



State of Hawaii

Employment Forecasts for the Short-Term Future 2009-2011



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Quality Information for Informed Decisions



Introduction

Employment Forecasts for the Short-Term Future provides short-term industry and occupational projections for the State of Hawaii. The data tables use actual 3rd quarter 2009 employment for the base year and forecasts employment for the 3rd quarter 2011.

This report presents the employment forecasts for occupations and industries. The fastest growing jobs are presented in graphical format. A table of 'Hot Jobs' has occupations with the most projected annual job openings along with average wages and is categorized by education and training level.

The information in this report may be used by students and jobseekers who are making career decisions; education and training program planners who develop specific occupational training programs; job placement specialists who help people find employment; counselors who assist individuals in selecting careers; managers who design, evaluate, and direct employment and training programs; policy decision makers who develop short-range to long-range personnel policies; and employers who need information to help them plan the expansion or relocation of their businesses.

Prior to using the employment forecasts in this publication, it is important to understand the methodology used to develop these projections and take note of the limitations of the data.



*For more detailed projections data,
go to the HIWI website:
www.hiwi.org*

Methodology

These are the general steps used to forecast employment and estimate job openings in Hawaii:

Industry employment is obtained from the Hawaii State Department of Labor and Industrial Relations' Quarterly Census of Employment and Wages (QCEW) and Current Employment Statistics (CES). Monthly employment was compiled from January 1990 through September 2009.

Industry employment forecasts were produced using the Short-term Industry Projections software system. The system uses a state leading index, a combination of selected variables, that helps predict changes in employment. National economic variables were provided with the system and state variables included civilian labor force, unemployment rate, average weekly hours and earnings, general fund revenues, transient accommodations tax, building permits, visitor arrivals, and retail sales. The system uses a series of statistical models to project employment and a forecast is chosen based on established statistical methodology. The projections were adjusted based on current industry employment trends and near future economic events.

Staffing patterns were derived from the May 2009 Occupational Employment Statistics (OES) survey, using Standard Occupational Classification (SOC) codes. The pattern was used to divide each industry's employment into different occupations for that industry, forming a matrix. Occupational projections were generated by the MicroMatrix Occupational Projections System software. The system applies occupational change factors to the projected patterns to form a projected matrix. Using national self-employment and unpaid family worker staffing patterns, the system generates employment estimates and projections for self-employed and unpaid family workers. Job openings were developed using occupational employment growth and national replacement rates.

Data limitations: These projections are based on historical employment trends and do not take into account any economic developments that may occur after the projections were completed. Projections should be viewed as indicators of relative magnitude and probable direction rather than as forecasts of absolute occupational demand. Therefore, it is more important to look at the growth rate and projected total openings rather than the projected employment for 2011.



Highlights

Statewide employment is forecasted to grow slightly by 0.8 percent , or 5,290 jobs, from the third quarter 2009 to the third quarter 2011. Annually, this amounts to just 0.4 percent job growth. However, this modest increase reverses a projected annual 1.4 percent decline from 2008 to 2010. Employment declined in 2009 over the previous year but because of the turnaround in the visitor industry and increasing tax revenues this forecast is more positive than the last.

On the occupational side...

- Healthcare support jobs should lead the way in terms of fastest annual job growth with 1.6 percent. Following very closely will be healthcare practitioners and technical occupations also with 1.6 percent annual growth.
- With a projected 1.4 percent annual growth for food preparation and serving related occupations, this group may expand by 1,940 jobs between 2009 and 2011. Personal care and services jobs are also expecting 1.4 percent annual job growth. Occupations in the business and financial operations field may see 1.1 percent growth in its employment annually.
- Construction and extraction jobs will experience the greatest job loss with a forecasted 2.0 percent annual decline.

On the industry side...

- Leisure and hospitality is expected to lead the recovery as visitors return to the islands. Annual job growth of 1.3 percent is forecasted as the accommodation and food services industry bounces back.
- Education and health services will experience annual growth of 1.1 percent, demonstrating strength particularly in the health care and social assistance industry.
- The large trade, transportation, and utilities industry is forecasted to expand by 0.5 percent annually.
- Construction may undergo more job loss, though at a slower pace, with a projected 2.9 percent annual decrease. This is one sector of the economy that is still struggling and has yet to benefit from a turnaround. Other industries showing a significant drop are information (-2.3 percent), natural resources and mining (-1.6 percent), and manufacturing (-1.2 percent).



