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ATTACHMENT

State of Hawaii Integrated Local Plan for Title I-B of the Workforce Investment Act and the Wagner-Peyser Plan

July 1, 2013 – June 30, 2017

Oahu WIB Local Area Plan

Department of Labor & Industrial Relations
DLIR Working Together
State of Hawaii

WORKFORCE DEVELOPMENT COUNCIL

Hawaii Instructions
For 2013-2017 Local Area Plans
Title I – Workforce Investment Act and the Wagner-Peyser Act

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2013 – 2017 Local Integrated Workforce Plan Assurances

Purpose

The purpose of these planning instructions is to provide guidance to Local Areas and Local Workforce Investment Boards (LWIBs) for development of their *2013-2017 Integrated WIA and Wagner-Peyser Plans*.

The Chief Elected Official (CEO) should initiate the local planning process to engage business, education and system partners in a collaborative, data-driven strategic planning effort. This collaboration is meant to create an understanding of the local area's workforce investment needs, a shared vision of how the local workforce investment system can be designed to meet those needs, and agreement on the key strategies to achieve this vision. LWIBs must comply with the Workforce Investment Act, Section (§) 118(a), which requires local plans to be consistent with *The State of Hawai'i's 2012(-2017) Integrated Workforce Investment Act and Wagner Peyser State Plan*. Therefore, elements of the Local Plan should be organized according to the three main sections of the State Plan: 1) Strategic Plan, 2) Operational Plan, and 3) Assurances **[TEGL 21-11, pg. 4]**. Questions in these sections will solicit the following information:

I. *Strategic Plan* - explanations of how labor market data and trends were analyzed, interpreted and used to develop new initiatives, strategies, policies and procedures to improve the local system's delivery of employment and training services and meet performance goals. Descriptions of how local strategies align policy, operations and administrative systems in the best interests of job seekers and employers to support the governor's strategic workforce vision and *State of Hawaii's 2012 Integrated Workforce Investment Act and Wagner-Peyser State Plan*. The impetus for specific quantitative targets and desired outcomes should result from these local strategies.

II. *Operational Plan* – descriptions of how specific workforce programs align with and implement the vision and strategies outlined in the *Strategic Plan* section to serve employers and targeted sub-populations at the local level. If applicable, descriptions of significant changes to the Local Board structure or financing to support WIA activities should also be included.

III. *Assurances* - affirmations that key obligations in the law and regulations have been met. The assurances may form a basis for self-monitoring of these requirements and for federal and state monitoring of the local areas.

The timeline on the following page provides milestones in development of the Local Plans.

Calendar

December 24, 2012	Department of Labor and Industrial Relations ("DLIR") Director issued WIA Bulletin No. 06-12, Change 1 to extend the Workforce Investment Act Local Area Plans through June 30, 2013.
February 14, 2013	Plan instructions discussed with the counties.
March ~~1~~ 13, 2013	WIA Bulletin distributing Local Plan Instructions is issued.
April 2, 2013	Draft WIA Local Area Four Year Plans are due to the state. Local Areas post plans for public review and comment.
April 2- May 2, 2013	State reviews drafts for completeness, accuracy and appropriateness. Included in the Plan are the MOUs with One-Stop Partners.
May 9, 2013	Provide comments for revisions to the Local Areas. Local Areas submit final Plan with comments received.
June 6, 2013	Local Area Plans are reviewed and approved by the WDC
July 1, 2013	Local Area Five Year Plans 2012-2017 are effective.

References

1. Workforce Investment Act of 1998 (WIA), P.L. 105-220, Sections (§§) 117(d) and 118
2. Title 20 Code of Federal Regulations (Title 20 CFR) §§ 661.345, 661.350 and 661.355
2. Training and Employment Guidance Letter ("TEGL") No. 21-11 and TEGL No. 37-11
3. WIA Bulletins 06-12 and 06-12, Change 1
4. http://www.hiwi.org/ – web page of DLIR's Research & Statistics Office

Logistics Instructions

Format

Local Areas should respond to the instructions in this guide. Plans should include the instructions, followed by the Local Area response. See a list of References on page 4. Please do the following:

- Use 8.5 x 11 inch white paper and a font size of 11 or greater.
- Organize the plan by sections, following the same order as these plan instructions.
- Include a cover sheet with the contact person's name, address, phone, fax, and e-mail address. Include a table of contents.
- Place a list of appendices and the required documents at the end of the plan.

Submittal

See the Local Area Plan Calendar on page iii. Local Areas are to submit Local Area Plans to WDD no later than April 2, 2013 for review. Each Local Area Plan should be submitted via a cover letter, jointly signed by the Mayor and the LWIB chairperson.

Revisions may be required. Revised Local Area Plans are to be submitted to WDD with a cover letter, jointly signed by the Mayor and the Local Workforce Investment Board chairperson, no later than May 9, 2013 with a copy of comments received from the public and an explanation of how the comments were addressed for presentation at the June 6, 2013 WDC meeting.

Please submit three hard copy sets of the final WIA Local Plan, with original signatures, and an electronic file to:

Elaine Young, Interim Executive Director
Workforce Development Council
830 Punchbowl Street, Room 329
Honolulu, HI 96813

Local Plan Certification Signatures

Name of Grant Recipient: City & County of Honolulu
Contact Person/Title: Derek Chinen, Planner

Phone: 808-768-5889 Fax: N/A E-mail: owib@honolulu.gov

This plan represents the Oahu Local Workforce Investment Board's efforts to maximize and coordinate resources available under Title I of the Workforce Investment Act (WIA) of 1998. It is submitted for the period of July 1, 2013 – June 30, 2017 with the assurance that we will operate our Workforce Investment Act and Wagner-Peyser programs in accordance with this plan and applicable federal and state laws and regulations.

Chair of the Oahu Workforce Investment Board	Mayor of the City & County of Honolulu
James Tollefson Name (printed or typed)	Kirk Caldwell Name (printed or typed)
4-2-2013 Date	4-1-2013 Date

Plan Narrative

State of Hawaii Integrated Local Plan
for Title I-B of the Workforce Investment Act
and the Wagner-Peyser Plan
July 1, 2013 – June 30, 2017

WORKFORCE INVESTMENT ACT ("WIA") AND WAGNER-PEYSER PLANNING GUIDANCE FOR HAWAII'S LOCAL WORKFORCE INVESTMENT AREAS

State Vision and Goals

The activities in this 2012-2017 WIA Hawaii State Plan begin with the strategic vision of the Governor. The Governor's "New Day Plan" has three overarching strategies—Growing a Sustainable Economy, Investing in People, and Transforming Government.

- **A Sustainable Economy** includes initiatives in renewable energy; sustainable agriculture; and tourism efforts that focus on culture and the arts, and creative industries.

- **Investing in People** focuses on aligning education and workforce development, and includes: increasing the number of native Hawaiians and other underrepresented groups in higher education enrollment and completion; raising graduation standards for public schools to better prepare students for a more competitive society; and to better use funding to meet current and future employer needs. Healthcare Transformation is a major part of the Governor's plan to move Hawaii forward, and the transformation begins with ensuring an adequate number of high-skilled healthcare workers for all areas in Hawaii.

- **Transforming Government** began with the appointment of the state's first chief information officer, Sanjeev "Sonny" Bhagowalia. A statewide plan to update all technology and systems in the executive branch will help to reduce costs, eliminate redundancies, better meet customer/taxpayer needs, and foster innovation.

Section I - Strategic Plan

This section should address how the economic downturn has impacted the economy of the local area, its businesses, job seekers and workers. Include in your descriptions the sources of information and dates. How are the various activities related to sustainable development? Respond to each question by assessing your local area's current and future strategies and by identifying steps to implement and improve your service level.

A. Assessment of Labor and Economic Market Needs

1. Identify the workforce investment needs of businesses, job seekers and workers in your local area. Include a description of the demographics of the county e.g. ethnic, racial, linguistic, older persons and individuals with disabilities? **[WIA Section 118(b)(1)(A); Title 20 Code of Federal Regulations (CFR) § 661.350(a)(1)]**

Summary area profile for the City and County of Honolulu:
(Source: Hawaii State Department of Labor & Industrial Relations; Hawaii Workforce Infonet)

Honolulu County, Hawaii - The City and County of Honolulu is a combined city-county jurisdiction located in the U.S. state of Hawai'i. It is also the official municipal and cultural entity of the combined urban district of Honolulu and the rest of the island of O'ahu in the U.S. state of Hawai'i, as prescribed in the city charter adopted in 1907 and accepted by the Legislature of the Territory of Hawai'i. The City and County encompasses all of the island of O'ahu and several minor outlying islands including all of the Northwestern Hawaiian Islands (islands beyond Ni'ihau except Midway Atoll). It acts as a public corporation that manages various aspects of traditional municipal governance primarily in the American manner. The population of the City and County was 876,156 at the 2000 census, making it the eleventh-largest municipality in the United States. Upon becoming a consolidated city-county on April 30, 1907, the combined territories were incorporated as the City and County of Honolulu, as it is known today. The motto is Ha'aheo No 'O Honolulu (Honolulu Pride).

Current Jobs Available
There are 12,992 job openings advertised online in Honolulu County, Hawaii on March 14, 2013 (Jobs De-duplication Level1).

Candidates Available
There were 22,323 potential candidates in the workforce system that were looking for work in Honolulu County, Hawaii in March 14, 2013.

Candidate Area Distribution
The counties in Hawaii where the highest number of potential candidates in the workforce system were looking for work in March 14, 2013 were Honolulu County, Hawaii (22,323) , Hawaii County, Hawaii (12,054) , Maui County, Hawaii (8,431) and Kauai County, Hawaii (6,848) . There were 3,527 candidates who indicated that they were willing to work anywhere in the state.

Education Level of Available Candidates
The most common education level of potential candidates in the system in Honolulu County, Hawaii on March 14, 2013 was a High School Diploma or Equivalent with 34.52% of the total specified. The second most common level was a 1 to 3 Years at College or a Technical or Vocational School with 21.85% of the total specified.

Employment Wage Statistics
The average weekly wage for Honolulu County, Hawaii in 4th quarter, 2010 was $897. This would be equivalent to $22.43 per hour or $46,644 per year, assuming a 40-hour week worked the year around.

Employment Wage Statistics Distribution
The counties with the highest estimated average weekly wages in Hawaii for the 4th quarter, 2010 are Honolulu County, Hawaii ($897) , Maui County, Hawaii ($765) , Kauai County, Hawaii ($758) and Hawaii County, Hawaii ($736) .

Desired Salary of Available Candidates

The most common desired salary of potential candidates in the system in Honolulu County, Hawaii is 20k - 30k or more with 35.2% of the total specified. The second most common level is 35k - 45k or more with 24.33% of the total specified. 2,985 potential candidates had no specific desired salary specified.

Area Labor Force, Employment and Unemployment Data

The total civilian labor force (not seasonally adjusted) for Honolulu County, Hawaii in December, 2012 was 455,050, of which 435,500 were employed and 19,550 were unemployed. The unemployment rate was 4.3% percent.

Labor Force, Employment and Unemployment Distribution

The counties in Hawaii with the highest unemployment rate (not seasonally adjusted) in December, 2012 were Hawaii County, Hawaii (6.9%), Kauai County, Hawaii (6.0%), Maui County, Hawaii (5.2%) and Honolulu County, Hawaii (4.3%).

Industry Employment Distribution

The total number of employees located in Honolulu County, Hawaii in 4th quarter, 2010 was 436,921. The largest major industry sector was Public Administration with 22.2% of the employment, followed by Accommodation and Food Services with 12.6% of the employment, and Health Care and Social Assistance with 10.8% of the employment.

Current Employment Statistics

Current employment by industry for Honolulu County, Hawaii on December, 2012 were Total Nonfarm (446,400).

Occupational Employment Distribution

The 2008 total estimated number of employed in Honolulu County, Hawaii was 370,490. The largest major occupational group was Office and Administrative Support Occupations with 21.1% of the estimated employed, followed by Sales and Related Occupations with 13.6% of the estimated employed, and Food Preparation and Serving Related Occupations with 12.8% of the estimated employed.

Occupations by Candidates Available

The occupations with the highest number of potential candidates in the workforce system that were looking for work in Honolulu County, Hawaii on March 14, 2013 are Customer Service Representatives (781) , Office Clerks, General (674) , Security Guards (470) , Retail Salespersons (447) , Cashiers (442) , Stock Clerks- Stockroom, Warehouse, or Storage Yard (406) , Construction Laborers (393) , Executive Secretaries and Administrative Assistants (370) , Administrative Services Managers (352) and Janitors and Cleaners, Except Maids and Housekeeping Cleaners (340) .

Candidates By Occupation Group

There were 22,323 potential candidates in the workforce system that were looking for work in Honolulu County, Hawaii in March 14, 2013. The largest major occupational group was Office and Administrative Support Occupations with 18.7% of the potential candidates, followed by Management Occupations with 9.6% of the potential candidates, and Sales and Related Occupations with 7.2% of the potential candidates.

Occupations by Employment Wage

The occupations with the highest paying 2011 estimated mean (annual) wages in Honolulu County, Hawaii were Family and General Practitioners ($193,240) , Pediatricians, General ($173,500) , Chief Executives ($151,670) , Psychiatrists ($125,500) , Airline Pilots, Copilots, and Flight Engineers ($148,840) , Optometrists ($117,690) , Biological Science Teachers, Postsecondary ($112,930) , Pharmacists ($112,040) , Obstetricians and Gynecologists ($220,740) and Physicians and Surgeons, All Other ($201,590) .

Occupations by Projected Growth

The highest 2008 - 2018 projected growth rate for Honolulu County, Hawaii was Waiters and Waitresses (0.3%) , Retail Salespersons (0.6%) , Cashiers (0.4%) , Combined Food Preparation and Serving Workers, Including Fast Food (1.1%) , Security Guards (1.0%) , Customer Service Representatives (1.3%) , Elementary School Teachers, Except Special Education (1.0%) , Registered Nurses (1.7%) , Secondary School Teachers, Except Special and Vocational Education (0.4%) and General and Operations Managers (-0.3%) .

Population Totals

The 2001 population of Honolulu County, Hawaii was estimated at 882,755. The 2011 population of Honolulu County, Hawaii was estimated at 963,607. This represents a 9.16 percent increase from 2001.

Population Distribution

The counties in Hawaii with the highest 2011 estimated population are Honolulu County, Hawaii (963,607), Hawaii County, Hawaii (186,738), Maui County, Hawaii (156,764) and Kauai County, Hawaii (67,701).

Income Totals

According to the US Census Bureau the Median Family Income in Honolulu County, Hawaii in 2010 was $81,370 . According to the US Census Bureau the Median Household Income in Honolulu County, Hawaii in 2011 was $65,489 . According to the HUD (Housing & Urban Development) the Median HUD Income in Honolulu County, Hawaii in 2012 was $82,700 . According to the BEA (Bureau of Economic Analysis) the Per Capita Income in Honolulu County, Hawaii in 2011 was $46,624 . According to the BEA (Bureau of Economic Analysis) the Total Income in Honolulu County, Hawaii in 2011 was $44,926,809,000 .

Income Distribution

The counties in Hawaii with the highest 2010 Median Family Income were Honolulu County, Hawaii ($81,370) , Maui County, Hawaii ($74,465) , Kauai County, Hawaii ($71,847) and Hawaii County, Hawaii ($66,348) .

Disability Statistics

COUNCIL FOR DISABILITY AWARENESS

It happens more often than you'd imagine

- Just over 1 in 4 of today's 20 year-olds will become disabled before they retire.[1]
- Over 37 million Americans are classified as disabled; about 12% of the total population. More than 50% of those disabled Americans are in their working years, from 18-64.[2]
- 8.8 million disabled wage earners, over 5% of U.S. workers, were receiving Social Security Disability (SSDI) benefits at the end of 2012.[3]
- In December of 2012, there were over 2.5 million disabled workers in their 20s, 30s, and 40s receiving SSDI benefits.[3]

Chances of becoming disabled

The following statistics come from CDA's PDQ disability risk calculator:[4]

- A typical female, age 35, 5'4", 125 pounds, non-smoker, who works mostly an office job, with some outdoor physical responsibilities, and who leads a healthy lifestyle has the following risks:
  - A 24% chance of becoming disabled for 3 months or longer during her working career;
    - with a 38% chance that the disability would last 5 years or longer
    - and with the average disability for someone like her lasting 82 months.
  - If this same person used tobacco and weighed 160 pounds, the risk would increase to a 41% chance of becoming disabled for 3 months or longer.
- A typical male, age 35, 5'10", 170 pounds, non-smoker, who works an office job, with some outdoor physical responsibilities, and who leads a healthy lifestyle has the following risks:
  - A 21% chance of becoming disabled for 3 months or longer during his working career;
    - with a 38% chance that the disability would last 5 years or longer
    - and with the average disability for someone like him lasting 82 months.
  - If this same person used tobacco and weighed 210 pounds, the risk would increase to a 45% chance of becoming disabled for 3 months or longer.

A sample of factors that increase the risk of disability:

Excess body weight, tobacco use, high risk activities or behaviors, chronic conditions such as; diabetes, high blood pressure, back pain, anxiety or depression, frequent alcohol consumption or substance abuse.

A sample of factors that decrease the risk of disability:

Maintaining a healthy body weight, no tobacco use, healthy diet and sleep habits, regular exercise, moderate to no alcohol consumption, avoidance of high risk behaviors including substance abuse, maintaining a healthy stress level, and effective treatment of chronic health conditions.

Disability Statistics

COUNCIL FOR DISABILITY AWARENESS

To calculate your own Personal Disability Quotient (PDQ), go to:

http://www.disabilitycanhappen.org/chances_disability/pdq.asp

To learn more about risk factors and ways to help reduce your risk, go to:

http://www.whatsmypdq.org.

Disability prevents people from earning a living:

- There were over 2.8 million new Social Security Disability Insurance (SSDI) applications in 2012, slightly lower than in the two previous years, but still 29% higher than in 2007, and 67% higher than 2002 levels.[3]
- 61% of surveyed wage earners personally know someone who has been disabled and unable to work for 3 months or longer.[5]
- Wage earners who know someone who has been disabled predict their own odds to be higher than respondents who do not.[5]
- The average group long-term disability claim lasts 34.6 months.[6]
- The average individual disability claim lasts 31.6 months.[7]
- One in eight workers will be disabled for five years or more during their working careers.[8]

Working Americans underestimate their risk of disability:

- 64% of wage earners believe they have a 2% or less chance of being disabled for 3 months or more during their working career.[5] The actual odds for a worker entering the workforce today are about 25%.[1]
- Most working Americans estimate that their own chances of experiencing a long term disability are substantially lower than the average worker's.[5]

Disability causes severe financial hardship:

- 90% of wage earners rated their "ability to earn an income" as "valuable" or "very valuable" in helping them achieve long-term financial security — wage earners perceive their ability to earn an income as even more valuable than retirement savings, medical insurance, personal possessions, other forms of savings or their homes.[5]
- Medical problems contributed to 62%[9] of all personal bankruptcies filed in the U.S. in 2007– an estimate of over 500,000.[10] This is a 50% increase over results from a similar 2001 study.
- Medical problems contributed to half of all home foreclosure filings in 2006.[11]

Common causes of disability:

- According to CDA's 2012 Long-Term Disability Claims Review[12], the following were the leading causes of new disability claims in 2011:
- Musculoskeletal/connective tissue disorders caused 28.9% of new claims.*
- Cancer was the 2nd leading cause of new disability claims at 14.4%

Disability Statistics

COUNCIL FOR DISABILITY AWARENESS

- Injuries and Poisoning caused 10.6% of new claims
- Cardiovascular/circulatory disorders caused 8.7% of new claims
- Mental disorders caused 9.2% of new claims.
- Cancer claims were lower as a percentage of new disability claims in 2011, although cancer remains the second leading cause of new disability claims and the fourth leading cause of ongoing claims.
- The most common causes of existing disability claims in 2011 included: diseases of the musculoskeletal system and connective tissue* (30.5% of all existing claims), diseases of the nervous system and sense organs (13.9%), diseases of the circulatory system (12.3%) and cancer (8.9%).
- Approximately 90% of disabilities are caused by illnesses rather than accidents.

** This category includes claims caused by neck and back pain; joint, muscle and tendon disorders; foot, ankle and hand disorders, etc.*

Few American workers are financially prepared:

How long could you afford to be without a paycheck?

- Do you save any of your annual income? 48% of U.S. families don't.[13]
- Do you have private pension coverage? Most of us - over 50% - don't.[1]
- Retirement savings? One-third of us have none.[1]
- 68% of Americans would find it very difficult or somewhat difficult to meet their current financial obligations if their next paycheck were delayed for one week.[14]
- 65% of working Americans say they could not cover normal living expenses even for a year if their employment income was lost; 38% could not pay their bills for more than 3 months.[5]
- Nearly nine in ten workers (86%) surveyed believe that people should plan in their 20's or 30's in case an income limiting disability should occur;
- Only half (50%) of all workers have actually planned for this possibility.
- Fewer than half (46%) have even discussed disability planning.[15]

Most American workers' incomes are not protected:

- About 100 million workers are without private disability income insurance.[1]
- 69% of workers in the private sector have no private long-term disability insurance.[1]

Think Social Security or Workers' Compensation will cover it?

Better do your homework:

- 65% of initial SSDI claim applications were denied in 2012.[3]
- Can your family live on $1,130 a month? That's the average monthly benefit paid by Social

Disability Statistics

COUNCIL FOR DISABILITY AWARENESS

Security Disability Insurance (SSDI) at the end of 2012.[16]

- The average SSDI monthly benefit payment for males was $1,256
- The average SSDI monthly benefit payment for females was $993

- At the end of 2011:
  - 7.6% of SSDI recipients received less than $500 monthly.
  - 48% received less than $1,000 per month.
  - 94% received less than $2,000 per month.[17]

- Less than 5% of disabling accidents and illnesses are work related. The other 95% are not, meaning Workers' Compensation doesn't cover them.[12]

For more information, please visit www.disabilitycanhappen.org

1. Social Security Administration, Fact Sheet February 7, 2013
2. U.S. Census Bureau, American Community Survey, 2011
3. Social Security Administration, Disabled Worker Beneficiary Statistics, December 2012
4. Council for Disability Awareness, Personal Disability Quotient (PDQ) calculator
5. Council for Disability Awareness, Disability Divide Consumer Disability Awareness Study, 2010
6. Gen Re, U.S. Group Disability Rate & Risk Management Survey 2012, based on claims closed in 2011
7. Gen Re, U.S. Individual DI Risk Management Survey 2011, based on claims closed in 2010
8. Commissioner's Disability Insurance Tables A and C, assuming equal weights by gender and occupation class
9. The American Journal of Medicine, June 4, 2009 Medical Bankruptcy in the United States, 2007: Results of a National Study; David U. Himmelstein, MD, Deborah Thorne, PhD, Elizabeth Warren, JD, Steffie Woolhandler, MD, MPH
10. U.S. Courts, Bankruptcy Statistics, 12-Month Period Ending December 2007
11. Get Sick, Get Out: The Medical Causes of Home Mortgage Foreclosures, Christopher Tarver Robertson, Richard Egelhof, & Michael Hoke; August 8, 2008
12. Council for Disability Awareness, Long-Term Disability Claims Review, 2012
13. U.S. Federal Reserve Board, Survey of Consumer Finances, 2010
14. American Payroll Association, "Getting Paid in America" Survey, 2012
15. Council for Disability Awareness, Worker Disability Planning and Preparedness Study, 2009
16. U.S. Social Security Administration, Beneficiary Data, December 2012
17. U.S. Social Security Administration, Annual Statistical Report on the Social Security Disability Insurance Program 2011

U.S. Bureau of Labor Statistics

Economic News Release

Employment Characteristics of Families Summary

For release 10:00 a.m. (EDT) Friday, April 26, 2013 USDL-13-0730

Technical information: (202) 691-6378 * cpsinfo@bls.gov * www.bls.gov/cps
Media contact: (202) 691-5902 * PressOffice@bls.gov

EMPLOYMENT CHARACTERISTICS OF FAMILIES -- 2012

In 2012, 10.5 percent of families included an unemployed person, down 1.0 percentage point from 2011, the U.S. Bureau of Labor Statistics reported today. Of the nation's 80.1 million families, 80.0 percent had at least one employed member in 2012.

These data on employment, unemployment, and family relationships are collected as part of the Current Population Survey (CPS), a monthly sample survey of approximately 60,000 households. Data in this release are annual averages. Families are classified either as married-couple families or as families maintained by women or men without spouses present. Unless otherwise noted, families include those without children as well as those with children under age 18. For further information, see the Technical Note.

Families and Unemployment

he number of families with at least one member unemployed decreased to 8.4 million in 012 from 9.0 million in 2011. The proportion of families with an unemployed member decreased to 10.5 percent in 2012. Black and Hispanic families remained more likely to have an unemployed member in 2012 (16.8 percent and 14.5 percent, respectively) than white and Asian families (9.5 percent and 9.2 percent, respectively). (See table 1.)

Most families with an unemployed member also had at least one family member who is employed. Among families with an unemployed member in 2012, 67.5 percent also had an employed family member, about the same as in 2011. (See table 1.)

Among married-couple families with an unemployed member, the proportion of families with at least one employed family member was 80.2 percent in 2012, up from 79.2 percent in 2011. Among families maintained by men (no spouse present) with an unemployed member, 53.3 percent had an employed member in 2012; for families maintained by women (no spouse present), the proportion was 45.6 percent. Both proportions were little changed from 2011. (See table 3.)

Families and Employment

The share of families with an employed member edged up to 80.0 percent in 2012 from 79.8 percent in 2011. The likelihood of having an employed family member rose in 2012 for black and Hispanic families, to 75.4 percent and 84.6 percent, respectively. The likelihood for white and Asian families showed little change at 80.1 percent and 88.1 percent, respectively. (See table 1.)

In 2012, families maintained by women with no spouse present remained less likely to have an employed member (72.4 percent) than married-couple families (81.9 percent) or families maintained by men with no spouse present (81.1 percent). Both the husband and wife were employed in 47.4 percent of married-couple families in 2012. The husband was the only worker in 20.2 percent of married-couple families, and the wife was the only worker in percent of these families. (See table 2.)

Families with Children

In 2012, 43.1 percent of all families included children (sons, daughters, step-children, or adopted children) under age 18. Among the 34.6 million families with children, 87.8 percent had at least one employed parent in 2012, up from 87.2 percent in 2011. The mother

was employed in 67.1 percent of families with children maintained by women with no spouse present in 2012, and the father was employed in 81.6 percent of families with children maintained by men with no spouse present. Among married-couple families with children, 96.3 percent had at least one employed parent in 2012. The share of married-couple families with children where both parents worked was 59.0 percent. (See table 4.)

.others

The labor force participation rate--the percent of the population working or looking for work--for all mothers with children under age 18 was 70.5 percent in 2012, little different from the prior year. In 2012, the participation rate for married mothers with a spouse present (68.3 percent) remained lower than the rate for mothers with other marital statuses (75.2 percent). (Other marital status refers to persons who never married or are widowed, divorced, separated, or married but living apart from their spouse.) Married mothers were equally as likely to be employed as mothers with other marital statuses in 2012, but their unemployment rate was substantially lower--5.4 percent, compared with 14.1 percent for mothers with other marital statuses. (See table 5.)

Mothers with younger children are less likely to be in the labor force than mothers with older children. In 2012, the labor force participation rate of mothers with children under 6 years old (64.8 percent) was lower than the rate of those whose youngest child was 6 to 17 years old (75.1 percent). The participation rate of mothers with infants under a year old was 57.0 percent. Among mothers with infants, there was virtually no difference in the participation rate of married mothers (57.0 percent) and those with other marital statuses (56.9 percent). However, the unemployment rate for married mothers of infants, at 5.5 percent, was considerably lower than the rate for mothers with other marital statuses, at 23.2 percent. (See tables 5 and 6.)

- Employment Characteristics of Families Technical Note
- Table 1. Employment and unemployment in families by race and Hispanic or Latino ethnicity, 2011-2012 annual averages
- Table 2. Families by presence and relationship of employed members and family type, 2011-2012 annual averages
- Table 3. Unemployment in families by presence and relationship of employed members and family type, 2011-2012 annual averages
- Table 4. Families with own children: Employment status of parents by age of youngest child and family type, 2011-2012 annual averages
- Table 5. Employment status of the population by sex, marital status, and presence and age of own children under 18, 2011-2012 annual averages
- Table 6. Employment status of mothers with own children under 3 years old by single year of age of youngest child and marital status, 2011-2012 annual averages
- HTML version of the entire news release

The PDF version of the news release

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Last Modified Date: April 26, 2013

U.S. Bureau of Labor Statistics | Division of Labor Force Statistics, PSB Suite 4675, 2 Massachusetts Avenue, NE Washington, DC 20212-0001

www.bls.gov/CPS | Telephone: 1-202-691-6378 | Contact CPS

DP02

SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES

2007-2011 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Hawaii				Honolulu County, Hawaii
	Estimate	Margin of Error	Percent	Percent Margin of Error	Estimate
HOUSEHOLDS BY TYPE					
Total households	445,513	+/-2,039	445,513	(X)	307,248
Family households (families)	310,284	+/-2,350	69.6%	+/-0.4	216,120
With own children under 18 years	126,224	+/-2,156	28.3%	+/-0.5	88,711
Married-couple family	229,073	+/-2,651	51.4%	+/-0.5	160,650
With own children under 18 years	91,453	+/-2,069	20.5%	+/-0.4	66,565
Male householder, no wife present, family	24,930	+/-1,130	5.6%	+/-0.3	16,702
With own children under 18 years	9,841	+/-919	2.2%	+/-0.2	5,878
Female householder, no husband present, family	56,281	+/-1,491	12.6%	+/-0.3	38,768
With own children under 18 years	24,930	+/-1,160	5.6%	+/-0.3	16,268
Nonfamily households	135,229	+/-1,996	30.4%	+/-0.4	91,128
Householder living alone	105,914	+/-1,773	23.8%	+/-0.4	71,790
65 years and over	35,149	+/-1,077	7.9%	+/-0.2	23,851
Households with one or more people under 18 years	153,239	+/-2,153	34.4%	+/-0.4	107,494
Households with one or more people 65 years and over	130,398	+/-1,180	29.3%	+/-0.2	92,178
Average household size	2.93	+/-0.01	(X)	(X)	2.96
Average family size	3.50	+/-0.02	(X)	(X)	3.54
RELATIONSHIP					
Population in households	1,304,538	*****	1,304,538	(X)	908,721
Householder	445,513	+/-2,039	34.2%	+/-0.2	307,248
Spouse	229,103	+/-2,576	17.6%	+/-0.2	160,607
Child	376,257	+/-3,275	28.8%	+/-0.3	264,570
Other relatives	171,091	+/-3,696	13.1%	+/-0.3	123,388
Nonrelatives	82,574	+/-2,427	6.3%	+/-0.2	52,908
Unmarried partner	27,189	+/-1,058	2.1%	+/-0.1	16,505
MARITAL STATUS					
Males 15 years and over	545,876	+/-194	545,876	(X)	383,081
r married	200,519	+/-2,339	36.7%	+/-0.4	143,648
v married, except separated	278,679	+/-2,663	51.1%	+/-0.5	196,466
Separated	7,135	+/-594	1.3%	+/-0.1	4,523

Subject	Hawaii				Honolulu County, Hawaii
	Estimate	Margin of Error	Percent	Percent Margin of Error	Estimate
Widowed	13,040	+/-769	2.4%	+/-0.1	8,848
Divorced	46,503	+/-1,581	8.5%	+/-0.3	29,596
Females 15 years and over	550,579	+/-184	550,579	(X)	387,080
Never married	154,725	+/-2,052	28.1%	+/-0.4	109,725
Now married, except separated	274,609	+/-2,918	49.9%	+/-0.5	194,635
Separated	9,000	+/-643	1.6%	+/-0.1	5,790
Widowed	54,412	+/-1,287	9.9%	+/-0.2	38,646
Divorced	57,833	+/-1,583	10.5%	+/-0.3	38,284
FERTILITY					
Number of women 15 to 50 years old who had a birth in the past 12 months	20,050	+/-943	20,050	(X)	14,306
Unmarried women (widowed, divorced, and never married)	6,158	+/-604	30.7%	+/-2.6	3,640
Per 1,000 unmarried women	38	+/-4	(X)	(X)	32
Per 1,000 women 15 to 50 years old	63	+/-3	(X)	(X)	63
Per 1,000 women 15 to 19 years old	29	+/-7	(X)	(X)	25
Per 1,000 women 20 to 34 years old	108	+/-6	(X)	(X)	104
Per 1,000 women 35 to 50 years old	32	+/-3	(X)	(X)	35
GRANDPARENTS					
Number of grandparents living with own grandchildren under 18 years	52,637	+/-1,863	52,637	(X)	37,708
Responsible for grandchildren	12,455	+/-1,010	23.7%	+/-1.5	8,576
Years responsible for grandchildren					
Less than 1 year	2,140	+/-335	4.1%	+/-0.6	1,347
1 or 2 years	2,300	+/-418	4.4%	+/-0.8	1,672
3 or 4 years	2,044	+/-378	3.9%	+/-0.7	1,416
5 or more years	5,971	+/-743	11.3%	+/-1.2	4,141
Number of grandparents responsible for own grandchildren under 18 years	12,455	+/-1,010	12,455	(X)	8,576
Who are female	7,454	+/-600	59.8%	+/-1.7	5,150
Who are married	9,911	+/-955	79.6%	+/-2.6	6,947
SCHOOL ENROLLMENT					
Population 3 years and over enrolled in school	331,875	+/-2,769	331,875	(X)	239,307
Nursery school, preschool	19,503	+/-820	5.9%	+/-0.2	13,662
Kindergarten	16,566	+/-894	5.0%	+/-0.3	11,459
Elementary school (grades 1-8)	127,885	+/-1,066	38.5%	+/-0.5	88,817
High school (grades 9-12)	72,661	+/-1,035	21.9%	+/-0.3	49,739
College or graduate school	95,260	+/-2,357	28.7%	+/-0.5	75,630
EDUCATIONAL ATTAINMENT					
Population 25 years and over	915,429	+/-152	915,429	(X)	637,827
Less than 9th grade	42,597	+/-1,480	4.7%	+/-0.2	30,392
9th to 12th grade, no diploma	47,752	+/-1,691	5.2%	+/-0.2	31,755
High school graduate (includes equivalency)	262,336	+/-3,627	28.7%	+/-0.4	176,119
Some college, no degree	202,617	+/-2,699	22.1%	+/-0.3	138,501
Associate's degree	90,017	+/-2,088	9.8%	+/-0.2	61,854
Bachelor's degree	179,254	+/-2,834	19.6%	+/-0.3	131,065
Graduate or professional degree	90,856	+/-2,268	9.9%	+/-0.2	68,141
Percent high school graduate or higher	(X)	(X)	90.1%	+/-0.2	(X)
Percent bachelor's degree or higher	(X)	(X)	29.5%	+/-0.4	(X)
[illegible]ERAN STATUS					
[illegible]ilian population 18 years and over	1,005,730	+/-1,080	1,005,730	(X)	696,704
Civilian veterans	114,109	+/-2,062	11.3%	+/-0.2	81,902

Subject	Hawaii				Honolulu County, Hawaii
	Estimate	Margin of Error	Percent	Percent Margin of Error	Estimate
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION					
Total Civilian Noninstitutionalized Population	(X)	(X)	(X)	(X)	(X)
With a disability	(X)	(X)	(X)	(X)	(X)
Under 18 years	(X)	(X)	(X)	(X)	(X)
With a disability	(X)	(X)	(X)	(X)	(X)
18 to 64 years	(X)	(X)	(X)	(X)	(X)
With a disability	(X)	(X)	(X)	(X)	(X)
65 years and over	(X)	(X)	(X)	(X)	(X)
With a disability	(X)	(X)	(X)	(X)	(X)
RESIDENCE 1 YEAR AGO					
Population 1 year and over	1,329,248	+/-817	1,329,248	(X)	931,988
Same house	1,127,869	+/-5,352	84.9%	+/-0.4	789,025
Different house in the U.S.	184,321	+/-5,164	13.9%	+/-0.4	128,689
Same county	123,174	+/-4,765	9.3%	+/-0.4	83,604
Different county	61,147	+/-2,382	4.6%	+/-0.2	45,085
Same state	8,505	+/-866	0.6%	+/-0.1	4,056
Different state	52,642	+/-2,324	4.0%	+/-0.2	41,029
Abroad	17,058	+/-1,528	1.3%	+/-0.1	14,274
PLACE OF BIRTH					
Total population	1,346,554	*****	1,346,554	(X)	944,287
Native	1,106,464	+/-4,686	82.2%	+/-0.3	759,115
Born in United States	1,067,245	+/-4,829	79.3%	+/-0.4	726,139
State of residence	738,779	+/-5,365	54.9%	+/-0.4	513,739
Different state	328,466	+/-2,810	24.4%	+/-0.2	212,400
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	39,219	+/-1,607	2.9%	+/-0.1	32,976
Foreign born	240,090	+/-4,686	17.8%	+/-0.3	185,172
U.S. CITIZENSHIP STATUS					
Foreign-born population	240,090	+/-4,686	240,090	(X)	185,172
Naturalized U.S. citizen	135,139	+/-3,066	56.3%	+/-0.9	106,098
Not a U.S. citizen	104,951	+/-3,305	43.7%	+/-0.9	79,074
YEAR OF ENTRY					
Population born outside the United States	279,309	+/-4,829	279,309	(X)	218,148
Native	39,219	+/-1,607	39,219	(X)	32,976
Entered 2000 or later	11,371	+/-798	29.0%	+/-1.6	9,917
Entered before 2000	27,848	+/-1,301	71.0%	+/-1.6	23,059
Foreign born	240,090	+/-4,686	240,090	(X)	185,172
Entered 2000 or later	68,656	+/-2,997	28.6%	+/-0.9	52,683
Entered before 2000	171,434	+/-3,171	71.4%	+/-0.9	132,489
WORLD REGION OF BIRTH OF FOREIGN BORN					
Foreign-born population, excluding population born at sea	240,090	+/-4,686	240,090	(X)	185,172
Europe	12,388	+/-902	5.2%	+/-0.4	7,777
Asia	186,985	+/-3,898	77.9%	+/-0.8	150,379
Africa	1,254	+/-268	0.5%	+/-0.1	819
nia	23,490	+/-2,066	9.8%	+/-0.8	17,308
Laun America	11,370	+/-1,044	4.7%	+/-0.4	6,464
Northern America	4,603	+/-601	1.9%	+/-0.2	2,425

Subject	Hawaii				Honolulu County, Hawaii
	Estimate	Margin of Error	Percent	Percent Margin of Error	Estimate
LANGUAGE SPOKEN AT HOME					
Population 5 years and over	1,259,148	+/-155	1,259,148	(X)	882,705
English only	936,252	+/-4,987	74.4%	+/-0.4	633,916
Language other than English	322,896	+/-4,954	25.6%	+/-0.4	248,789
Speak English less than "very well"	148,965	+/-4,054	11.8%	+/-0.3	121,217
Spanish	26,563	+/-1,301	2.1%	+/-0.1	17,107
Speak English less than "very well"	7,436	+/-833	0.6%	+/-0.1	4,448
Other Indo-European languages	18,859	+/-1,187	1.5%	+/-0.1	11,829
Speak English less than "very well"	3,773	+/-645	0.3%	+/-0.1	2,742
Asian and Pacific islander languages	275,593	+/-4,780	21.9%	+/-0.4	218,401
Speak English less than "very well"	137,483	+/-3,916	10.9%	+/-0.3	113,834
Other languages	1,881	+/-432	0.1%	+/-0.1	1,452
Speak English less than "very well"	273	+/-132	0.0%	+/-0.1	193
ANCESTRY					
Total population	1,346,554	*****	1,346,554	(X)	944,287
American	12,374	+/-1,001	0.9%	+/-0.1	8,170
Arab	1,998	+/-412	0.1%	+/-0.1	1,469
Czech	2,436	+/-407	0.2%	+/-0.1	1,430
Danish	3,996	+/-554	0.3%	+/-0.1	2,430
Dutch	9,779	+/-989	0.7%	+/-0.1	5,937
English	57,409	+/-1,972	4.3%	+/-0.1	34,949
French (except Basque)	23,817	+/-1,521	1.8%	+/-0.1	12,823
French Canadian	3,117	+/-555	0.2%	+/-0.1	1,622
German	88,827	+/-2,611	6.6%	+/-0.2	53,312
Greek	2,038	+/-409	0.2%	+/-0.1	1,528
Hungarian	2,805	+/-553	0.2%	+/-0.1	1,611
'rish	65,312	+/-2,000	4.9%	+/-0.1	40,298
talian	27,950	+/-1,511	2.1%	+/-0.1	17,201
Lithuanian	992	+/-270	0.1%	+/-0.1	643
Norwegian	10,206	+/-908	0.8%	+/-0.1	6,395
Polish	13,460	+/-1,080	1.0%	+/-0.1	8,429
Portuguese	57,721	+/-2,947	4.3%	+/-0.2	28,595
Russian	6,061	+/-805	0.5%	+/-0.1	3,383
Scotch-Irish	12,315	+/-1,005	0.9%	+/-0.1	6,700
Scottish	15,023	+/-934	1.1%	+/-0.1	8,323
Slovak	578	+/-149	0.0%	+/-0.1	325
Subsaharan African	2,015	+/-350	0.1%	+/-0.1	1,424
Swedish	10,050	+/-905	0.7%	+/-0.1	5,226
Swiss	2,757	+/-548	0.2%	+/-0.1	1,458
Ukrainian	1,305	+/-310	0.1%	+/-0.1	748
Welsh	4,720	+/-655	0.4%	+/-0.1	2,725
West Indian (excluding Hispanic origin groups)	2,042	+/-542	0.2%	+/-0.1	1,688

