they will provide the most job growth in coming years.

Figure 15. Projected Average Annual Job Growth by Industry for Short- and Long-Term



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, Projections program.

Although construction is not a very large industry, it is poised to be the fastest growing over the short- and long-term future as it emerges from a downcycle and benefits from rail transit and other commercial and residential projects. The specialty trades will contribute the most new construction jobs, followed by building construction, and to a lesser degree, heavy and civil engineering construction.

Government, on the flip side, is a large industry that is expected to contract over the long-term despite positive growth forecasted for next year. Expected job losses in the federal branch will negate the anticipated gains in local and state government.

The administrative and support services sector will boost the professional and business services industry. In the education and health services industry, almost three-fourths of the new jobs will be in the health care and social assistance sector. Meanwhile, leisure and hospitality will benefit from strength in the accommodation and food services sector.

These forecasted new jobs are just one part of the future job openings, and are attributed to economic growth. However, when a current worker leaves the labor force or changes occupation, it also creates a job opening, which we refer to as replacement openings. The combined total of the openings due to growth and replacements represent the total openings.

Many of the future job openings will occur in entry level, transitional jobs in which there is a constant turnover of workers, such as those related to food preparation and serving, sales, and office and administrative support (Figure 16). However, occupations with higher education and training such as management, education, and healthcare are also expected to provide lots of

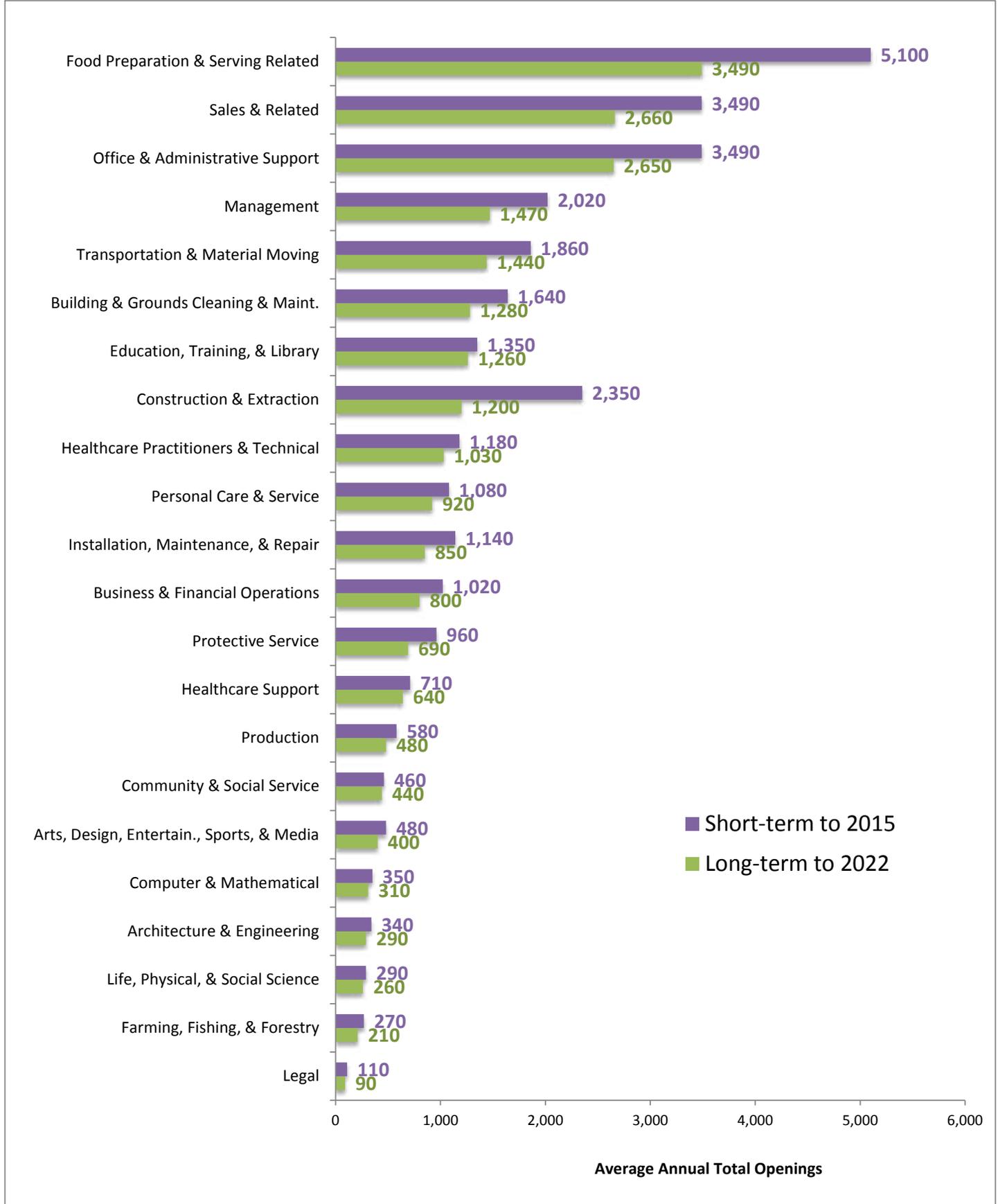
openings. It is noteworthy to see that construction and extraction type occupations will have many openings in the short-term, as the building industry and trades emerge from a prolonged downcycle and future projects are promising.