Occupational Forecasts

Hawaii's total employment is forecasted to increase from 644,130 in the third quarter of 2009 to 649,420 in the third quarter of 2011, for 0.8 percent growth or 5,290 net job growth. This amounts to 0.4 percent job growth for each year of the two-year period. This is a very modest increase but much improved over the previous forecast of a 2.8 percent decline over the 2008 to 2010 period. Since that last forecast, total employment has declined, but a turnaround in the visitor industry along with increasing state tax revenues in 2010 has led to a more positive forecast this time around.

During the 2009-2011 period, there may be about 19,960 total job openings annually - openings due to projected employment growth coupled with openings due to replacements needs that arise when workers retire or leave their jobs for other reasons.

Of the 22 major occupational groups (Table 1), 14 of them are expected to expand, while the other 8 may contract. The fastest growing groups will be healthcare support and healthcare practitioners and technical occupations - both growing at 1.6 percent annually. The second fastest-growing groups, both with 1.4 percent annual growth, are food preparation and serving related and personal care services. Rounding out the top five will be the business and financial operations occupational group with 1.1 percent annual projected growth. At the bottom end, construction and extraction occupations are predicted to decline at the fastest rate of 2.0 percent annually.

In terms of net employment growth, the following occupational groups rank highest: food preparation and serving related (+1,940 jobs); healthcare practitioners and technical (+830 jobs); and personal care and service (+720 jobs). The greatest net employment decline will be in construction and extraction (-1,460 jobs).

Considering annual job openings, the food preparation and serving related field will provide the greatest number of opportunities with 3,960. Other occupational groups with a high number of job openings are: sales and related (2,580 openings); office and administrative support (2,330 openings); education, training, and library (1,190 openings); personal care and service (1,010 openings); and transportation and material moving (1,000 openings). The fewest job openings is expected to be in legal occupations (70).

On page 5 (Figure 1), there is a list of the fastest-growing occupations, which are typically dominated by smaller occupations projected to grow more rapidly. Home health aides top the list with 4.2 percent average annual forecasted growth and a total of 30 anticipated openings each year. Second on the list is personal and home care aides with projected annual growth of 4.0 percent and 260 openings. Other fast growing occupations with a significant number of job openings are: hotel, motel and resort desk clerks with 2.8 percent growth and 160 openings annually; and compliance officers with 3.7 percent growth and 130 openings each year.

Hot jobs are listed on page 6 (Table 2) - occupations with the most average annual openings, sorted by the level of education and training requirements. Generally, these are the larger occupations which may not necessarily be growing at a fast pace. For example, general and operations managers is projected to contract by 0.9 percent annually during the 2009-2011 period, but due to replacement needs, there is an expectation of 260 job openings each year. Teachers, both elementary and secondary, should produce 260 and 240 job openings a year, respectively. Registered nurses may