Subject	Honolulu County, Hawaii		
	Margin of Error	Percent	Percent Margin of Error
HOUSEHOLDS BY TYPE			
Total households	+/-1,282	307,248	(X)
Family households (families)	+/-1,532	70.3%	+/-0.4
With own children under 18 years	+/-1,609	28.9%	+/-0.5
Married-couple family	+/-1,830	52.3%	+/-0.6
With own children under 18 years	+/-1,679	21.7%	+/-0.5
Male householder, no wife present, family	+/-924	5.4%	+/-0.3
With own children under 18 years	+/-699	1.9%	+/-0.2
Female householder, no husband present, family	+/-1,129	12.6%	+/-0.4
With own children under 18 years	+/-834	5.3%	+/-0.3
Nonfamily households	+/-1,435	29.7%	+/-0.4
Householder living alone	+/-1,338	23.4%	+/-0.4
65 years and over	+/-825	7.8%	+/-0.3
Households with one or more people under 18 years	+/-1,521	35.0%	+/-0.5
Households with one or more people 65 years and over	+/-1,005	30.0%	+/-0.3
Average household size	+/-0.01	(X)	(X)
Average family size	+/-0.02	(X)	(X)
RELATIONSHIP			
Population in households	+/-768	908,721	(X)
Householder	+/-1,282	33.8%	+/-0.1
Spouse	+/-1,807	17.7%	+/-0.2
Child	+/-2,446	29.1%	+/-0.3
Other relatives	+/-2,644	13.6%	+/-0.3
Nonrelatives	+/-1,899	5.8%	+/-0.2
Unmarried partner	+/-851	1.8%	+/-0.1
MARITAL STATUS			
Males 15 years and over	+/-30	383,081	(X)
Never married	+/-1,742	37.5%	+/-0.5
Now married, except separated	+/-1,975	51.3%	+/-0.5
Separated	+/-465	1.2%	+/-0.1
Widowed	+/-652	2.3%	+/-0.2
Divorced	+/-1,100	7.7%	+/-0.3
Females 15 years and over	+/-30	387,080	(X)
Never married	+/-1,644	28.3%	+/-0.4
Now married, except separated	+/-2,222	50.3%	+/-0.6
Separated	+/-502	1.5%	+/-0.1
Widowed	+/-913	10.0%	+/-0.2
Divorced	+/-1,194	9.9%	+/-0.3
FERTILITY			
Number of women 15 to 50 years old who had a birth in the past 12 months	+/-721	14,306	(X)
Unmarried women (widowed, divorced, and never married)	+/-477	25.4%	+/-3.0
Per 1,000 unmarried women	+/-4	(X)	(X)
Per 1,000 women 15 to 50 years old	+/-3	(X)	(X)
Per 1,000 women 15 to 19 years old	+/-8	(X)	(X)
Per 1,000 women 20 to 34 years old	+/-6	(X)	(X)
Per 1,000 women 35 to 50 years old	+/-3	(X)	(X)
GRANDPARENTS			
nber of grandparents living with own grandchildren under 18 years	+/-1,452	37,708	(X)
Responsible for grandchildren	+/-857	22.7%	+/-1.8

Subject	Honolulu County, Hawaii		
	Margin of Error	Percent	Percent Margin of Error
Years responsible for grandchildren			
Less than 1 year	+/-283	3.6%	+/-0.8
1 or 2 years	+/-382	4.4%	+/-1.0
3 or 4 years	+/-313	3.8%	+/-0.8
5 or more years	+/-618	11.0%	+/-1.4
Number of grandparents responsible for own grandchildren under 18 years	+/-857	8,576	(X)
Who are female	+/-513	60.1%	+/-2.1
Who are married	+/-838	81.0%	+/-3.5
SCHOOL ENROLLMENT			
Population 3 years and over enrolled in school	+/-2,268	239,307	(X)
Nursery school, preschool	+/-728	5.7%	+/-0.3
Kindergarten	+/-790	4.8%	+/-0.3
Elementary school (grades 1-8)	+/-946	37.1%	+/-0.5
High school (grades 9-12)	+/-771	20.8%	+/-0.3
College or graduate school	+/-1,800	31.6%	+/-0.5
EDUCATIONAL ATTAINMENT			
Population 25 years and over	*****	637,827	(X)
Less than 9th grade	+/-1,287	4.8%	+/-0.2
9th to 12th grade, no diploma	+/-1,269	5.0%	+/-0.2
High school graduate (includes equivalency)	+/-2,654	27.6%	+/-0.4
Some college, no degree	+/-2,230	21.7%	+/-0.3
Associate's degree	+/-1,675	9.7%	+/-0.3
Bachelor's degree	+/-2,153	20.5%	+/-0.3
Graduate or professional degree	+/-1,956	10.7%	+/-0.3
'ercent high school graduate or higher	(X)	90.3%	+/-0.3
.'ercent bachelor's degree or higher	(X)	31.2%	+/-0.5
VETERAN STATUS			
Civilian population 18 years and over	+/-1,036	696,704	(X)
Civilian veterans	+/-1,620	11.8%	+/-0.2
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION			
Total Civilian Noninstitutionalized Population	(X)	(X)	(X)
With a disability	(X)	(X)	(X)
Under 18 years	(X)	(X)	(X)
With a disability	(X)	(X)	(X)
18 to 64 years	(X)	(X)	(X)
With a disability	(X)	(X)	(X)
65 years and over	(X)	(X)	(X)
With a disability	(X)	(X)	(X)
RESIDENCE 1 YEAR AGO			
Population 1 year and over	+/-652	931,988	(X)
Same house	+/-4,067	84.7%	+/-0.4
Different house in the U.S.	+/-4,009	13.8%	+/-0.4
Same county	+/-3,769	9.0%	+/-0.4
Different county	+/-2,028	4.8%	+/-0.2
Same state	+/-549	0.4%	+/-0.1
ferent state	+/-1,986	4.4%	+/-0.2
Abroad	+/-1,378	1.5%	+/-0.1

Subject	Honolulu County, Hawaii		
	Margin of Error	Percent	Percent Margin of Error
PLACE OF BIRTH			
Total population	*****	944,287	(X)
Native	+/-4,072	80.4%	+/-0.4
Born in United States	+/-4,131	76.9%	+/-0.4
State of residence	+/-4,443	54.4%	+/-0.5
Different state	+/-2,199	22.5%	+/-0.2
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	+/-1,393	3.5%	+/-0.1
Foreign born	+/-4,072	19.6%	+/-0.4
U.S. CITIZENSHIP STATUS			
Foreign-born population	+/-4,072	185,172	(X)
Naturalized U.S. citizen	+/-2,664	57.3%	+/-1.0
Not a U.S. citizen	+/-2,818	42.7%	+/-1.0
YEAR OF ENTRY			
Population born outside the United States	+/-4,131	218,148	(X)
Native	+/-1,393	32,976	(X)
Entered 2000 or later	+/-788	30.1%	+/-1.9
Entered before 2000	+/-1,129	69.9%	+/-1.9
Foreign born	+/-4,072	185,172	(X)
Entered 2000 or later	+/-2,525	28.5%	+/-1.0
Entered before 2000	+/-2,665	71.5%	+/-1.0
WORLD REGION OF BIRTH OF FOREIGN BORN			
Foreign-born population, excluding population born at sea	+/-4,072	185,172	(X)
Europe	+/-712	4.2%	+/-0.4
sia	+/-3,530	81.2%	+/-0.9
Africa	+/-186	0.4%	+/-0.1
Oceania	+/-1,642	9.3%	+/-0.8
Latin America	+/-593	3.5%	+/-0.3
Northern America	+/-452	1.3%	+/-0.2
LANGUAGE SPOKEN AT HOME			
Population 5 years and over	*****	882,705	(X)
English only	+/-4,251	71.8%	+/-0.5
Language other than English	+/-4,249	28.2%	+/-0.5
Speak English less than "very well"	+/-3,723	13.7%	+/-0.4
Spanish	+/-1,035	1.9%	+/-0.1
Speak English less than "very well"	+/-646	0.5%	+/-0.1
Other Indo-European languages	+/-1,007	1.3%	+/-0.1
Speak English less than "very well"	+/-579	0.3%	+/-0.1
Asian and Pacific Islander languages	+/-4,004	24.7%	+/-0.5
Speak English less than "very well"	+/-3,656	12.9%	+/-0.4
Other languages	+/-375	0.2%	+/-0.1
Speak English less than "very well"	+/-110	0.0%	+/-0.1
ANCESTRY			
Total population	*****	944,287	(X)
American	+/-789	0.9%	+/-0.1
Arab	+/-399	0.2%	+/-0.1
Czech	+/-342	0.2%	+/-0.1
Danish	+/-411	0.3%	+/-0.1
Dutch	+/-726	0.6%	+/-0.1
sh	+/-1,582	3.7%	+/-0.2
French (except Basque)	+/-1,052	1.4%	+/-0.1
French Canadian	+/-336	0.2%	+/-0.1

Subject	Honolulu County, Hawaii		
	Margin of Error	Percent	Percent Margin of Error
German	+/-1,767	5.6%	+/-0.2
Greek	+/-351	0.2%	+/-0.1
Hungarian	+/-432	0.2%	+/-0.1
Irish	+/-1,673	4.3%	+/-0.2
Italian	+/-1,220	1.8%	+/-0.1
Lithuanian	+/-215	0.1%	+/-0.1
Norwegian	+/-764	0.7%	+/-0.1
Polish	+/-814	0.9%	+/-0.1
Portuguese	+/-1,713	3.0%	+/-0.2
Russian	+/-504	0.4%	+/-0.1
Scotch-Irish	+/-686	0.7%	+/-0.1
Scottish	+/-665	0.9%	+/-0.1
Slovak	+/-100	0.0%	+/-0.1
Subsaharan African	+/-275	0.2%	+/-0.1
Swedish	+/-578	0.6%	+/-0.1
Swiss	+/-402	0.2%	+/-0.1
Ukrainian	+/-213	0.1%	+/-0.1
Welsh	+/-431	0.3%	+/-0.1
West Indian (excluding Hispanic origin groups)	+/-520	0.2%	+/-0.1

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2007-2011 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '******' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

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Disability prevalence data for Honolulu County, Hawaii

The estimated number of persons in Honolulu County, Hawaii and the percent with self care difficulty or independent living difficulty by age (with comparable estimates for the state and the nation).

Data from the 2008-2010 American Community Survey.

	Ages 18-64						Ages 65 and over					
Area	**Total persons**	**M.E.[1]**	**With a self care difficulty**	**M.E.[1]**	**With an independent living difficulty**	**M.E.[1]**	**Total persons**	**M.E.[1]**	**With a self care difficulty**	**M.E.[1]**	**With an independent living difficulty**	**M.E.[1]**
Honolulu County	555,165	1,474	1.2%	0.1%	2.3%	0.2%	132,881	520	7.5%	0.6%	16.8%	0.9%
Hawaii	807,930	1,484	1.3%	0.1%	2.7%	0.2%	186,500	306	7.6%	0.6%	16.9%	0.8%
US	189,239,988	12,937	1.8%	0.1%	3.4%	0.1%	38,279,866	8,925	8.8%	0.1%	16.4%	0.1%

Note: The percentages of the population with an independent living difficulty or a self-care difficulty are presented separately. These percentages should not be added together, since persons with a self-care difficulty are generally a subset of those with an independent living difficulty and therefore would be double-counted. The broadest measure is provided by independent living difficulty.

Census definitions for independent living difficulty[2], self care difficulty[3] and counties[4] and places[5] is contained within the technical notes[6].

Chose another county[7] or place[8] in Hawaii.

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Local Disability Data for Planners

A Planning Resource for County and State Data

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Honolulu County Disability HOUSING Statistics

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Hawaii Submit

POPULATION

Disability POPULATION Statistics for Honolulu County, Hawaii

From Pooled 2005-2007 ACS PUMS Data

There are 7 PUMAs which exactly comprise Honolulu County, Hawaii
These PUMAs are: 301, 302, 303, 304, 305, 306 and 307.

Disability POPULATION Statistics for Honolulu County, Hawaii

Subject	With a Disability	% With a Disability	Without a Disability	% Without a Disability	Total Population	% of Total Population	Sample Size
Population	Total	% of Population	Total	% of Population	Total	% Ages 5+	Sample Size
Ages 5+	101,220	12.5%	711,150	87.5%	812,370	N/A%	24,329
Ages 21-64	47,630	9.3%	465,310	90.7%	512,940	63.1%	14,999
Ages 16-64	50,020	8.8%	518,110	91.2%	568,130	69.9%	16,517
Demographics -- Ages 21-64	Total	% of Ages 21-64 w/ Disability	Total	% of Ages 21-64 w/o Disability	Total	% of Ages 21-64	Sample Size
Male	25,190	52.9%	229,980	49.4%	255,170	49.7%	7,331
Female	22,440	47.1%	235,330	50.6%	257,770	50.3%	7,668
White	17,840	37.5%	167,700	36.0%	185,540	36.2%	5,508

Non-White	29,790	62.5%	297,610	64.0%	327,400	63.8%	9,491
Hispanic	3,980	8.4%	29,290	6.3%	33,270	6.5%	840
Non-Hispanic	43,650	91.6%	436,020	93.7%	479,670	93.5%	14,159
Education -- Ages 21-64	Total	% of Ages 21-64 w/ Disability	Total	% of Ages 21-64 w/o Disability	Total	% of Ages 21-64	Sample Size
Less Than High School Degree	7,770	16.3%	27,440	5.9%	35,210	6.9%	1,002
High School Degree (Including GED)	15,920	33.4%	124,680	26.8%	140,600	27.4%	3,916
Some College or Associate's degree	14,490	30.4%	158,810	34.1%	173,300	33.8%	4,969
Bachelor's Degree or Higher	9,450	19.8%	154,380	33.2%	163,830	31.9%	5,112
Labor Force Participation -- Ages 16-64	Total	% of Ages 16-64 w/ Disability	Total	% of Ages 16-64 w/o Disability	Total	% of Ages 16-64	Sample Size
Employed	20,900	41.8%	390,580	75.4%	411,480	72.4%	11,857
In Labor Force, Not Employed *	2,160	4.3%	17,020	3.3%	19,180	3.4%	541
In Labor Force	23,060	46.1%	407,600	78.7%	430,660	75.8%	12,398
Not in Labor Force	26,960	53.9%	110,510	21.3%	137,470	24.2%	4,119
Labor Force Participation -- Ages 21-64	Total	% of Ages 21-64 w/ Disability	Total	% of Ages 21-64 w/o Disability	Total	% of Ages 21-64	Sample Size
Employed	20,360	42.7%	369,230	79.4%	389,590	76.0%	11,270
In Labor Force, Not Employed *	1,920	4.0%	13,520	2.9%	15,440	3.0%	437
In Labor Force	22,280	46.8%	382,750	82.3%	405,030	79.0%	11,707
Not in Labor Force	25,350	53.2%	82,560	17.7%	107,910	21.0%	3,292
Transportation to Work -- Ages 21-64	Total	% of Employed, Ages 21-64 w/ Disability	Total	% of Employed, Ages 21-64 w/o Disability	Total	% of Employed, Ages 21-64	Sample Size
Employed, Not Currently at Work	1,970	9.7%	8,580	2.3%	10,550	2.7%	345
Work at Home	760	3.7%	11,730	3.2%	12,490	3.2%	384
Car, Truck or Van	14,240	69.9%	300,950	81.5%	315,190	80.9%	9,132
Mass Transit	1,880	9.2%	25,190	6.8%	27,070	6.9%	749
Other	1,510	7.4%	22,780	6.2%	24,290	6.2%	660
Travel Time to Work -- Employed, Ages 21-64	Total	% of Employed, Ages 21-64 w/ Disability	Total	% of Employed, Ages 21-64 w/o Disability	Total	% of Employed, Ages 21-64	Sample Size

Employed, Not Currently at Work	1,970	9.7%	8,580	2.3%	10,550	2.7%	345
Work at Home	760	3.7%	11,730	3.2%	12,490	3.2%	384
1-15 Minutes	5,590	27.5%	118,050	32.0%	123,640	31.7%	3,498
16-30 Minutes	6,420	31.5%	139,430	37.8%	145,850	37.4%	4,112
31-60 Minutes	4,950	24.3%	81,230	22.0%	86,180	22.1%	2,580
More Than an Hour	660	3.2%	10,210	2.8%	10,870	2.8%	351
% of Poverty Level -- Ages 5+	**Total**	**% of Population w/ Disability**	**Total**	**% of Population w/o Disability**	**Total**	**% of Ages 5+**	**Sample Size**
Below 100%	15,880	15.7%	51,620	7.3%	67,500	8.3%	1,721
100%-149%	7,920	7.8%	33,060	4.6%	40,980	5.0%	1,212
150%-199%	8,880	8.8%	56,230	7.9%	65,110	8.0%	1,682
200%-299%	17,020	16.8%	111,630	15.7%	128,650	15.8%	3,725
300%-399%	14,330	14.2%	113,550	16.0%	127,880	15.7%	3,760
400%-499%	11,920	11.8%	90,430	12.7%	102,350	12.6%	3,197
500%+	25,280	25.0%	254,630	35.8%	279,910	34.5%	9,032
Lived at Current Location One Year Ago -- Ages 5+	**Total**	**% of Population w/ Disability**	**Total**	**% of Population w/o Disability**	**Total**	**% of Ages 5+**	**Sample Size**
Yes, same house (non-movers)	89,530	88.5%	607,130	85.4%	696,660	85.8%	21,285
No, different house in US	11,690	11.5%	104,030	14.6%	115,720	14.2%	3,044
Language Other than English at Home -- Ages 5+	**Total**	**% of Population w/ Disability**	**Total**	**% of Population w/o Disability**	**Total**	**% of Ages 5+**	**Sample Size**
No, speaks only English	67,940	67.1%	527,880	74.2%	595,820	73.3%	18,259
Yes, speaks another language	33,280	32.9%	183,270	25.8%	216,550	26.7%	6,070

* Percentages in the rows for the Labor Force, Not Employed individuals are NOT to be confused with unemployment rate. The unemployment rate is the percentage of individuals in the labor force who are not employed. The percentages in the rows are calculated for individuals 16-64 and individuals 21-64, regardless of labor force participation. To calculate the unemployment rate, which is NOT provided in the tables, divide the number of people who are unemployed by the number of people in the labor force, for each population of interest.

NOTE: Population does not include residents of institutional and noninstitutional group quarters. Read more about the ACS and group quarters

We'd like to learn about how this information is being used! Please tell us a little bit about yourself.
I am a:

Journalist • Researcher • Planner • Student • Other

DisabilityPlanningData.com is an InfoUse project
Stata programming, database development and web development by Jeff Pflueger
Completed in collaboration with Cornell University Employment and Disability Institute
With funding from the National Institute on Disability and Rehabilitation Research (NIDRR) H133B03111

People QuickFacts	Honolulu County	Hawaii
Population, 2012 estimate	976,372	1,392,313
Population, 2010 (April 1) estimates base	953,207	1,360,301
Population, percent change, April 1, 2010 to July 1, 2012	2.4%	2.4%
Population, 2010	953,207	1,360,301
Persons under 5 years, percent, 2011	6.5%	6.4%
Persons under 18 years, percent, 2011	22.0%	22.2%
Persons 65 years and over, percent, 2011	14.8%	14.7%
Female persons, percent, 2011	49.8%	49.8%
White persons, percent, 2011 (a)	22.2%	26.0%
Black persons, percent, 2011 (a)	2.5%	2.0%
American Indian and Alaska Native persons, percent, 2011 (a)	0.4%	0.4%
Asian persons, percent, 2011 (a)	43.6%	38.5%
Native Hawaiian and Other Pacific Islander persons, percent, 2011 (a)	9.6%	10.1%
Persons reporting two or more races, percent, 2011	21.6%	22.9%
Persons of Hispanic or Latino Origin, percent, 2011 (b)	8.5%	9.2%
White persons not Hispanic, percent, 2011	19.4%	22.9%
Living in same house 1 year & over, percent, 2007-2011	84.7%	84.9%
Foreign born persons, percent, 2007-2011	19.6%	17.8%
Language other than English spoken at home, percent age 5+, 2007-2011	28.2%	25.6%
High school graduate or higher, percent of persons age 25+, 2007-2011	90.3%	90.1%
Bachelor's degree or higher, percent of persons age 25+, 2007-2011	31.2%	29.5%
Veterans, 2007-2011	81,902	114,109
Mean travel time to work (minutes), workers age 16+, 2007-2011	27.1	25.9
Housing units, 2011	337,522	522,305
Homeownership rate, 2007-2011	56.9%	58.7%
Housing units in multi-unit structures, percent, 2007-2011	44.6%	38.9%
Median value of owner-occupied housing units, 2007-2011	$560,300	$529,500
Households, 2007-2011	307,248	445,513
Persons per household, 2007-2011	2.96	2.93

Per capita money income in the past 12 months (2011 dollars), 2007-2011	$30,016	$29,203
Median household income, 2007-2011	$71,263	$67,116
Persons below poverty level, percent, 2007-2011	9.3%	10.2%

2. What are the current and projected employment opportunities in your local area? Explain how the demand list was shaped for top industries and occupations. **[WIA § 118(b)(1)(B); 20 CFR § 661.350(a)(2)]**

Here are the top 25 occupations that are predicted to have the most future job openings in Honolulu County.

Occupation Title	2008 Employment	2018 Projected Employment	2008 - 2018 Annual Percent Change	Estimated Annual Openings	Growth Description
Waiters and Waitresses	10,340	10,680	0.3%	610	Slow Growing
Retail Salespersons	17,890	19,030	0.6%	610	Fast Growing
Cashiers	9,790	10,150	0.4%	480	Slow Growing
Combined Food Preparation and Serving Workers, Including Fast Food	9,790	10,820	1.1%	310	Fast Growing
Security Guards	9,040	9,910	1.0%	270	Fast Growing
Customer Service Representatives	5,640	6,360	1.3%	250	Fast Growing
Elementary School Teachers, Except Special Education	7,630	8,430	1.0%	250	Fast Growing
Registered Nurses	6,790	7,970	1.7%	240	Fast Growing
Secondary School Teachers, Except Special and Vocational Education	6,820	7,080	0.4%	220	Slow Growing
Office Clerks, General	12,070	12,600	0.4%	220	Slow Growing
Personal and Home	3,360	4,950	4.7%	200	Fast

Care Aides					Growing
Stock Clerks and Order Fillers	5,420	5,920	0.9%	180	Fast Growing
First-Line Supervisors/Managers of Office and Administrative Support Workers	5,420	5,710	0.5%	150	Slow Growing
Carpenters	7,040	7,440	0.6%	130	Slow Growing
Accountants and Auditors	4,800	5,330	1.1%	130	Fast Growing
Landscaping and Groundskeeping Workers	5,110	5,700	1.2%	120	Fast Growing
Nursing Aides, Orderlies, and Attendants	3,600	4,440	2.3%	120	Fast Growing
Maintenance and Repair Workers, General	4,340	4,760	1.0%	110	Fast Growing
Bookkeeping, Accounting, and Auditing Clerks	6,260	6,540	0.4%	100	Slow Growing
Social and Human Service Assistants	2,320	2,820	2.2%	100	Fast Growing
Network Systems and Data Communications Analysts	1,400	1,950	3.9%	80	Fast Growing
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	2,150	2,680	2.5%	80	Fast Growing
Construction Laborers	4,110	4,630	1.3%	80	Fast Growing
Self-Enrichment Education Teachers	1,510	1,930	2.8%	70	Fast Growing
Medical Assistants	2,290	2,710	1.8%	70	Fast Growing

BRIGHT OUTLOOK NATIONALLY | GREEN OCCUPATIONS

Source: Hawaii Department of Labor

Data was also culled from the Research and Economic Analysis Division of the Hawaii State Department of Business, Economic Development and Tourism; Projections to 2040; March 2012)

"The resident population of Hawaii, which includes active-duty military personnel and their dependents, is projected to increase from 1,363,621 in 2010 to 1,708,900 in 2040, an average growth rate of 0.8 percent per year over the projection period.

The level of active-duty military personnel has been increasing in recent years. Without a clear known direction of the future level of military personnel in Hawaii this projection is produced based on an assumption that the population of active-duty military personnel will decrease gradually from its 2010 level to the past ten year average.

Table 1-1 presents the projection of total resident population by county. As has been the case with previous DBEDT long-range projections, the Neighbor Island counties are projected to have higher population growth than Honolulu. The resident population of the City and County of Honolulu is projected to increase at an annual rate of 0.4 percent from 2010 to 2040, while Hawaii County is projected to grow at 1.6 percent annually, Maui County at 1.4 percent, and Kauai County at 1.1 percent.

As a result, the Neighbor Island population as the share of the state total will increase from 29.9 percent in 2010 to 36.4 percent in 2040, while the corresponding share of the City and County of Honolulu is projected to decrease from 70.1 percent to 63.6 percent.Table 1-1. Resident Population by County: 1980-2040

Year	State Total	Hawaii County	Honolulu County	Kauai County	Maui County
1980[1]	968,500	92,900	764,600	39,400	71,600
1985[1]	1,039,698	105,900	804,294	44,357	85,147
1990[1]	1,113,491	121,572	838,534	51,676	101,709
1995[1]	1,196,854	140,492	881,399	57,068	117,895
2000[1]	1,213,519	149,244	876,629	58,568	129,078
2005[1]	1,292,729	168,237	918,181	62,863	143,448
2010[1]	1,363,621	185,406	955,775	67,226	155,214
2015[2]	1,418,300	202,700	976,200	71,400	168,000
2020[2]	1,481,200	220,900	1,003,700	75,600	181,000
2025[2]	1,543,200	239,600	1,029,400	80,000	194,200
2030[2]	1,602,300	258,500	1,052,100	84,400	207,300
2035[2]	1,657,500	277,300	1,071,200	88,700	220,200
2040[2]	1,708,900	296,300	1,086,700	93,000	232,900
Average annual growth rate (%)					

1980-1985	1.4	2.7	1.0	2.4	3.5
1985-1990	1.4	2.8	0.8	3.1	3.6
1990-1995	1.5	2.9	1.0	2.0	3.0
1995-2000	0.3	1.2	-0.1	0.5	1.8
2000-2005	1.3	2.4	0.9	1.4	2.1
2005-2010	1.1	2.0	0.8	1.4	1.6
2010-2015[3]	0.8	1.8	0.4	1.2	1.6
2015-2020	0.9	1.7	0.6	1.2	1.5
2020-2025	0.8	1.6	0.5	1.1	1.4
2025-2030	0.8	1.5	0.4	1.1	1.3
2030-2035	0.7	1.4	0.4	1.0	1.2
2035-2040	0.6	1.3	0.3	0.9	1.1

[1] July estimates by the U.S. Census Bureau
[2] DBEDT projections, figures presented here can be different from those in the appendix tables because of rounding.
[3] Assumption of a gradual decrease of the military personnel from 40,300 in 2010 to 36,800 in 2015 is reflected in the slow growth rate during this period.

The size and composition of the population are affected by the interaction of three variables: births, deaths, and net migration. This projection is based on the assumption that the fertility rate will remain constant at the 2007-2009 level, while the survival rate is assumed to steadily improve over the projection period. The methodology used to calculate the future value of survival rates is discussed in the next section.

Table 1-2. De Facto Population by County: 1980-2040

Year	State Total	Hawaii County	Honolulu County	Kauai County	Maui County
1980[1]	1,054,218	99,181	822,408	46,341	86,288
1985[1]	1,136,160	112,343	853,605	55,086	115,125
1990[1]	1,257,319	137,103	913,268	68,558	138,390
1995[1]	1,298,096	152,482	921,626	68,844	155,144
2000[1]	1,336,005	166,429	926,192	74,734	168,650
2005[1]	1,412,500	188,612	959,340	79,561	184,987
2010[1]	1,469,236	202,552	988,316	83,352	195,015
2015[2]	1,539,100	221,200	1,016,800	89,500	211,600
2020[2]	1,604,100	239,700	1,043,900	94,500	226,000
2025[2]	1,669,800	259,000	1,070,100	99,800	240,900
2030[2]	1,732,300	278,400	1,093,200	105,000	255,700
2035[2]	1,791,400	297,800	1,113,100	110,200	270,400
2040[2]	1,846,500	317,300	1,129,300	115,200	284,700
Average annual growth rate (%)					

1980-1985	1.5	2.5	0.7	3.5	5.9
1985-1990	2.0	4.1	1.4	4.5	3.7
1990-1995	0.6	2.1	0.2	0.1	2.3
1995-2000	0.6	1.8	0.1	1.7	1.7
2000-2005	1.1	2.5	0.7	1.3	1.9
2005-2010	0.8	1.4	0.6	0.9	1.1
2010-2015	0.9	1.8	0.6	1.4	1.6
2015-2020	0.8	1.6	0.5	1.1	1.3
2020-2025	0.8	1.6	0.5	1.1	1.3
2025-2030	0.7	1.5	0.4	1.0	1.2
2030-2035	0.7	1.4	0.4	1.0	1.1
2035-2040	0.6	1.3	0.3	0.9	1.0

[1] DBEDT estimates
[2] DBEDT projections

Due to population aging and faster increase in deaths in comparison to births, the natural population increase (i.e., total births minus total deaths) will decrease over time even with improving survivorship (Table 1-3). This implies that the state will need more net-migration than experienced in the past to support the same level of population growth.

Assumptions for future migration were developed based on historical time series information on population change and natural population growth, and the Census Bureau's estimates of historical international migration. International migration, which has shown a relatively stable level in the past, was assumed to follow a trend similar to what Hawaii experienced in the past 10 years. Unlike international migration, net domestic migration has shown a great volatility in the past. The assumption for future net domestic migration was developed by combining county staffs' observations on ongoing trends and their prospects for the future trend to the estimated past trend. Overall, the net domestic migration was projected to be a little lower than experienced in the past. Together with declining natural population growth, it resulted in moderate population growth in the future.

Table 1-3. Components of Change in Other Civilian Population (Annual average for the period)

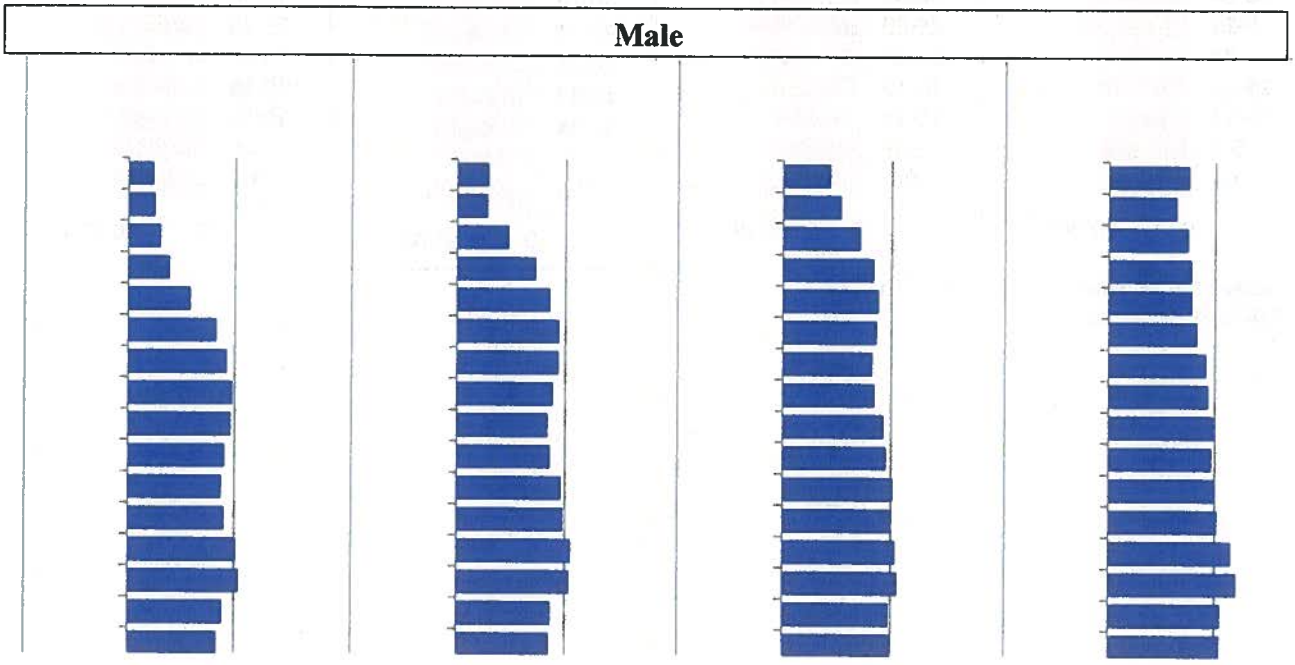
Period	Population change	Number of births[3]	Number of deaths	Net migration
1980-1985[1]	13,400	14,700	5,200	3,900
1985-1990[1]	16,500	15,000	6,100	7,600
1990-1995[1]	20,200	16,000	7,000	11,200
1995-2000[1]	4,600	14,700	8,000	-2,100
2000-2005[1]	13,400	14,800	8,500	7,100
2005-2010[1]	13,100	15,900	9,200	6,400
2010-2015[2]	12,700	16,420	10,300	6,600
2015-2020[2]	12,600	17,200	11,200	6,600
2020-2025[2]	12,400	17,800	12,000	6,600
2025-2030[2]	11,800	18,200	13,000	6,600
2030-2035[2]	11,000	18,700	14,300	6,600
2035-2040[2]	10,300	19,400	15,800	6,600

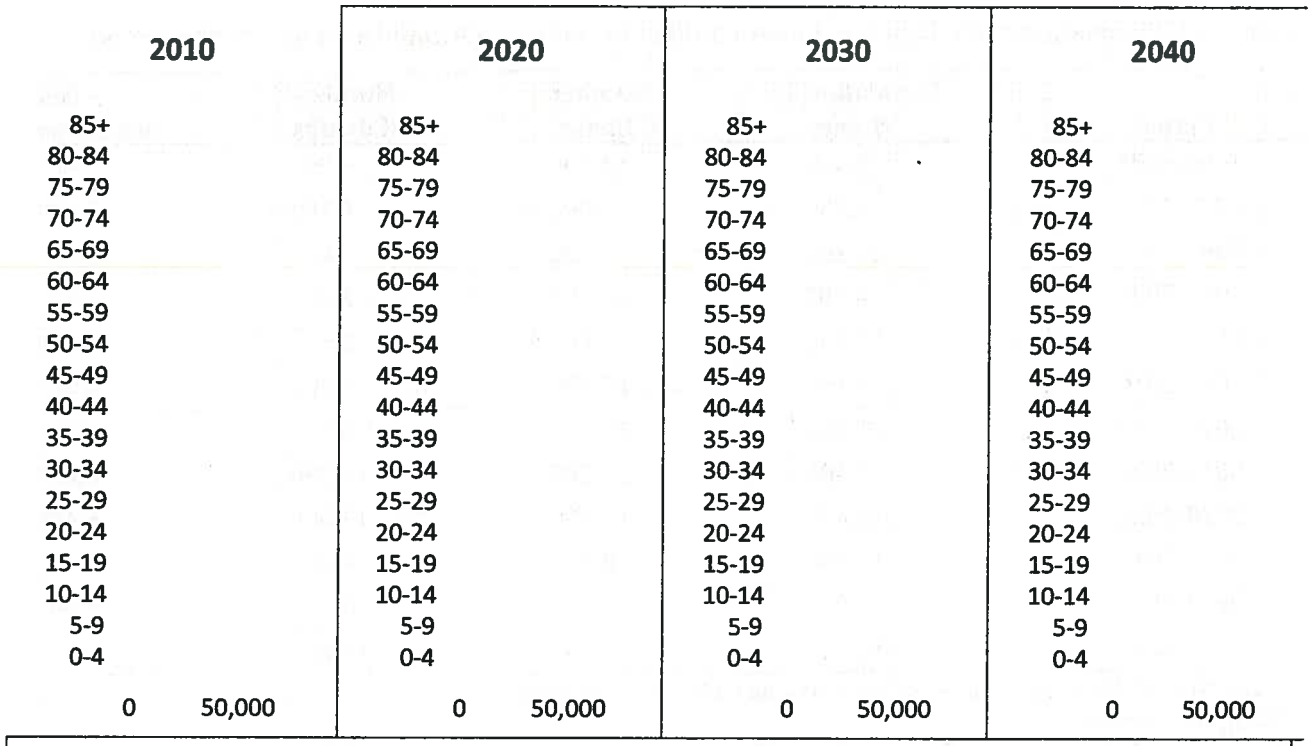
[1] DBEDT calculation based on the population data by U.S. Census Bureau
[2] DBEDT projections
[3] Decrease of births during 1995-2005 reflects a decrease of the female population at child bearing ages. The population between 25 and 44 years old decreased by 11 percent from 1992 to 2003 while the total population increased by 8 percent for the same period.

The aging of the population is one of the most prominent features of Hawaii's population trend. The share of the population 65 years of age and over increased from 8.0 percent in 1980 to 14.5 percent in 2010. This trend will continue in the future, increasing this share of the total population to 23.6 percent in 2040 (Table 1-4). Figure 1-1 compares the age structure of the population of the State of Hawaii from 2010 to 2040 by gender. As seen in the figures, the aging of Hawaii's population is more evident for the female population.

Projections of population for the state and four counties by selected characteristics and by five-year age groups are presented in Appendix Tables A-2 through A-21.

Figure 1-1. Age Distribution for the Resident Population of Hawaii: 2010 to 2040





Female

[1] Actual figure, source: U.S. Census Bureau
[2] DBEDT projections

Table 1-4. Share of Total Resident Population by Age Group: 1980-2040

Age group	1980[1]	1990[1]	2000[1]	2010[1]	2020[2]	2030[2]	2040[2]
0-14	23.3%	21.4%	20.2%	18.5%	18.5%	18.8%	18.5%
15-24	19.8%	14.8%	13.6%	13.3%	12.3%	12.1%	12.6%
25-34	18.7%	18.1%	14.1%	13.6%	13.4%	12.6%	12.5%
35-44	11.6%	16.2%	15.8%	12.9%	12.0%	12.1%	11.5%
45-54	9.7%	9.8%	14.2%	14.2%	11.6%	10.9%	11.1%
55-64	8.9%	8.5%	8.9%	13.0%	12.8%	10.6%	10.2%
65+	8.0%	11.2%	13.3%	14.5%	19.4%	23.0%	23.6%

[1] DBEDT calculation based on the population data by U.S. Census Bureau
[2] DBEDT projections

2. Gross Domestic Product and Personal Income

Projections of gross domestic product (GDP) and personal income are summarized in Tables 1-5 and 1-6. With decelerating population growth, the projection predicts moderate economic growth as a whole.

The real gross domestic product of Hawaii is forecast to grow at 1.7 percent per year over the projection period. The growth of GDP depends on demand from outside the region as well as local consumption and investment. Demand from outside the region is assumed exogenously as it is determined by factors that are difficult to incorporate in the model.

Table 1-5. Projections of Real GDP

Real GDP (State total, in million 2005 dollars)						
2010[1]	2015[2]	2020[2]	2025[2]	2030[2]	2035[2]	2040[2]
59,329	65,400	71,500	77,700	84,100	90,600	97,200

Average Annual Growth Rate					
2010-2015	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040
2.0%	1.8%	1.7%	1.6%	1.5%	1.4%

[1] Actual figure, source: U.S. Bureau of Economic Analysis (BEA),
[2] DBEDT projections

This projection takes into accounts the large government construction plans that have already been approved and scheduled for the projection period. Besides these, the projection anticipates an overall slowdown in the long-term growth of investment, leading to a forecast of a moderate GDP growth.

Another factor that contributes to the moderate level of GDP growth is an anticipation of slow tourism growth. Although tourism expenditures grew at a double digit rate during the recovery period from the recent recession, it is expected to grow at an average of 1.0 percent annually in real terms for the period of 2011-2040. Table A-69 in the Appendix provides more detailed tourism projections by county.

Hawaii's total personal income is forecast to grow at an annual rate of 1.7 percent in real terms over the projection period.

With a growing population, per capita personal income will grow at a lower rate than that of total personal income. In particular, the Neighbor Islands are expected to experience relatively low growth of per capita personal income as a result of higher rates of population growth.

Figure 1-2. Average Annual Growth of Real Personal Income for the State

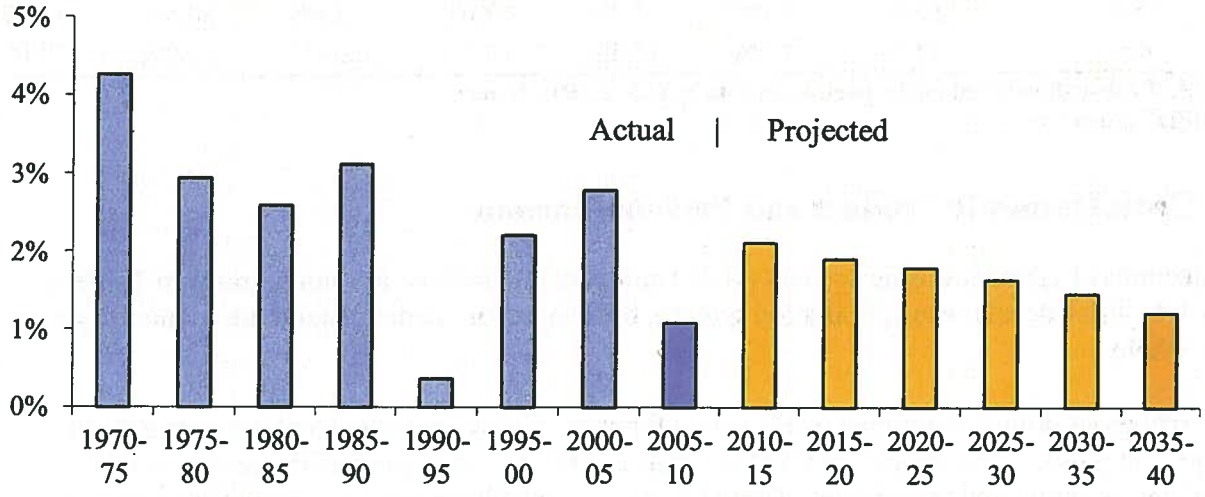


Table 1-6. Actual and Projected Personal Income (in million 2005 dollars)

	1980[1]	1990[1]	2000[1]	2010[2]	2020[3]	2030[3]	2040[3]
State Total	26,277	34,796	39,517	47,838	58,330	69,100	79,170
Hawaii County	2,224	2,827	3,702	5,040	6,700	8,450	10,120
Honolulu County	21,372	27,821	30,414	36,140	43,180	50,290	56,870
Kauai County	932	1,348	1,643	2,000	2,510	3,060	3,560
Maui County	1,749	2,799	3,757	4,670	5,950	7,300	8,620
	Average Annual Growth Rate						
	1980-90	1990-00	2000-10	2010-20	2020-30	2030-40	
State total	2.8%	1.3%	1.9%	2.0%	1.7%	1.4%	
Hawaii County	2.4%	2.7%	3.1%	2.9%	2.3%	1.8%	
Honolulu County	2.7%	0.9%	1.7%	1.8%	1.5%	1.2%	
Kauai County	3.8%	2.0%	2.0%	2.3%	2.0%	1.5%	
Maui County	4.8%	3.0%	2.2%	2.5%	2.1%	1.7%	

[1] Actual figure, source: U.S. Bureau of Economic Analysis (BEA)
[2] County figures for 2010 are DBEDT estimates while state figures for 2010 are from the BEA
[3] DBEDT projections

Among the components of personal income, transfer payments are expected to grow at a faster rate than other components because of increased retirement incomes of the aging population. As a result, the share of transfer payments to total personal income is projected to increase from 15.9 percent in 2010 to 23.0 percent in 2040, while the share of labor income, the largest component of personal income, is projected to decrease from 73.1 percent in 2010 to 65.5 percent in 2040.

Detailed historical series and projections of personal income are reported in Appendix Tables A-57 through A-62.

3. Jobs and Employment

Total civilian wage and salary jobs in Hawaii are expected to increase from 623,573 in 2010 to 753,700 in 2040, an average annual growth of 0.6 percent throughout the forecast period. Total jobs (wage and salary jobs plus self-employed jobs) are projected to have a higher growth rate than that of wage and salary jobs, from 792,057 in 2010 to 1,044,900 in 2040, an average annual growth of 0.9 percent over the projection period.

The higher growth rate of projected total jobs is due to a faster growth rate projected for self-employed jobs than wage and salary jobs. For the period from 1980 to 2010, self-employed jobs have achieved 2.7 percent annual growth on average, while the average annual growth of wage and salary jobs for the period was 1.1 percent. As a result, the statewide share of self-employed jobs to total jobs increased from 14.3 percent in 1980 to 21.3 percent in 2010. This trend is expected to continue in the future, but at a more moderate rate than observed in the past.