The top ten occupations projected to have the most job openings in the long-term future through 2022 are usually the largest occupations (Figure 17). Retail salespersons tops the list, followed by combined food preparation and serving workers. Waiters and waitresses, as well as cashiers, are third and fourth on the list. Three building and grounds cleaning related occupations made the list: maids and housekeeping cleaners; landscaping and groundskeeping workers; and janitors and cleaners. There is only one office-related job on the list, which is general office clerks. Registered nurses made the list last time and again is one of the top jobs in terms of job openings. General and operations managers rounds out the top ten list.

Not surprisingly, most of the top ten jobs are low paying jobs, and they also have minimal education and training requirements. In fact, eight of the ten jobs average a salary of \$32,000 or less, while the overall average pay is \$45,420. In addition, these eight occupations need only a HS diploma or less education, and just short-term on-the-job training. Only registered nurses and general and operations managers have wages above the statewide average and they both require college degrees.

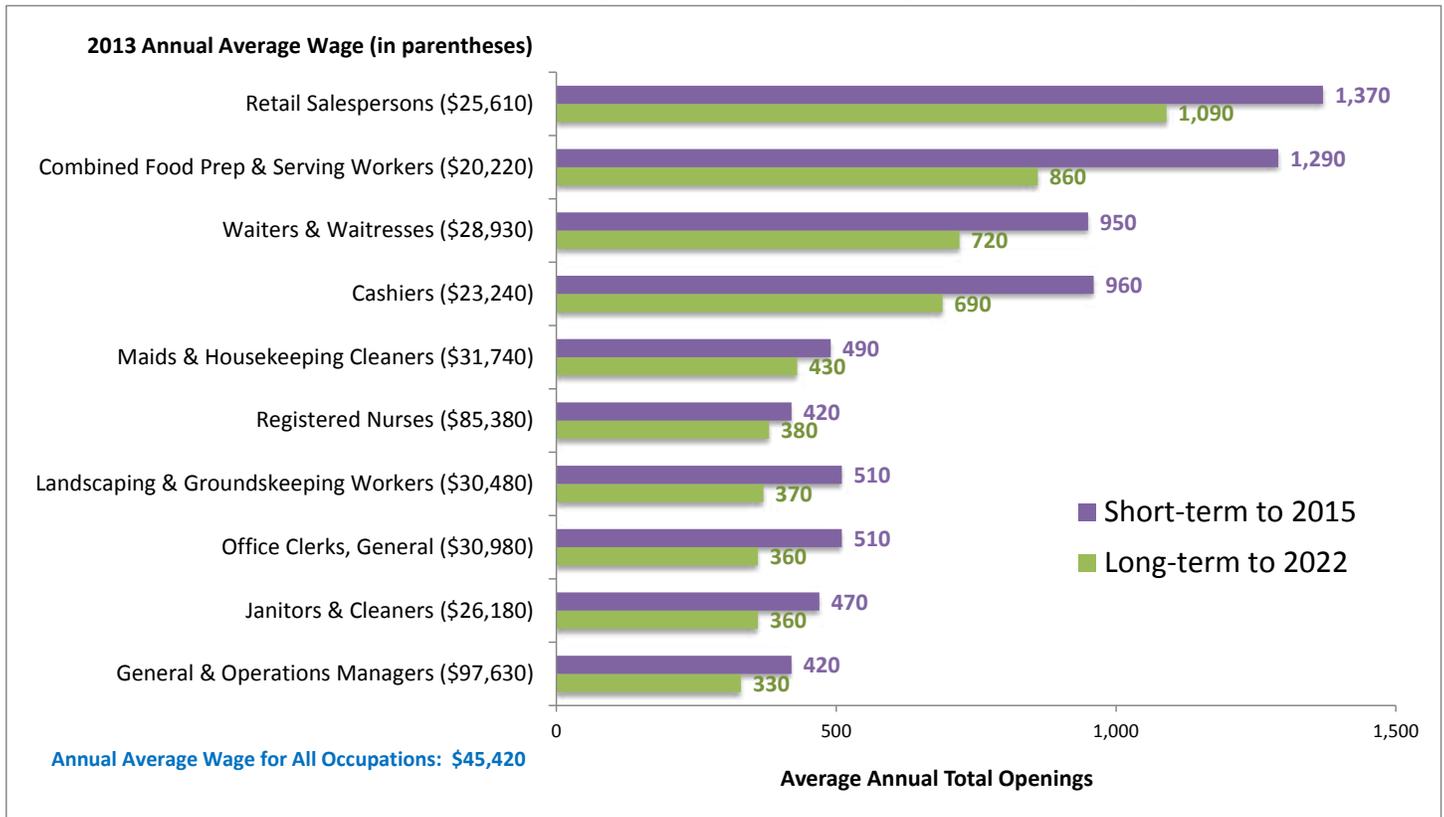
Overall, more than half of the state's projected job openings through 2022 require only a high school diploma or less (Figure 18). About 22 percent of the future openings will require a Bachelor's degree and another 6 percent will need an Associate's degree. Master's and Doctoral/Professional degrees will be required by 5 and