Table 1. Occupational Employment and Growth, 2009-2011, State of Hawaii

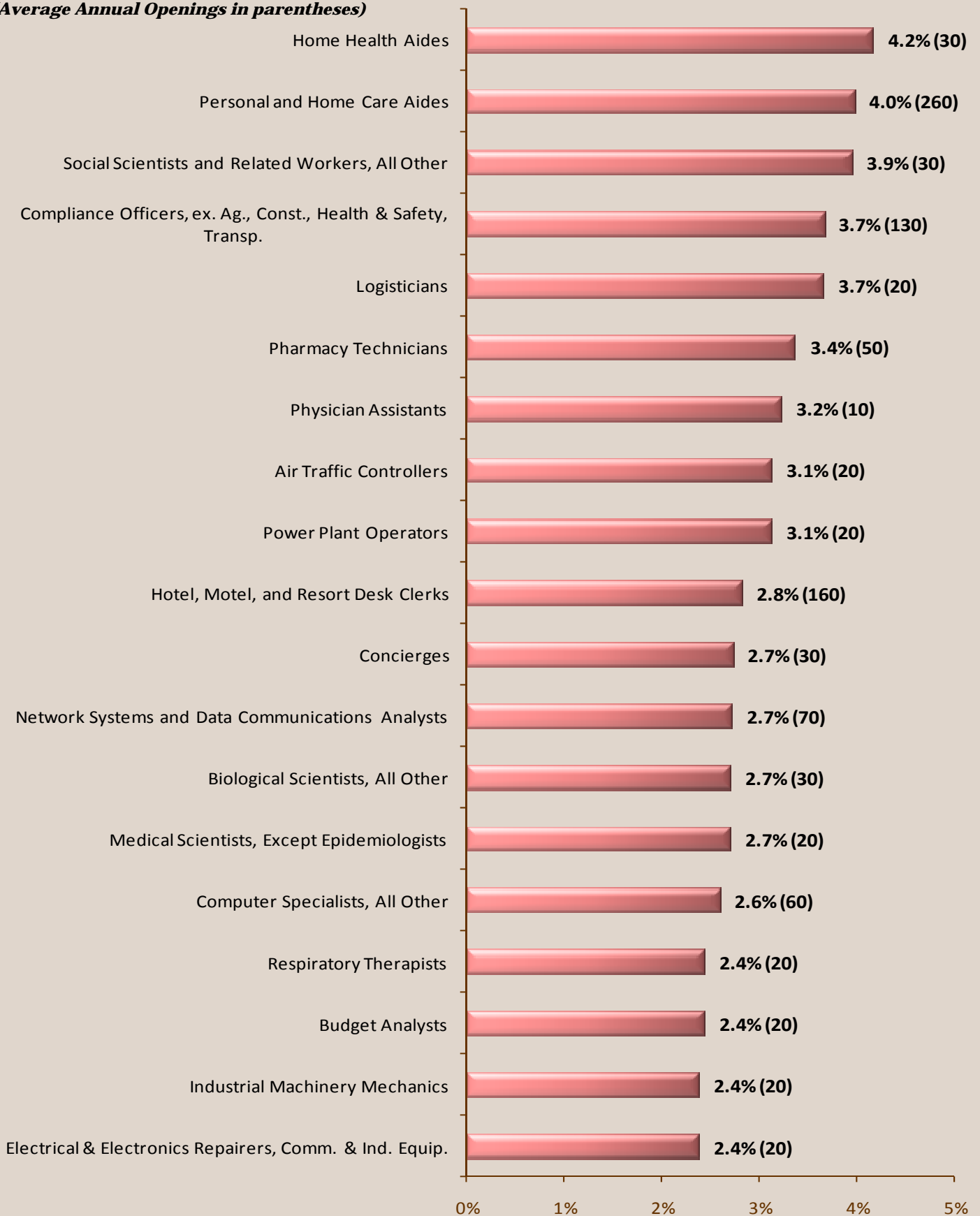
Occupational Group	3rd Qtr. 2009	3rd Qtr. 2011	Net Growth	Percent Growth	Avg. Ann. Growth	Avg. Ann. Openings
TOTAL, ALL OCCUPATIONS	644,130	649,420	5,290	0.8%	0.4%	19,960
Management	41,870	41,700	-170	-0.4%	-0.2%	940
Business and Financial Operations	27,910	28,520	610	2.2%	1.1%	820
Computer and Mathematical	8,720	8,880	160	1.8%	0.9%	250
Architecture and Engineering	9,460	9,510	50	0.5%	0.3%	250
Life, Physical, and Social Science	7,960	8,090	130	1.6%	0.8%	330
Community and Social Services	11,520	11,660	140	1.2%	0.6%	320
Legal	5,130	5,060	-70	-1.4%	-0.7%	70
Education, Training, and Library	42,570	43,170	600	1.4%	0.7%	1,190
Arts, Design, Entertainment, Sports, & Media	13,340	13,310	-30	-0.2%	-0.1%	400
Healthcare Practitioners and Technical	26,650	27,480	830	3.1%	1.6%	880
Healthcare Support	14,470	14,930	460	3.2%	1.6%	370
Protective Service	21,170	21,470	300	1.4%	0.7%	760
Food Preparation and Serving Related	68,460	70,400	1,940	2.8%	1.4%	3,960
Building & Grounds Cleaning & Maintenance	36,950	37,560	610	1.7%	0.8%	860
Personal Care and Service	25,590	26,310	720	2.8%	1.4%	1,010
Sales and Related	67,400	68,010	610	0.9%	0.5%	2,580
Office and Administrative Support	97,820	97,650	-170	-0.2%	-0.1%	2,330
Farming, Fishing, and Forestry	4,870	4,830	-40	-0.8%	-0.4%	150
Construction and Extraction	37,250	35,790	-1,460	-3.9%	-2.0%	560
Installation, Maintenance, and Repair	21,370	21,640	270	1.3%	0.6%	550
Production	16,540	16,460	-80	-0.5%	-0.2%	400
Transportation and Material Moving	37,110	36,990	-120	-0.3%	-0.2%	1,000

Total may not add due to rounding to the nearest ten.

see another 310 openings each year. Many of these hot jobs only require short-term on-the-job training and will provide many job openings: waiters and waitresses (1,150 openings); cashiers (980 openings); and retail salespersons (870 openings). Nine of the 30 hot jobs in the list are food preparation and serving related, and another six jobs are office and administrative support positions. In general, the higher the education and training level, the higher the average wage.