Jobs in the other counties have increased at a much faster rate than in Honolulu in the past. This trend is expected to continue over the projection period, increasing the Neighbor Island's share of statewide total jobs from 28.9 percent in 2009 to 33.9 percent in 2040.

Figure 1-3. Average Annual Growth of Total Civilian Jobs for the State

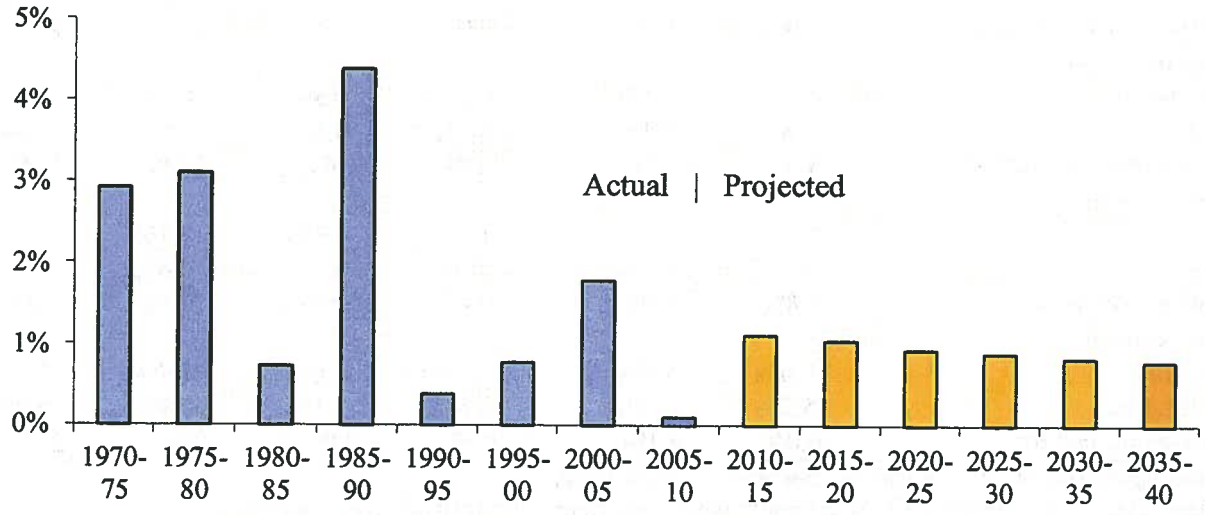


Table 1-7. Actual and Projected Civilian Jobs

	1980[1]	1990[1]	2000[1]	2010[2]	2020[3]	2030[3]	2040[3]
State Total							
Total Jobs	530,417	681,354	721,661	792,057	881,400	964,600	1,044,900
W&S Jobs	454,618	575,925	589,148	623,573	673,800	716,200	753,700
Self-employed Jobs	75,799	105,429	132,513	168,484	207,600	248,300	291,200
Hawaii County							
Total Jobs	45,948	66,884	79,142	93,900	112,200	131,400	151,700
W&S Jobs	34,847	52,088	59,122	66,300	75,700	84,500	93,100
Self-employed Jobs	11,101	14,796	20,020	27,600	36,600	46,900	58,600
Honolulu County							
Total Jobs	423,522	515,631	522,866	562,800	611,800	653,400	690,400
W&S Jobs	369,265	442,944	436,758	458,600	489,000	513,600	534,100
Self-employed Jobs	54,257	72,687	86,108	104,200	122,700	139,900	156,200
Kauai County							
Total Jobs	21,718	32,610	36,441	40,900	46,500	52,000	57,500
W&S Jobs	17,968	26,599	27,939	29,500	31,900	34,000	35,800
Self-employed Jobs	3,750	6,011	8,502	11,400	14,600	18,000	21,700
Maui County							
Total Jobs	39,229	66,229	83,212	94,400	110,900	127,700	145,300
W&S Jobs	32,538	54,294	65,329	69,200	77,100	84,200	90,700
Self-employed Jobs	6,691	11,935	17,883	25,200	33,700	43,600	54,600

	Average Annual Growth Rate					
	1980-90	1990-00	2000-10	2010-20	2020-30	2030-40
State Total						
Total Jobs	2.5%	0.6%	0.9%	1.1%	0.9%	0.8%
W&S Jobs	2.4%	0.2%	0.6%	0.8%	0.6%	0.5%
Self-employed Jobs	3.4%	2.3%	2.4%	2.1%	1.8%	1.6%
Hawaii County						
Total Jobs	3.8%	1.7%	1.7%	1.8%	1.6%	1.4%
W&S Jobs	4.1%	1.3%	1.2%	1.3%	1.1%	1.0%
Self-employed Jobs	2.9%	3.1%	3.3%	2.8%	2.5%	2.2%
Honolulu County						
Total Jobs	2.0%	0.1%	0.7%	0.8%	0.7%	0.6%
W&S Jobs	1.8%	-0.1%	0.5%	0.6%	0.5%	0.4%
Self-employed Jobs	3.0%	1.7%	1.9%	1.6%	1.3%	1.1%
Kauai County						
Total Jobs	4.1%	1.1%	1.2%	1.3%	1.1%	1.0%
W&S Jobs	4.0%	0.5%	0.5%	0.8%	0.6%	0.5%
Self-employed Jobs	4.8%	3.5%	3.0%	2.5%	2.1%	1.9%
Maui County						
Total Jobs	5.4%	2.3%	1.3%	1.6%	1.4%	1.3%
W&S Jobs	5.3%	1.9%	0.6%	1.1%	0.9%	0.8%
Self-employed Jobs	6.0%	4.1%	3.5%	3.0%	2.6%	2.3%

[1] Actual figure, source: U.S. Bureau of Economic Analysis (BEA)
[2] County figures for 2010 are DBEDT estimates while state figures for 2010 are from the BEA
[3] DBEDT projections, figures presented here can be different from those in the appendix tables because of rounding.

Rapid expansion of older population has raised concerns over the future labor supply. Labor force is determined by the size of the working-age population and the labor force participation rate. Although the working-age population, consisting of persons 16 years of age and over, is expected to grow faster than the total population, the faster growth will largely be attributable to the expansion of the older population segment consisting of persons 65 years and over. Consequently, the growth of the labor force will slow down significantly during the projection period as the older population group leaves the workforce and moves into retirement.

The number of employed is expected to grow slower than job growth. The state's total civilian employed is projected to reach 708,500 by 2040, an annual growth of 0.6 percent and a 20.6 percent increase from the 2010 level. Due to multiple job holders, the number of employed has typically been lower than the total number of jobs. While the ratio of employed to jobs tends to be affected by economic conditions at the time, it has largely shown downward trends, particularly in 2000s. The statewide ratio of employed to total jobs decreased from 0.81 in 2000 to 0.74 in 2010. This trend is expected to continue over the projection period, lowering the rate to 0.68 in 2040.

Table 1-8. Actual and Projected Civilian Employed

	1980[1]	1990[1]	2000[1]	2010[1]	2020[2]	2030[2]	2040[2]
State Total	419,750	537,600	584,850	587,400	633,000	672,400	708,500
Hawaii County	40,850	56,300	70,750	75,150	88,000	100,900	113,900
Honolulu County	322,800	401,250	416,450	414,500	434,200	448,500	459,900
Kauai County	18,700	25,200	29,000	29,050	32,300	35,300	38,000
Maui County	35,650	54,900	68,700	68,700	78,500	87,700	96,600
	Average Annual Growth Rate						
	1980-90	1990-00	2000-10	2010-20	2020-30	2030-40	
State total	2.5%	0.8%	0.0%	0.8%	0.6%	0.5%	
Hawaii County	3.3%	2.3%	0.6%	1.6%	1.4%	1.2%	
Honolulu County	2.2%	0.4%	-0.0%	0.5%	0.3%	0.3%	
Kauai County	3.0%	1.4%	0.0%	1.1%	0.9%	0.8%	
Maui County	4.4%	2.3%	0.0%	1.3%	1.1%	1.0%	

[1] Actual figure, source: Hawaii State Department of Labor & Industrial Relations
[2] DBEDT projections

II. Hawaii Population and Economic Projection Methodology

The DBEDT 2040 projection series are produced using the Hawaii Population and Economic Projection and Simulation Model, which was developed by the Department in 1978 and refined over the years. It is an inter-industry econometric model that generates economic forecasts for the state and its four counties on an annual basis.

The 2040 Series uses the detailed population characteristics from the 2010 decennial census, 2010 job and income data from the Bureau of Economic Analysis, and the 2007 Hawaii input-output (I-O) tables as baseline data for the projection.

The model contains five blocks: final demand, income, output, employment, and population. The final demand components are either projected by a set of econometric equations or exogenously given. The statewide projected final demands are allocated to each industry using the relevant final demand vectors in the 2007 I-O table. Industrial outputs are then derived by multiplying the projected final demands by the total requirements matrix of the 2007 I-O table.

Jobs are derived by dividing each industry's projected output by job-to-output ratio. Once jobs are projected, labor income is estimated as a function of total jobs.

The population projection is done separately using the cohort component method. However, the demographic module interacts closely with the economic module, as the demographic size and characteristics are key factors in the determination of many economic variables.

For endogenous variables, regression-based analyses are conducted to capture economic relationships among the variables. To capture county-specific behavior, the variables are estimated at the county level whenever necessary data are available. When data are not available at the county level or when estimations at the county level involve excessive randomness, variables are estimated at the state level and the state-level estimates are allocated to each county using other relevant information.

With a few exceptions, variables are estimated in logarithmic forms so that the estimated coefficients represent elasticities of dependent variables with respect to the change in explanatory variables. When the estimation results show the presence of autocorrelation in error terms, AR (autoregressive) terms are added to the equations to correct the problem.

The following sections describe the demographic and economic modules of the model.

1. The Demographic Module

The resident population is divided into three components: military personnel, military dependents, and other civilians. The number of military personnel and their dependents stationed in Hawaii is mainly the result of national defense considerations, with the state's economic situation having little impact. In the current projections, the population of active-duty military personnel and their dependents were assumed to be exogenous using information available at the time of the projection. The projected totals were then allocated to each age and sex category

using the age and sex composition of military personnel and their dependents. The age and sex composition of military personnel and their dependents were derived from the American Community Survey 5 year data set covering the period from 2006 to 2010.

The other civilian component of population was projected from a base population using the cohort-component method. Other civilian population at a year t is estimated as the population from the previous year, plus births minus deaths plus net migration.

$$CIVILIAN_{t,k} = CIVILIAN_{t-1,k-1} + BIRTHS_t - DEATHS_{t,k} + NETMIG_{t,k}$$

where $CIVILIAN_{t,k}$: number of other civilians at age k in year t
$BIRTHS_t$: number of newborn babies in year t
$DEATHS_{t,k}$: number of other civilians deceased at age k in year t
$NETMIG_{t,k}$: number of net migrants at age k in year t

The foundation data sets used for population projections include the 2010 decennial population census, intercensal estimates for the 2001-2009 period by the U.S. Census Bureau, and birth and death data collected by the Hawaii Department of Health. At the county level, the U.S. Census Bureau provides only an abridged population table containing data by 5-year age intervals. In order to produce a single age-sex population table for the other civilian population for each county, the single-year age by sex tables for each county and state from the decennial censuses were used as supplementary information.

Projection of the population is based on a complex set of assumptions about fertility and mortality. These assumptions play a key role in determining the size of natural population increase and age structure of the population in the future. Methodologies used in estimating current levels of fertility and mortality rates, and assumptions about their future levels are explained in detail below.

Fertility Rates

An age-specific fertility rate indicates the probability that a woman of childbearing age will give birth in a given year. Multiplied by the number of females of childbearing age, fertility rates estimate the number of births that will take place in a given year.

The age-and sex-specific fertility rates for each of the four counties were estimated using the birth data from the Hawaii State Department of Health. These data contain detailed information on each individual birth compiled by the sex of baby, the age of mother, the residence and military status of the baby's parents. Since the size of military dependent population was assumed to be determined by the number of the armed forces stationed in Hawaii, births by military dependent female or female in the armed forces were removed from the calculation.

The age-and sex-specific fertility rates for other civilian population were then calculated by dividing the number of other civilian births for each gender by the number of other civilian women in each age category. In order to mitigate random fluctuation in estimates due to small sample size, data for three years from 2007 to 2009 were averaged to produce the 2008 estimates of age-specific fertility rates for each county (Appendix Tables A-22 through A-26).

The next step was to adjust the calculated 2008 fertility rates for the likely change in the future fertility rates. The difficulty lies in the fact that the direction of the future fertility change is not clear. Fertility rates in most developed countries have declined sharply for many decades since the end of baby boom years. In the U.S. the downward trend continued until around 1980. Since then, the fertility rates of the U.S. have been relatively stable. Fertility rates in Hawaii have shown similar trends as in the U.S. albeit the total fertility rate of Hawaii has shown a slight increase in 2000s.

Fertility rates change over time as a result of changes in age and ethnicity composition, maternity patterns, socio-economic factors, and changes in policies that may affect the cost of bearing and raising children. Since we do not have clear clues on the future direction of those factors, it often seems to remain an open question whether the fertility rates in a region would increase or decrease in the future.

The assumptions for future fertility rates used by the U.S. Census Bureau are not consistent across the projection series. In the population projections released in 1996, the U.S. Census Bureau assumed a slight increase in overall fertility, but the assumption varied by ethnic groups. For example, levels of fertility were assumed to increase slightly for Whites and Blacks, decrease slightly for Asians and remain constant for Hispanics. If we adopt the Census Bureau's assumption, we may have to consider an assumption somewhere between a slight decrease in fertility rate and constant fertility rate since Hawaii has large proportion of Asian population. The Census Bureau, however, held fertility rates constant throughout the projection periods in its 2005 population projections series for states, while the previous assumptions were kept for national population projections.[1] This inconsistency reflects the lack of consensus on the future trends of fertility rates in the U.S.

With a lack of both consensus and analysis on the direction of fertility changes in Hawaii, this projection assumed fertility rates for each county to remain constant at 2007-2009 average levels throughout the projection period.

Life Tables and Survival Rates

The life tables for the other civilian population component were developed for the four counties using the same life table methodology as used for the U.S. national life tables.[2]

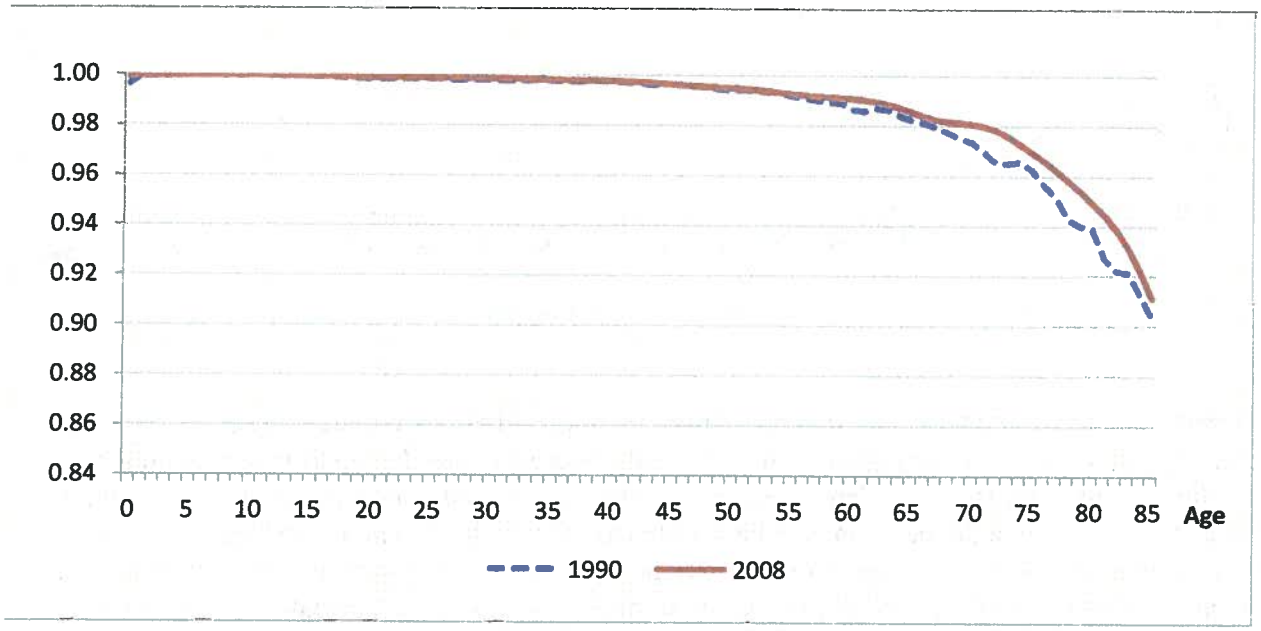
First, mortality rates for the year 2008 were calculated by dividing the average deaths for 2007 through 2009 by the other civilian population in each category for the corresponding years. Next, the number of persons living at the beginning of each age interval was calculated. This statistic was standardized by beginning from a group total of 100,000 in the less-than-one age group. Then the number of expected deaths in each age group was subtracted from the number living at the beginning of that age interval to produce the number living at the beginning of the next interval.

In order to approximate mid-year (July 1st) conditions, the stationary population in the interval was calculated by subtracting half the number dying in each age interval from the number living at the beginning of the interval. Survival rates for each age were then calculated by dividing the

stationary population in each interval by the population in the previous interval (Appendix Tables A-27 through A-36).

Compared to fertility rates, the future direction of changes in mortality rates is less controversial. With better health services and increased affluence, mortality rates have generally decreased over time and will continue to decrease (Figures 2-1 and 2-2).

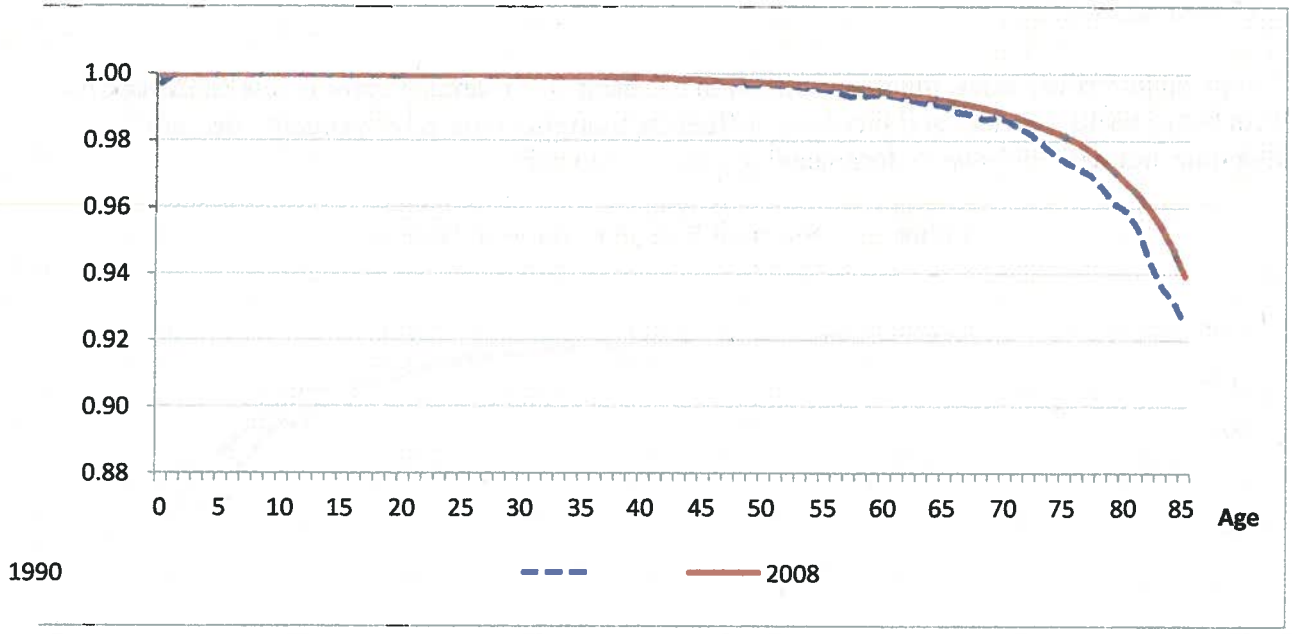
Figure 2-1. Survival Rates for Males in Hawaii



[1] *Methodology Summary, Interim Population Projections for States by Age and Sex: 2004 to 2030*, Population Projections Branch, Population Division, U.S. Census Bureau,
Methodology and Assumptions for the Population Projections of the United states: 1999 to 2100, Population Division Working Paper N0.38, Population Division, U.S. Census Bureau, January 2000.

[2] "United States Life Tables, 2003", *National Vital Statistics Reports*, Center for Disease Control and Prevention, April 2006.
Palmore, J. and R.Gardner, *Measuring Mortality, Fertility, and Natural Increase*, East-West Center, Honolulu, 1994.

Figure 2-2. Survival Rates for Females in Hawaii



The question is to what degree and in what pattern the mortality rates would decrease in the future. In this projection, age- and sex-specific mortality rates were adjusted in the following manner using methodologies used by the U.S. Census Bureau. Firstly, target life expectancies at birth for the four counties in Hawaii were developed using target life expectancy for the nation developed by the Census Bureau as a reference. The middle series projections of the Census Bureau, that were published in January 2000, were based on the assumption that average life expectancy at birth for the U.S. will increase gradually from 1999 values of 74.1 years for the male population and 79.8 years for the female population to 2050 values of 81.2 years for the male population and 86.7 years for the female population.[3] Based on a review of historical relationship between life expectancy in Hawaii and that of the U.S., target life expectancies for the four counties in Hawaii in 2040 were developed as presented in Table 2-2.

Table 2-1. Life Expectancy at Birth for the U.S. and Hawaii: 1980-2008 (Total Residents)

	United States			**Hawaii**		
	Both Sexes	Male	Female	Both Sexes	Male	Female
1980	73.7	70.0	77.4	77.8	74.5	81.5
1990	75.4	71.8	78.8	78.9	75.9	82.1
2000	77.0	74.3	79.7	79.8	77.1	82.5
2005	77.8	75.2	80.4	80.5	77.6	83.4
2008	NA	NA	NA	81.1	78.3	83.9

Source: Hawaii State Data Book, multiple issues.
Life expectancies for Hawaii for 2001- 2008 are estimates by DBEDT.

[3] *Methodology and Assumptions for the Population Projections of the United states: 1999 to 2100*, Population Division Working Paper N0.38, Population Division, U.S. Census Bureau, January 2000.

Table 2-2. Projected Life Expectancy at Birth for Hawaii: 2008 and 2040 (Other Civilian)

	Life Expectancy in 2008[1]		Projected Life Expectancy in 2040[2]	
	Female	Male	Female	Male
State of Hawaii	83.9	78.3	88.3	83.0
Hawaii County	82.8	76.5	87.2	81.1
Honolulu County	84.1	78.8	88.6	83.5
Kauai County	83.1	77.9	87.5	82.5
Maui County	83.6	77.8	88.0	82.4

[1] DBEDT Estimates.
[2] DBEDT Projections.

The next step involved adjusting mortality rates to meet the target life expectancies. To develop the pattern of mortality decline in the future, the Census Bureau collected expert opinions regarding how much faster the mortality rates of some age groups will decline in the future relative to the others. They divided the population into three age groups: under 15, between 15 and 65, and over 65. Their survey found that "average annual rate of mortality decline" experienced by the age group under 15 years will be 2.1 times higher than that of the age group over 65 years until 2020 and 1.6 times higher for the year after 2020. For the age group between 15 to 64 years, it will be 1.3 times higher than that of the age group over 65 years until 2020 and 1.2 times higher for the year after 2020. [4]

In this projection, the same rates of mortality decline as developed by the Census Bureau were assumed with one modification. The age group over 65 years was further divided into two groups: age group between 65 and 84 and age group over 85. This modification was introduced with the notion that mortality rates for extremely high ages tended to be underestimated in Hawaii. Underestimation of mortality and overestimation of population at extremely high ages have been reported by many demographers.[5] In order to reduce this potential exaggeration of older population, it was assumed that mortality rates of the age group over 85 years would decrease at a rate lower than that of the age group between 65 to 84 years throughout the projection period.

Using these assumptions, life tables for the projection period were constructed to project annual population and deaths of other civilians for each county.

Net Migration

Net migration includes net domestic migration and net international migration. In this version of the projection, the international migration was assumed to remain constant at its average of the past 10 years. On the other hand, the net domestic migration was assumed at a level that was 15 percent lower than observed in the past 10 years.

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[4] See same reference as in the footnote 3, pp12-13.
[5] Wilmoth, J.R., "Are Mortality Rates Falling at Extremely High Ages: An Investigation Based on a Model Proposed by Coale and Kisker", *Population Studies*, Vol.49. No.2, July 1995, pp281-295.

The projected net migration for the state total was then allocated to each county using the patterns observed in the past 10 years, and each county total was allocated to each single age-sex category using distributions from the American Community Survey (ACS) migration data.

2. The Economic Module

Projection of GDP and Final Demand

Gross Domestic Product (GDP) for states is the state equivalent of GDP for a nation. Two approaches can be used to estimate GDP for a state: the income approach and the expenditure approach. GDP estimates published by the U.S. Bureau of Economic Analysis (BEA) are measured using the income approach as the summation of the factor income earned and costs of production. We estimated GDP using the expenditure approach as follows;

$$GDP = C + I + G + (X - M)$$

where C : Personal consumption expenditures
I : Private investment
G : Government spending, including government investment
X : Exports
M : Imports

Conceptually, the two approaches should yield the same estimates since they are basically two different methods for measuring the state's overall economic activity. However, due to many practical details involved in calculating nominal and real GDP, the estimates of GDP included in the projections need to be compared to the BEA's estimates of GDP with caution.

Each component of GDP can be divided into many sub-components for an effective estimation. Exports were divided into tourism export and non-tourism exports. Government spending was defined in terms of three components: state and local government spending, federal military spending, and federal civilian spending. Due to lack of data at the county level, most components of final demand were projected at the state level.

In all estimation equations presented in this report, the subscript 't' indicates year while 'i' indicates industry.

Personal Consumption Expenditures

The annual estimates of personal consumption expenditures (PCEs) for the State of Hawaii were no longer available after 2000 when DBEDT decided to use BEA's estimates of GDP by State instead of estimating on its own. From then on, PCEs of Hawaii were estimated only once every few years as part of the construction of the Hawaii I-O tables. Historically, however, personal consumption had shown a relatively stable relationship with income. Assuming the continuation of the relationship over time, PCEs were estimated as a function of disposable personal income (DPI) as follows;

$$\ln(PCEs)_{t,state} = \beta_0 + \beta_1 \cdot \ln(DPI)_{t,\,state} + AR(1)$$

The first order autoregressive term- AR(1) - was included to correct the autocorrelation in error.

Private Investment

Determining the size of the capital stock of an economy, investment is a key element of long- term economic growth. In spite of this, forecasting future levels of investment is not an easy task due to its severe volatility and cyclical behavior. A number of different model specifications were examined using data from many different sources. At the end of numerous econometric exercises, the following specification was adopted.

Private investment (PIV) was modeled as a function of the demand for houses (DHOUSE), unemployment rate (UNEMPRT), and the previous level of PIV. The unemployment rate was included to account for the sensitivity of the private investment to short-term fluctuations of the economy. Demand for houses was calculated by dividing total population with average household size for that year. Average household size was assumed to gradually decrease from 2.89 in 2010 to 2.8 in 2040 based on its historical trend.

$$PIV_{t,state} = \beta_0 + \beta_1 \cdot UNEMPRT_{t,state} + \beta_2 \cdot DHOUSE_{t,state} + \beta_3 \cdot PIV_{t-1,state}$$

$$DHOUSE_{t,state} = \frac{Population_{t,state}}{Household\,Size_{t,state}}$$

Government Spending

The projection of state and local government spending (SLGS) was projected as a function of personal income (PI) as follows.

$$\ln(SLGS)_{t,state} = \beta_0 + \beta_1 \cdot \ln(PI)_{t,\,state} + AR(1)$$

Federal government spending was divided into two categories: military spending and civilian spending. Federal government civilian spending (FGCS) was estimated using an econometric model, while exogenously determined growth rates were applied to project military spending. Similar to state and local government spending, federal government civilian spending was assumed to depend on statewide personal income while federal government military spending was assumed to grow at about 1 percent annually in real terms over the forecast period.

$$\ln(FGCS)_{t,state} = \beta_0 + \beta_1 \cdot \ln(PI)_{t,\,state} + AR(1)$$ Exports

Exports consist of the commodities and services that are sold to people and businesses outside the State of Hawaii. If constraints in local production capacity are not considered, the level of exports would depend solely on factors outside the economy. For this reason, future levels of exports were either exogenously given or projected using a separate model.

Exports consist of tourism exports (visitor expenditures) and non-tourism exports. A detailed description of the methodology used for the projection of visitor expenditures is presented at the end of this section.

With little information on factors affecting non-tourism exports, they were modeled to be determined by the size of output. That is, exports for each industry were calculated assuming that the proportions of output to be exported in total output would remain constant at the levels in the 2007 I-O table.

Imports

The 2007 I-O tables contain information on proportions of inputs imported from outside the Hawaii economy for each industry and final demand sectors in that year. It was assumed that these proportions would remain constant over the projection period. Total imports were then estimated by multiplying the projected outputs and final demands by these import coefficients.

Projections of Output

Historical data on industrial outputs in Hawaii are not available on an annual basis. The U.S. Census Bureau publishes output data by industry at five-year intervals with a three year lag. The 2007 I-O tables of Hawaii were updated based on the 2007 Economic Census, which was the most recent release of output data by the Census Bureau at the time of the construction of the I-O tables.

The 2007 Hawaii I-O tables are available in two versions of industry aggregations. A detailed table includes 68 industry sectors, while a condensed table has 20 industry sectors. Industry classification in this projection series is consistent with the classification in the condensed version of the 2007 I-O tables. A detailed description of the 2007 Hawaii I-O tables is available on the DBEBT's web site at http://hawaii.gov/dbedt/info/economic/data_reports/2007-io.

The I-O tables include detailed information on flows of goods and services among the final demand and the producing sectors in the economy. Annual outputs for each industry were projected by applying the final demand-output relationships in the 2007 Hawaii I-O tables to the annually-projected final demands. To estimate final demand for an industry, each component of projected final demands was distributed among industries using the final demand coefficients derived from the I-O table. Total final demand for an industry was then estimated by summing up the individual components. The industry outputs were estimated using industries' projected final demands and the total requirement matrix from the 2007 I-O table. These projected outputs, in turn, formed the basis for projecting job counts by industry.

Projections of Jobs

Jobs data reported in this projection series are consistent with the BEA job data in definition and coverage with the exception that military jobs were subtracted from the BEA jobs data to calculate civilian jobs.

The projection of jobs involves two types of jobs: wage and salary jobs and self-employed jobs. In this projection, total jobs (wage and salary jobs plus self-employed jobs) were first projected for each industry using the ratios of total jobs to output, and then the wage and salary jobs and self-employed jobs were estimated based on their relationships to total jobs.

Total jobs (TJOB) for each industry at the state level were projected by multiplying corresponding outputs with industry specific total jobs-to-output ratios. As a result of productivity increase, more output per job and thus, fewer new jobs are required to increase output by a given amount. The job-to-output ratios were derived from the 2007 I-O tables and adjusted from the 2007 levels to reflect this advancement in production technology. Because of unavailability of annual output data, estimates of labor productivity growth were developed using the historical ratios of jobs and real GDP for each industry. The projected statewide total jobs by industry were then allocated to four counties based on historical trends.

$$TJOB_{t,i,state} = OUTPUT_{t,i,state} \bullet \left(\frac{TJOB}{OUTPUT}\right)_{t,i,state}$$

$$\left(\frac{TJOB}{OUTPUT}\right)_{t,i,state} = \left(\frac{TJOB}{OUTPUT}\right)_{t-1,i,state} \bullet \text{Productivity Factor}_i$$

Wage and salary jobs (WSJOB) were projected using the projections of total jobs, and industry and county specific ratios of the wage and salary jobs to the total jobs. The ratios of wage and salary jobs to total jobs were also adjusted to account for the observed trend of the increasing share of self-employed jobs. The statewide share of self-employed jobs out of total jobs increased from 14 percent in 1980 to 21 percent in 2010. The increasing trend is found in all four counties, albeit not to the same degree.

$$WSJOB_{t,i,county} = TJOB_{t,i,county} \bullet \left(\frac{WSJOB}{TJOB}\right)_{t,i,county}$$

$$\left(\frac{WSJOB}{TJOB}\right)_{t,i,county} = \left(\frac{WSJOB}{TJOB}\right)_{t-1,i,county} \bullet \text{Annual Changing Factor}_{county}$$

Self-employed jobs (SEJOB) for each industry for each county were then calculated as the residual.

SEJOB =TJOB - WSJOB

Projections of Employment and Labor Force

Employment can be defined in two ways. One is *person-based* and the other is *position-based.* In general, employment data that are published with labor force and unemployment data are based on household surveys, and are therefore, *person-based.* In this case, employment is defined as the number of people who are employed in a given period regardless of whether the person is working full-time or part-time.

On the other hand, the position-based employment is defined as the number of positions, full-time or part-time, in a given period. In this report, the term "Employment (or Employed)" is used to denote the *person-based* employment, and "Jobs" is used to denote the *position-based* employment.

Typically, *jobs* exceed *employed* because of multiple-job holders. If a person holds two part-time positions, the person would be counted once in the employment data but twice in the jobs data. The ratio of *employed* to total jobs in Hawaii was 0.74 in 2010.

EMPLOYED was estimated as a function of total jobs. Although the ratio of employed to total jobs has shown decreasing pattern in all four counties, the decreasing patterns are quite different across counties. For this reason, EMPLOYED was estimated for each county separately.

$$\ln(EMPLOYED_{t,\,county}) = \beta_0 + \beta_1 \cdot \ln(TJOB_{t,\,county}) + AR(1)$$

Labor force (LFORCE) consists of all members of the civilian non-institutionalized population aged 16 and over who have a job or are actively seeking one. It is calculated by multiplying the working age population - population aged 16 and over – with the labor force participation rate.

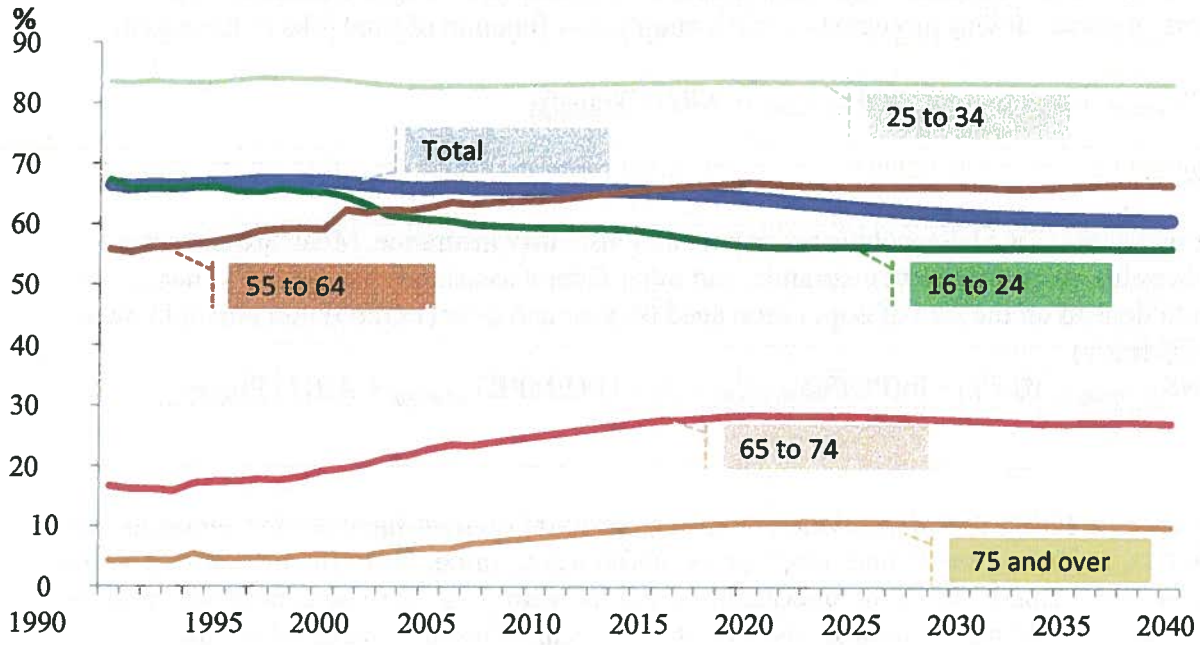
Labor Force = Working Age Population • Labor Force Participation Rate

Labor force participation rates are affected by labor market conditions in the short term while the long term trend is determined by the composition of the working age population. The labor force participation rate in the U.S. peaked at 67.1 percent during the period from 1997 to 2000 and has gradually declined since 2000. The steady increase in the labor force participation rate until 2000 was mainly caused by the increasing share of women in the labor force. With the labor force participation rate of women stabilized, the long-term labor force participation rate is expected to gradually decrease over time due to the aging of the population.

Unlike the national trend, the labor force participation rate in Hawaii peaked at 68.5 percent in 1990 and has declined since then. It is not immediately clear whether the decline of Hawaii's labor force participation rate in the 1990s was mainly a result of high unemployment rates during the period or a result of an aging population. However, one thing is clear at this point as the baby boom generation enters retirement, the impact of the aging population on the labor supply will become more important in the coming decades.

In the previous projections, the labor force participation rate was estimated at the aggregate level using an econometric model. With increasing attention on the aging population and its impact on the labor supply, however, a new approach was employed in the current projection. To fully incorporate the different labor participation patterns by age, the labor force was projected by single age by multiplying the projected population by the age specific labor force participation rate. For future participation rate by age, a long-term projection by the U.S. Bureau of Labor Statistics (BLS) was used. The total labor force was then calculated as the sum of the projected single age labor forces. Figure 2-3 depicts the long-term trends of the BLS projections of participation rates by age group.

Figure 2-3. Projection of Labor Force Participation Rate by Age Group (BLS)



Once the civilian labor force and employed were projected, the unemployed (UNEMP) and unemployment rate (UNEMPRT) were calculated as follows;

$$UNEMP_{t,state} = LFORCE_{t,state} - EMPLOYED_{t,state}$$

$$UNEMPRT_{t,state} = \frac{UNEMP_{t,state}}{LFORCE_{t,state}} \cdot 100$$

Projections of Income

Personal income (PI) was projected in terms of four components: labor income, transfer payments, property income (dividends, interests and rent), and contributions for government insurance. Each of these components was projected as described below, and the following formula produces the projections of personal income;

Personal Income = Labor Income + Transfer Payment + Property Income – Contributions for Government Social Insurance

Labor Income

Labor income (LINC) includes wages and salaries, supplements to wages and salaries, and proprietors' income. It was projected for each county as a function of total jobs in the county.

$$\ln(LINC)_{t,\,county} = \beta_0 + \beta_1 \cdot \ln(TJOB)_{t,\,county} + AR(1)$$ Transfer

Payments

Transfer payments (TRANS) include retirement and disability insurance, Medicare and other medical benefits, unemployment insurance, and other federal assistance payments.[6] Thus, it was modeled to depend on the size of population aged 65 year and over (POP65) and unemployment rate (UNEMPRT).

$$\ln(TRANS)_{t,\,county} = \beta_0 + \beta_1 \cdot \ln(POP65)_{t,\,county} + \beta_2 \cdot UNEMPRT_{t,\,county} + AR(1)$$ Property

Income

Property income (DIR) includes dividend income, personal interest income, and rental income. Many factors, such as interest rate, stock price, and housing price, will affect the future size of property income. Due to the large uncertainty involved with these variables, however, property income of each county was estimated based on its historical relations to personal income.

$$\ln(DIR)_{t,county} = \beta_0 + \beta_1 \cdot \ln(PI)_{t,\,county} + AR(1)$$

Contributions for Government Social Insurance

Contributions for government social insurance (CGI) consist of employer contributions for government social insurance and employee and self-employed contributions for government social insurance. It was estimated as a function of labor income.

$$\ln(CGI)_{t,\,county} = \beta_0 + \beta_1 \cdot \ln(LINC)_{t,\,county} + AR(1)$$

Disposable Income

Subtracting personal tax from the projected personal income gives disposable income.

Disposable Income = Personal Income – Personal Tax

Personal tax is estimated as a function of personal income. Since total personal tax is more or less determined as a proportion of aggregated income, personal tax was estimated in raw value rather than in logarithm. In this way, personal tax would grow about at a same rate as personal income.

$$PTAX_{t,\,state} = \beta_0 + \beta_1 \cdot PI_{t,\,state} + AR(1)$$

[6] Retirement benefit accounted for 33% of total transfer payments while medical benefits accounted for another 38% of total transfer payments that Hawaii residents received in 2010.

Tourism Projections

The tourism projections underlying the DBEDT 2040 series reflect a combination of econometric analyses and relationship modeling. Visitor arrival, visitor days, and daily visitor census projections in this report are for visitor arrival by air. Visitor arrival to Hawaii by cruise ships was assumed to be constant at the 2010 level throughout the projection period. In 2010, arrivals by cruise ships accounted for 1.4 percent of total visitors with 101,200 visitors.

Visitor Arrival Projections

Visitor arrivals in Hawaii have gone through several different growth phases. Between 1960 and 1973, arrivals grew at a double digit rate with an average annual growth rate of 18.3 percent. The growth slowed down between 1973 and 1990 with visitor arrivals growing at 5.7 percent annually before a decade long stagnation started. Visitor arrivals increased only 0.3 percent annually during 1990 to 2000. Starting in 2004, Hawaii visitor industry experienced rapid growth again, with visitor arrivals peaking in 2006 with 7.5 million visitors. Due to the global economic downturn, however, visitor arrivals decreased by 10.4 percent in 2008 and another 4.4 percent in 2009 to 6.4 million visitors. With an 8.7 percent increase in visitor arrivals, a significant portion of the 2008-2009 loss was recovered in 2010.

The latest short-term forecasts by DBEDT (Quarterly Statistical & Economic Report: 1Q 2012) projected that visitor arrivals would grow at over 2 percent annually for the next 3-4 years. This projection for the near future is incorporated in the current version of the long-range projections. Long term visitor growth, however, will be affected not only by outside economic conditions but also the supply constraints in the state. Given the maturity of Hawaii's tourism industry and the increasing competition from other destinations, Hawaii's visitor arrivals are expected to grow at a slower rate into the long-term future.