Figure 16. Projected Average Annual Total Job Openings by Occupation Group for Short- and Long-Term



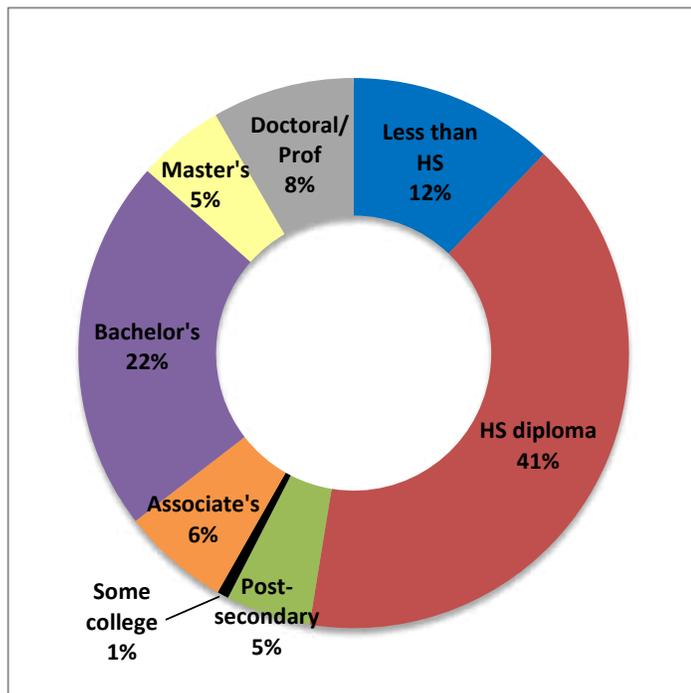
Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, Projections program.

Figure 17. Occupations with the Most Projected Average Annual Total Job Openings for Short- and Long-Term



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, Projections program.

Figure 18. Projected Average Annual Total Job Openings by Education Requirements, 2012-2022



Source: Hawaii State Department of Labor and Industrial Relations, Research and Statistics Office, Projections program.

8 percent of job openings, respectively. The remaining job opportunities will need a postsecondary certificate (5 percent) or some college (1 percent).

A significant portion of job openings (88 percent) will not demand any related work experience. About 8 percent will require less than 5 years experience and the remaining 4 percent will need 5 or more years.

Almost 40 percent of the job openings will also have no job training requirements. About 23 percent will need moderate-term on-the-job training and another 23 percent will require short-term on-the-job training. Long-term on-the-job training will be needed for just 8 percent of job openings. The rest of the openings will need an internship/residency (4 percent) or an apprenticeship training program (2 percent).

More Labor Market Information Available on Hawaii Workforce Infonet Website

For more information, visit the Research and Statistics Office's website at www.hiwi.org. There you will find many publications that the Labor Market Research Section produces about the state of the local labor market as well as employment projections by industry and occupations and detailed analyses. Recently published reports include:

- [Affirmative Action Programs](#) – Labor Information tables for state and counties updated Table 1- Labor Force Information by Sex and Race with 2013 Annual Local Area Unemployment Statistics (LAUS) data and based on 2006-2010 Census.
- [Employment Forecasts for the Short-Term Future](#) provides short-term industry and occupational projections for Hawaii, using 1st Quarter 2013 employment data to forecast employment for the 1st Quarter 2015.
- [Local Employment Dynamics](#) reports can be generated for Hawaii private industries based on quarterly workforce indicators such as employment, job creation and flow via new hires and separations, worker turnover, and wages by industry, age, and gender.
- [Long-Term Industry and Occupational Projections, State of Hawaii 2012-2022](#) tables contain state employment for industries and occupations and expected growth amounts for the designated time period as well as occupational openings based on growth and replacement needs.
- [Long-Term Industry and Occupational Projections, Counties 2010-2020](#) tables contain county employment for industries and occupations and expected growth amounts for the designated time period as well as occupational openings based on growth and replacement needs.
- [Occupational Employment and Wages in Hawaii 2013](#) is an annual report compiling the results of the Occupational Employment Statistics survey, collecting employment and wage data by occupation over a three-year period from approximately 3,500 establishments.



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