Figure 1. Fastest Growing Occupations, 2009-2011, State of Hawaii

(Average Annual Openings in parentheses)



Occupations are ranked by average annual growth and includes only occupations with 300+ employment in the 3rd Quarter 2009.

Table 2. Jobs with Most Openings by Educ. & Training, 2009-2011, State of Hawaii

Occupation by Education & Training Level	Average Annual Openings			Avg. Ann. Growth	Annual Wage
	Growth	Replacements	Total		
Bachelor's degree or higher					
General and Operations Managers	0	260	260	-0.9%	\$96,910
Elementary School Teachers, Except Special Education	80	180	260	0.9%	\$48,730
Secondary School Teachers, exc. Special & Vocational Educ.	20	230	240	0.2%	\$48,660
Business Operations Specialists, All Other	90	120	200	1.6%	\$60,680
Associate degree					
Registered Nurses	180	130	310	1.9%	\$80,020
Related work experience					
First-Line Supervisors/Managers of Retail Sales Workers	40	180	220	0.5%	\$40,550
First-Line Supervisors/Mgrs. of Office & Admin. Support Workers	10	140	150	0.1%	\$49,320
Long-term on-the-job training					
Cooks, Restaurant	90	160	250	1.5%	\$30,450
Moderate-term on-the-job training					
Customer Service Representatives	70	210	270	1.0%	\$32,360
Maintenance and Repair Workers, General	80	90	170	1.2%	\$40,110
Short-term on-the-job training					
Waiters and Waitresses	220	930	1,150	1.4%	\$24,760
Cashiers	130	860	980	0.9%	\$21,570
Retail Salespersons	160	710	870	0.7%	\$25,930
Combined Food Preparation & Serving Workers, incl. Fast Food	250	210	470	2.1%	\$20,220
Counter Attendants, Cafeteria, Food Concession, & Coffee Shop	50	400	450	1.3%	\$21,490
Food Preparation Workers	70	350	420	0.8%	\$21,740
Security Guards	140	210	350	1.4%	\$26,240
Maids and Housekeeping Cleaners	150	160	310	1.5%	\$29,480
Stock Clerks and Order Fillers	90	180	280	1.3%	\$24,970
Laborers and Freight, Stock, and Material Movers, Hand	0	280	280	-0.8%	\$31,050
Janitors & Cleaners, exc. Maids & Housekeeping Cleaners	30	240	270	0.3%	\$25,900
Dining Room and Cafeteria Attendants and Bartender Helpers	50	220	260	1.4%	\$23,810
Personal and Home Care Aides	210	60	260	4.0%	\$19,160
Dishwashers	50	190	250	1.7%	\$22,210
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	30	210	240	1.2%	\$21,120
Office Clerks, General	0	190	190	-0.1%	\$28,510
Landscaping and Groundskeeping Workers	80	100	180	0.8%	\$30,220
Hotel, Motel, and Resort Desk Clerks	70	90	160	2.8%	\$33,900
Bartenders	40	110	150	1.3%	\$28,780
Reservation & Transportation Ticket Agents & Travel Clerks	50	100	150	1.1%	\$29,870

Includes only occupations with 150+ total openings. Annual wage is from the May 2009 BLS OES survey.



Industry Forecasts

Total employment in the State of Hawaii is forecasted to expand from 644,130 in the third quarter 2009 to 649,420 in the third quarter 2011, an increase of 5,290 jobs. This translates into a 0.8 percent rate of growth over the two-year period, or 0.4 percent annually. This is an improved outlook compared to the previous forecast of a 2.8 percent decline during the 2008 to 2010 period.

Of the 12 industry divisions (Table 3), six will display positive growth and six will undergo negative growth. This is a much improved ratio than the last time around when only two industry divisions were projected to have positive growth during the 2008 to 2010 period.

As tourism begins to rebound with increasing visitor arrivals and spending, the leisure and hospitality industry division is predicted to benefit from the fastest job growth, with 1.3 percent average annual growth. About 2,680 jobs are expected during this two-year period, roughly half of the entire statewide forecasted job increase. Fueling this expansion will be the accommodation and food services sector, which should be strong in both the hotel and restaurant areas.