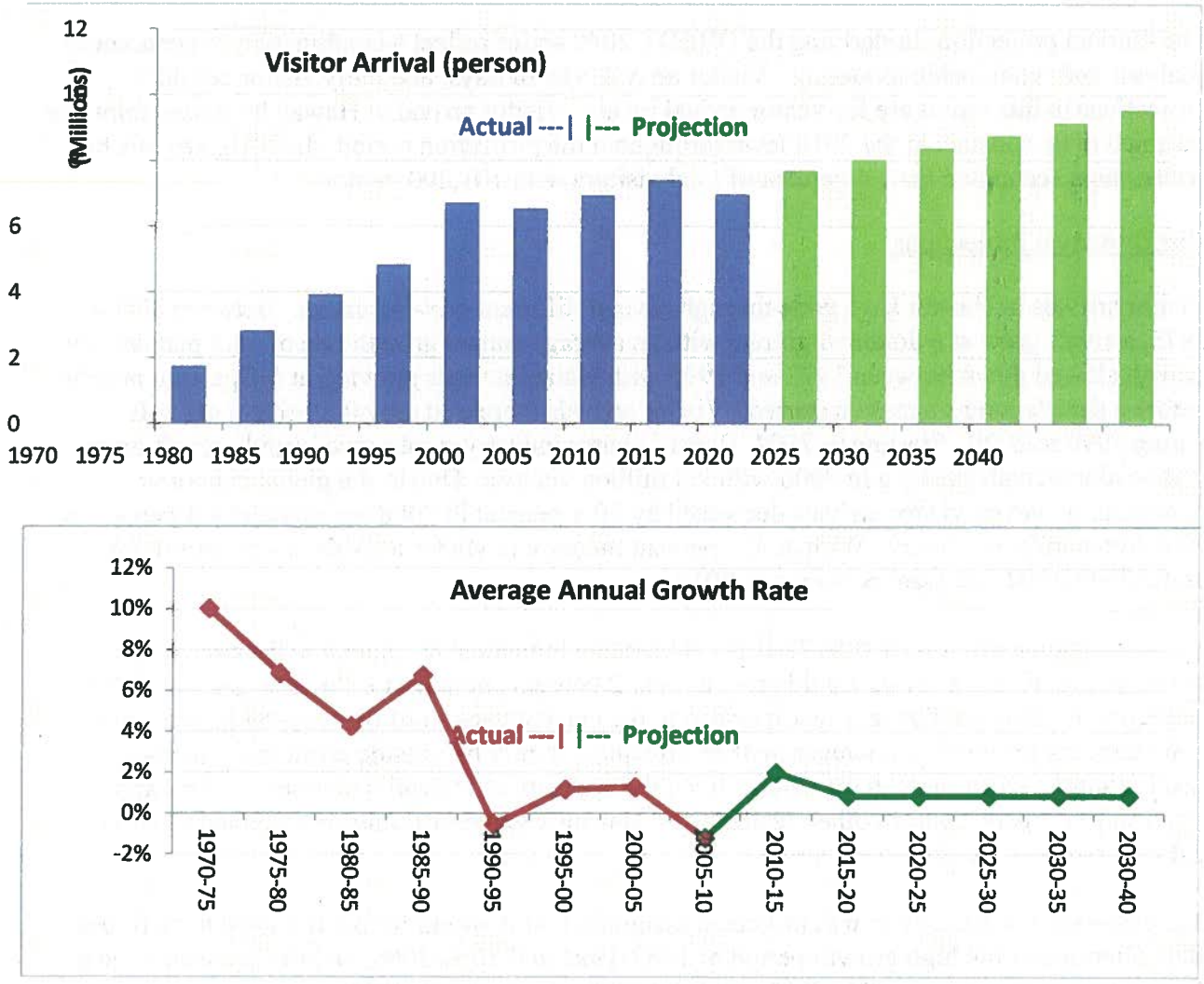
The long term visitor growth was projected assuming that it would follow the 1980 to 2010 trend after filtering out the high growth period of 1987-1991 and 2004-2006, and the decreases due to the terrorist attack in September 2001 and the worldwide recession in 2008;

$$\ln(VA_{t,state}) = \beta_0 + \beta_1 \cdot Time + \beta_2 \cdot D8791 + \beta_3 \cdot D0406 + \beta_4 \cdot D01 + \beta_5 \cdot D0809$$

Where: VA = Visitor arrivals, total at state level
Time = time trend, starting from 1980
D8791 = dummy variable representing the period of 1987 to 1991
D0406 = dummy variable representing the period of 2004-2006
D01 = dummy variable representing 2001
D0809 = dummy variable representing the period of 2008-2009
Period estimated: 1980 – 2010

The modeling results showed that the average annual visitor arrival growth for the period was about 0.9%.

Figure 2-4. Visitor Arrival Projection



Visitor Days and Daily Visitor Census

Visitor days and daily visitor census were projected by the following sequence and assumptions:

1. Growth of total visitor arrivals: projected using econometric models
2. Domestic and international arrivals = total arrivals × share of domestic and international visitors; shares were developed based on historical trends
3. Visitor days = arrivals × average length of stay; average lengths of stay were developed for international and domestic visitors based on historical trends
4. Visitor days by county = statewide visitor days × county share of visitor days, county shares of visitor days were developed based on historical trends
5. Arrivals by county = visitor days / average length of stay by county; average lengths of stay by county were developed based on historical trends
6. Average daily visitor census = visitor days/ 365 or 366 for leap years

Table 2-3 presents the assumptions used in projecting visitor days, daily census, and the arrivals by county.

Table 2-3. Assumptions for the Projections of Visitor Days and Daily Visitor Census

	1990	2000	2010	2020	2030	2040
Share of Visitor Arrival (%)						
Domestic	64.2	64.0	71.9	69.0	67.0	65.0
International	35.8	36.0	28.1	31.0	33.0	35.0
Length of Stay (days)						
Domestic	9.6	10.1	10.0	10.0	10.0	10.0
International	6.3	6.6	7.7	7.7	7.7	7.7
County Share of Visitor Days (%)						
Hawaii	10.8	12.9	13.9	14.2	14.6	15.0
Honolulu	53.6	50.4	48.7	47.7	46.8	46.0
Kauai	11.2	10.7	11.0	11.2	11.4	11.5
Maui	24.4	26.0	26.5	26.9	27.2	27.5
Length of Stay by County (days)						
Hawaii	5.4	6.3	7.1	7.1	7.1	7.1
Honolulu	5.9	6.6	7.4	7.4	7.4	7.4
Kauai	5.2	6.1	7.5	7.5	7.5	7.5
Maui	6.0	7.1	8.1	8.1	8.1	8.1

Visitor Expenditures

Total visitor expenditures are calculated as the sum of the following three components.

Total Visitor Expenditure = Air visitor expenditure + Supplemental business expenditure + Cruise visitor expenditure

The future values of the air visitor per-person per-day spending (PPPD), supplemental business expenditure and cruise visitor expenditure were derived by applying annual growth rates to their actual values in 2010. Annual growth rates for each expenditure were developed based on the historical trends (see Table 2-4). Using the projected PPPD, air visitor expenditures were calculated by multiplying it with the projected visitor days.

The total visitor expenditure was then allocated to the four counties based on the projected county shares of total expenditures. The county expenditure shares were developed based on the past trends and the projected shares of visitor days (see Table 2-5).

1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

Table 2-4. Assumptions on the Annual Growth Rate of Visitor Expenditure (%)

	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40
Air visitor PPPD	4.3	2.8	2.5	2.5	2.5	2.5
Supplemental business expenditure	3.3	3.3	3.3	3.3	3.3	3.3
Cruise visitor expenditure	11.2	3.5	3.5	3.5	3.5	3.5

[1] It includes the actual performance in year 2011.

Table 2-5. Assumptions on the County Shares of Expenditures (%)

	2002	2005	2010	2020	2030	2040
Hawaii	13.8	14.0	12.5	12.9	13.2	13.5
Honolulu	48.0	48.5	50.7	49.5	48.7	47.9
Kauai	10.5	9.8	10.3	10.5	10.7	10.8
Maui	27.8	27.8	26.6	27.1	27.5	27.8

3. Describe any significant changes in your local area resulting from the current economic downturn and any differences in the way services are being delivered. **[20 CFR § 661.355]**

Research was done to measure the economic impact on the local area. An excellent analysis by JP Morgan Chase was located. Their analysis included data from sources like Moody's Analytics which the lwib cannot afford to purchase as well as access to economists who specialize in this subset of economics on the national level. Their analysis spans the time period of the economic downturn.

It is almost three years since the official end of the Great Recession—the worst economic downturn since the Great Depression. Yet there are only limited signs of genuine labor market recovery. Employment remains well below its pre-recession 2007 peak even though employment has grown over the past five quarters at about the same rate as it grew following past recessions. The unemployment rate continues to exceed 8 percent, and many economists, including the Congressional Budget Office, predict it will remain above 8 percent for the next several years. The Federal Reserve recently forecast the unemployment rate at between 6.8 and 7.7 percent at the end of 2014. Despite this dreary national outlook, there is some cause for optimism. Between the fourth quarter of 2010 and fourth quarter of 2011, the US experienced a net total increase of 1.7 million jobs and forecasters project additional increases over the next few years. [1]

Here is an overview of employment trends for Honolulu.

During the recession the national economy lost 8.4 million jobs. It has experienced slow growth since, but employment has not returned to pre-recession levels. Exhibit 1 presents actual and projected employment trends for the nation and Honolulu from 2007 to 2017.

1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

Exhibit 2 shows employment for industry sectors since the beginning of the recession and projected to 2017. Employment in 2007 is normed to 1.0 across industries allowing for easier comparisons of growth in employment across industries starting from this base year.

The disproportionate size of some sectors means employment fluctuations for these sectors have a more significant impact on the overall local economy. To get a sense of these magnitudes, exhibit 3 displays the absolute number of jobs and the percentage change in employment by sectors during the Great Recession and the recent recovery period.

Employment Growth Forecasts

Nationally, employment is projected to grow from 2012 to 2017 at an average rate of roughly 1.8 percent per year.[2] During the recovery, employment in Honolulu is projected to grow from 2012 to 2017 at roughly 1.3 percent per year.

The projected changes in employment level by industry for Honolulu between 2011 and 2017 are presented in exhibit 4.

The projected changes in employment level by occupation for Honolulu between 2011 and 2017 are presented in exhibit 5.

Employment Growth by Skill Level

We project the net growth in jobs by industry as well as the skill requirements of these jobs for 2012 through 2017 for Honolulu. Skill is measured by the level of educational attainment a given job requires.[3]

Exhibits 6 through 10 show net employment growth across sectors separately for each of five educational requirement categories: less than high school degree, high school degree only, some college, college graduate, and advanced degree.

Exhibit 11 summarizes projected job growth rates by educational attainment group in Honolulu, showing both percentage change and net change in number of jobs.

Unemployment through the Recovery: Who is Left Behind?

The net increase in jobs requiring different skill levels is only one side of the economic recovery story. The other side is the size of the labor pool by skill level that is searching for jobs. We typically use the unemployment rate as an indicator of the size of this labor pool. The unemployment rate tells us the number of individuals actively searching for work as a percentage of the labor force. The labor force is the total number of employed and unemployed workers.

1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

In February 2012, there were 12.9 million unemployed workers in the U.S.; more than 7 million of these workers had a high school degree or less. However, the official unemployment data only include those who are actively searching for work. Many others have given up actively searching, but would still take a job if one was offered – the so-called "marginally attached" or "discouraged" workers.[4] In February 2012, in addition to the unemployed there were another 2.8 million marginally attached persons. If marginally attached individuals were included in the unemployed, the unemployment rate for February 2012 would increase from 8.3 to 9.8 percent.

Exhibit 12 shows that in Honolulu (as in the nation as a whole) the low skilled are disproportionately represented among the unemployed relative to the employed.[5]

Exhibit 13 shows the differences in unemployment rates by gender, race/ethnicity, and age for Honolulu.

Nationally, the unemployed are disproportionately more likely to not be US citizens, to speak a primary language other than English, and to have a work limiting physical or mental condition. Exhibit 14 presents for Honolulu the percent of unemployed overall and by skill level with these selected potential labor market barriers that make finding work in a weak economy especially difficult.

Conclusion

The recovery is continuing, but at a slow pace with relatively modest employment growth projected over the next five years. In Honolulu, using our metro industry forecast, we estimate employment growth by the required skill levels of jobs and industry sectors. Across given skill level requirements, the industries with the highest net employment gains vary. This stems from the different distributions of specific jobs within industries.

Putting net employment gains in perspective, the size of the unemployed population is still many times the number of job openings in the economy. Low-skill workers are disproportionately represented among the unemployed. In addition, low-skill unemployed are more likely to have personal characteristics and circumstances that can make finding work difficult. The economy has not yet seen the job growth necessary to get us back to employment levels before the recession, much less meeting the job needs of a growing labor force. More job creation is needed across industry sectors and all skill levels to return to a truly healthy economy.

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[2] We refer the reader to the accompanying National Report for further details on U.S. employment growth prospects.

[3] Metro-level industry growth projections are derived from data supplied by Moody's Analytics Inc. We discuss in detail the data and methodology for determining job skill requirements in the accompanying National Report Appendix. A brief summary of our methodology is also included at the end of this memo.

[4] The US Department of Labor officially defines someone as "marginally attached to the labor market" if they are not working, searched for work in the last year but are not in the last week, and are willing to take a job if offered. "Discouraged workers" are a subset of the marginally attached who say the reason they are no longer searching is because they do not believe there is a job available in their line of work or they lack the necessary schooling or training, or they cannot find work due to discrimination.

[5] All figures in this section are from the 2010 American Community Survey for workers ages 18 and older. We do not report figures for categories with sample of less than 50 in the survey.

1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

Data

Data from several different sources are used in this study.

Current Employment Statistics (CES). The CES is a monthly survey conducted by the Bureau of Labor Statistics of approximately 140,000 establishments representing payroll employment in non-farm sectors. Besides the farm sector, the CES also excludes the self-employed, proprietors, unpaid, and domestic workers.

Moody's Analytics. Historical data from the CES as well as projections from 2012 and 2017 are provided by Moody's Analytics Inc., a private forecasting firm. We use this data to measure metro-level employment by industry from 2007 through 2011 and projections from 2012 through 2017.

Current Population Survey (CPS). The CPS is a monthly survey conducted by the Bureau of Labor Statistics of approximately 60,000 households representing the civilian non-institutionalized population. The CPS is the only data source that can provide current information on national employment by both industry and occupation, as well as information on educational attainment levels. While the CES is generally considered the most reliable source for industry employment *counts*, the CPS provides accurate information on the employment *share* of an industry that is in a particular occupation or education category.

American Community Survey (ACS). The American Community Survey (ACS) collects annual demographic and labor market data that are representative for local areas with a population of at least 65,000. We use the 2010 (latest available) ACS to calculate metro unemployment rates by education, age, gender, and race as well as to measure barriers to reemployment for individuals ages 18 and older.

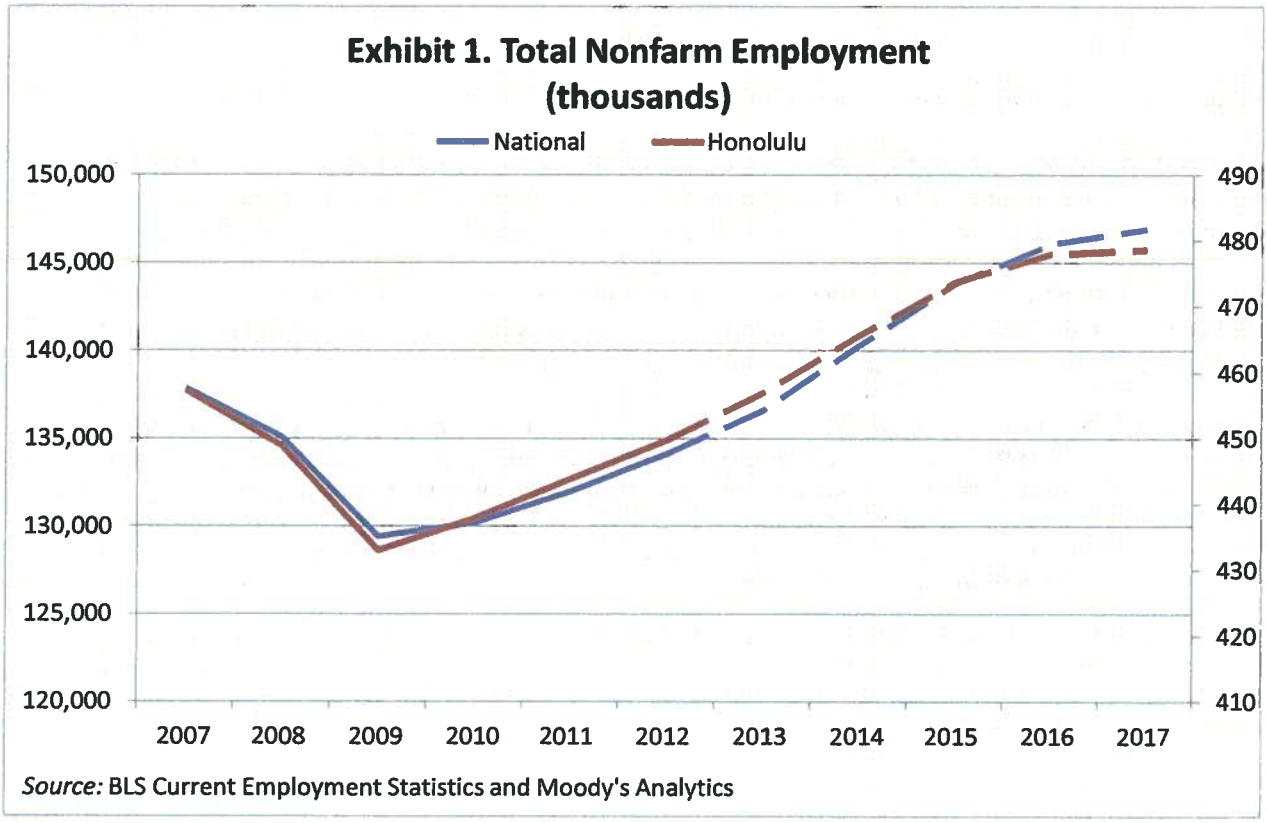
Methods

We measure metro-level average industry employment each quarter 2007-2011 using the CES data and projected quarterly employment 2012-2017 using Moody's Analytics forecast. We then estimate a set of national industry-occupation employment figures using the fixed occupational employment distribution within each industry from the 2011 CPS. This provides an estimate of occupational employment at each point in time under the assumptions that there is no within-industry change in the distribution of occupations over the 2012-2017 period and that the national distribution of occupations within industry is a good approximation for the metro.

We use the 2007 CPS to measure the national distribution of educational attainment within each industry-occupation cell. While education is only one proxy for skill, it is the only such measure available in the CPS. We hold the education distribution fixed in the 2007 pre-recession year because we believe that during the Great Recession and its aftermath, the overall lack of jobs induced many individuals with higher levels of educational attainment to fill jobs for which they may be overqualified. To get a better sense of the underlying job requirements of a particular industry-occupation, the 2007 educational levels are likely more accurate than 2011 levels.

By applying the 2011 CPS occupation distribution within industry data to the Moody's forecast, and then applying the 2007 CPS education distribution within industry-occupations, we arrive at the projected number of jobs by educational attainment requirement.

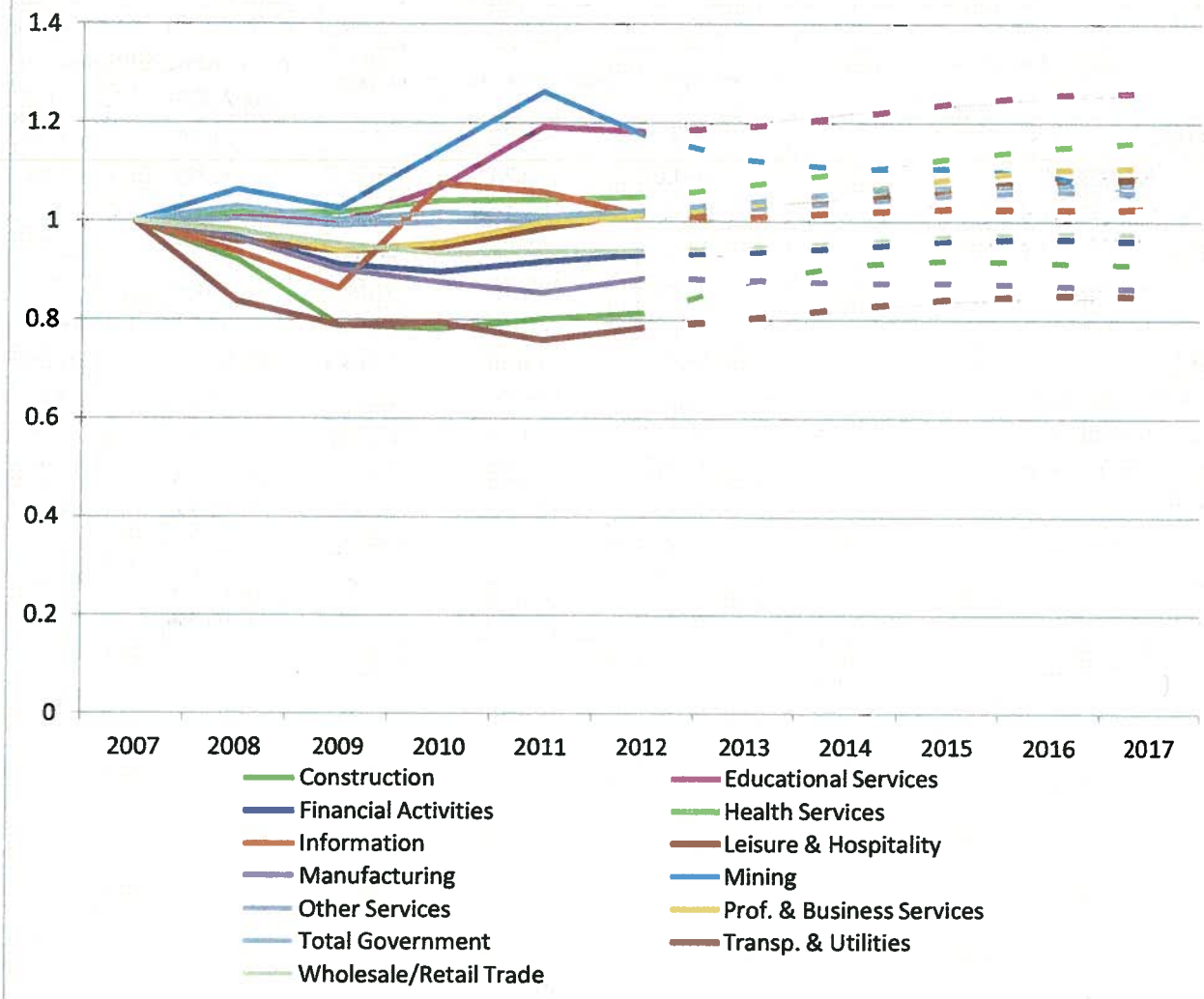
1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.



Source: BLS Current Employment Statistics and Moody's Analytics

1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

Exhibit 2. Change in Employment since 2007



Source: BLS Current Employment Statistics and Moody's Analytics

[1]Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

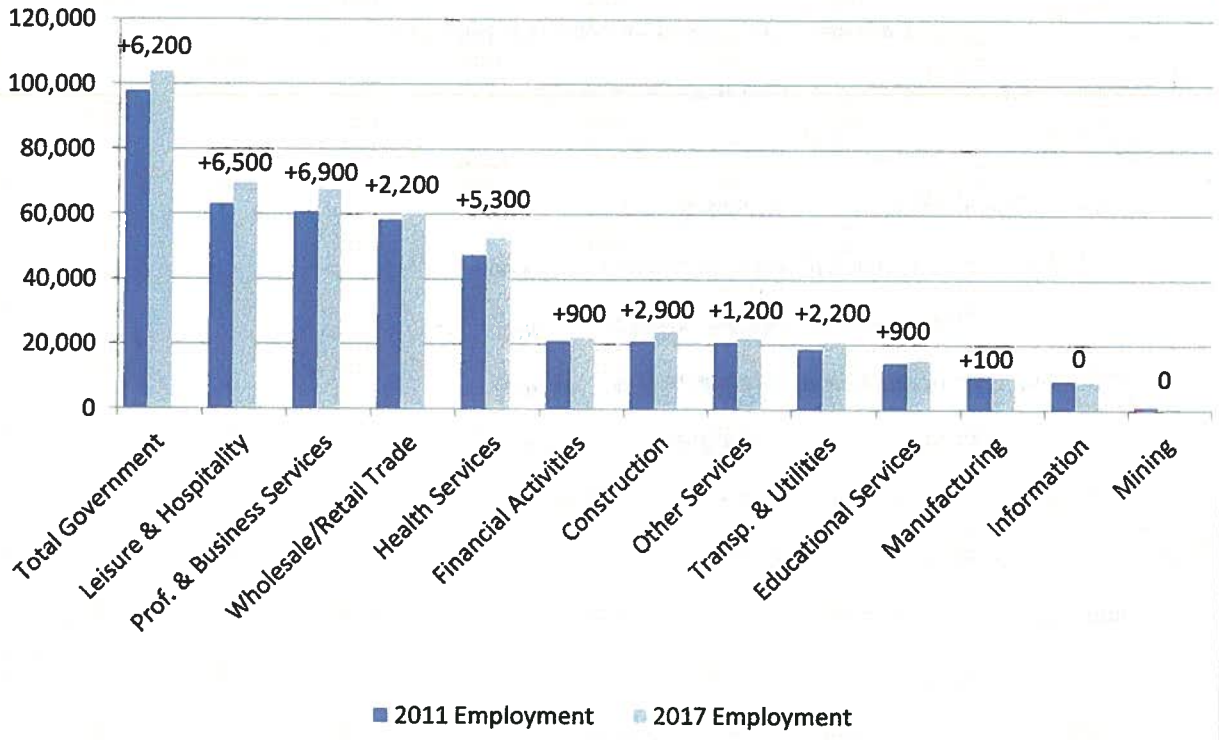
Exhibit 3. Percent Change in Employment between 2011 and 2007

Industry	2007 Q4 Employment	2009 Q4 Employment	2011 Q4 Employment	% Change in Employment, 2007-2009	% Change in Employment 2007-2011
Total Government	96,879	97,186	97,917	0.3%	1.1%
Leisure & Hospitality	64,083	60,282	63,213	-5.9%	-1.4%
Wholesale/Retail Trade	62,048	59,176	58,240	-4.6%	-6.1%
Prof. & Business Services	61,035	57,417	60,855	-5.9%	-0.3%
Health Services	45,555	46,364	47,553	1.8%	4.4%
Construction	26,272	20,745	21,066	-21.0%	-19.8%
Transp. & Utilities	24,630	19,436	18,699	-21.1%	-24.1%
Financial Activities	22,973	20,954	21,086	-8.8%	-8.2%
Other Services	20,742	20,582	20,776	-0.8%	0.2%
Educational Services	12,146	12,106	14,467	-0.3%	19.1%
Manufacturing	11,834	10,681	10,131	-9.7%	-14.4%
Information	8,528	7,378	9,035	-13.5%	5.9%
Mining	709	728	895	2.7%	26.2%
Total Nonfarm	457,434	433,035	443,933	-5.3%	-3.0%

Source: CES andMoody's Analytics

1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

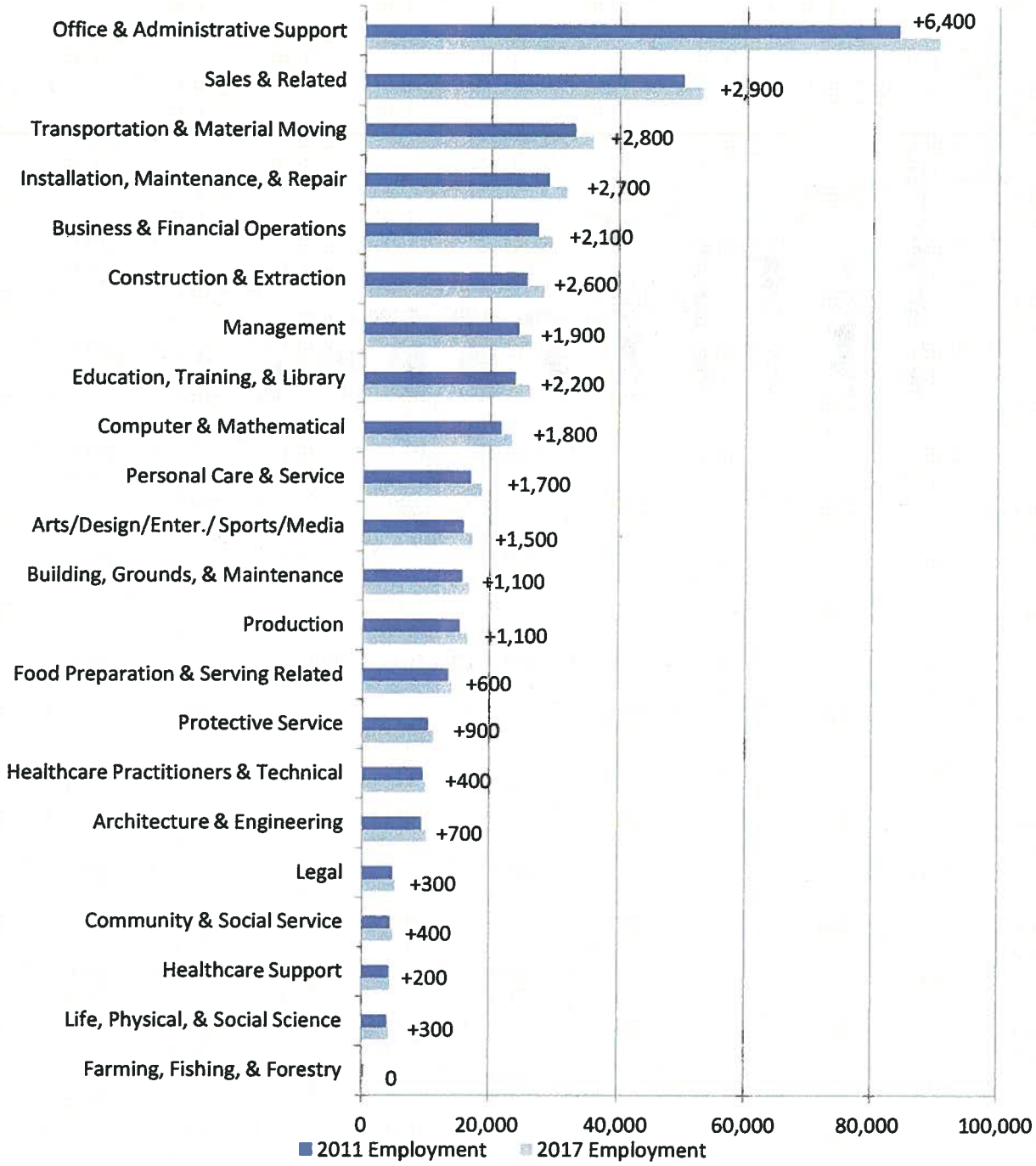
Exhibit 4. 2011 and 2017 Employment Level by Industry



Source: : BLS Current Employment Statistics & Moody's Analytics

1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

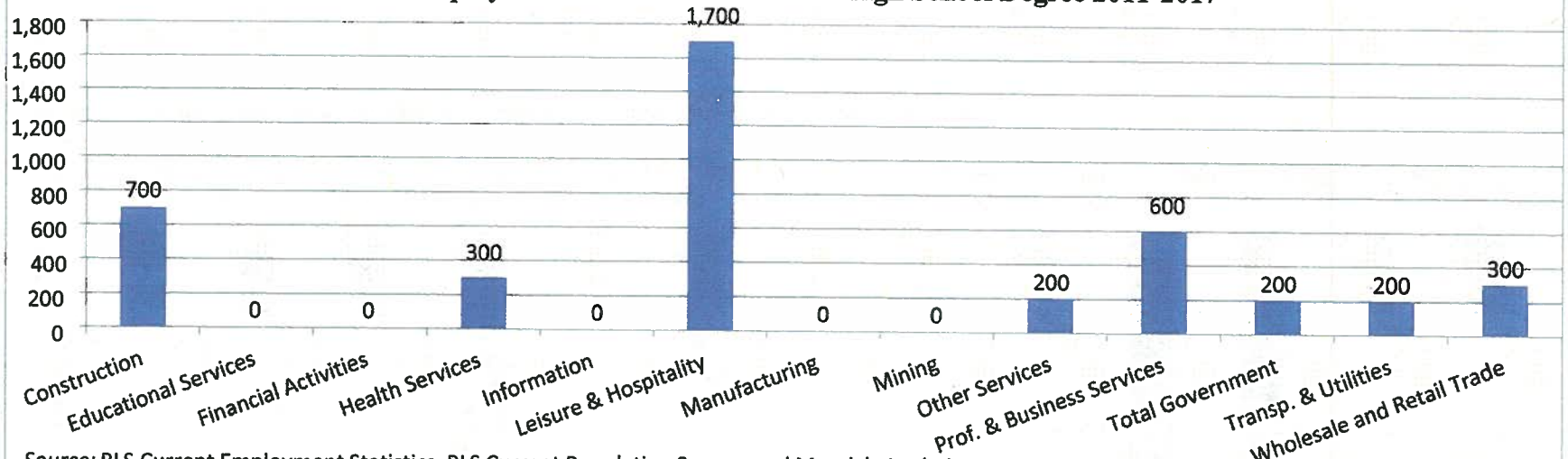
Exhibit 5. 2011 and 2017 Employment Level by Occupation



Source: BLS Current Employment Statistics, BLS Occupational Employment Statistics, & Moody's Analytics

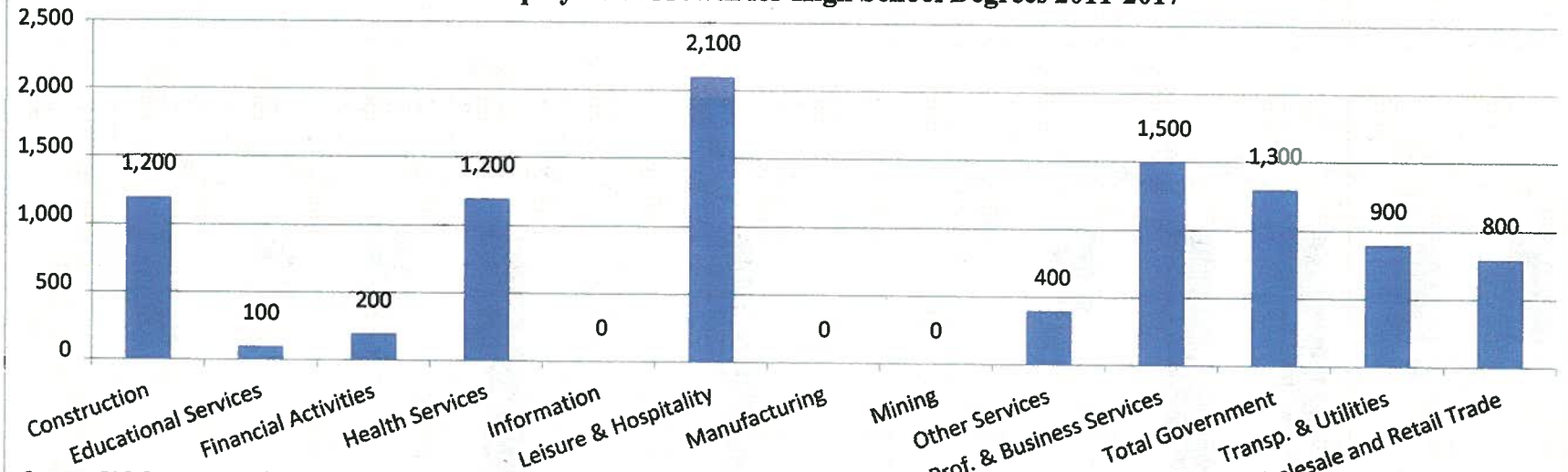
1Current and historical employment and employment by industry numbers in this report are from the Current Employment Statistics (CES) data published by the Bureau of Labor Statistics. Industry projections are from Moody's Analytics and are rounded to the nearest hundred. The CES covers non-farm payroll employment. Excluded groups include the self-employed, domestic, and unpaid workers. See box at end of memo for further details.

Exhibit 6. Net Employment Growth for Less than High School Degree 2011-2017



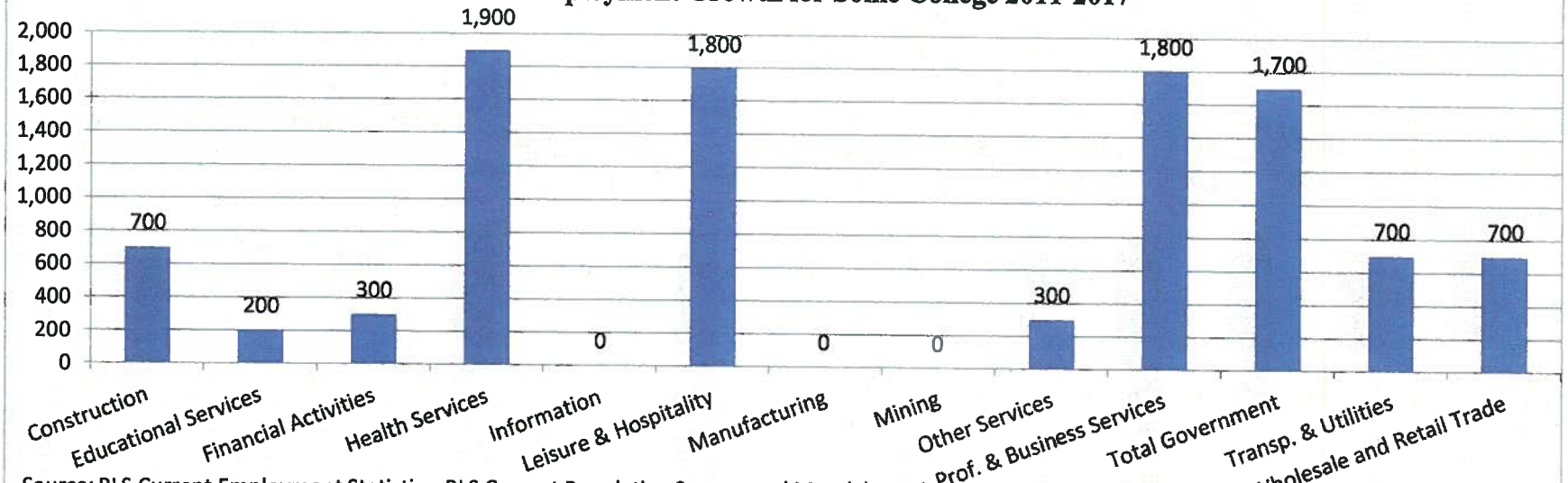
Source: BLS Current Employment Statistics, BLS Current Population Survey, and Moody's Analytics
Note: All values are rounded to the nearest hundred.

Exhibit 7. Net Employment Growth for High School Degrees 2011-2017



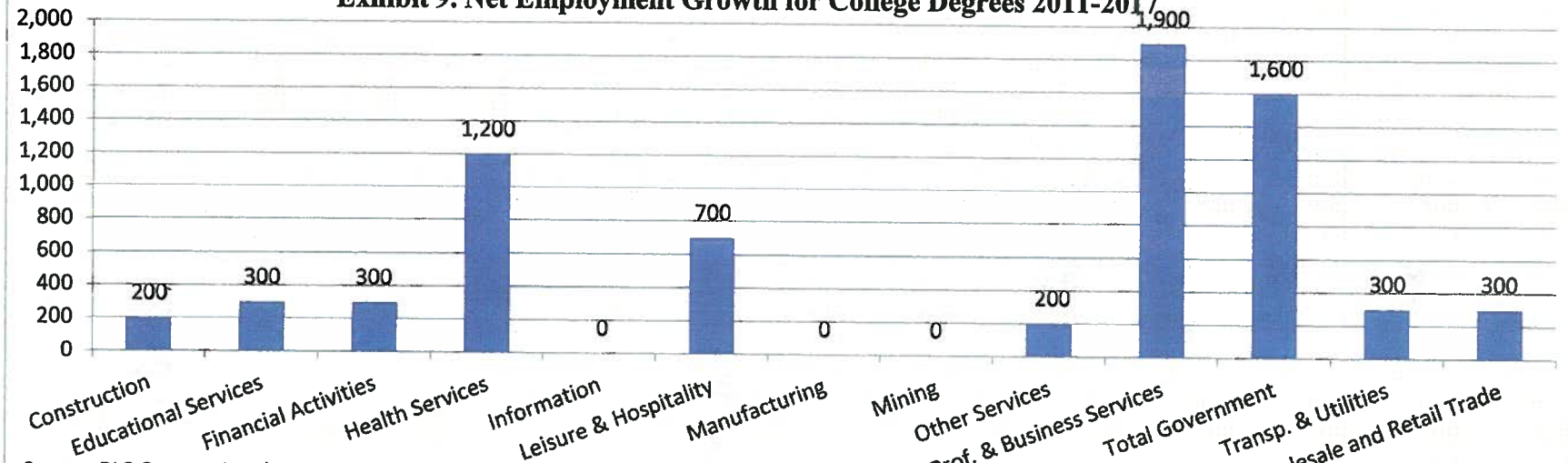
Source: BLS Current Employment Statistics, BLS Current Population Survey, and Moody's Analytics
Note: All values are rounded to the nearest hundred.

Exhibit 8. Net Employment Growth for Some College 2011-2017



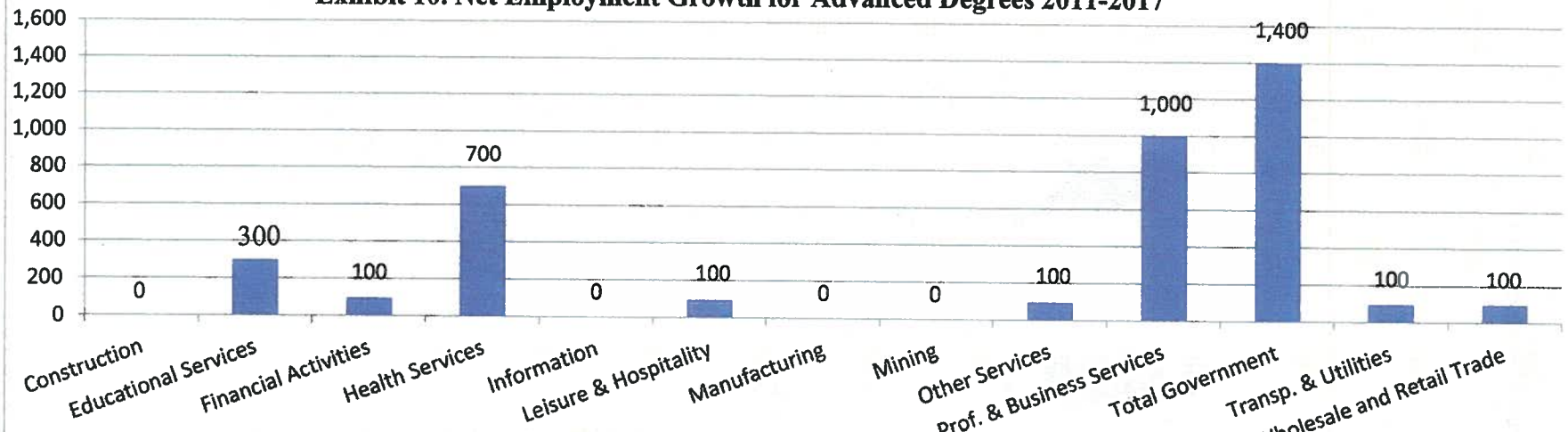
Source: BLS Current Employment Statistics, BLS Current Population Survey, and Moody's Analytics
Note: All values are rounded to the nearest hundred.

Exhibit 9. Net Employment Growth for College Degrees 2011-2017



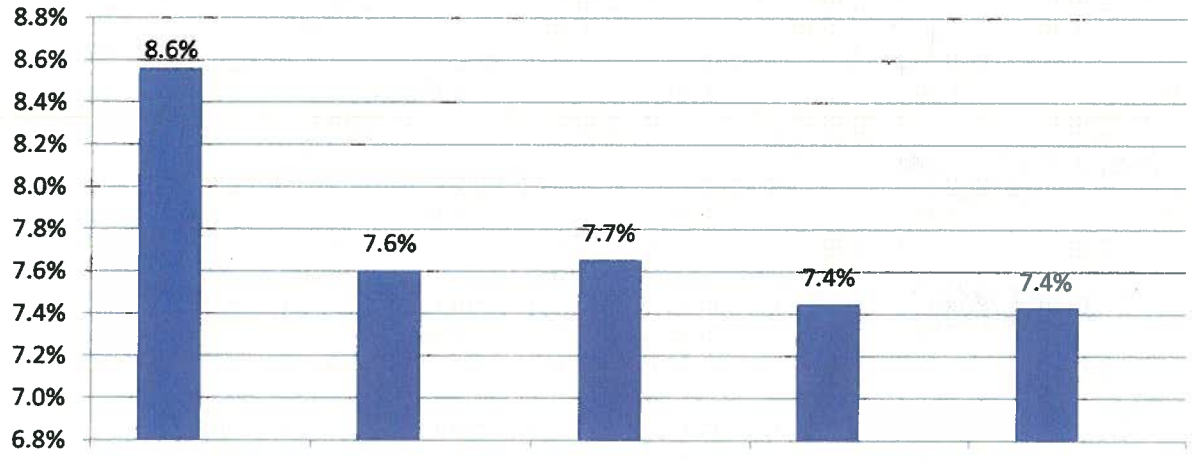
Source: BLS Current Employment Statistics, BLS Current Population Survey, and Moody's Analytics
Note: All values are rounded to the nearest hundred.

Exhibit 10. Net Employment Growth for Advanced Degrees 2011-2017



Source: BLS Current Employment Statistics, BLS Current Population Survey, and Moody's Analytics
Note: All values are rounded to the nearest hundred.

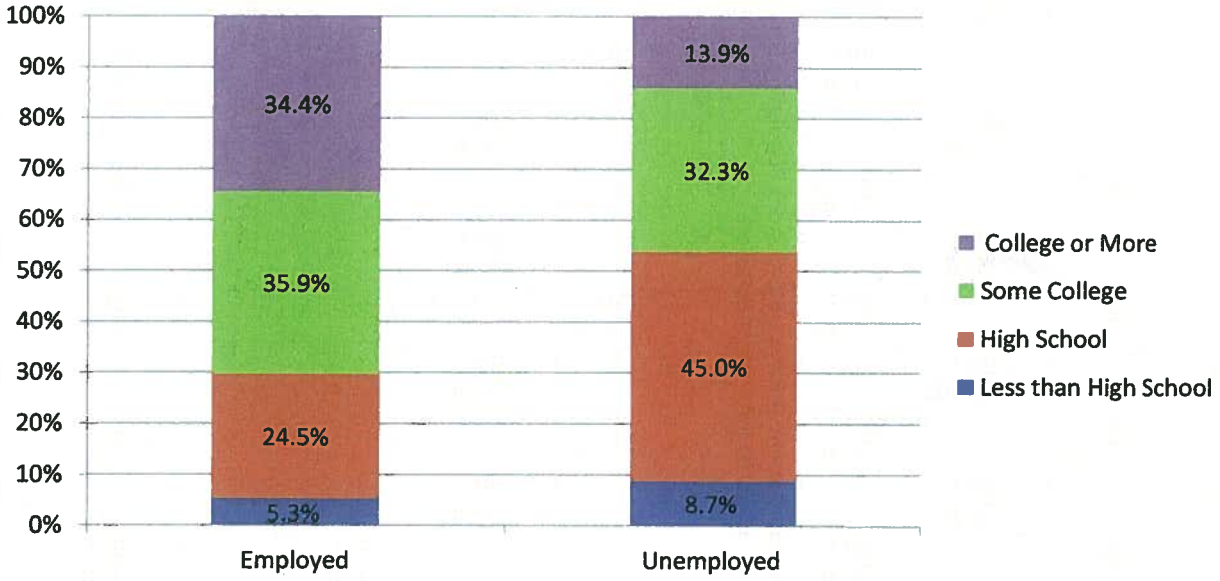
Exhibit 11. 2011-2017 Net Change in Employment by Education Requirement



	No High School Degree	High School Degree	Some College	College Degree	Advanced Degree
Net Change in Number of Jobs	*+4,300*	*+9,300*	*+9,800*	*+6,900*	*+3,700*

Source: BLS Current Employment Statistics, BLS Current Population Survey, and Moody's Analytics

Exhibit 12. Education Distribution of Employed and Unemployed 2010



Source: Author's calculations from the 2010 American Community Survey.

Exhibit 13. 2010 Unemployment Rates by Gender, Race, Age, and Skill Level

	All	Less than High School	High School	Some College	Bachelor's Degree	Advanced Degree
Unemployment Rate	6.0%	9.6%	10.5%	5.4%	2.6%	2.3%
Unemployed	28,303	2,473	12,732	9,154	2,837	1,107
Gender						
Male	6.1%	11.1%	10.9%	4.9%	2.5%	1.6%
Female	5.9%	8.0%	10.0%	6.0%	2.8%	3.0%
Race						
White, Non-Hispanic	5.8%	--	9.7%	7.4%	3.2%	3.8%
Black, Non-Hispanic	14.4%	--	--	--	--	--
Hispanic	8.6%	--	15.6%	4.2%	--	--
Other	5.6%	10.1%	9.9%	4.8%	2.3%	0.5%
Age						
18-25	12.8%	--	22.0%	8.6%	4.6%	--
26-35	6.1%	--	9.5%	5.7%	3.2%	0.8%
36-45	6.0%	--	9.4%	5.4%	1.9%	1.8%
46-55	3.9%	4.6%	6.0%	2.9%	2.6%	4.6%
56-65	3.7%	1.9%	4.9%	5.3%	2.7%	1.6%

Source: Author's calculations from the 2010 American Community Survey.
-- indicates figure not reported because base sample is less than 50.

Exhibit 14. Potential Barriers to Re-Employment Among Unemployed by Skill Level

	All		Less than High School	High School	Some College	Bachelor's Degree	Advanced Degree
	Em-ployed	Unem-ployed	Unem-ployed	Unem-ployed	Unem-ployed	Unem-ployed	Unem-ployed
Unemployment Rate		6.0%	9.6%	10.5%	5.4%	2.6%	2.3%
Number	443,194	28,303	2,473	12,732	9,154	2,837	1,107
Not U.S. Citizen	10.2%	11.7%	--	9.7%	15.1%	--	--
Primary Language other than English	4.7%	4.1%	--	2.5%	3.6%	--	--
Work limiting physical or mental condition	3.8%	9.3%	--	10.0%	9.0%	--	--

Source: Author's calculations from the 2010 American Community Survey.
-- indicates figure not reported because base sample is less than 50.

Economic Forecast

OUTPUT AND EMPLOYMENT

	2005	2008	2009	2010	2011	2012	2013	2014
United States								
Real GDP								
$ billions (fourth quarter)	$12,736	$12,884	$12,873	$13,181	$13,441	$13,648	***$14,090***	***$14,654***
% change over the four quarters	2.8%	-3.3%	-0.1%	2.4%	2.0%	1.5%	***3.2%***	***4.0%***
Nonfarm employment								
Job count (fourth quarter)	134,639,000	135,153,333	129,526,667	130,283,667	132,286,667	134,455,000	***136,189,659***	***138,513,010***
% change over the four quarters	1.8%	-2.0%	-4.2%	0.6%	1.5%	1.6%	***1.3%***	***1.7%***
Average monthly change	197,833	-232,472	-468,889	63,083	166,917	180,694	***180,694***	***180,694***
Hawaii								
Real GDP								
$ billions (fourth quarter)	$58	$59	$58	$58	$58	***$60***	***$62***	***$65***
% change over the four quarters	4.2%	-1.2%	-2.4%	0.8%	0.7%	***2.7%***	***3.7%***	***4.2%***
Nonfarm employment								
Job count (fourth quarter)	607,300	609,300	584,067	590,033	595,733	609,633	***618,289***	***629,882***
% change over the four quarters	2.6%	-2.7%	-4.1%	1.0%	1.0%	2.3%	***1.4%***	***1.9%***
Average monthly change	1,264	-1,397	-2,103	497	475	1,158	***721***	***966***

WHAT THE TABLE SHOWS:

- Hawaii's GDP forecast is derived from the national forecast by allocating output to each of the 50 states based on employment shares. So, forecast misses reflect surprises in the aggregate forecast as well as unexpected shifts in a state's GDP share.
- Hawaii's economy is expanding more rapidly now than the national economy.

KEY MESSAGES:

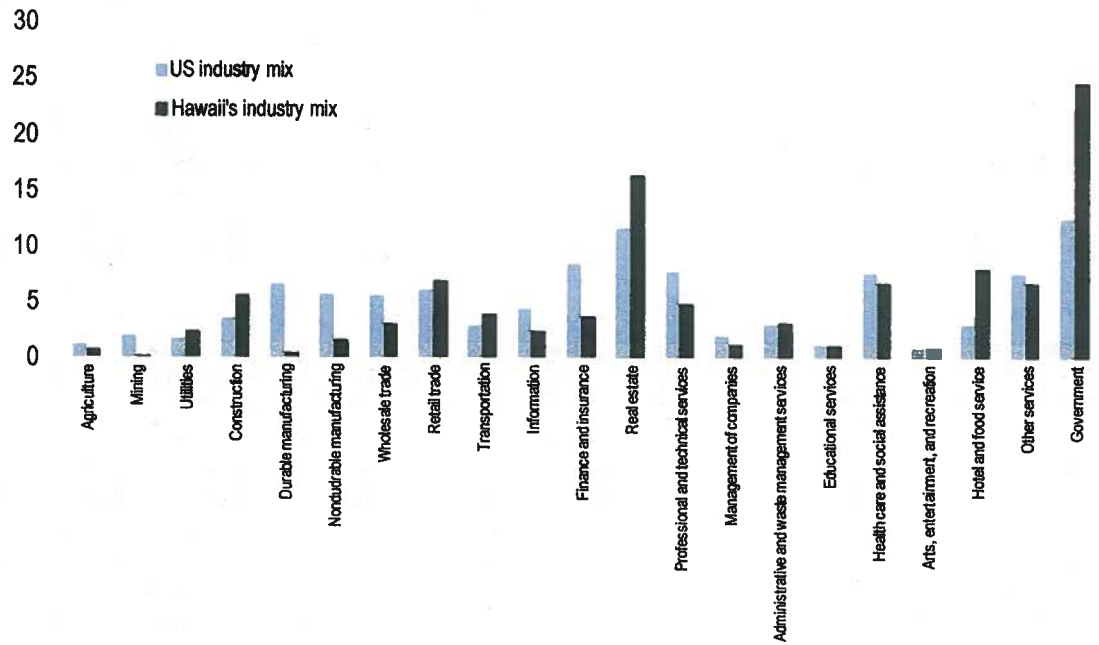
- The recovery pace is forecast to continue to speed up.

Note: GDP figures are based on quarterly values that are interpolated from annual GDP estimates using quarterly employment changes. Unbolded figures are reported actual values and bold figures represent forecasts.

Sources: US Department of Commerce;
US Department of Labor.

The Economy's Structure

PERCENT OF TOTAL GDP DERIVED FROM SELECTED INDUSTRIES



WHAT THE CHART SHOWS:

- The figure compares the relative importance of selected industries to the state's economy with the national footprint of each industry (state and national figures reflect the value added of each industry as a percent of aggregate state or US nominal GDP, respectively).
- Hawaii depends more than other states on construction, retail trade, real estate social services, and the hotels. The outsized government presentation gives it some stability.

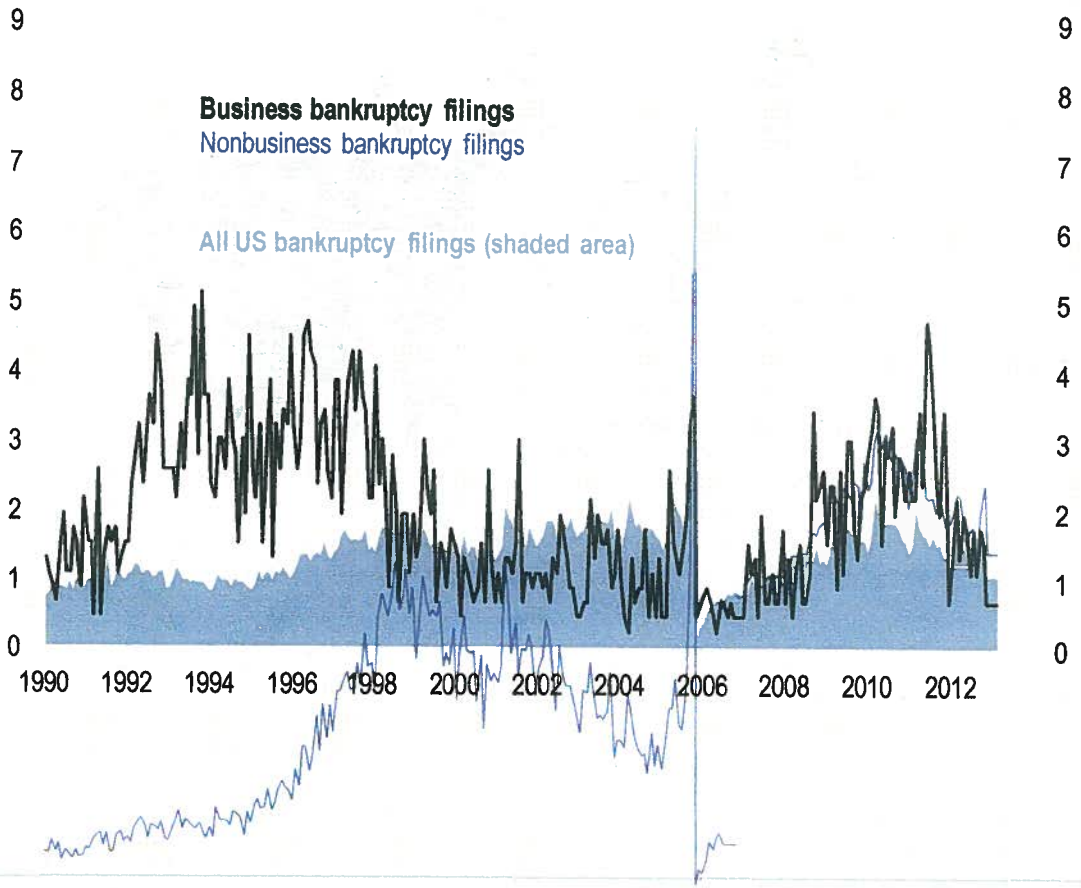
KEY MESSAGES:

- The heavy exposure to real estate businesses is a challenge, given the out-of-synch trends in house prices.

Source: US Department of Commerce. Updated through 2011.

Bankruptcies

RATIO OF BANKRUPTCY FILINGS TO THE 2007 Q4 NUMBER



WHAT THE CHART SHOWS:

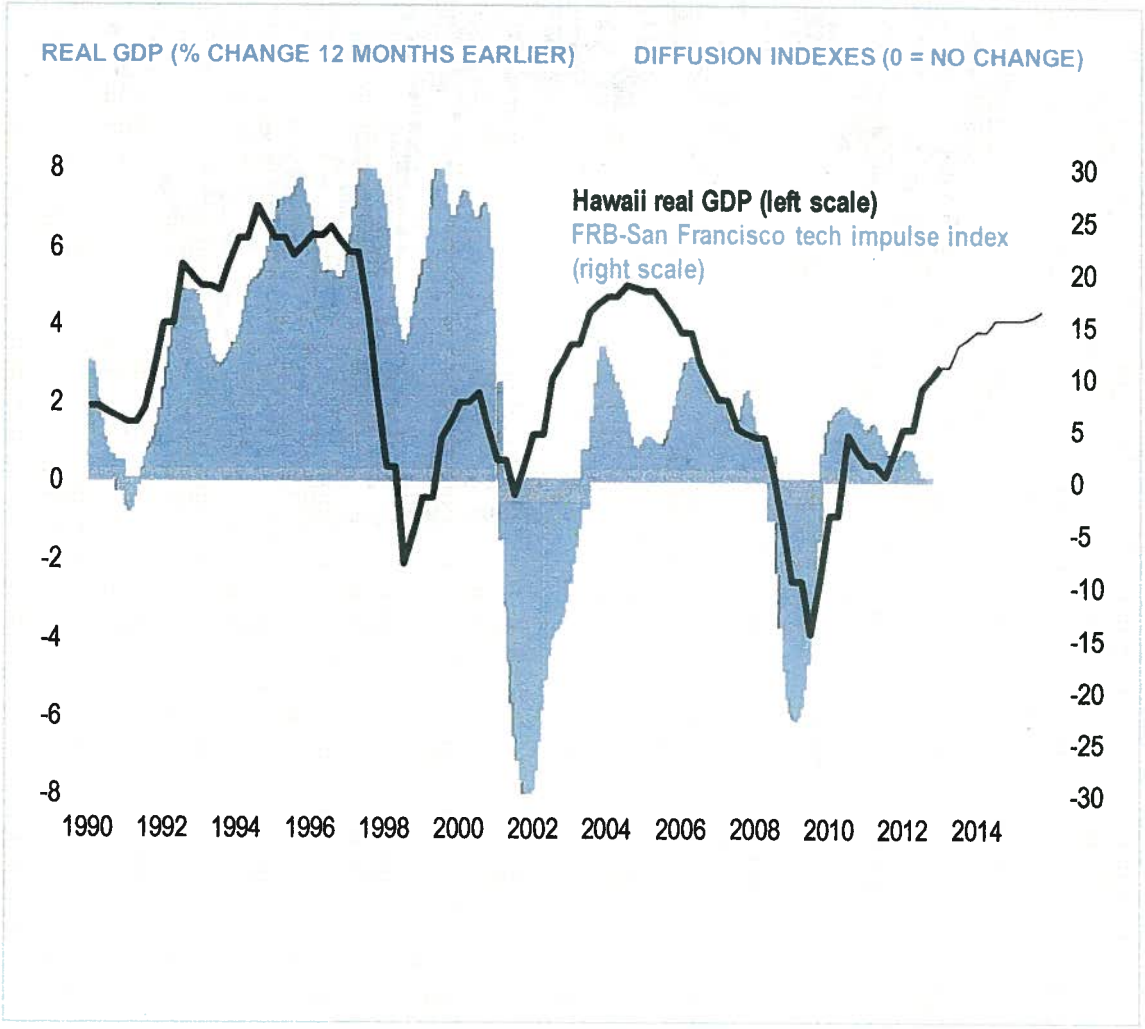
- The ratio of bankruptcy filing by businesses and persons to filings in 2007 Q4.
- Filings for bankruptcy is receding.

KEY MESSAGES:

- Indicators of financial stress are a useful coincident indication of economic distress.
- Financial stress is easing as the economy improves.

Source: Administrative Office of the U.S. Courts; Updated through December 2012..

FRB SF Business Survey



WHAT THE CHART SHOWS:

- The San Francisco Federal Reserve Bank survey of local businesses slowed earlier, but has stabilized.
- The index readings represent the net difference in the percent expecting improving conditions and those expecting worsening conditions.
- The survey is picking up new strength in recent months.

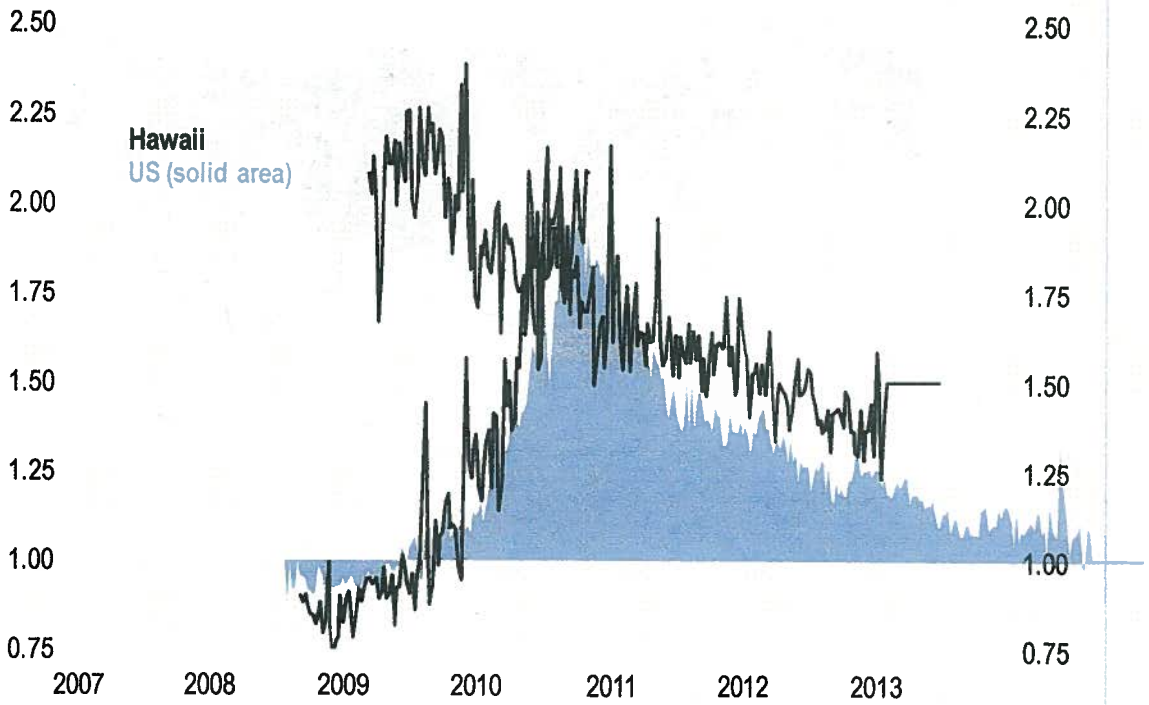
KEY MESSAGES:

- The business outlook remains favorable in Hawaii.

Sources: Federal Reserve Bank of Kansas City; US Department of Commerce. Updated through December 2012 (surveys) and 2012 Q4 (GDP).

Initial Jobless Claims

RATIO OF INITIAL CLAIMS FOR UNEMPLOYMENT INSURANCE TO THE 2007 Q4 LEVEL



WHAT THE CHART SHOWS:

- The figure tracks layoffs in Hawaii and the national level of claims.
- Weekly layoffs, both the state and national tallies, are illustrated in the figure as a ratio to the level of layoffs in the fourth quarter of 2007, prior to the recession.
- Jobless claims have not fallen as much as they have on the mainland and remain quite elevated.

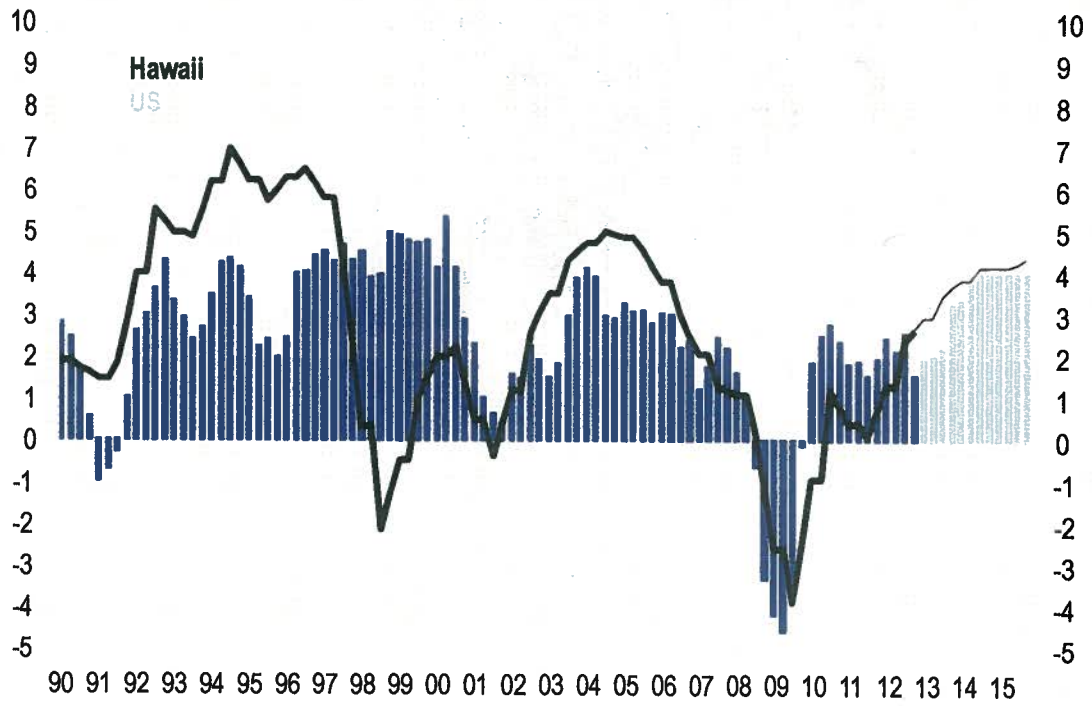
KEY MESSAGES:

- Jobless claims signal only a gradual improvement in Hawaii's economic recovery.

Source: US Department of Labor. Updated through February 2, 2013 (state) and February 9, 2013 (US).

Economic Growth

REAL GDP GROWTH (PERCENT CHANGE FROM FOUR QUARTERS EARLIER)



WHAT THE CHART SHOWS:

- Real GDP growth in Hawaii (the line in the figure) is superimposed on top of US real GDP growth (bars in the figure).
- Hawaii slowed sharply ahead of the national economy, but the turnaround has matched, if not exceeded, the national growth trends.

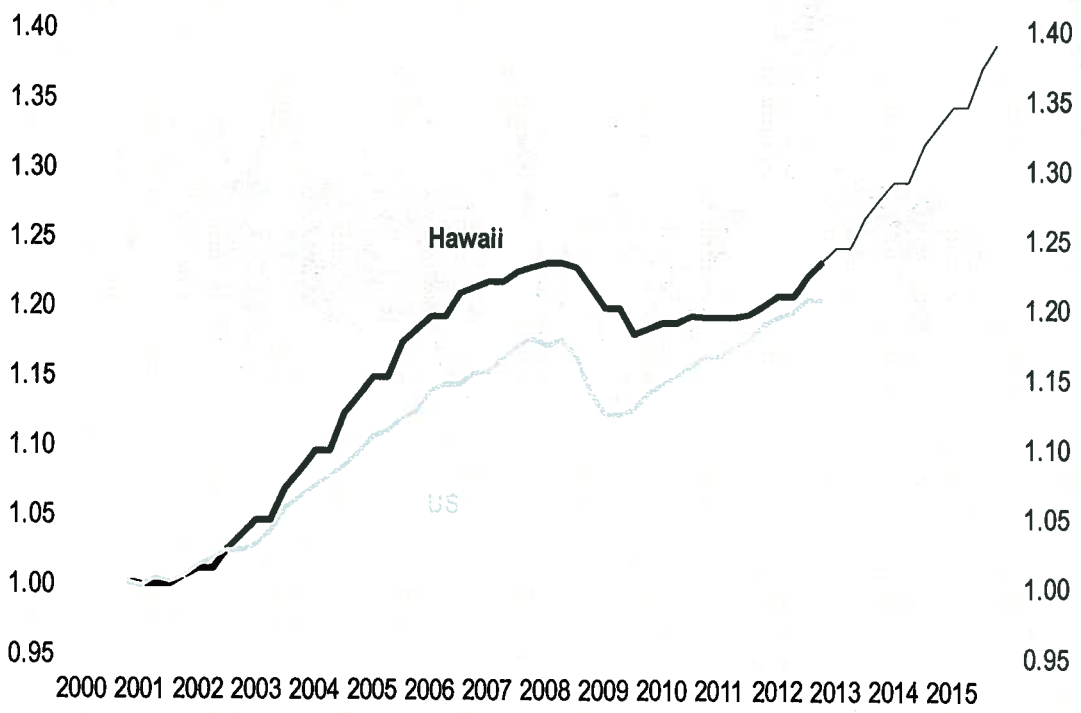
KEY MESSAGES:

- Hawaii's economy is expected to speed up this year from last year's sluggish pace.

Source: US Department of Commerce. Updated through 2012 Q4.

Economic Output

REAL GDP LEVEL (RATIO TO 2000 Q4)



WHAT THE CHART SHOWS:

- The figure illustrates the evolution of real GDP of the state and the overall US economy since the fourth quarter of 2000, the peak of the previous business cycle—that is, at any point in time the lines trace the ratio of real GDP to its level in 2000 Q4.
- Hawaii's economy expanded much faster than the national economy in the last decade on a cumulative basis and only stalled when the national economy contracted.

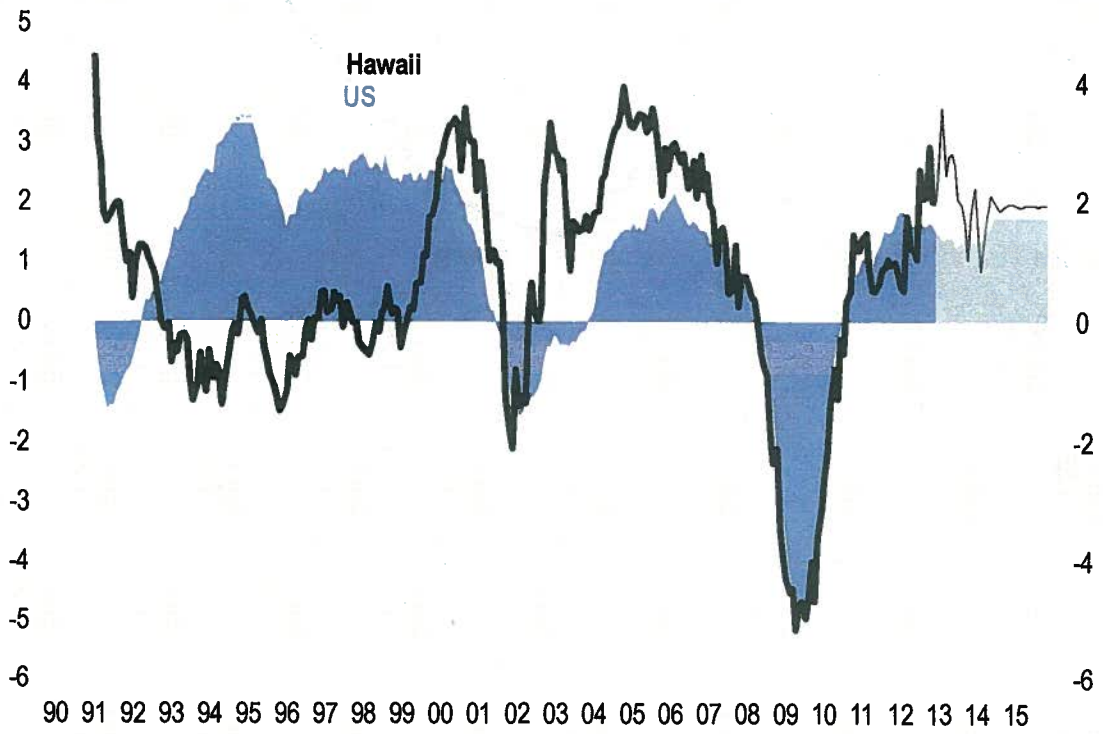
KEY MESSAGES:

- Hawaii lost some momentum in recent years but a stall is better than the contraction seen nationally and the state's economy is expected to resume growing again.
- The state's economy is expected to remain on a slow track for the next several years.

Source: US Department of Commerce. Updated through 2012 Q4.

Employment Growth

NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE FROM 12 MONTHS EARLIER)



WHAT THE CHART SHOWS:

- The job market recovery matches the national trend that remains slow.
- Hawaii's businesses are hiring again and job employment continues to accelerate.

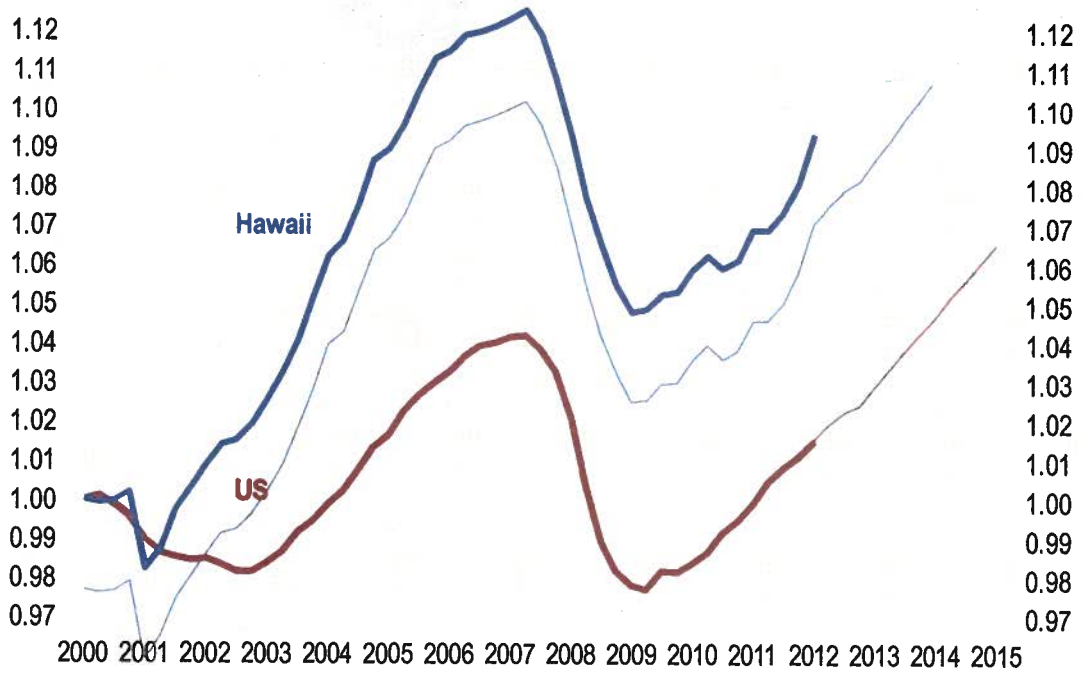
KEY MESSAGES:

- The labor market is improving quickly.

Source: US Department of Labor. Updated through January 2013.

Employment

NONFARM PAYROLL EMPLOYMENT (RATIO TO THE 2000 Q4 LEVEL)



WHAT THE CHART SHOWS:

- The figure illustrates the evolution of employment in the state compared with the nation since 2000 Q4, the peak of the previous business cycle. The lines trace out the ratio of employment at the time to employment in 2000 Q4.
- Hawaii's work force grew 10% more cumulatively than the national job market in this decade, but gave up half of those gains when the economy stalled amid the national recession. Fifty-five percent of the recession's job losses have been reversed.

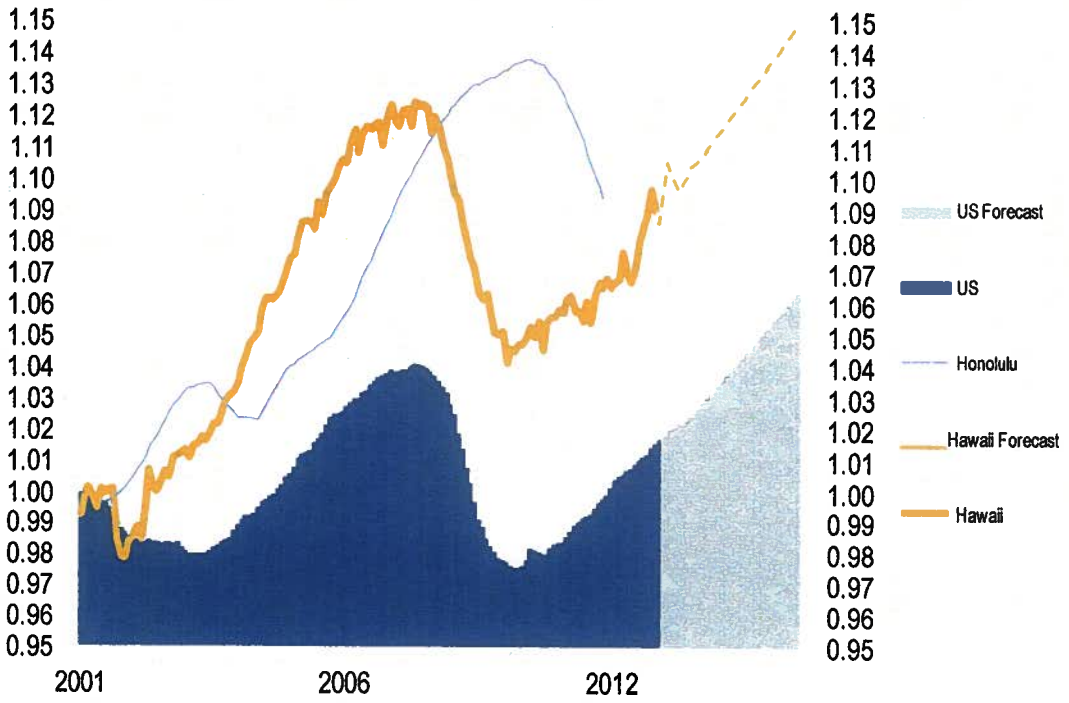
KEY MESSAGES:

- Hawaii's economy may be growing slowly but economic conditions compare very favorably with the nation economy, taking a longer historical perspective.

Source: US Department of Labor. Updated through January 2013.

Intrastate Employment

NONFARM PAYROLL EMPLOYMENT IN SELECTED COMMUNITIES (RATIO TO 2000 Q4 LEVEL)



WHAT THE CHART SHOWS:

- Job trends in Honolulu, compared with the state and with the national economy.

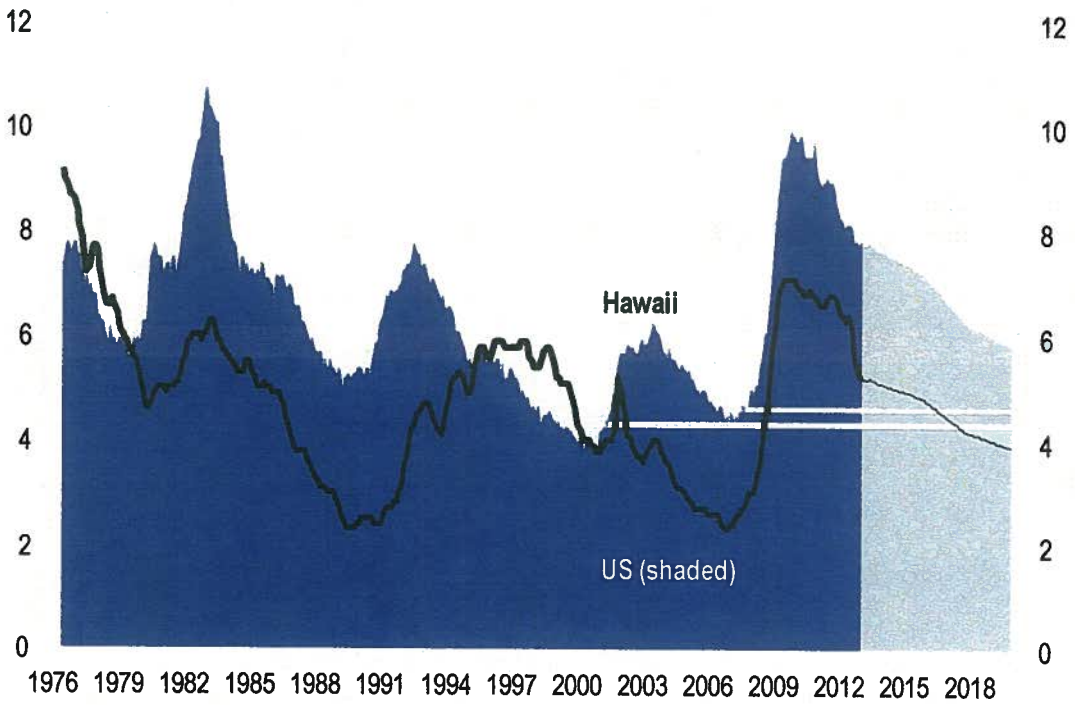
KEY MESSAGES:

- Business conditions are poor in Honolulu.

Source: US Department of Labor. Updated through December 2012 (state) and January 2013 (US).

Unemployment

UNEMPLOYMENT (PERCENT OF THE LABOR FORCE)



WHAT THE CHART SHOWS:

- Business conditions are beginning to improve noticeably, judging by the recent decline in the unemployment rate.

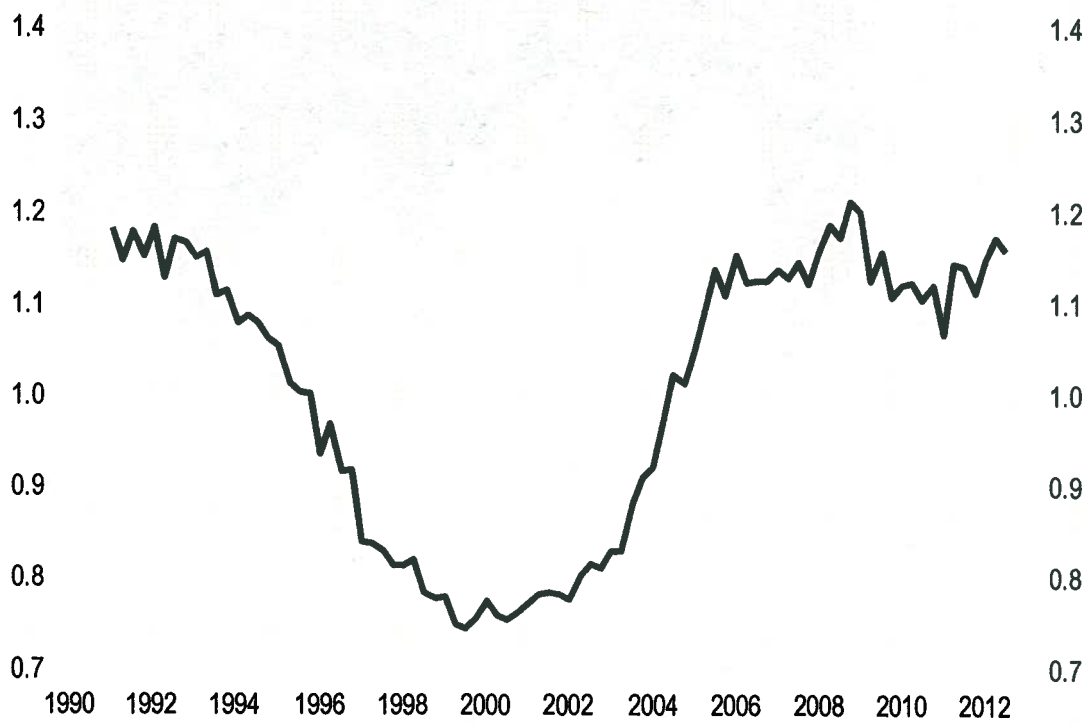
KEY MESSAGES:

- The unemployment rate is the single best indicator of the relative economic performance of a region and by this standard the contraction no longer appears to be intensifying.
- Unemployment is expected to continue to decline.

Source: US Department of Labor. Updated through December 2012 (state) and January 2013 (US).