Hawaii's largest industry division, education and health services, is forecasted to post a 1.1 percent annual job growth. An estimated 2,630 jobs will be created during the two-year period, almost three-fourths of which will be in the health care and social assistance sector. Ambulatory health care services, hospitals, and social assistance will support this sector well, and nursing and residential care facilities will contribute modestly.

The professional and business services industry division is slated to post 0.7 percent annual job growth. The 960 additional jobs forecasted will occur in the administrative and support and waste management and remediation services sector as significant growth is anticipated mainly in the administrative and support services field.

The prominent trade, transportation, and utilities industry division may see 0.5 percent annual job growth. The 1,100 new jobs will come mostly in the retail trade sector as general merchandise stores will demonstrate strong job growth and food and beverage stores will hold its own. The transportation and warehousing sector will see modest job growth due to expansion in air transportation.

Government may experience 0.4 percent annual employment growth, with only 560 newly created jobs over the two-year period. Although federal government may add jobs, both state and local government are bracing for job losses.

The construction industry division has not yet seen signs of an upturn and therefore the forecast for the two-year period is for a 2.9 percent decline annually. The loss of 1,780 jobs over the two-year period will be distributed in all sectors of the industry, but concentrated heavily in the specialty trade and building construction areas.

The information industry division may contract by 2.3 percent annually due to downsizing in the publishing industries. Natural resources and mining is projected to decrease by 1.6 percent annually due to weakness in the crop production area of agriculture, and manufacturing is forecasted to shrink by 1.2 percent annually as food manufacturers cut jobs.

On page 9 (Figure 2), the top ten fastest growing detailed industries are listed in a chart and the leading industry is computer and electronic product manufacturing (a small industry) with 11.8 percent annual growth. Larger industries in the chart include: general merchandise stores (2.9 percent), nursing and residential care facilities (2.3 percent), and

Table 3. Industry Employment and Growth, 2009-2011, State of Hawaii

Industry	3rd Qtr. 2009	3rd Qtr. 2011	Net Growth	Percent Growth	Avg. Ann. Growth
TOTAL, ALL INDUSTRIES	644,130	649,420	5,290	0.8%	0.4%
NATURAL RESOURCES AND MINING	6,760	6,550	-210	-3.1%	-1.6%
Agriculture, Forestry, Fishing and Hunting	6,410	6,180	-230	-3.6%	-1.8%
Mining	350	370	20	5.7%	2.9%
CONSTRUCTION	30,320	28,540	-1,780	-5.9%	-2.9%
MANUFACTURING	13,510	13,180	-330	-2.4%	-1.2%
TRADE, TRANSPORTATION, AND UTILITIES	109,790	110,890	1,100	1.0%	0.5%
Wholesale Trade	17,640	17,480	-160	-0.9%	-0.5%
Retail Trade	65,550	66,510	960	1.5%	0.7%
Transportation and Warehousing	23,400	23,610	210	0.9%	0.4%
Utilities	3,200	3,280	80	2.5%	1.3%
INFORMATION	8,760	8,350	-410	-4.7%	-2.3%
FINANCIAL ACTIVITIES	27,590	27,490	-100	-0.4%	-0.2%
Finance and Insurance	16,220	15,840	-380	-2.3%	-1.2%
Real Estate and Rental and Leasing	11,370	11,650	280	2.5%	1.2%
PROFESSIONAL AND BUSINESS SERVICES	70,380	71,340	960	1.4%	0.7%
Professional, Scientific, and Technical Services	24,090	23,950	-140	-0.6%	-0.3%
Management of Companies and Enterprises	6,890	6,830	-60	-0.9%	-0.4%
Admin. & Support & Waste Mgmt. & Remediation Services	39,400	40,570	1,170	3.0%	1.5%
EDUCATION AND HEALTH SERVICES	122,360	124,990	2,630	2.1%	1.1%
Educational Services	57,550	58,230	680	1.2%	0.6%
Health Care and Social Assistance	64,810	66,760	1,950	3.0%	1.5%
LEISURE AND HOSPITALITY	100,770	103,450	2,680	2.7%	1.3%
Arts, Entertainment, and Recreation	10,710	10,420	-290	-2.7%	-1.4%
Accommodation and Food Services	90,060	93,030	2,970	3.3%	1.6%
OTHER SERVICES	23,980	24,230	250	1.0%	0.5%
GOVERNMENT	75,090	75,650	560	0.7%	0.4%
Federal Government	33,300	34,860	1,560	4.7%	2.3%
State Government, excluding Education and Hospitals	22,750	22,000	-750	-3.3%	-1.6%
Local Government, excluding Education and Hospitals	19,040	18,790	-250	-1.3%	-0.7%
SELF-EMPLOYED & UNPAID FAMILY WORKERS	54,830	54,760	-70	-0.1%	-0.1%

Total may not add due to rounding to the nearest ten.

accommodation (2.1 percent). The top ten detailed industries (Figure 3) projected to have the greatest net job growth are listed in a chart and the three leading industries are: food services and drinking places (1,540 job growth); accommodation (1,430 job growth); and administrative and support services (1,130 job growth).