Relative House Prices

RATIO OF THE STATE'S HOUSE PRICES TO THE NATIONAL AVERAGE (1995 Q2 = 1.0)



WHAT THE CHART SHOWS:

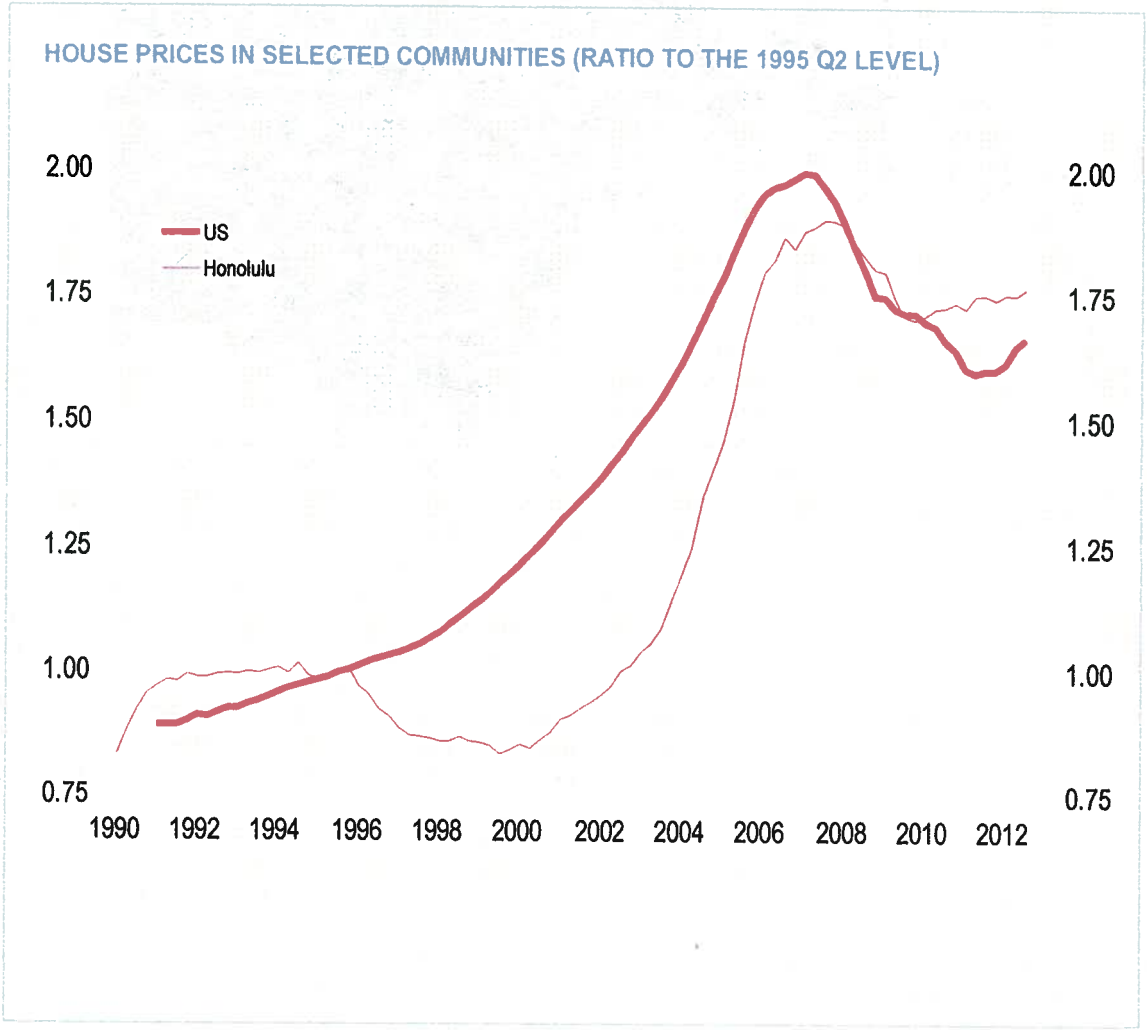
- The figure tracks the relative price of houses in the state versus the nation—that is, it reflects the ratio of the state price index to the national house price index, with that ratio set to unity in the summer of 1995. A drop in the line means that house prices in the state lag the national trend. States that did not suffer from speculative conditions saw a decline in the relative price of houses in this last decade.
- Hawaii mirrored the same speculative roller coaster ride seen in the national averages.

KEY MESSAGES:

- Real estate is a little pricey by national standards but even here, prices are scaling back faster than the national averages.

Source: FHFA. Updated through 2012 Q3.

Real Estate Markets



WHAT THE CHART SHOWS:

- The figure tracks the cumulative percentage deviation in house prices since 1995 in selected local markets and compares those with the national average.
- House prices are holding steady at somewhat elevated levels.

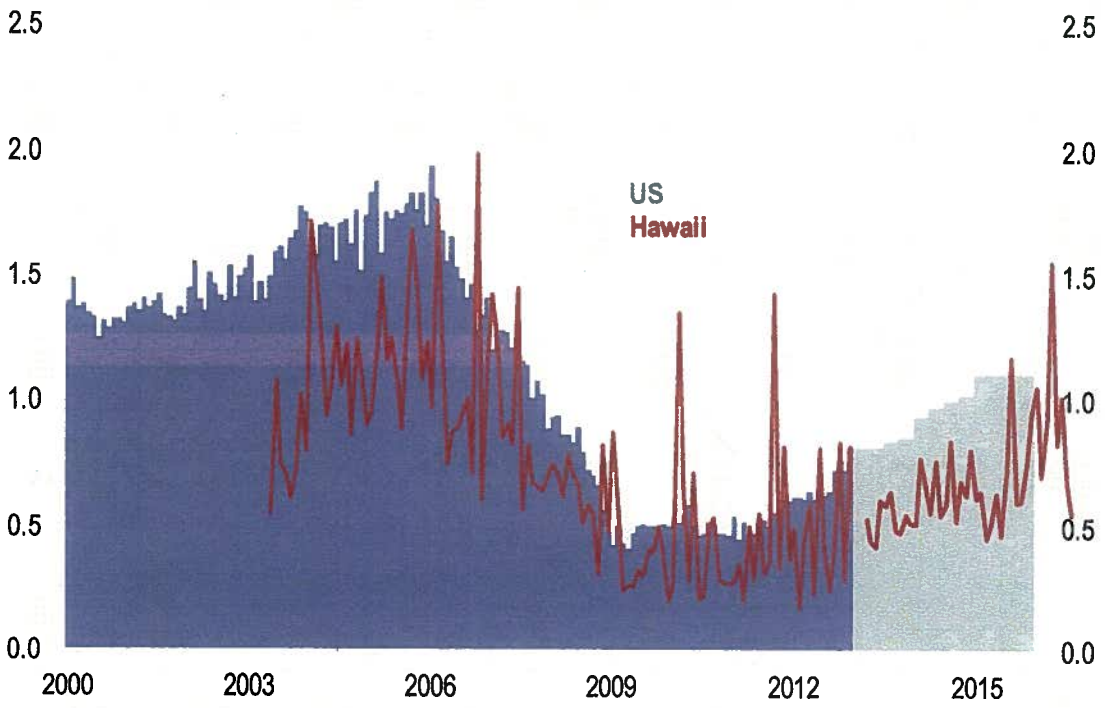
KEY MESSAGE:

- House prices caught up with the inflated values seen in the national averages and so now are correcting too but not as much as elsewhere.

Sources: FHFA; Standard & Poor's. Updated through 2012 Q3.

New Home Building

HOUSING STARTS (RATIO TO THE JULY 1990 LEVEL)



WHAT THE CHART SHOWS:

- New home construction in Hawaii, compared with the US average level of construction.
- New home building in the state has dropped back about 50% since the peak of the boom, less than the national average, but may be reviving.

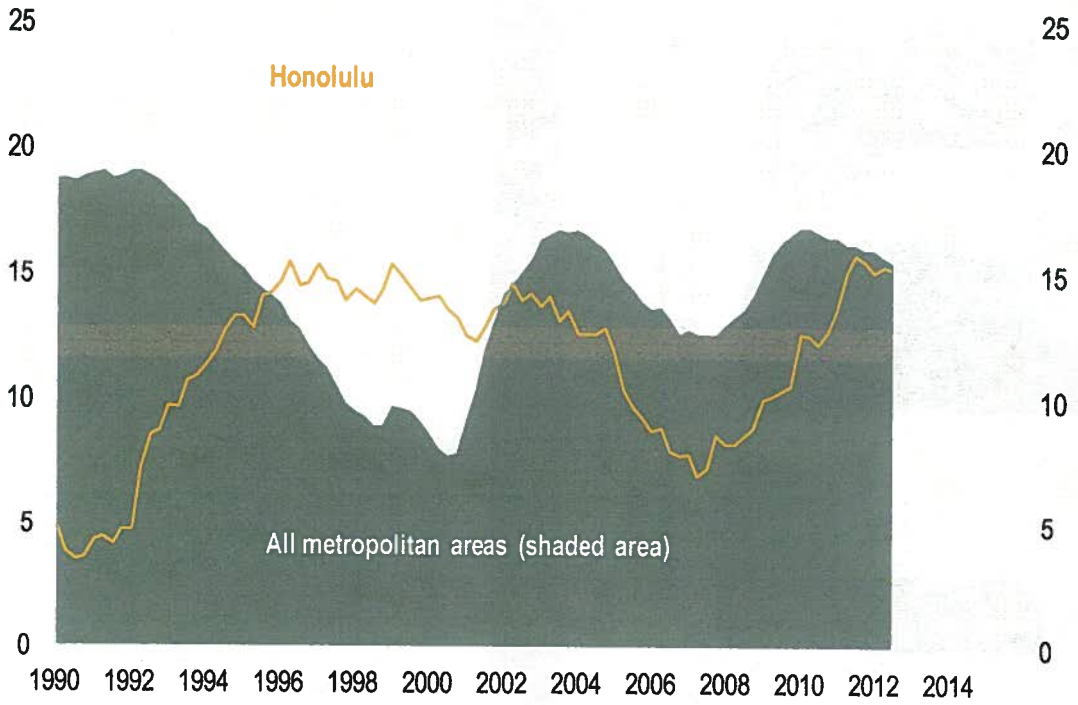
KEY MESSAGES:

- New home building is expected to expand only gradually.

Source: Census Department. Updated through December 2012.

Office Markets

PERCENT OF OFFICE SPACE THAT IS VACANT



WHAT THE CHART SHOWS:

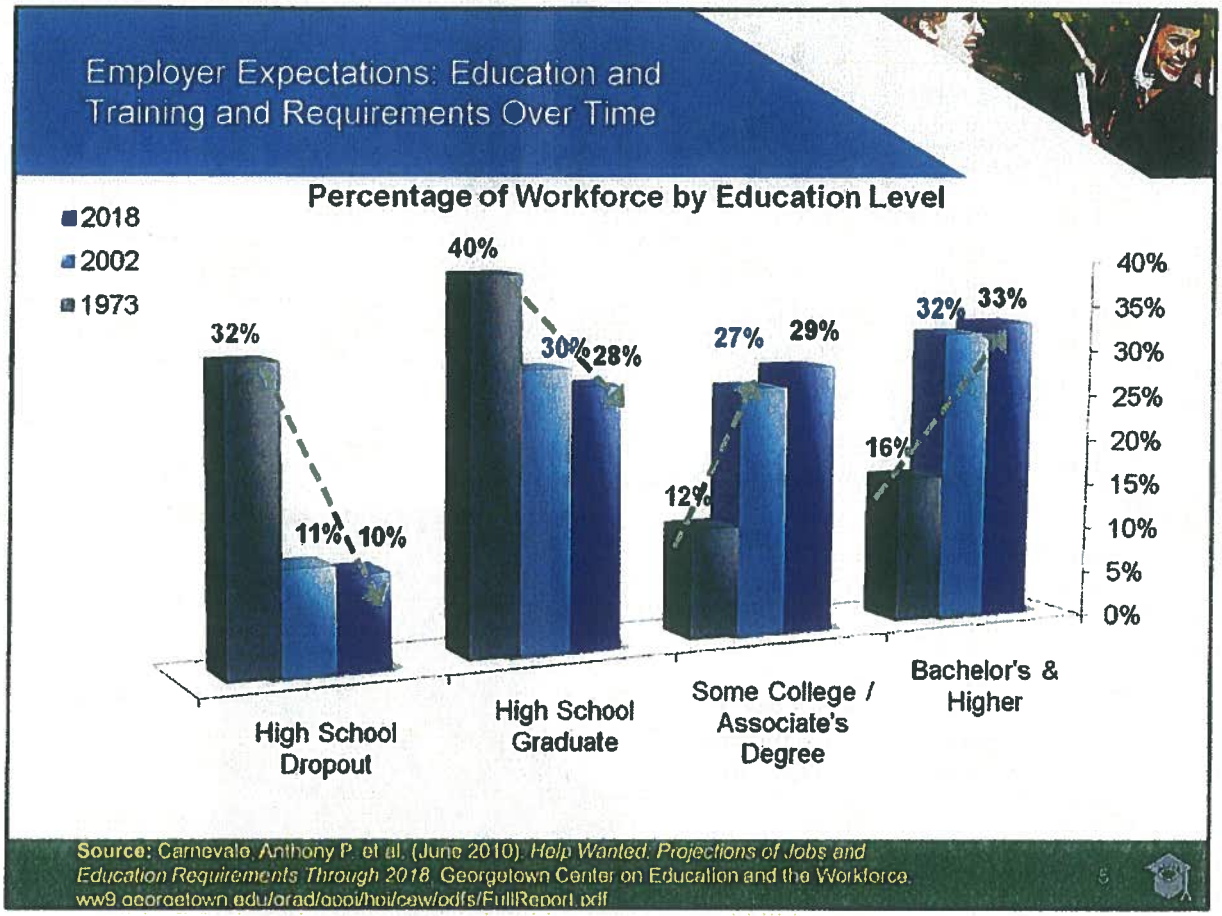
- Office building conditions in Honolulu compared with the national average.
- Vacancy rates rose sharply during the recession, but may be cresting.

KEY MESSAGES:

- Commercial real estate conditions are likely to be stable in 2013.

Source: CB Richard Ellis (formerly CB Commercial Property Information Systems), Office Vacancy Index of the United States. Updated through 2012 Q3.

4. What is the assessment of the current workforce skills and knowledge, and what are the skill gaps that the local area will work to close?



The Skills Mismatch: Demand for Middle-Skill Workers Outpaces Hawaii's Supply

- **In 1950, 60% of jobs were classified as unskilled, attainable by young people with high school diplomas or less. Today, 20% of jobs are considered to be unskilled.**
- ***One result:* The demand for middle- and high-skilled workers is outpacing the state's supply of workers educated and experienced at that level.**
  - **73% of Hawaii's jobs are middle or high skills** (jobs that require some postsecondary education or training)
  - **Yet only 42% of Hawaii's adults have some postsecondary degree** (associate's or higher)

Sources: Carnevale, Anthony P. and Donna Desrochers (2003). *Standards for What? The Economic Roots of K-12 Reform.* Education Testing Services. http://www.learndoeam.org/For-Educators/Standards-for-What.pdf ; Skills to Compete. http://www.skills2compete.org National Center for Higher Education Management Systems, analysis of 2009 American Community Survey. http://www.higheredinfo.org

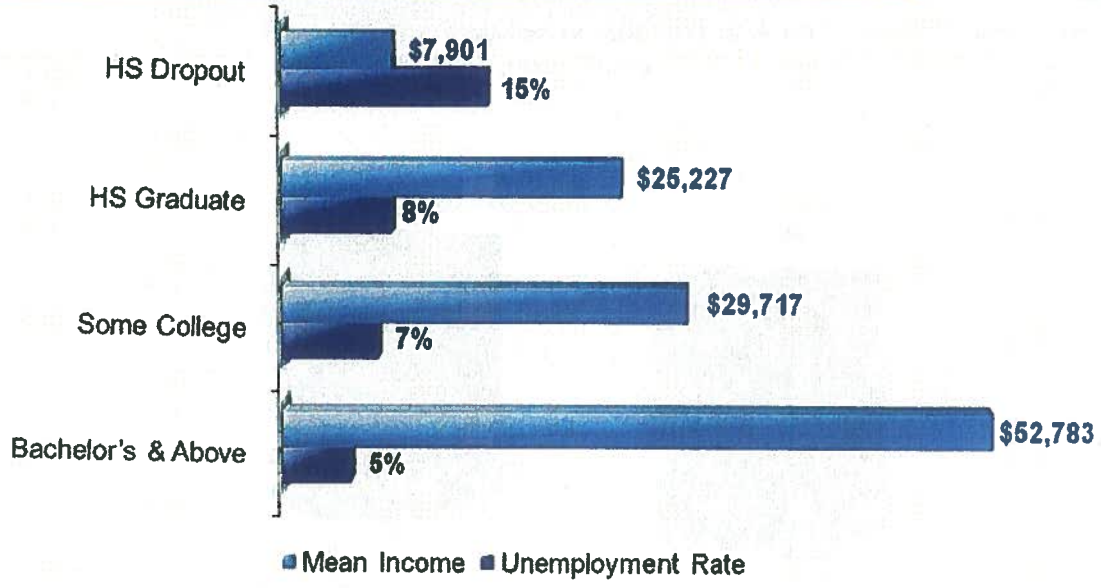
International Advantage: Increased Competition from Abroad

- While the benefits of graduating high school college- and career-ready and attaining some postsecondary credential affects each individual student, it also impacts our standing as a nation in an increasingly competitive global economy and workforce.
- Education attainment and achievement in the U.S. have gone stagnant at a time when the global economy is demanding increased education and more complex skills – and other countries are responding.

U.S. students rank 12th in reading, 13th in science, and 24th in math on international testing.

Source: OECD, *PISA 2009 Database*. Statlink – http://dx.doi.org/10.1787/888932343342

Personal Benefits: Higher Earnings and Rates of Employment



Hawaii Statistics: Total Unemployment: 7%, Mean Income: $32,003

Source: U.S. Census Bureau (2011). *Current Population Survey*. Figures are based on the total persons in the civilian labor force. http://www.census.gov/cps/data/cpstablecreator.html

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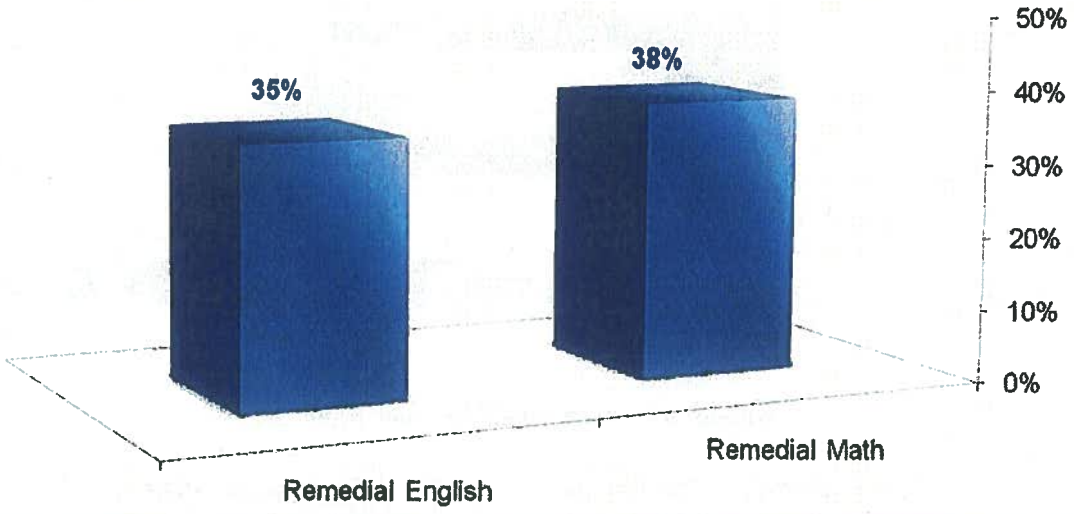
Enrollment in College Does NOT Equal College Readiness in Hawaii

Percentage of Hawaii first-year students in two-year and four-year institutions requiring remediation, 2009



Source: Hawaii P-20 Partnerships for Education "College and Career Indicators Report Class of 2009" http://www.p20hawaii.org/node/115

Hawaii's Commitment to Closing the Expectations Gap to Date

- In 2008, Hawaii increased the requirements for its voluntary Board of Education Recognition Diploma – now the Step Up Diploma – raising it to the college- and career-ready level.
- As part of the Step Up requirements, students must pass an Algebra II end-of-course exam, which includes a college-ready cut score, used by higher education for admissions and placement decisions, as well as eligibility for certain state scholarships.
- Hawaii adopted the Common Core State Standards in May 2010.
- Hawaii is a Governing State in the Smarter Balanced Assessment Consortium, a group of states working to develop a common assessment system using Race to the Top Common Assessment funds.
- In 2011, Hawaii adopted graduation requirements aligned to the Common Core State Standards for all students beginning with the Class of 2016.
- Hawaii has a P-20 data system that regularly matches student-level data across the K-12 and postsecondary systems, and produces annual "College- and Career-Ready Indicator Reports" for each high school in the state.

HAWAII 2011

MEMBER Alliance of States | COMPLETE COLLEGE AMERICA

For a strong economy, the skills gap must be closed.

68% By 2020, jobs requiring a career certificate or college degree

41% Hawaii adults who currently have an associate degree or higher

27% Skills gap

Data: See the Sources and Methodology section on our website.

Too few students make it through college.

Of students who enroll in a public college or university: **100**

	2-Year Public College		4-Year Public College	
	Full-Time	Part-Time	Full-Time	Part-Time
Enroll	40	27	32	0
Return as sophomores	27	13	26	0
Graduate on time (100% time)	1	0	5	0
Additional graduates 150% time	4	1	11	0
200% time	2	1	2	0
Total graduates	7	2	18	0

Graduate in 4 years: **9**

18 Graduate in 8 years

Key to measuring time	Associate	Bachelor's
100% time	2 years	4 years
150% time	3 years	6 years
200% time	4 years	8 years

Data: 2-year cohort started in fall 2004; 4-year cohort started in fall 2002

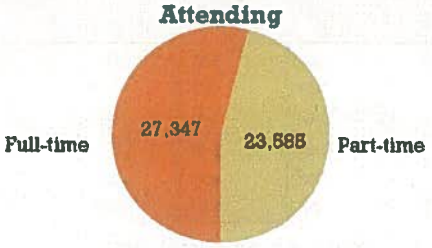
For too many students, the path through college ends with no degree — and often lots of debt.

Note: This report presents data only from public colleges and universities.

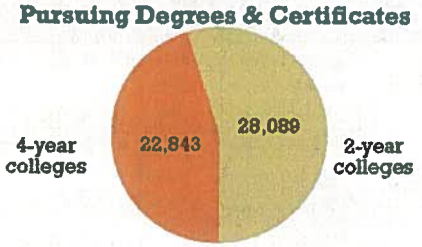
We're making great progress in providing access to more students.

Total public college enrollment: 50,932

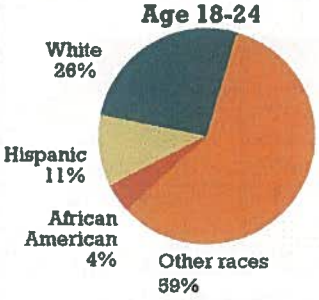
Attending



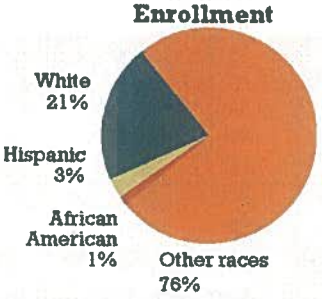
Pursuing Degrees & Certificates



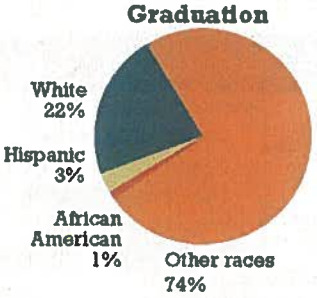
Total State Population, Age 18-24



College Enrollment



College Graduation

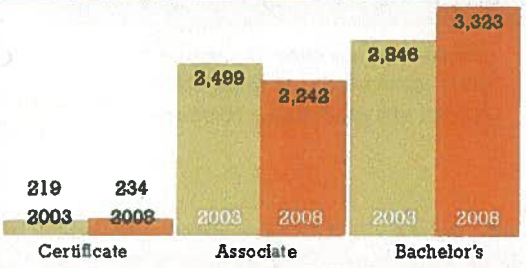


Data: Fall 2009 enrollment from IPEDS; population data from Census ACS PUMS 06-08

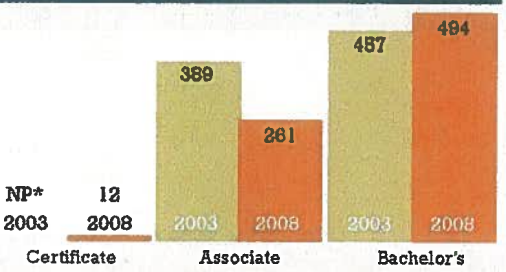
! Now we must have more success from **all** students.

For states to compete, their students must earn more degrees and certificates.

Overall Credentials Awarded



Science, Technology, Engineering, Math (STEM) Credentials Awarded



Data: 2007-08

! And all credentials should provide clear pathways to success.

NP = The state did not provide data for this metric.*

Graduation rates are very low, especially if you're poor, part time, Native Hawaiian, Hispanic, or older.

Certificate-Seeking Students		All	White	Hispanic	Native Hawaiian	Age 25 and Over	Age 20–24	Directly from HS (age 17–19)	Pell Grant Recipients (at entry)	Remedial
2008 Full-Time	On-time (1 year)	19.4%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
	Within 1½ years	25.0%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
	Within 2 years	27.8%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
2008 Part-Time	Within 1 year	2.9%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
	Within 1½ years	5.9%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
	Within 2 years	11.8%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*

27.8%

11.8%

In most states, very few students seeking certificates ever graduate.

Associate Degree-Seeking Students		All	White	Hispanic	Native Hawaiian	Age 25 and Over	Age 20–24	Directly from HS (age 17–19)	Pell Grant Recipients (at entry)	Remedial
2004 Full-Time	On-time (2 years)	3.2%	5.7%	DS*	3.0%	9.2%	4.3%	2.8%	3.1%	1.7%
	Within 3 years	12.2%	11.7%	DS*	8.8%	16.3%	12.1%	11.8%	10.9%	10.3%
	Within 4 years	15.8%	15.7%	DS*	12.3%	21.4%	15.4%	15.7%	15.0%	15.7%
2004 Part-Time	Within 2 years	0.8%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
	Within 3 years	3.2%	5.3%	DS*	DS*	5.5%	DS*	2.4%	4.3%	2.1%
	Within 4 years	8.1%	7.5%	DS*	4.1%	8.5%	8.1%	8.5%	7.5%	8.3%

15.7%

12.3%

Associate degree graduation rates are abysmal across the country — for Native Hawaiian students, they're worse.

Bachelor's Degree-Seeking Students		All	White	Hispanic	Native Hawaiian	Age 25 and Over	Age 20–24	Directly from HS (age 17–19)	Pell Grant Recipients (at entry)	Remedial
2002 Full-Time	On-time (4 years)	14.9%	16.8%	DS*	7.3%	DS*	DS*	14.6%	DS*	DS*
	Within 6 years	50.3%	38.8%	29.3%	43.2%	DS*	44.4%	50.4%	DS*	DS*
	Within 8 years	57.1%	40.4%	34.1%	53.0%	DS*	51.6%	57.2%	DS*	DS*
2002 Part-Time	Within 4 years	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
	Within 6 years	20.0%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*
	Within 8 years	30.0%	DS*	DS*	DS*	DS*	DS*	DS*	DS*	DS*

Almost no one over the age of 25 graduates; students fresh out of high school are most likely to succeed.

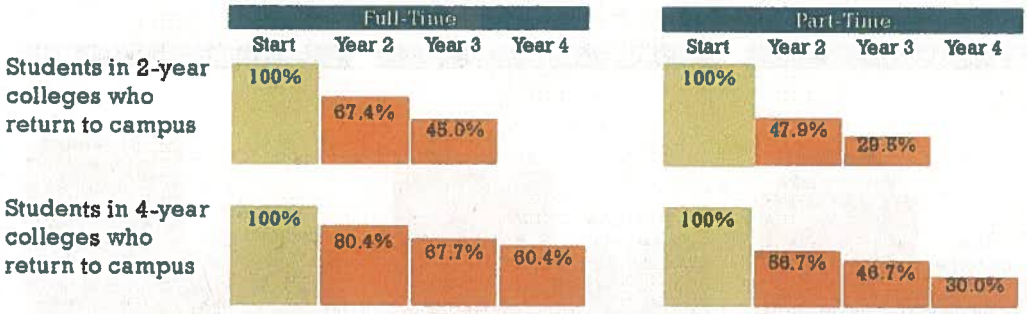
Data: Certificate cohort started in 2008–09, associate cohort started in 2004–05, bachelor's cohort started in 2002–03

! Given changing demographics, our country will not have enough skilled Americans to compete unless many more students from **all** backgrounds and walks of life graduate.

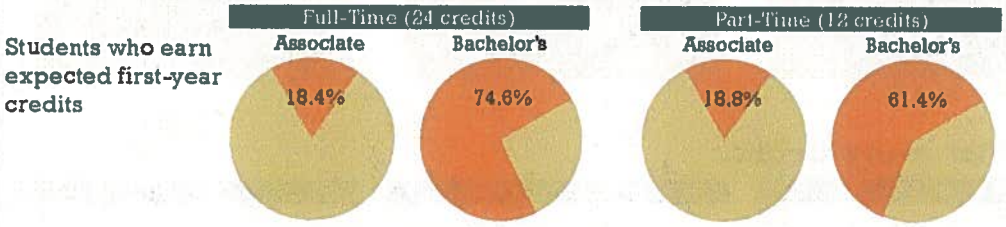
DS* = Fewer than 10 students, so data were suppressed.

Retention rates drop from year to year.

Many get discouraged and drop out ...



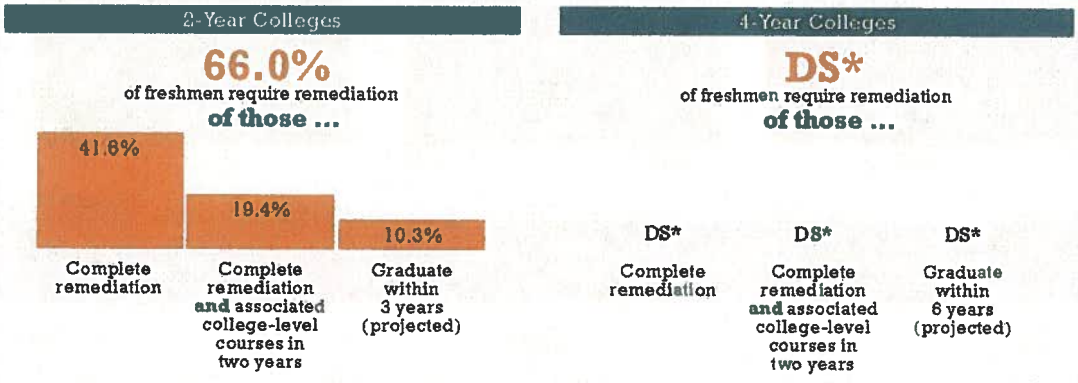
... after falling off track early.



Data: Associate cohort started in 2004–05, bachelor's cohort started in 2002–03; earned credits from fall 2006

! Staying enrolled is particularly tough for part-time students, who must often balance jobs and school.

Remediation must be fixed.



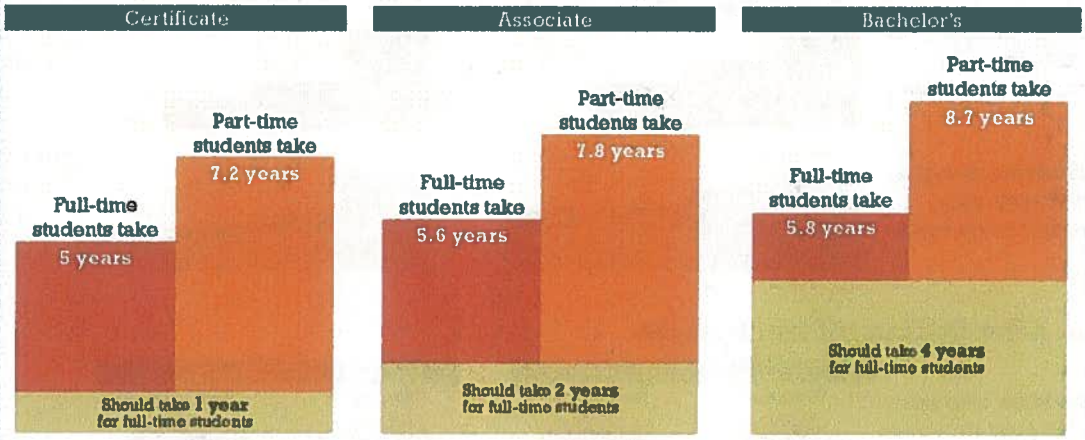
Data: Fall 2006

! Current approaches almost always guarantee failure.

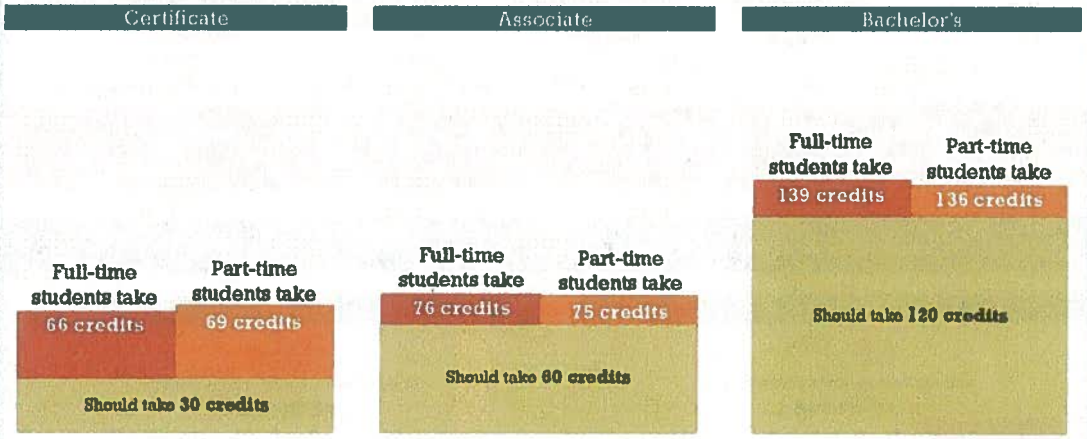
DS = Fewer than 10 students, so data were suppressed.*

Precious time and money are lost when students don't graduate on schedule.

Students are taking too much time ...



... and too many credits.

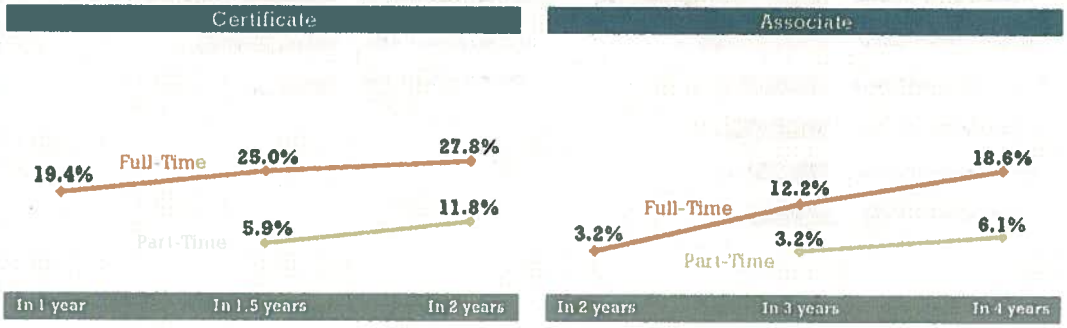


Data: 2007-08

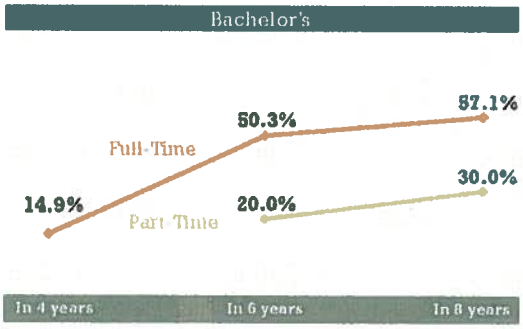
! More students must graduate on time.

More time isn't giving us enough success.

For certificate and associate degree students, graduation rates are very low ... even when students take more time.



On-time graduation rates for bachelor's degree students are shockingly low. And adding time beyond six years produces little additional success.

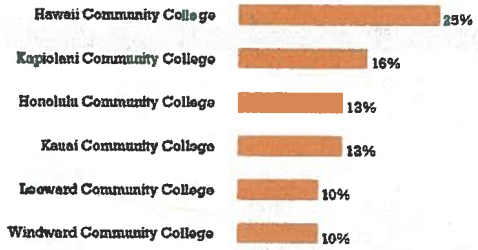


Data: Certificate cohort started in 2005–06; associate cohort started in 2004–05; bachelor's cohort started in 2002–03

! Even modest progress provides little comfort when overall graduation rates are so low.

Graduation rates by campus

Public two-year colleges
(In 3 years)



Public four-year colleges
(In 6 years)

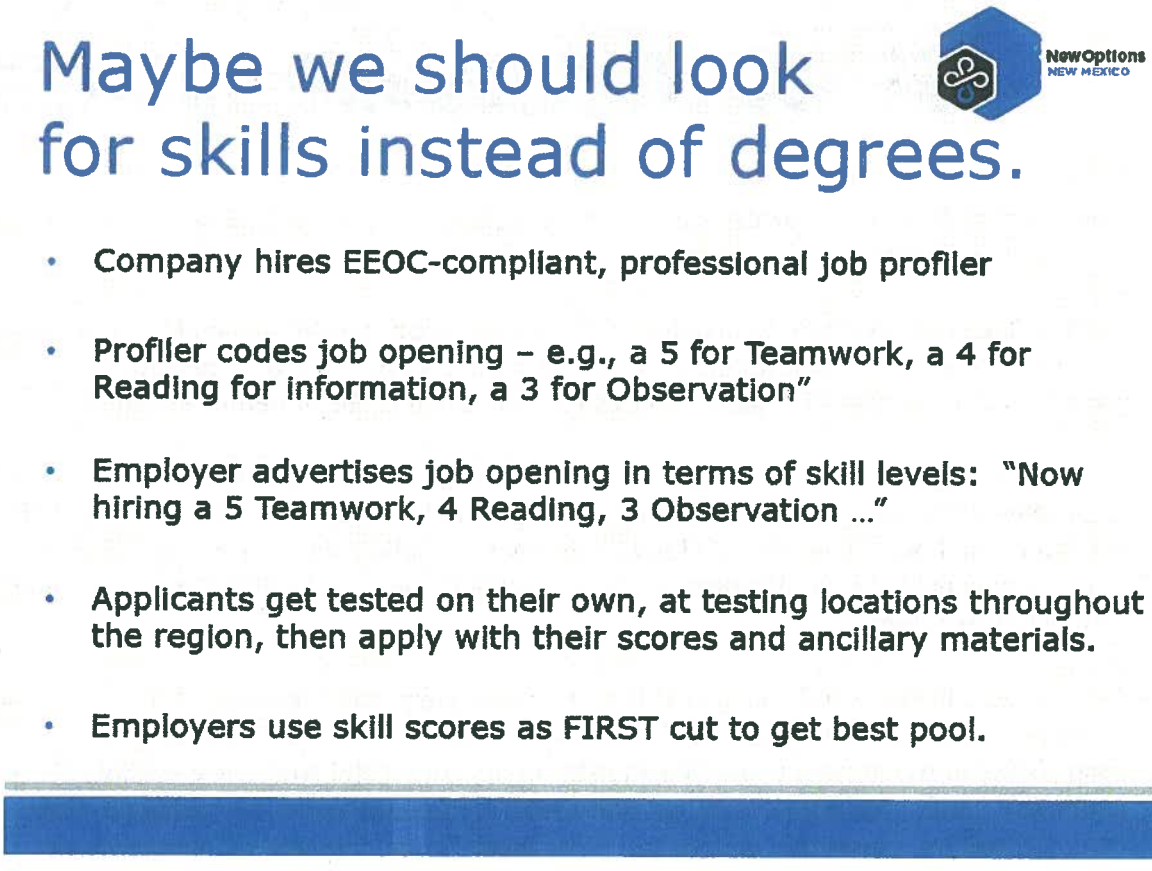
Data: Reported by institutions to NCES Integrated Postsecondary Education Data System (IPEDS). Graduation rates are for first-time, full-time students completing certificate or degree within 150 percent of normal program time. Source: U.S. Department of Education, IPEDS 2009-10 Graduation Rates

In addition to a focus on the aforementioned education-based "skills gaps" there are also those who look at "skills gaps" as based in cognitive skills.

Dr. Merrilea Mayo, the lead strategist for the New Options NM project funded by the W. K. Kellogg Foundation, says:

> "...for a couple of decades our nation has been obsessed with whether or not we have enough scientist or engineers to fill the jobs available I mean for the most part we've been saying they're not enough but then... maybe we had too many and I started to think you know what we're doing is we're trying to match the number of degrees produced to the numbers of jobs available because the degree has a certain name on the top of it, job has a certain name on top we think that should be a one-on-one correspondence. But maybe what's more important are the skills that underlay the degrees I mean that's what really dictates how people perform on a job and maybe that's what we should be looking at and that's what should be measuring instead and I was confirmed in this view by turn out to be an enormous bulk of industrial psychology literature, spending 40 years literally over a thousand studies that showed the degrees are not the same as skills..."

The following data are the result of her research on cognitive skills:



Case Studies

Employer	Positions Filled Using WorkKeys	Outcomes (compared to prior practices)
Subaru of Indiana Automotive (Lafayette, IN)	Automotive assembly workers	25% reduction in turnover
Covidian Health Care (Macon, GA)	Manufacturing production	Per-person hiring cost reduced from $2300 to $600 Time-to-hire reduced from 45 days to 17 days Time to full employee efficiency reduced from 2 years to 6 months
Steelscape (Calama, WA; Richmond and Rancho Cucamonga, CA)	Self-directed manufacturing teams	<4% turnover overall and a "Best Practice" award from the American Psychological Association for its hiring process.
Bradner Village, a retirement community (Marion, IN)	Nurses, nursing assistants, dietary staff, etc.	37% reduction in turnover
Inova Health System (Falls Church, VA)	Customer assistants and clinical technicians	73% reduction in turnover; $1.8M cost savings
911 call center (Lexington county, SC)	Call center operators	50% reduction in turnover; skills-related turnover went to 0.

NewOptions NEW MEXICO

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The Board will research the different ways of measuring skills gaps; discuss findings with others in the field and then formulate a strategy for addressing targeted skills gaps.

Further, the Oahu Workforce Investment Board and local one-stop provider are working with the University of Hawaii Community Colleges on a number of workforce development solutions aimed at reducing the skills gaps in industries identified in the governor's New Day in Hawaii Plan.

In an attempt to understand the existing skills gaps in Honolulu, members of the OWIB, Oahu Worklinks and the University of Hawaii Community Colleges have participated in the Skill Panels coordinated by the Workforce Development Council in Health Care, Agriculture, and Software Development.

Our current efforts to address the skills gap involve supporting the Oahu Work Links and their partnership with the University of Hawaii Community Colleges to better align services for One-Stop clients to move from Oahu WorkLinks highly successful workforce training programs for adults and youth, into both credit and non-credit community college training programs in health care, agriculture, renewable energy and other growing and targeted industry sectors.

5. What challenges does the local area face in attaining the skills and education and training needed to obtain employment? **[WIA § 118(b)(1)(C)); 20 CFR § 661.350(a)(2)]**

Before "training needed to obtain employment" occurs, there first must be sustainable business revenue sources and entrepreneurship in the local area. Our local plan aligns with the state plan which seeks to realize the Governor's New Day Plan goals related to economic development for the future and Hawaii's emerging industries.

Training challenges to match and support economic growth are related to securing adequate resources to fund additional and/or new skills and education training related to future employment opportunities.

Crucially, as with all counties throughout the United States, the potential financial impact from sequestration on federal programs that support workforce training and education are of grave concern. Added to the changes in the allowable ceiling of administrative costs, addition reductions in federal spending will impact all counties in the state of Hawaii.

6. How well is the Local Area equipped to meet those challenges?

Key stakeholders in the local area constantly are applying for grants funds, seeking partnerships with business and learning how to merge resources to best equip themselves to meet those challenges.

Director Takamine of the Hawaii State Department of Labor and Industrial Relations has insightfully created a series of meetings and opportunities for various federal grant fund recipients to join together to best leverage resources.

Further, to overcome these challenges, the OWIB supports the joint effort between Oahu WorkLinks, the state of Office of Career and Technical Education and the University of Hawaii Community Colleges to improve the alignment of services delivered to Oahu's one-stop clients. The OWIB believes that this joint effort will maximize existing resources including, but not limited to formula funding, existing and future competitive grants as well as state resources in an attempt to better serve Honolulu's dislocated, under-employed, and youth in need.

B. Local Area Vision, Goals and Strategies

1. What is the vision of the LWIB?

Our vision is for the City and County of Honolulu to be a "smart economy" positioned well for the Asia Pacific century.

For us, a smart economy is an economy that utilizes its resources efficiently and effectively. These resources are its people, its natural resources, and its ability to innovate beyond traditional stereotypes. Additionally, a smart economy strategically invests in talent management for economic diversity and long term success.

We see this vision as directly growing from the Governor's New Day Plan.

The goals to realize this vision are:

- Matching operations to the Governor's New Day Plan;
- Supporting sustainable business development which diversifies our economy
- Developing regional resources related to talent management
- Supporting entrepeneurship as a core part of job creation strategies

Given extremely limited resources due to budgetary cuts in the public workforce system, the only strategy is to partner with like-minded organizations in the community.

2. Indicate any additional goals for Program Years 2012-2017 that fall outside the Governor's New Day goals listed on page 1that are important for the Local Area.

During the life of this four year plan, there may be additional goals that arise which fall outside of the Governor's New Day goals listed on page one.

3. What are the Local Area's two to four top priorities for 2012-2014?

    1. Supporting veterans per the priority set by President Obama;
    2. Researching skills gaps related to education as well as cognitive skills;
    3. Supporting entrepeneurship and the state's identified emerging industries as they align with the Governor's New Day Plan,

4. How has the Local Area aligned itself with regional economic development to ensure that workforce development services support anticipated industry growth, employment opportunities and required skilled competencies? **[Training Employment Guidance Letter (TEGL) No. 21-11, Item 7A, Bullet 1]**

OWIB continuously seeks new opportunities to learn about and potentially partner with like-minded initiatives in the community. Board meetings have focused on the Chamber of Commerce of Hawaii and the impact of military changes on the economy, changes in the hospitality industry, the Hawaii State Department of Education's Castle Complex redesign, the healthcare industry, the renewable energy industry and the Public Utilities Commission as well as others. In addition, the Board has also connected with the important Asia Pacific regional economy to discuss common workforce issues such as skills gaps and credentialing which are facing the region. The Board co-sponsored the first Asia Pacific Workforce Roundtable in December 2012 with the National Association of Workforce Boards, the McGraw-Hill Research Foundation and the East West Center. A white paper was developed by the McGraw-Hill Research Foundation from this event. It may be found at: http://mcgraw-hillresearchfoundation.org/tag/asia-pacific/

5. How has the Local Area coordinated across different programs and funding streams to integrate planning processes and operational procedures to lower costs and increase the effectiveness of service delivery? How do these cross-program strategies link to employers and sector strategies (such as the skill panels for healthcare, agriculture and software development). **[TEGL No. 21-11, Items 5 & 7A, Bullet 2]**

The Youth Center leadership and staff achievements have led to amazing grant awards. These grants allow the Youth Center to coordinate services across different programs to best match youth needs. For example, YouthBuild involves the construction industry, unions, state departments with land utilization initiatives.

The skills panels for healthcare, agriculture and software development were all state level initiatives to which all local areas were invited to participate. Given extremely limited staffing at all local areas, joining together with the state is the only practical way to have "cross-program strategies (that) link to employers and sector strategies."

6. Has the Local Area performed a skills gap analysis for the top 5-10 targeted jobs? If yes, please attach a copy of the analysis and include O*NET codes. **[TEGL No. 21-11, Item 7A, Bullet 3]**

A few years ago, the Board negotiated and secured an internet based program that allowed for skills gap analysis that used O*NET codes. The program called TORQ allowed industries, individuals, policy makers and others to analyze the abilities of the current and/or projected talent pool as well as the transferrable skills and education needs to fill any skills gaps. TORQ was used by customers as well as business developers to gain insight to job possibilities and the skills gaps that may or may not be there as a result of changes in career paths. TORQ was shared with businesses that contacted the business developers. In addition, the Mayor held a press conference that was covered by local television newscasts to unveil TORQ. However, due to budget changes, the one-stop needed to discontinue the program.

The Board is now in the process of researching a project based on the O*NET codes of the hospitality industry. We are at the beginning stages of a potential partnership with team members of a company that specializes in education and workforce initiatives.

7. What are the Local Area's key partnerships that are necessary to implement the strategies (be specific). **[TEGL No. 21-11, Items 7A, Bullet 3 & 7B]**

PRIORITY:	SPECIFIC KEY PARTNERSHIPS (PRELIMINARY):
Supporting veterans	• Chamber of Commerce of Hawaii's Military Affairs Division; • the US DOL Veterans' Employment and Training Service

Researching skills gaps	• Innovate+Educate; • Houghton Mifflin Harcourt; • New Options NM
Supporting entrepeneurship	• Hawaii State Department of Economic Development and Tourism; • US Small Business Administration; • Microenterprise resources

8. If applied, how have "lessons learned" from evaluation studies been used to modify and improve service delivery strategies? **[TEGL No. 21-11, Item 7A, Bullet 4]**

One-stop staff practice continuous quality improvement. Weekly meetings allow them to share common challenges, strategies and new ideas for frontline operations.

9. Identify the job skills/credentials that are needed to obtain the employment opportunities available in your Local Area, and the education and training resources that exist to assist individuals in obtaining these skills. If there are not enough training/education/OJT resources, how will the Local Area and its partners address the deficit(s)? **[TEGL No. 21-11, Item 7A, Bullet 5 & 7C, WIA § 117(b)(2)(A)]**

There are a variety of job skills/credentials that are needed to obtain employment in our Local Area. The types of jobs available span everything from those requiring advanced post-graduate work to those that require specialized skills in technology to vital blue collar jobs to healthcare.

The wider the variety of training/education/OJT resources there are, the more opportunities there may be for our customers' needs to be best addressed. An excellent example of partners addressing deficits occurred during the implementation of the state's "Green Grant." The state had various non-profits, public sector agencies including the community colleges and trade unions working together to develop training needed to implement the grant's goals. As needs occur, we will endeavor to replicate this approach to the extent possible to address any future deficits.

Here is a snapshot of job skills/credentials of Hawaii's job seeker pool:

Rank	Minimum Education Level	Potential Candidates	Percent
1	Less than High School	1,852	4.95%
2	High School Diploma or Equivalent	14,483	38.71%
3	1 to 3 Years at College or a Technical or Vocational School	8,000	21.38%

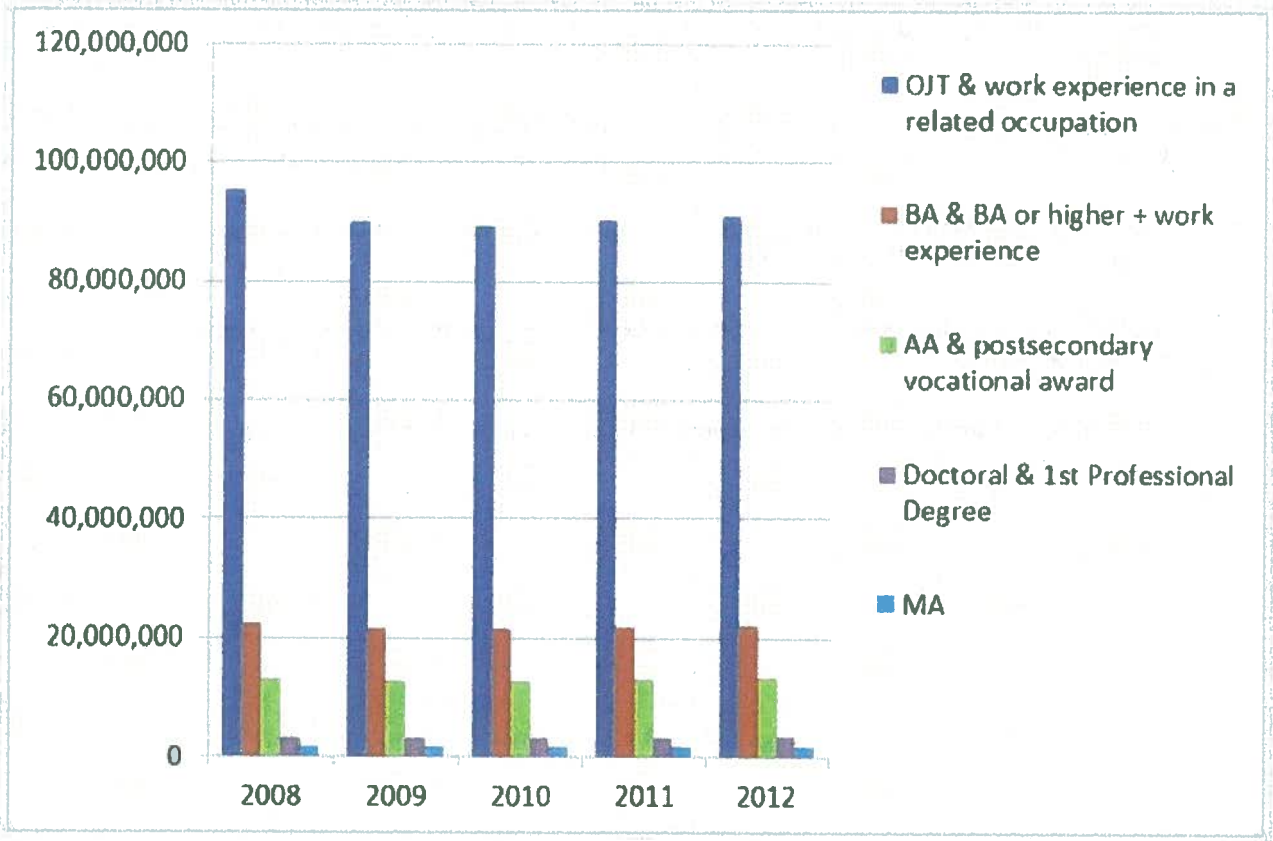
Rank	Minimum Education Level	Potential Candidates	Percent
4	Vocational School Certificate	2,042	5.46%
5	Associates Degree	3,088	8.25%
6	Bachelor's Degree	5,641	15.08%
7	Master's Degree	1,783	4.77%
8	Doctorate Degree	282	.75%
9	Specialized Degree (e.g. MD, DDS)	246	.66%

Candidate Source: Individuals with active resumes in the workforce system , Hawaii DLIR

Jobs by Ed Level 2008-2012

(source: EMSI, 2012 Summary)

We filtered for jobs by education level to get a better handle on how various ed levels have performed and to get a relative sense of scale. *Note: 2012 data is a projection.* The following charts compare the results:



	2008	2009	2010	2011	2012	Change	% Change	2011 Median Hourly Wage	2011 Hourly Wage
OJT & work experience in a related occupation	95,274,317	90,123,788	89,370,871	90,428,600	91,071,686	-4,202,631	-4%	$14.60	$15.62
BA & BA or higher + work experience	22,375,417	21,651,129	21,579,687	21,835,311	22,133,512	-241,905	-1%	$33.50	$36.26
AA & postsecondary vocational award	13,166,772	12,846,076	12,884,576	13,091,314	13,331,322	164,550	1%	$21.24	$22.22
Doctoral & 1st Professional Degree	3,263,663	3,248,322	3,297,444	3,348,026	3,420,603	156,940	5%	$47.44	$51.45
MA	1,722,549	1,723,630	1,744,084	1,768,540	1,813,224	90,675	5%	$28.08	$29.23

- **OJT & work experience jobs** dominate the US workforce. There are over 91 million jobs listed for 2012, making OJT the biggest employment sector with more than double the jobs as all the other ed-level jobs combined. From 2008-12, these jobs declined by 4%. OJT jobs have dropped the most since the recession, both proportionately (-4%) and by sheer numbers (-4 million).

- Occupations commonly associated with **associates degrees** and **postsecondary vocational awards** are the third largest group and represent 13.3 million jobs. These jobs grew by 1% from 2008-12.

- Occupations with **bachelor's degree** represent 22 million jobs, the second largest group on our list. The occupations declined by 1% from 08-12.

- **Master's degree**-related occupations are the smallest set and grew by 5%. This group represents 1.8 million jobs.

- **Doctoral & first professional degrees** represent 3.4 million jobs and grew by 5% from 08-12.

Education and training classification by detailed occupation

This table has been updated to correct errors in the category assignments for select occupations. More information on the changes is available at http://www.bls.gov/errata/emp_corrections_01132012.htm				
2010 National Employment Matrix title and code		Typical education needed for entry	Work experience in a related occupation	Typical on-the-job training needed to attain competency in the occupation
Chief Executives	11-1011	Bachelor's degree	More than 5 years	None
General and Operations Managers	11-1021	Associate's degree	1 to 5 years	None
Legislators	11-1031	Bachelor's degree	1 to 5 years	None
Advertising and Promotions Managers	11-2011	Bachelor's degree	1 to 5 years	None
Marketing Managers	11-2021	Bachelor's degree	1 to 5 years	None
Sales Managers	11-2022	Bachelor's degree	1 to 5 years	None
Public Relations and Fundraising Managers	11-2031	Bachelor's degree	1 to 5 years	None
Administrative Services Managers	11-3011	High school diploma or equivalent	1 to 5 years	None
Computer and Information Systems Managers	11-3021	Bachelor's degree	More than 5 years	None
Financial Managers	11-3031	Bachelor's degree	More than 5 years	None
Industrial Production Managers	11-3051	Bachelor's degree	1 to 5 years	None
Purchasing Managers	11-3061	Bachelor's degree	More than 5 years	None
Transportation, Storage, and Distribution Managers	11-3071	High school diploma or equivalent	More than 5 years	None
Compensation and Benefits Managers	11-3111	Bachelor's degree	1 to 5 years	None
Human Resources Managers	11-3121	Bachelor's degree	1 to 5 years	None
Training and Development Managers	11-3131	Bachelor's degree	1 to 5 years	None
Farmers, Ranchers, and Other Agricultural Managers	11-9013	High school diploma or equivalent	More than 5 years	None
Construction Managers	11-9021	Associate's degree	More than 5 years	None
Education Administrators, Preschool and Childcare Center/Program	11-9031	Bachelor's degree	1 to 5 years	None
Education Administrators, Elementary and Secondary School	11-9032	Master's degree	1 to 5 years	None
Education Administrators, Postsecondary	11-9033	Master's degree	1 to 5 years	None
Education Administrators, All Other	11-9039	Bachelor's degree	1 to 5 years	None
Architectural and Engineering Managers	11-9041	Bachelor's degree	More than 5 years	None
Food Service Managers	11-9051	High school diploma or equivalent	1 to 5 years	None
Gaming Managers	11-9071	Some college, no degree	More than 5 years	None
Lodging Managers	11-9081	High school diploma or equivalent	1 to 5 years	None
Medical and Health Services Managers	11-9111	Bachelor's degree	None	None
Natural Sciences Managers	11-9121	Bachelor's degree	More than 5 years	None
Postmasters and Mail Superintendents	11-9131	High school diploma or equivalent	1 to 5 years	Moderate-term on-the-job training
Property, Real Estate, and Community Association Managers	11-9141	High school diploma or equivalent	1 to 5 years	None

Social and Community Service Managers	11-9151	Bachelor's degree	1 to 5 years	None
Emergency Management Directors	11-9161	Bachelor's degree	1 to 5 years	Long-term on-the-job training
Managers, All Other	11-9199	High school diploma or equivalent	1 to 5 years	None
Agents and Business Managers of Artists, Performers, and Athletes	13-1011	Bachelor's degree	1 to 5 years	None
Buyers and Purchasing Agents, Farm Products	13-1021	High school diploma or equivalent	None	Long-term on-the-job training
Wholesale and Retail Buyers, Except Farm Products	13-1022	High school diploma or equivalent	None	Long-term on-the-job training
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	High school diploma or equivalent	None	Long-term on-the-job training
Claims Adjusters, Examiners, and Investigators	13-1031	High school diploma or equivalent	None	Long-term on-the-job training
Insurance Appraisers, Auto Damage	13-1032	Postsecondary non-degree award	None	Moderate-term on-the-job training
Compliance Officers	13-1041	Bachelor's degree	None	Moderate-term on-the-job training
Cost Estimators	13-1051	Bachelor's degree	None	None
Farm Labor Contractors	13-1074	Less than high school	Less than 1 year	Short-term on-the-job training
Human Resources, Training, and Labor Relations Specialists, All Other	13-1078	Bachelor's degree	None	None
Logisticians	13-1081	Bachelor's degree	1 to 5 years	None
Management Analysts	13-1111	Bachelor's degree	1 to 5 years	None
Meeting, Convention, and Event Planners	13-1121	Bachelor's degree	Less than 1 year	None
Compensation, Benefits, and Job Analysis Specialists	13-1141	Bachelor's degree	None	None
Training and Development Specialists	13-1151	Bachelor's degree	None	None
Market Research Analysts and Marketing Specialists	13-1161	Bachelor's degree	None	None
Business Operations Specialists, All Other	13-1199	High school diploma or equivalent	Less than 1 year	Long-term on-the-job training
Accountants and Auditors	13-2011	Bachelor's degree	None	None
Appraisers and Assessors of Real Estate	13-2021	High school diploma or equivalent	None	Apprenticeship
Budget Analysts	13-2031	Bachelor's degree	None	None
Credit Analysts	13-2041	Bachelor's degree	None	None
Financial Analysts	13-2051	Bachelor's degree	None	None
Personal Financial Advisors	13-2052	Bachelor's degree	None	None
Insurance Underwriters	13-2053	Bachelor's degree	None	Moderate-term on-the-job training
Financial Examiners	13-2061	Bachelor's degree	None	Moderate-term on-the-job training
Credit Counselors	13-2071	Bachelor's degree	None	Moderate-term on-the-job training
Loan Officers	13-2072	High school diploma or equivalent	None	Moderate-term on-the-job training

Tax Examiners and Collectors, and Revenue Agents	13-2081	Bachelor's degree	None	Moderate-term on-the-job training
Tax Preparers	13-2082	High school diploma or equivalent	None	Moderate-term on-the-job training
Financial Specialists, All Other	13-2099	Bachelor's degree	None	Moderate-term on-the-job training
Computer and Information Research Scientists	15-1111	Doctoral or professional degree	None	None
Computer Systems Analysts	15-1121	Bachelor's degree	None	None
Computer Programmers	15-1131	Bachelor's degree	None	None
Software Developers, Applications	15-1132	Bachelor's degree	None	None
Software Developers, Systems Software	15-1133	Bachelor's degree	None	None
Database Administrators	15-1141	Bachelor's degree	1 to 5 years	None
Network and Computer Systems Administrators	15-1142	Bachelor's degree	None	None
Computer Support Specialists	15-1150	Some college, no degree	None	Moderate-term on-the-job training
Information Security Analysts, Web Developers, and Computer Network Architects	15-1179	Bachelor's degree	1 to 5 years	None
Computer Occupations, All Other	15-1799	Bachelor's degree	None	None
Actuaries	15-2011	Bachelor's degree	None	Long-term on-the-job training
Mathematicians	15-2021	Master's degree	None	None
Operations Research Analysts	15-2031	Bachelor's degree	None	None
Statisticians	15-2041	Master's degree	None	None
Mathematical Technicians	15-2091	Bachelor's degree	None	None
Mathematical Science Occupations, All Other	15-2099	Bachelor's degree	None	None
Architects, Except Landscape and Naval	17-1011	Bachelor's degree	None	Internship/residency
Landscape Architects	17-1012	Bachelor's degree	None	Internship/residency
Cartographers and Photogrammetrists	17-1021	Bachelor's degree	None	None
Surveyors	17-1022	Bachelor's degree	None	None
Aerospace Engineers	17-2011	Bachelor's degree	None	None
Agricultural Engineers	17-2021	Bachelor's degree	None	None
Biomedical Engineers	17-2031	Bachelor's degree	None	None
Chemical Engineers	17-2041	Bachelor's degree	None	None
Civil Engineers	17-2051	Bachelor's degree	None	None
Computer Hardware Engineers	17-2061	Bachelor's degree	None	None
Electrical Engineers	17-2071	Bachelor's degree	None	None
Electronics Engineers, Except Computer	17-2072	Bachelor's degree	None	None
Environmental Engineers	17-2081	Bachelor's degree	None	None
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111	Bachelor's degree	None	None
Industrial Engineers	17-2112	Bachelor's degree	None	None
Marine Engineers and Naval Architects	17-2121	Bachelor's degree	None	None
Materials Engineers	17-2131	Bachelor's degree	None	None
Mechanical Engineers	17-2141	Bachelor's degree	None	None
Mining and Geological Engineers, Including Mining Safety Engineers	17-2151	Bachelor's degree	None	None

Nuclear Engineers	17-2161	Bachelor's degree	None	None
Petroleum Engineers	17-2171	Bachelor's degree	None	None
Engineers, All Other	17-2199	Bachelor's degree	None	None
Architectural and Civil Drafters	17-3011	Associate's degree	None	None
Electrical and Electronics Drafters	17-3012	Associate's degree	None	None
Mechanical Drafters	17-3013	Associate's degree	None	None
Drafters, All Other	17-3019	Associate's degree	None	None
Aerospace Engineering and Operations Technicians	17-3021	Associate's degree	None	None
Civil Engineering Technicians	17-3022	Associate's degree	None	None
Electrical and Electronics Engineering Technicians	17-3023	Associate's degree	None	None
Electro-Mechanical Technicians	17-3024	Associate's degree	None	None
Environmental Engineering Technicians	17-3025	Associate's degree	None	None
Industrial Engineering Technicians	17-3026	Associate's degree	None	None
Mechanical Engineering Technicians	17-3027	Associate's degree	None	None
Engineering Technicians, Except Drafters, All Other	17-3029	Associate's degree	None	None
Surveying and Mapping Technicians	17-3031	High school diploma or equivalent	None	Moderate-term on-the-job training
Animal Scientists	19-1011	Doctoral or professional degree	None	None
Food Scientists and Technologists	19-1012	Bachelor's degree	None	None
Soil and Plant Scientists	19-1013	Bachelor's degree	None	None
Biochemists and Biophysicists	19-1021	Doctoral or professional degree	None	None
Microbiologists	19-1022	Bachelor's degree	None	None
Zoologists and Wildlife Biologists	19-1023	Bachelor's degree	None	None
Biological Scientists, All Other	19-1029	Doctoral or professional degree	None	None
Conservation Scientists	19-1031	Bachelor's degree	None	None
Foresters	19-1032	Bachelor's degree	None	None
Epidemiologists	19-1041	Master's degree	None	None
Medical Scientists, Except Epidemiologists	19-1042	Doctoral or professional degree	None	None
Life Scientists, All Other	19-1099	Bachelor's degree	None	None
Astronomers	19-2011	Doctoral or professional degree	None	None
Physicists	19-2012	Doctoral or professional degree	None	None
Atmospheric and Space Scientists	19-2021	Bachelor's degree	None	None
Chemists	19-2031	Bachelor's degree	None	None
Materials Scientists	19-2032	Bachelor's degree	None	None
Environmental Scientists and Specialists, Including Health	19-2041	Bachelor's degree	None	None
Geoscientists, Except Hydrologists and Geographers	19-2042	Bachelor's degree	None	None
Hydrologists	19-2043	Master's degree	None	None
Physical Scientists, All Other	19-2099	Bachelor's degree	None	None
Economists	19-3011	Bachelor's degree	None	None

Survey Researchers	19-3022	Bachelor's degree	None	None
Clinical, Counseling, and School Psychologists	19-3031	Doctoral or professional degree	None	Internship/residency
Industrial-Organizational Psychologists	19-3032	Master's degree	None	Internship/residency
Psychologists, All Other	19-3039	Master's degree	None	Internship/residency
Sociologists	19-3041	Master's degree	None	None
Urban and Regional Planners	19-3051	Master's degree	None	None
Anthropologists and Archeologists	19-3091	Master's degree	None	None
Geographers	19-3092	Bachelor's degree	None	None
Historians	19-3093	Master's degree	None	None
Political Scientists	19-3094	Master's degree	None	None
Social Scientists and Related Workers, All Other	19-3099	Bachelor's degree	None	None
Agricultural and Food Science Technicians	19-4011	Associate's degree	None	None
Biological Technicians	19-4021	Bachelor's degree	None	None
Chemical Technicians	19-4031	Associate's degree	None	Moderate-term on-the-job training
Geological and Petroleum Technicians	19-4041	Associate's degree	None	Moderate-term on-the-job training
Nuclear Technicians	19-4051	Associate's degree	None	Moderate-term on-the-job training
Social Science Research Assistants	19-4061	Associate's degree	None	None
Environmental Science and Protection Technicians, Including Health	19-4091	Associate's degree	None	Moderate-term on-the-job training
Forensic Science Technicians	19-4092	Bachelor's degree	None	Moderate-term on-the-job training
Forest and Conservation Technicians	19-4093	Associate's degree	None	None
Life, Physical, and Social Science Technicians, All Other	19-4099	Associate's degree	None	Moderate-term on-the-job training
Substance Abuse and Behavioral Disorder Counselors	21-1011	High school diploma or equivalent	None	Moderate-term on-the-job training
Educational, Guidance, School, and Vocational Counselors	21-1012	Master's degree	None	None
Marriage and Family Therapists	21-1013	Master's degree	None	Internship/residency
Mental Health Counselors	21-1014	Master's degree	None	Internship/residency
Rehabilitation Counselors	21-1015	Master's degree	None	None
Counselors, All Other	21-1019	Master's degree	None	None
Child, Family, and School Social Workers	21-1021	Bachelor's degree	None	None
Healthcare Social Workers	21-1022	Master's degree	None	None
Mental Health and Substance Abuse Social Workers	21-1023	Bachelor's degree	None	None
Social Workers, All Other	21-1029	Bachelor's degree	None	None
Health Educators	21-1091	Bachelor's degree	None	None
Probation Officers and Correctional Treatment Specialists	21-1092	Bachelor's degree	None	Short-term on-the-job training
Social and Human Service Assistants	21-1093	High school diploma or equivalent	None	Short-term on-the-job training
Community and Social Service Specialists, All Other	21-1798	Bachelor's degree	None	None

Clergy	21-2011	Bachelor's degree	None	Moderate-term on-the-job training
Directors, Religious Activities and Education	21-2021	Bachelor's degree	1 to 5 years	None
Religious Workers, All Other	21-2099	Bachelor's degree	None	None
Lawyers	23-1011	Doctoral or professional degree	None	None
Judicial Law Clerks	23-1012	Doctoral or professional degree	None	None
Administrative Law Judges, Adjudicators, and Hearing Officers	23-1021	Bachelor's degree	1 to 5 years	Moderate-term on-the-job training
Arbitrators, Mediators, and Conciliators	23-1022	Bachelor's degree	1 to 5 years	Moderate-term on-the-job training
Judges, Magistrate Judges, and Magistrates	23-1023	Doctoral or professional degree	More than 5 years	Short-term on-the-job training
Paralegals and Legal Assistants	23-2011	Associate's degree	None	None
Court Reporters	23-2091	Postsecondary non-degree award	None	Short-term on-the-job training
Title Examiners, Abstractors, and Searchers	23-2093	High school diploma or equivalent	None	Short-term on-the-job training
Legal Support Workers, All Other	23-2099	High school diploma or equivalent	None	Short-term on-the-job training
Postsecondary Teachers	25-1000	Doctoral or professional degree	None	None
Preschool Teachers, Except Special Education	25-2011	Associate's degree	None	None
Kindergarten Teachers, Except Special Education	25-2012	Bachelor's degree	None	Internship/residency
Elementary School Teachers, Except Special Education	25-2021	Bachelor's degree	None	internship/residency
Middle School Teachers, Except Special and Career/Technical Education	25-2022	Bachelor's degree	None	Internship/residency
Career/Technical Education Teachers, Middle School	25-2023	Bachelor's degree	1 to 5 years	Internship/residency
Secondary School Teachers, Except Special and Career/Technical Education	25-2031	Bachelor's degree	None	Internship/residency
Career/Technical Education Teachers, Secondary School	25-2032	Bachelor's degree	1 to 5 years	Internship/residency
Special Education Teachers, Preschool, Kindergarten, and Elementary School	25-2041	Bachelor's degree	None	Internship/residency
Special Education Teachers, Middle School	25-2053	Bachelor's degree	None	Internship/residency
Special Education Teachers, Secondary School	25-2054	Bachelor's degree	None	Internship/residency
Adult Basic and Secondary Education and Literacy Teachers and instructors	25-3011	Bachelor's degree	None	Internship/residency
Self-Enrichment Education Teachers	25-3021	High school diploma or equivalent	1 to 5 years	None
Teachers and Instructors, All Other	25-3999	Bachelor's degree	None	None
Archivists	25-4011	Bachelor's degree	None	None
Curators	25-4012	Master's degree	None	None
Museum Technicians and Conservators	25-4013	Bachelor's degree	None	None

Librarians	25-4021	Master's degree	None	None
Library Technicians	25-4031	Postsecondary non-degree award	None	None
Audio-Visual and Multimedia Collections Specialists	25-9011	Bachelor's degree	1 to 5 years	None
Farm and Home Management Advisors	25-9021	Master's degree	None	None
Instructional Coordinators	25-9031	Master's degree	More than 5 years	None
Teacher Assistants	25-9041	High school diploma or equivalent	None	Short-term on-the-job training
Education, Training, and Library Workers, All Other	25-9099	Bachelor's degree	None	None
Art Directors	27-1011	Bachelor's degree	1 to 5 years	None
Craft Artists	27-1012	High school diploma or equivalent	None	Long-term on-the-job training
Fine Artists, Including Painters, Sculptors, and Illustrators	27-1013	High school diploma or equivalent	None	Long-term on-the-job training
Multimedia Artists and Animators	27-1014	Bachelor's degree	None	Moderate-term on-the-job training
Artists and Related Workers, All Other	27-1019	High school diploma or equivalent	None	Long-term on-the-job training
Commercial and Industrial Designers	27-1021	Bachelor's degree	None	None
Fashion Designers	27-1022	High school diploma or equivalent	None	Long-term on-the-job training
Floral Designers	27-1023	High school diploma or equivalent	None	Short-term on-the-job training
Graphic Designers	27-1024	Bachelor's degree	None	None
Interior Designers	27-1025	Bachelor's degree	None	None
Merchandise Displayers and Window Trimmers	27-1026	High school diploma or equivalent	None	Moderate-term on-the-job training
Set and Exhibit Designers	27-1027	Bachelor's degree	None	None
Designers, All Other	27-1029	Bachelor's degree	None	None
Actors	27-2011	Some college, no degree	None	Long-term on-the-job training
Producers and Directors	27-2012	Bachelor's degree	1 to 5 years	None
Athletes and Sports Competitors	27-2021	High school diploma or equivalent	None	Long-term on-the-job training
Coaches and Scouts	27-2022	High school diploma or equivalent	None	Long-term on-the-job training
Umpires, Referees, and Other Sports Officials	27-2023	High school diploma or equivalent	None	Long-term on-the-job training
Dancers	27-2031	High school diploma or equivalent	None	Long-term on-the-job training
Choreographers	27-2032	High school diploma or equivalent	More than 5 years	Long-term on-the-job training
Music Directors and Composers	27-2041	Bachelor's degree	1 to 5 years	None
Musicians and Singers	27-2042	High school diploma or equivalent	None	Long-term on-the-job training
Entertainers and Performers, Sports and Related Workers, All Other	27-2099	High school diploma or equivalent	None	None

Radio and Television Announcers	27-3011	Bachelor's degree	None	None
Public Address System and Other Announcers	27-3012	High school diploma or equivalent	None	Short-term on-the-job training
Broadcast News Analysts	27-3021	Bachelor's degree	None	None
Reporters and Correspondents	27-3022	Bachelor's degree	None	None
Public Relations Specialists	27-3031	Bachelor's degree	None	Moderate-term on-the-job training
Editors	27-3041	Bachelor's degree	1 to 5 years	None
Technical Writers	27-3042	Bachelor's degree	1 to 5 years	Short-term on-the-job training
Writers and Authors	27-3043	Bachelor's degree	None	Long-term on-the-job training
Interpreters and Translators	27-3091	Bachelor's degree	None	Long-term on-the-job training
Media and Communication Workers, All Other	27-3099	High school diploma or equivalent	None	Short-term on-the-job training
Audio and Video Equipment Technicians	27-4011	Postsecondary non-degree award	None	Moderate-term on-the-job training
Broadcast Technicians	27-4012	Associate's degree	None	Short-term on-the-job training
Radio Operators	27-4013	High school diploma or equivalent	None	Short-term on-the-job training
Sound Engineering Technicians	27-4014	Postsecondary non-degree award	None	Short-term on-the-job training
Photographers	27-4021	High school diploma or equivalent	None	Long-term on-the-job training
Camera Operators, Television, Video, and Motion Picture	27-4031	Bachelor's degree	None	Moderate-term on-the-job training
Film and Video Editors	27-4032	Bachelor's degree	1 to 5 years	None
Media and Communication Equipment Workers, All Other	27-4099	High school diploma or equivalent	None	Moderate-term on-the-job training
Chiropractors	29-1011	Doctoral or professional degree	None	None
Dentists, General	29-1021	Doctoral or professional degree	None	Internship/residency
Oral and Maxillofacial Surgeons	29-1022	Doctoral or professional degree	None	Internship/residency
Orthodontists	29-1023	Doctoral or professional degree	None	Internship/residency
Prosthodontists	29-1024	Doctoral or professional degree	None	Internship/residency
Dentists, All Other Specialists	29-1029	Doctoral or professional degree	None	Internship/residency
Dietitians and Nutritionists	29-1031	Bachelor's degree	None	Internship/residency
Optometrists	29-1041	Doctoral or professional degree	None	None
Pharmacists	29-1051	Doctoral or professional degree	None	None
Physicians and Surgeons	29-1060	Doctoral or professional degree	None	Internship/residency

Physician Assistants	29-1071	Master's degree	None	None
Podiatrists	29-1081	Doctoral or professional degree	None	Internship/residency
Registered Nurses	29-1111	Associate's degree	None	None
Occupational Therapists	29-1122	Master's degree	None	None
Physical Therapists	29-1123	Doctoral or professional degree	None	None
Radiation Therapists	29-1124	Associate's degree	None	None
Recreational Therapists	29-1125	Bachelor's degree	None	None
Respiratory Therapists	29-1126	Associate's degree	None	None
Speech-Language Pathologists	29-1127	Master's degree	None	None
Therapists, All Other	29-1128	Master's degree	None	None
Veterinarians	29-1131	Doctoral or professional degree	None	None
Audiologists	29-1181	Doctoral or professional degree	None	None
Health Diagnosing and Treating Practitioners, All Other	29-1199	Master's degree	None	None
Medical and Clinical Laboratory Technologists	29-2011	Bachelor's degree	None	None
Medical and Clinical Laboratory Technicians	29-2012	Associate's degree	None	None
Dental Hygienists	29-2021	Associate's degree	None	None
Cardiovascular Technologists and Technicians	29-2031	Associate's degree	None	None
Diagnostic Medical Sonographers	29-2032	Associate's degree	None	None
Nuclear Medicine Technologists	29-2033	Associate's degree	None	None
Radiologic Technologists and Technicians	29-2037	Associate's degree	None	None
Emergency Medical Technicians and Paramedics	29-2041	Postsecondary non-degree award	None	None
Dietetic Technicians	29-2051	High school diploma or equivalent	None	Moderate-term on-the-job training
Pharmacy Technicians	29-2052	High school diploma or equivalent	None	Moderate-term on-the-job training
Psychiatric Technicians	29-2053	Postsecondary non-degree award	None	Short-term on-the-job training
Respiratory Therapy Technicians	29-2054	Associate's degree	None	Moderate-term on-the-job training
Surgical Technologists	29-2055	Postsecondary non-degree award	None	None
Veterinary Technologists and Technicians	29-2056	Associate's degree	None	None
Licensed Practical and Licensed Vocational Nurses	29-2061	Postsecondary non-degree award	None	None
Medical Records and Health Information Technicians	29-2071	Postsecondary non-degree award	None	None
Opticians, Dispensing	29-2081	High school diploma or equivalent	None	Long-term on-the-job training
Orthotists and Prosthetists	29-2091	Master's degree	None	None

Health Technologists and Technicians, All Other	29-2799	Postsecondary non-degree award	None	Short-term on-the-job training
Occupational Health and Safety Specialists	29-9011	Bachelor's degree	None	Moderate-term on-the-job training
Occupational Health and Safety Technicians	29-9012	High school diploma or equivalent	None	Moderate-term on-the-job training
Athletic Trainers	29-9091	Bachelor's degree	None	None
Healthcare Practitioners and Technical Workers, All Other	29-9799	Bachelor's degree	None	None
Home Health Aides	31-1011	Less than high school	None	Short-term on-the-job training
Nursing Aides, Orderlies, and Attendants	31-1012	Postsecondary non-degree award	None	None
Psychiatric Aides	31-1013	High school diploma or equivalent	None	Short-term on-the-job training
Occupational Therapy Assistants	31-2011	Associate's degree	None	None
Occupational Therapy Aides	31-2012	High school diploma or equivalent	None	Short-term on-the-job training
Physical Therapist Assistants	31-2021	Associate's degree	None	None
Physical Therapist Aides	31-2022	High school diploma or equivalent	None	Moderate-term on-the-job training
Massage Therapists	31-9011	Postsecondary non-degree award	None	None
Dental Assistants	31-9091	Postsecondary non-degree award	None	None
Medical Assistants	31-9092	High school diploma or equivalent	None	Moderate-term on-the-job training
Medical Equipment Preparers	31-9093	High school diploma or equivalent	None	Moderate-term on-the-job training
Medical Transcriptionists	31-9094	Postsecondary non-degree award	None	None
Pharmacy Aides	31-9095	High school diploma or equivalent	None	Short-term on-the-job training
Veterinary Assistants and Laboratory Animal Caretakers	31-9096	High school diploma or equivalent	None	Short-term on-the-job training
Healthcare Support Workers, All Other	31-9799	High school diploma or equivalent	None	Short-term on-the-job training
First-Line Supervisors of Correctional Officers	33-1011	High school diploma or equivalent	1 to 5 years	Moderate-term on-the-job training
First-Line Supervisors of Police and Detectives	33-1012	High school diploma or equivalent	1 to 5 years	Moderate-term on-the-job training
First-Line Supervisors of Fire Fighting and Prevention Workers	33-1021	Postsecondary non-degree award	1 to 5 years	None
First-Line Supervisors of Protective Service Workers, All Other	33-1099	High school diploma or equivalent	1 to 5 years	None
Firefighters	33-2011	Postsecondary non-degree award	None	Long-term on-the-job training

Fire Inspectors and Investigators	33-2021	High school diploma or equivalent	More than 5 years	Moderate-term on-the-job training
Forest Fire Inspectors and Prevention Specialists	33-2022	High school diploma or equivalent	More than 5 years	Moderate-term on-the-job training
Bailiffs	33-3011	High school diploma or equivalent	None	Moderate-term on-the-job training
Correctional Officers and Jailers	33-3012	High school diploma or equivalent	None	Moderate-term on-the-job training
Detectives and Criminal Investigators	33-3021	High school diploma or equivalent	1 to 5 years	Moderate-term on-the-job training
Fish and Game Wardens	33-3031	High school diploma or equivalent	None	Short-term on-the-job training
Parking Enforcement Workers	33-3041	High school diploma or equivalent	None	Short-term on-the-job training
Police and Sheriff's Patrol Officers	33-3051	High school diploma or equivalent	None	Moderate-term on-the-job training
Transit and Railroad Police	33-3052	High school diploma or equivalent	None	Short-term on-the-job training
Animal Control Workers	33-9011	High school diploma or equivalent	None	Moderate-term on-the-job training
Private Detectives and Investigators	33-9021	Some college, no degree	1 to 5 years	Moderate-term on-the-job training
Gaming Surveillance Officers and Gaming Investigators	33-9031	High school diploma or equivalent	None	Short-term on-the-job training
Security Guards	33-9032	High school diploma or equivalent	None	Short-term on-the-job training
Crossing Guards	33-9091	High school diploma or equivalent	None	Short-term on-the-job training
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	33-9092	High school diploma or equivalent	None	Short-term on-the-job training
Transportation Security Screeners (Federal Only)	33-9093	High school diploma or equivalent	None	Moderate-term on-the-job training
Protective Service Workers, All Other	33-9099	High school diploma or equivalent	None	Short-term on-the-job training
Chefs and Head Cooks	35-1011	High school diploma or equivalent	1 to 5 years	None
First-Line Supervisors of Food Preparation and Serving Workers	35-1012	High school diploma or equivalent	1 to 5 years	None
Cooks, Fast Food	35-2011	Less than high school	None	Short-term on-the-job training
Cooks, Institution and Cafeteria	35-2012	Less than high school	None	Short-term on-the-job training
Cooks, Private Household	35-2013	Postsecondary non-degree award	1 to 5 years	None
Cooks, Restaurant	35-2014	Less than high school	Less than 1 year	Moderate-term on-the-job training
Cooks, Short Order	35-2015	Less than high school	None	Short-term on-the-job training