Figure 2. Fastest Growing Industries, 2009-2011, State of Hawaii

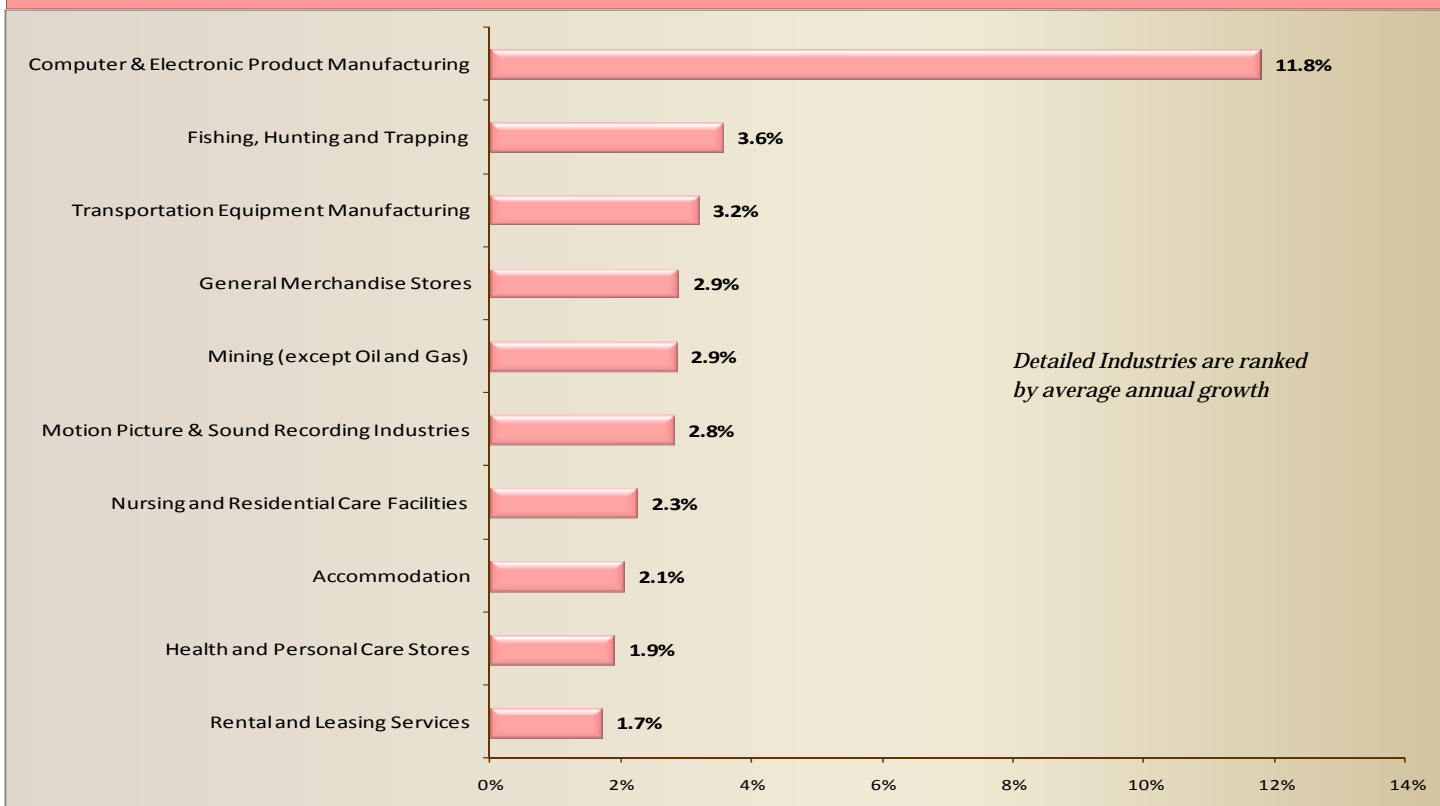


Figure 3. Industries with Highest Net Job Growth, 2009-2011, State of Hawaii