Cooks, All Other	35-2019	Less than high school	None	Moderate-term on-the-job training
Food Preparation Workers	35-2021	Less than high school	None	Short-term on-the-job training
Bartenders	35-3011	Less than high school	None	Short-term on-the-job training
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	Less than high school	None	Short-term on-the-job training
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	35-3022	Less than high school	None	Short-term on-the-job training
Waiters and Waitresses	35-3031	Less than high school	None	Short-term on-the-job training
Food Servers, Nonrestaurant	35-3041	Less than high school	None	Short-term on-the-job training
Dining Room and Cafeteria Attendants and Bartender Helpers	35-9011	Less than high school	None	Short-term on-the-job training
Dishwashers	35-9021	Less than high school	None	Short-term on-the-job training
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	35-9031	Less than high school	None	None
Food Preparation and Serving Related Workers, All Other	35-9099	Less than high school	None	Short-term on-the-job training
First-Line Supervisors of Housekeeping and Janitorial Workers	37-1011	High school diploma or equivalent	1 to 5 years	None
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	High school diploma or equivalent	1 to 5 years	None
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	37-2011	Less than high school	None	Short-term on-the-job training
Maids and Housekeeping Cleaners	37-2012	Less than high school	None	Short-term on-the-job training
Building Cleaning Workers, All Other	37-2019	High school diploma or equivalent	None	Short-term on-the-job training
Pest Control Workers	37-2021	High school diploma or equivalent	None	Moderate-term on-the-job training
Landscaping and Groundskeeping Workers	37-3011	Less than high school	None	Short-term on-the-job training
Pesticide Handlers, Sprayers, and Applicators, Vegetation	37-3012	High school diploma or equivalent	None	Moderate-term on-the-job training
Tree Trimmers and Pruners	37-3013	High school diploma or equivalent	None	Short-term on-the-job training
Grounds Maintenance Workers, All Other	37-3019	Less than high school	None	Short-term on-the-job training
Gaming Supervisors	39-1011	High school diploma or equivalent	1 to 5 years	None
Slot Supervisors	39-1012	High school diploma or equivalent	1 to 5 years	None
First-Line Supervisors of Personal Service Workers	39-1021	High school diploma or equivalent	1 to 5 years	None
Animal Trainers	39-2011	High school diploma or equivalent	None	Moderate-term on-the-job training
Nonfarm Animal Caretakers	39-2021	Less than high school	None	Short-term on-the-job training
Gaming Dealers	39-3011	High school diploma or equivalent	None	Moderate-term on-the-job training

Gaming and Sports Book Writers and Runners	39-3012	High school diploma or equivalent	None	Short-term on-the-job training
Gaming Service Workers, All Other	39-3019	High school diploma or equivalent	None	Moderate-term on-the-job training
Motion Picture Projectionists	39-3021	Less than high school	None	Short-term on-the-job training
Ushers, Lobby Attendants, and Ticket Takers	39-3031	Less than high school	None	Short-term on-the-job training
Amusement and Recreation Attendants	39-3091	Less than high school	None	Short-term on-the-job training
Costume Attendants	39-3092	High school diploma or equivalent	None	Short-term on-the-job training
Locker Room, Coatroom, and Dressing Room Attendants	39-3093	High school diploma or equivalent	None	Short-term on-the-job training
Entertainment Attendants and Related Workers, All Other	39-3099	High school diploma or equivalent	None	Short-term on-the-job training
Embalmers	39-4011	Postsecondary non-degree award	None	Short-term on-the-job training
Funeral Attendants	39-4021	High school diploma or equivalent	None	Short-term on-the-job training
Funeral Service Managers, Directors, Morticians, and Undertakers	39-4831	Associate's degree	None	Apprenticeship
Barbers	39-5011	Postsecondary non-degree award	None	None
Hairdressers, Hairstylists, and Cosmetologists	39-5012	Postsecondary non-degree award	None	None
Makeup Artists, Theatrical and Performance	39-5091	Postsecondary non-degree award	None	None
Manicurists and Pedicurists	39-5092	Postsecondary non-degree award	None	None
Shampooers	39-5093	Less than high school	None	Short-term on-the-job training
Skincare Specialists	39-5094	Postsecondary non-degree award	None	None
Baggage Porters and Bellhops	39-6011	High school diploma or equivalent	None	Short-term on-the-job training
Concierges	39-6012	High school diploma or equivalent	None	Moderate-term on-the-job training
Tour Guides and Escorts	39-7011	High school diploma or equivalent	None	Moderate-term on-the-job training
Travel Guides	39-7012	High school diploma or equivalent	None	Moderate-term on-the-job training
Childcare Workers	39-9011	High school diploma or equivalent	None	Short-term on-the-job training
Personal Care Aides	39-9021	Less than high school	None	Short-term on-the-job training
Fitness Trainers and Aerobics Instructors	39-9031	High school diploma or equivalent	None	Short-term on-the-job training
Recreation Workers	39-9032	Bachelor's degree	None	None
Residential Advisors	39-9041	Some college, no degree	Less than 1 year	Short-term on-the-job training

Personal Care and Service Workers, All Other	39-9099	High school diploma or equivalent	None	Short-term on-the-job training
First-Line Supervisors of Retail Sales Workers	41-1011	High school diploma or equivalent	1 to 5 years	None
First-Line Supervisors of Non-Retail Sales Workers	41-1012	High school diploma or equivalent	More than 5 years	None
Cashiers	41-2011	Less than high school	None	Short-term on-the-job training
Gaming Change Persons and Booth Cashiers	41-2012	High school diploma or equivalent	None	Short-term on-the-job training
Counter and Rental Clerks	41-2021	Less than high school	None	Short-term on-the-job training
Parts Salespersons	41-2022	Less than high school	None	Moderate-term on-the-job training
Retail Salespersons	41-2031	Less than high school	None	Short-term on-the-job training
Advertising Sales Agents	41-3011	High school diploma or equivalent	None	Moderate-term on-the-job training
Insurance Sales Agents	41-3021	High school diploma or equivalent	None	Moderate-term on-the-job training
Securities, Commodities, and Financial Services Sales Agents	41-3031	Bachelor's degree	None	Moderate-term on-the-job training
Travel Agents	41-3041	High school diploma or equivalent	None	Moderate-term on-the-job training
Sales Representatives, Services, All Other	41-3099	High school diploma or equivalent	None	Short-term on-the-job training
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	41-4011	Bachelor's degree	None	Moderate-term on-the-job training
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	High school diploma or equivalent	None	Moderate-term on-the-job training
Demonstrators and Product Promoters	41-9011	High school diploma or equivalent	None	Short-term on-the-job training
Models	41-9012	Less than high school	None	None
Real Estate Brokers	41-9021	High school diploma or equivalent	1 to 5 years	None
Real Estate Sales Agents	41-9022	High school diploma or equivalent	None	Long-term on-the-job training
Sales Engineers	41-9031	Bachelor's degree	None	Moderate-term on-the-job training
Telemarketers	41-9041	Less than high school	None	Short-term on-the-job training
Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	41-9091	High school diploma or equivalent	None	Short-term on-the-job training
Sales and Related Workers, All Other	41-9799	High school diploma or equivalent	None	Moderate-term on-the-job training
First-Line Supervisors of Office and Administrative Support Workers	43-1011	High school diploma or equivalent	1 to 5 years	None
Switchboard Operators, Including Answering Service	43-2011	High school diploma or equivalent	None	Short-term on-the-job training

Telephone Operators	43-2021	High school diploma or equivalent	None	Short-term on-the-job training
Communications Equipment Operators, All Other	43-2099	High school diploma or equivalent	None	Short-term on-the-job training
Bill and Account Collectors	43-3011	High school diploma or equivalent	None	Moderate-term on-the-job training
Billing and Posting Clerks	43-3021	High school diploma or equivalent	None	Short-term on-the-job training
Bookkeeping, Accounting, and Auditing Clerks	43-3031	High school diploma or equivalent	None	Moderate-term on-the-job training
Gaming Cage Workers	43-3041	High school diploma or equivalent	None	Short-term on-the-job training
Payroll and Timekeeping Clerks	43-3051	High school diploma or equivalent	None	Moderate-term on-the-job training
Procurement Clerks	43-3061	High school diploma or equivalent	None	Moderate-term on-the-job training
Tellers	43-3071	High school diploma or equivalent	None	Short-term on-the-job training
Brokerage Clerks	43-4011	High school diploma or equivalent	None	Moderate-term on-the-job training
Correspondence Clerks	43-4021	High school diploma or equivalent	None	Short-term on-the-job training
Court, Municipal, and License Clerks	43-4031	High school diploma or equivalent	None	Moderate-term on-the-job training
Credit Authorizers, Checkers, and Clerks	43-4041	High school diploma or equivalent	None	Short-term on-the-job training
Customer Service Representatives	43-4051	High school diploma or equivalent	None	Short-term on-the-job training
Eligibility Interviewers, Government Programs	43-4061	Associate's degree	None	Moderate-term on-the-job training
File Clerks	43-4071	High school diploma or equivalent	None	Short-term on-the-job training
Hotel, Motel, and Resort Desk Clerks	43-4081	High school diploma or equivalent	None	Short-term on-the-job training
Interviewers, Except Eligibility and Loan	43-4111	High school diploma or equivalent	None	Short-term on-the-job training
Library Assistants, Clerical	43-4121	High school diploma or equivalent	None	Short-term on-the-job training
Loan Interviewers and Clerks	43-4131	High school diploma or equivalent	None	Short-term on-the-job training
New Accounts Clerks	43-4141	High school diploma or equivalent	None	Short-term on-the-job training
Order Clerks	43-4151	High school diploma or equivalent	None	Short-term on-the-job training
Human Resources Assistants, Except Payroll and Timekeeping	43-4161	High school diploma or equivalent	None	Short-term on-the-job training

Receptionists and Information Clerks	43-4171	High school diploma or equivalent	None	Short-term on-the-job training
Reservation and Transportation Ticket Agents and Travel Clerks	43-4181	High school diploma or equivalent	None	Short-term on-the-job training
Information and Record Clerks, All Other	43-4199	High school diploma or equivalent	None	Short-term on-the-job training
Cargo and Freight Agents	43-5011	High school diploma or equivalent	None	Short-term on-the-job training
Couriers and Messengers	43-5021	High school diploma or equivalent	None	Short-term on-the-job training
Police, Fire, and Ambulance Dispatchers	43-5031	High school diploma or equivalent	None	Moderate-term on-the-job training
Dispatchers, Except Police, Fire, and Ambulance	43-5032	High school diploma or equivalent	None	Moderate-term on-the-job training
Meter Readers, Utilities	43-5041	High school diploma or equivalent	None	Short-term on-the-job training
Postal Service Clerks	43-5051	High school diploma or equivalent	None	Short-term on-the-job training
Postal Service Mail Carriers	43-5052	High school diploma or equivalent	None	Short-term on-the-job training
Postal Service Mail Sorters, Processors, and Processing Machine Operators	43-5053	High school diploma or equivalent	None	Short-term on-the-job training
Production, Planning, and Expediting Clerks	43-5061	High school diploma or equivalent	None	Moderate-term on-the-job training
Shipping, Receiving, and Traffic Clerks	43-5071	High school diploma or equivalent	None	Short-term on-the-job training
Stock Clerks and Order Fillers	43-5081	Less than high school	None	Short-term on-the-job training
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	High school diploma or equivalent	None	Short-term on-the-job training
Executive Secretaries and Executive Administrative Assistants	43-6011	High school diploma or equivalent	1 to 5 years	None
Legal Secretaries	43-6012	High school diploma or equivalent	None	Moderate-term on-the-job training
Medical Secretaries	43-6013	High school diploma or equivalent	None	Moderate-term on-the-job training
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	43-6014	High school diploma or equivalent	None	Short-term on-the-job training
Computer Operators	43-9011	High school diploma or equivalent	None	Moderate-term on-the-job training
Data Entry Keyers	43-9021	High school diploma or equivalent	None	Moderate-term on-the-job training
Word Processors and Typists	43-9022	High school diploma or equivalent	None	Short-term on-the-job training
Desktop Publishers	43-9031	Associate's degree	None	Short-term on-the-job training
Insurance Claims and Policy Processing Clerks	43-9041	High school diploma or equivalent	None	Moderate-term on-the-job training

Mail Clerks and Mail Machine Operators, Except Postal Service	43-9051	High school diploma or equivalent	None	Short-term on-the-job training
Office Clerks, General	43-9061	High school diploma or equivalent	None	Short-term on-the-job training
Office Machine Operators, Except Computer	43-9071	High school diploma or equivalent	None	Short-term on-the-job training
Proofreaders and Copy Markers	43-9081	Bachelor's degree	None	Moderate-term on-the-job training
Statistical Assistants	43-9111	Bachelor's degree	None	None
Office and Administrative Support Workers, All Other	43-9799	High school diploma or equivalent	None	Short-term on-the-job training
First-Line Supervisors of Farming, Fishing, and Forestry Workers	45-1011	High school diploma or equivalent	1 to 5 years	None
Agricultural Inspectors	45-2011	Bachelor's degree	None	Moderate-term on-the-job training
Animal Breeders	45-2021	High school diploma or equivalent	1 to 5 years	Short-term on-the-job training
Graders and Sorters, Agricultural Products	45-2041	Less than high school	None	Short-term on-the-job training
Miscellaneous Agricultural Workers	45-2090	Less than high school	None	Short-term on-the-job training
Fishers and Related Fishing Workers	45-3011	Less than high school	None	Moderate-term on-the-job training
Hunters and Trappers	45-3021	Less than high school	None	Short-term on-the-job training
Forest and Conservation Workers	45-4011	High school diploma or equivalent	None	Moderate-term on-the-job training
Fallers	45-4021	High school diploma or equivalent	None	Moderate-term on-the-job training
Logging Equipment Operators	45-4022	High school diploma or equivalent	None	Moderate-term on-the-job training
Log Graders and Scalers	45-4023	High school diploma or equivalent	None	Moderate-term on-the-job training
Logging Workers, All Other	45-4029	High school diploma or equivalent	None	Moderate-term on-the-job training
First-Line Supervisors of Construction Trades and Extraction Workers	47-1011	High school diploma or equivalent	More than 5 years	None
Boilermakers	47-2011	High school diploma or equivalent	None	Apprenticeship
Brickmasons and Blockmasons	47-2021	High school diploma or equivalent	None	Apprenticeship
Stonemasons	47-2022	High school diploma or equivalent	None	Apprenticeship
Carpenters	47-2031	High school diploma or equivalent	None	Apprenticeship
Carpet Installers	47-2041	Less than high school	None	Short-term on-the-job training
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042	High school diploma or equivalent	None	Moderate-term on-the-job training

Floor Sanders and Finishers	47-2043	High school diploma or equivalent	None	Moderate-term on-the-job training
Tile and Marble Setters	47-2044	Less than high school	None	Long-term on-the-job training
Cement Masons and Concrete Finishers	47-2051	Less than high school	None	Moderate-term on-the-job training
Terrazzo Workers and Finishers	47-2053	High school diploma or equivalent	None	Apprenticeship
Construction Laborers	47-2061	Less than high school	None	Short-term on-the-job training
Paving, Surfacing, and Tamping Equipment Operators	47-2071	High school diploma or equivalent	None	Moderate-term on-the-job training
Pile-Driver Operators	47-2072	High school diploma or equivalent	None	Moderate-term on-the-job training
Operating Engineers and Other Construction Equipment Operators	47-2073	High school diploma or equivalent	None	Moderate-term on-the-job training
Drywall and Ceiling Tile Installers	47-2081	Less than high school	None	Moderate-term on-the-job training
Tapers	47-2082	Less than high school	None	Moderate-term on-the-job training
Electricians	47-2111	High school diploma or equivalent	None	Apprenticeship
Glaziers	47-2121	High school diploma or equivalent	None	Apprenticeship
Insulation Workers, Floor, Ceiling, and Wall	47-2131	Less than high school	None	Short-term on-the-job training
Insulation Workers, Mechanical	47-2132	High school diploma or equivalent	None	Apprenticeship
Painters, Construction and Maintenance	47-2141	Less than high school	None	Moderate-term on-the-job training
Paperhangers	47-2142	High school diploma or equivalent	None	Moderate-term on-the-job training
Pipelayers	47-2151	High school diploma or equivalent	None	Short-term on-the-job training
Plumbers, Pipefitters, and Steamfitters	47-2152	High school diploma or equivalent	None	Apprenticeship
Plasterers and Stucco Masons	47-2161	Less than high school	None	Long-term on-the-job training
Reinforcing Iron and Rebar Workers	47-2171	High school diploma or equivalent	None	Apprenticeship
Roofers	47-2181	Less than high school	None	Moderate-term on-the-job training
Sheet Metal Workers	47-2211	High school diploma or equivalent	None	Apprenticeship
Structural Iron and Steel Workers	47-2221	High school diploma or equivalent	None	Apprenticeship
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011	Less than high school	None	Short-term on-the-job training
Helpers--Carpenters	47-3012	Less than high school	None	Short-term on-the-job training

Helpers--Electricians	47-3013	High school diploma or equivalent	None	Short-term on-the-job training
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	47-3014	Less than high school	None	Short-term on-the-job training
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015	High school diploma or equivalent	None	Short-term on-the-job training
Helpers--Roofers	47-3016	Less than high school	None	Short-term on-the-job training
Helpers, Construction Trades, All Other	47-3019	Less than high school	None	Short-term on-the-job training
Construction and Building Inspectors	47-4011	High school diploma or equivalent	More than 5 years	Moderate-term on-the-job training
Elevator Installers and Repairers	47-4021	High school diploma or equivalent	None	Apprenticeship
Fence Erectors	47-4031	High school diploma or equivalent	None	Moderate-term on-the-job training
Hazardous Materials Removal Workers	47-4041	High school diploma or equivalent	None	Moderate-term on-the-job training
Highway Maintenance Workers	47-4051	High school diploma or equivalent	None	Moderate-term on-the-job training
Rail-Track Laying and Maintenance Equipment Operators	47-4061	High school diploma or equivalent	None	Moderate-term on-the-job training
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	Less than high school	None	Moderate-term on-the-job training
Segmental Pavers	47-4091	High school diploma or equivalent	None	Moderate-term on-the-job training
Construction and Related Workers, All Other	47-4799	High school diploma or equivalent	None	Moderate-term on-the-job training
Derrick Operators, Oil and Gas	47-5011	Less than high school	None	Short-term on-the-job training
Rotary Drill Operators, Oil and Gas	47-5012	Less than high school	None	Moderate-term on-the-job training
Service Unit Operators, Oil, Gas, and Mining	47-5013	Less than high school	None	Moderate-term on-the-job training
Earth Drillers, Except Oil and Gas	47-5021	High school diploma or equivalent	None	Moderate-term on-the-job training
Explosives Workers, Ordnance Handling Experts, and Blasters	47-5031	High school diploma or equivalent	None	Moderate-term on-the-job training
Continuous Mining Machine Operators	47-5041	High school diploma or equivalent	None	Moderate-term on-the-job training
Mine Cutting and Channeling Machine Operators	47-5042	High school diploma or equivalent	None	Moderate-term on-the-job training
Mining Machine Operators, All Other	47-5049	High school diploma or equivalent	None	Moderate-term on-the-job training
Rock Splitters, Quarry	47-5051	High school diploma or equivalent	None	Moderate-term on-the-job training
Roof Bolters, Mining	47-5061	High school diploma or equivalent	None	Moderate-term on-the-job training

Roustabouts, Oil and Gas	47-5071	Less than high school	None	Moderate-term on-the-job training
Helpers--Extraction Workers	47-5081	High school diploma or equivalent	None	Short-term on-the-job training
Extraction Workers, All Other	47-5099	High school diploma or equivalent	None	Moderate-term on-the-job training
First-Line Supervisors of Mechanics, Installers, and Repairers	49-1011	High school diploma or equivalent	1 to 5 years	None
Computer, Automated Teller, and Office Machine Repairers	49-2011	Postsecondary non-degree award	None	None
Radio, Cellular, and Tower Equipment Installers and Repairs	49-2021	Associate's degree	None	Moderate-term on-the-job training
Telecommunications Equipment installers and Repairers, Except Line installers	49-2022	Postsecondary non-degree award	None	Moderate-term on-the-job training
Avionics Technicians	49-2091	Postsecondary non-degree award	None	None
Electric Motor, Power Tool, and Related Repairers	49-2092	Postsecondary non-degree award	None	Long-term on-the-job training
Electrical and Electronics Installers and Repairers, Transportation Equipment	49-2093	Postsecondary non-degree award	None	Long-term on-the-job training
Electrical and Electronics Repairers, Commercial and Industrial Equipment	49-2094	Postsecondary non-degree award	None	Long-term on-the-job training
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	49-2095	Postsecondary non-degree award	None	Long-term on-the-job training
Electronic Equipment Installers and Repairers, Motor Vehicles	49-2096	Postsecondary non-degree award	None	Short-term on-the-job training
Electronic Home Entertainment Equipment Installers and Repairers	49-2097	Postsecondary non-degree award	None	None
Security and Fire Alarm Systems Installers	49-2098	High school diploma or equivalent	None	Moderate-term on-the-job training
Aircraft Mechanics and Service Technicians	49-3011	Postsecondary non-degree award	None	None
Automotive Body and Related Repairers	49-3021	High school diploma or equivalent	None	Moderate-term on-the-job training
Automotive Glass Installers and Repairers	49-3022	High school diploma or equivalent	None	Moderate-term on-the-job training
Automotive Service Technicians and Mechanics	49-3023	High school diploma or equivalent	None	Long-term on-the-job training
Bus and Truck Mechanics and Diesel Engine Specialists	49-3031	High school diploma or equivalent	None	Long-term on-the-job training
Farm Equipment Mechanics and Service Technicians	49-3041	High school diploma or equivalent	None	Long-term on-the-job training
Mobile Heavy Equipment Mechanics, Except Engines	49-3042	High school diploma or equivalent	None	Long-term on-the-job training
Rail Car Repairers	49-3043	High school diploma or equivalent	None	Long-term on-the-job training

Motorboat Mechanics and Service Technicians	49-3051	High school diploma or equivalent	None	Long-term on-the-job training
Motorcycle Mechanics	49-3052	High school diploma or equivalent	None	Long-term on-the-job training
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053	High school diploma or equivalent	None	Moderate-term on-the-job training
Bicycle Repairers	49-3091	High school diploma or equivalent	None	Moderate-term on-the-job training
Recreational Vehicle Service Technicians	49-3092	High school diploma or equivalent	None	Long-term on-the-job training
Tire Repairers and Changers	49-3093	High school diploma or equivalent	None	Moderate-term on-the-job training
Mechanical Door Repairers	49-9011	High school diploma or equivalent	None	Moderate-term on-the-job training
Control and Valve Installers and Repairers, Except Mechanical Door	49-9012	High school diploma or equivalent	None	Moderate-term on-the-job training
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	Postsecondary non-degree award	None	Long-term on-the-job training
Home Appliance Repairers	49-9031	High school diploma or equivalent	None	Moderate-term on-the-job training
Industrial Machinery Mechanics	49-9041	High school diploma or equivalent	None	Long-term on-the-job training
Maintenance Workers, Machinery	49-9043	High school diploma or equivalent	None	Moderate-term on-the-job training
Millwrights	49-9044	High school diploma or equivalent	None	Long-term on-the-job training
Refractory Materials Repairers, Except Brickmasons	49-9045	Postsecondary non-degree award	None	Moderate-term on-the-job training
Electrical Power-Line Installers and Repairers	49-9051	High school diploma or equivalent	None	Long-term on-the-job training
Telecommunications Line Installers and Repairers	49-9052	High school diploma or equivalent	None	Long-term on-the-job training
Camera and Photographic Equipment Repairers	49-9061	Associate's degree	None	Long-term on-the-job training
Medical Equipment Repairers	49-9062	Associate's degree	None	Moderate-term on-the-job training
Musical Instrument Repairers and Tuners	49-9063	Postsecondary non-degree award	None	Long-term on-the-job training
Watch Repairers	49-9064	High school diploma or equivalent	None	Long-term on-the-job training
Precision Instrument and Equipment Repairers, All Other	49-9069	Associate's degree	None	Long-term on-the-job training
Maintenance and Repair Workers, General	49-9071	High school diploma or equivalent	None	Moderate-term on-the-job training
Coin, Vending, and Amusement Machine Servicers and Repairers	49-9091	High school diploma or equivalent	None	Short-term on-the-job training

Commercial Divers	49-9092	Postsecondary non-degree award	None	Moderate-term on-the-job training
Fabric Menders, Except Garment	49-9093	Less than high school	None	Long-term on-the-job training
Locksmiths and Safe Repairers	49-9094	High school diploma or equivalent	None	Long-term on-the-job training
Manufactured Building and Mobile Home Installers	49-9095	High school diploma or equivalent	None	Moderate-term on-the-job training
Riggers	49-9096	High school diploma or equivalent	None	Short-term on-the-job training
Signal and Track Switch Repairers	49-9097	Postsecondary non-degree award	None	Moderate-term on-the-job training
Helpers--Installation, Maintenance, and Repair Workers	49-9098	High school diploma or equivalent	None	Moderate-term on-the-job training
Installation, Maintenance, and Repair Workers, All Other	49-9799	High school diploma or equivalent	None	Moderate-term on-the-job training
First-Line Supervisors of Production and Operating Workers	51-1011	Postsecondary non-degree award	1 to 5 years	None
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	51-2011	High school diploma or equivalent	None	Moderate-term on-the-job training
Coil Winders, Tapers, and Finishers	51-2021	High school diploma or equivalent	None	Short-term on-the-job training
Electrical and Electronic Equipment Assemblers	51-2022	High school diploma or equivalent	None	Short-term on-the-job training
Electromechanical Equipment Assemblers	51-2023	High school diploma or equivalent	None	Short-term on-the-job training
Engine and Other Machine Assemblers	51-2031	High school diploma or equivalent	None	Short-term on-the-job training
Structural Metal Fabricators and Fitters	51-2041	High school diploma or equivalent	None	Moderate-term on-the-job training
Fiberglass Laminators and Fabricators	51-2091	High school diploma or equivalent	None	Moderate-term on-the-job training
Team Assemblers	51-2092	High school diploma or equivalent	None	Moderate-term on-the-job training
Timing Device Assemblers and Adjusters	51-2093	High school diploma or equivalent	None	Moderate-term on-the-job training
Assemblers and Fabricators, All Other	51-2099	High school diploma or equivalent	None	Moderate-term on-the-job training
Bakers	51-3011	Less than high school	None	Long-term on-the-job training
Butchers and Meat Cutters	51-3021	Less than high school	None	Long-term on-the-job training
Meat, Poultry, and Fish Cutters and Trimmers	51-3022	Less than high school	None	Short-term on-the-job training
Slaughterers and Meat Packers	51-3023	Less than high school	None	Moderate-term on-the-job training
Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	51-3091	Less than high school	None	Moderate-term on-the-job training
Food Batchmakers	51-3092	High school diploma or equivalent	Less than 1 year	Short-term on-the-job training

Food Cooking Machine Operators and Tenders	51-3093	High school diploma or equivalent	Less than 1 year	Short-term on-the-job training
Computer-Controlled Machine Tool Operators, Metal and Plastic	51-4011	High school diploma or equivalent	None	Moderate-term on-the-job training
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	51-4012	High school diploma or equivalent	None	Moderate-term on-the-job training
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4021	High school diploma or equivalent	None	Moderate-term on-the-job training
Forging Machine Setters, Operators, and Tenders, Metal and Plastic	51-4022	High school diploma or equivalent	None	Moderate-term on-the-job training
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	51-4023	High school diploma or equivalent	None	Moderate-term on-the-job training
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	51-4031	High school diploma or equivalent	None	Moderate-term on-the-job training
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4032	High school diploma or equivalent	None	Moderate-term on-the-job training
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4033	High school diploma or equivalent	None	Moderate-term on-the-job training
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4034	High school diploma or equivalent	None	Moderate-term on-the-job training
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4035	High school diploma or equivalent	None	Moderate-term on-the-job training
Machinists	51-4041	High school diploma or equivalent	None	Long-term on-the-job training
Metal-Refining Furnace Operators and Tenders	51-4051	High school diploma or equivalent	None	Moderate-term on-the-job training
Pourers and Casters, Metal	51-4052	High school diploma or equivalent	None	Moderate-term on-the-job training
Model Makers, Metal and Plastic	51-4061	High school diploma or equivalent	None	Long-term on-the-job training
Patternmakers, Metal and Plastic	51-4062	High school diploma or equivalent	None	Long-term on-the-job training
Foundry Mold and Coremakers	51-4071	High school diploma or equivalent	None	Moderate-term on-the-job training
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072	High school diploma or equivalent	None	Moderate-term on-the-job training
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4081	High school diploma or equivalent	None	Moderate-term on-the-job training
Tool and Die Makers	51-4111	High school diploma or equivalent	None	Long-term on-the-job training
Welders, Cutters, Solderers, and Brazers	51-4121	High school diploma or equivalent	Less than 1 year	Moderate-term on-the-job training
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	51-4122	High school diploma or equivalent	None	Moderate-term on-the-job training

Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	51-4191	High school diploma or equivalent	None	Moderate-term on-the-job training
Layout Workers, Metal and Plastic	51-4192	High school diploma or equivalent	None	Moderate-term on-the-job training
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	51-4193	High school diploma or equivalent	None	Moderate-term on-the-job training
Tool Grinders, Filers, and Sharpeners	51-4194	High school diploma or equivalent	None	Moderate-term on-the-job training
Metal Workers and Plastic Workers, All Other	51-4199	High school diploma or equivalent	None	Moderate-term on-the-job training
Prepress Technicians and Workers	51-5111	Postsecondary non-degree award	None	None
Printing Press Operators	51-5112	High school diploma or equivalent	None	Moderate-term on-the-job training
Print Binding and Finishing Workers	51-5113	High school diploma or equivalent	None	Short-term on-the-job training
Laundry and Dry-Cleaning Workers	51-6011	Less than high school	None	Short-term on-the-job training
Pressers, Textile, Garment, and Related Materials	51-6021	Less than high school	None	Short-term on-the-job training
Sewing Machine Operators	51-6031	Less than high school	None	Short-term on-the-job training
Shoe and Leather Workers and Repairers	51-6041	High school diploma or equivalent	None	Moderate-term on-the-job training
Shoe Machine Operators and Tenders	51-6042	High school diploma or equivalent	None	Short-term on-the-job training
Sewers, Hand	51-6051	Less than high school	None	Moderate-term on-the-job training
Tailors, Dressmakers, and Custom Sewers	51-6052	Less than high school	None	Moderate-term on-the-job training
Textile Bleaching and Dyeing Machine Operators and Tenders	51-6061	High school diploma or equivalent	None	Short-term on-the-job training
Textile Cutting Machine Setters, Operators, and Tenders	51-6062	High school diploma or equivalent	None	Moderate-term on-the-job training
Textile Knitting and Weaving Machine Setters, Operators, and Tenders	51-6063	High school diploma or equivalent	None	Moderate-term on-the-job training
Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	51-6064	High school diploma or equivalent	None	Moderate-term on-the-job training
Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	51-6091	High school diploma or equivalent	None	Moderate-term on-the-job training
Fabric and Apparel Patternmakers	51-6092	High school diploma or equivalent	None	Moderate-term on-the-job training
Upholsterers	51-6093	High school diploma or equivalent	None	Moderate-term on-the-job training
Textile, Apparel, and Furnishings Workers, All Other	51-6099	High school diploma or equivalent	None	Short-term on-the-job training
Cabinetmakers and Bench Carpenters	51-7011	High school diploma or equivalent	None	Moderate-term on-the-job training

Furniture Finishers	51-7021	High school diploma or equivalent	None	Short-term on-the-job training
Model Makers, Wood	51-7031	High school diploma or equivalent	None	Moderate-term on-the-job training
Patternmakers, Wood	51-7032	High school diploma or equivalent	None	Moderate-term on-the-job training
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	High school diploma or equivalent	None	Short-term on-the-job training
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	High school diploma or equivalent	None	Short-term on-the-job training
Woodworkers, All Other	51-7099	High school diploma or equivalent	None	Moderate-term on-the-job training
Nuclear Power Reactor Operators	51-8011	High school diploma or equivalent	None	Long-term on-the-job training
Power Distributors and Dispatchers	51-8012	High school diploma or equivalent	None	Long-term on-the-job training
Power Plant Operators	51-8013	High school diploma or equivalent	None	Long-term on-the-job training
Stationary Engineers and Boiler Operators	51-8021	High school diploma or equivalent	None	Long-term on-the-job training
Water and Wastewater Treatment Plant and System Operators	51-8031	High school diploma or equivalent	None	Long-term on-the-job training
Chemical Plant and System Operators	51-8091	High school diploma or equivalent	None	Long-term on-the-job training
Gas Plant Operators	51-8092	High school diploma or equivalent	None	Long-term on-the-job training
Petroleum Pump System Operators, Refinery Operators, and Gaugers	51-8093	High school diploma or equivalent	None	Long-term on-the-job training
Plant and System Operators, All Other	51-8099	High school diploma or equivalent	None	Long-term on-the-job training
Chemical Equipment Operators and Tenders	51-9011	High school diploma or equivalent	None	Moderate-term on-the-job training
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	51-9012	High school diploma or equivalent	None	Moderate-term on-the-job training
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	51-9021	High school diploma or equivalent	None	Moderate-term on-the-job training
Grinding and Polishing Workers, Hand	51-9022	Less than high school	None	Moderate-term on-the-job training
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	High school diploma or equivalent	None	Moderate-term on-the-job training
Cutters and Trimmers, Hand	51-9031	Less than high school	None	Short-term on-the-job training
Cutting and Slicing Machine Setters, Operators, and Tenders	51-9032	High school diploma or equivalent	None	Short-term on-the-job training
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	51-9041	High school diploma or equivalent	None	Moderate-term on-the-job training

Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	51-9051	High school diploma or equivalent	None	Moderate-term on-the-job training
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061	High school diploma or equivalent	None	Moderate-term on-the-job training
Jewelers and Precious Stone and Metal Workers	51-9071	High school diploma or equivalent	None	Long-term on-the-job training
Dental Laboratory Technicians	51-9081	High school diploma or equivalent	None	Moderate-term on-the-job training
Medical Appliance Technicians	51-9082	High school diploma or equivalent	None	Long-term on-the-job training
Ophthalmic Laboratory Technicians	51-9083	High school diploma or equivalent	None	Moderate-term on-the-job training
Packaging and Filling Machine Operators and Tenders	51-9111	High school diploma or equivalent	None	Moderate-term on-the-job training
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	51-9121	High school diploma or equivalent	None	Moderate-term on-the-job training
Painters, Transportation Equipment	51-9122	High school diploma or equivalent	None	Moderate-term on-the-job training
Painting, Coating, and Decorating Workers	51-9123	High school diploma or equivalent	None	Moderate-term on-the-job training
Semiconductor Processors	51-9141	Associate's degree	None	Moderate-term on-the-job training
Photographic Process Workers and Processing Machine Operators	51-9151	High school diploma or equivalent	None	Short-term on-the-job training
Adhesive Bonding Machine Operators and Tenders	51-9191	High school diploma or equivalent	None	Moderate-term on-the-job training
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	51-9192	Less than high school	None	Moderate-term on-the-job training
Cooling and Freezing Equipment Operators and Tenders	51-9193	High school diploma or equivalent	None	Moderate-term on-the-job training
Etchers and Engravers	51-9194	High school diploma or equivalent	None	Moderate-term on-the-job training
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195	High school diploma or equivalent	None	Long-term on-the-job training
Paper Goods Machine Setters, Operators, and Tenders	51-9196	High school diploma or equivalent	None	Moderate-term on-the-job training
Tire Builders	51-9197	High school diploma or equivalent	None	Moderate-term on-the-job training
Helpers--Production Workers	51-9198	Less than high school	None	Short-term on-the-job training
Production Workers, All Other	51-9399	High school diploma or equivalent	None	Moderate-term on-the-job training
Aircraft Cargo Handling Supervisors	53-1011	High school diploma or equivalent	1 to 5 years	None
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	53-1021	High school diploma or equivalent	1 to 5 years	None

First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	High school diploma or equivalent	1 to 5 years	None
Airline Pilots, Copilots, and Flight Engineers	53-2011	Bachelor's degree	1 to 5 years	Moderate-term on-the-job training
Commercial Pilots	53-2012	Postsecondary non-degree award	None	None
Air Traffic Controllers	53-2021	Associate's degree	None	Long-term on-the-job training
Airfield Operations Specialists	53-2022	High school diploma or equivalent	None	Long-term on-the-job training
Flight Attendants	53-2031	High school diploma or equivalent	None	Moderate-term on-the-job training
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	53-3011	High school diploma or equivalent	None	Moderate-term on-the-job training
Bus Drivers, Transit and Intercity	53-3021	High school diploma or equivalent	None	Moderate-term on-the-job training
Bus Drivers, School or Special Client	53-3022	High school diploma or equivalent	None	Moderate-term on-the-job training
Driver/Sales Workers	53-3031	High school diploma or equivalent	None	Short-term on-the-job training
Heavy and Tractor-Trailer Truck Drivers	53-3032	High school diploma or equivalent	1 to 5 years	Short-term on-the-job training
Light Truck or Delivery Services Drivers	53-3033	High school diploma or equivalent	None	Short-term on-the-job training
Taxi Drivers and Chauffeurs	53-3041	Less than high school	None	Short-term on-the-job training
Motor Vehicle Operators, All Other	53-3099	High school diploma or equivalent	None	Short-term on-the-job training
Locomotive Engineers	53-4011	High school diploma or equivalent	1 to 5 years	Moderate-term on-the-job training
Locomotive Firers	53-4012	High school diploma or equivalent	None	Short-term on-the-job training
Rail Yard Engineers, Dinkey Operators, and Hostlers	53-4013	High school diploma or equivalent	None	Moderate-term on-the-job training
Railroad Brake, Signal, and Switch Operators	53-4021	High school diploma or equivalent	None	Moderate-term on-the-job training
Railroad Conductors and Yardmasters	53-4031	High school diploma or equivalent	None	Moderate-term on-the-job training
Subway and Streetcar Operators	53-4041	High school diploma or equivalent	None	Moderate-term on-the-job training
Rail Transportation Workers, All Other	53-4099	High school diploma or equivalent	None	Moderate-term on-the-job training
Sailors and Marine Oilers	53-5011	Less than high school	None	Short-term on-the-job training
Captains, Mates, and Pilots of Water Vessels	53-5021	Bachelor's degree	None	None
Motorboat Operators	53-5022	High school diploma or equivalent	None	Short-term on-the-job training
Ship Engineers	53-5031	Bachelor's degree	None	None
Bridge and Lock Tenders	53-6011	Less than high school	None	Short-term on-the-job training

Parking Lot Attendants	53-6021	Less than high school	None	Short-term on-the-job training
Automotive and Watercraft Service Attendants	53-6031	Less than high school	None	Short-term on-the-job training
Traffic Technicians	53-6041	Less than high school	None	Short-term on-the-job training
Transportation Inspectors	53-6051	Some college, no degree	None	Short-term on-the-job training
Transportation Attendants, Except Flight Attendants	53-6061	High school diploma or equivalent	None	Short-term on-the-job training
Transportation Workers, All Other	53-6099	High school diploma or equivalent	None	Short-term on-the-job training
Conveyor Operators and Tenders	53-7011	Less than high school	None	Short-term on-the-job training
Crane and Tower Operators	53-7021	Less than high school	1 to 5 years	Long-term on-the-job training
Dredge Operators	53-7031	Less than high school	None	Short-term on-the-job training
Excavating and Loading Machine and Dragline Operators	53-7032	Less than high school	1 to 5 years	Moderate-term on-the-job training
Loading Machine Operators, Underground Mining	53-7033	Less than high school	None	Short-term on-the-job training
Hoist and Winch Operators	53-7041	Less than high school	None	Moderate-term on-the-job training
Industrial Truck and Tractor Operators	53-7051	Less than high school	Less than 1 year	Short-term on-the-job training
Cleaners of Vehicles and Equipment	53-7061	Less than high school	None	Short-term on-the-job training
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	Less than high school	None	Short-term on-the-job training
Machine Feeders and Offbearers	53-7063	Less than high school	None	Short-term on-the-job training
Packers and Packagers, Hand	53-7064	Less than high school	None	Short-term on-the-job training
Gas Compressor and Gas Pumping Station Operators	53-7071	Less than high school	None	Moderate-term on-the-job training
Pump Operators, Except Wellhead Pumpers	53-7072	Less than high school	None	Moderate-term on-the-job training
Wellhead Pumpers	53-7073	Less than high school	Less than 1 year	Moderate-term on-the-job training
Refuse and Recyclable Material Collectors	53-7081	Less than high school	None	Short-term on-the-job training
Mine Shuttle Car Operators	53-7111	Less than high school	None	Short-term on-the-job training
Tank Car, Truck, and Ship Loaders	53-7121	Less than high school	None	Short-term on-the-job training
Material Moving Workers, All Other	53-7199	Less than high school	None	Short-term on-the-job training

Source: Employment Projections program, U.S. Department of Labor, U.S. Bureau of Labor Statistics

10. How will the Local Area coordinate discretionary and formula-based investments across programs in support of the governor's vision? How will these funds be used to leverage other public and private resources in order to effectively and efficiently provide services? **[TEGL No. 21-11, Item 7B, Bullet 6]**

Director Takamine of the Hawaii State Department of Labor and Industrial Relations has insightfully created a series of meetings and opportunities for various federal grant fund recipients to join together to best leverage resources. Examples of leveraging funds can be found in Section II – Operational Plan.

Section II - Operational Plan

In the following sections, discuss how you will align federal, state and local policies and procedures, operations and administration. How will this alignment contribute to the avoidance of duplication and to closing gaps in service?

A. Service Delivery

1. What programs and funding streams support service delivery through the One-Stop Career Center (One-Stop) system? If applicable, what are the anticipated changes to those programs or funding streams? **[WIA §§ 121(b)(1)(B) & 121(c)(2)(A)(ii)]**

The WIA mandatory partners help with the one-stop/resource center and introduce their customers to the array of services available.

FOR JOBSEEKERS:

Oahu WorkLinks Services - for All Jobseekers:
✓ Access to job bank websites
✓ Career guidance and support learning about job skills requirements
✓ Job Seeker Workshops
✓ Access to photocopier, telephones, message center, fax, and assistive technology computer
✓ Library learning center
In addition, there are services just for those who meet these criteria:
✓ have been laid-off ***and*** you are receiving or eligible for unemployment insurance benefits,
✓ ***or*** meet income eligibility guidelines based on the family's income for the past year.
Services include all of the above Oahu WorkLinks services **plus** -- guidance to services available from our partner programs and tuition assistance for enrollment in approved training programs for high-demand occupations

The services above, are part of the federal "Workforce Investment Act of 1998." In this Act, the federal government organizes these services into separate categories. Here are brief descriptions of those categories along with related grants the Board is currently involved with:

Workforce Investment Act Adult Program
Unemployed adults (age 18+) from low-income families and employed adults who have not achieved self-sufficiency are eligible for training services, in addition to career counseling, case management, and employment and support services.

Workforce Investment Act Dislocated Worker Program
People who are laid off as a result of business closure or downsizing are eligible for re-training and re-employment services. There are no income criteria for this program.

Energy Sector Partnership Training:
Provides unemployed workers and others with career planning services, skills training in the classroom or on-the-job, and job placement assistance in the energy efficiency, renewable energy, and other green sectors. Businesses hiring qualified workers receive reimbursement of 50% of the wages during the training period.

Related City & County of Honolulu Programs:

Family Self-Sufficiency and Homeownership Program
Provides employment counseling, case management, and homeownership services to the State's Section 8 tenants and low-income public housing residents. Families establish a government interest-bearing "escrow" savings account that they can successfully draw at completion.

Ho'ala Program
Teaches life skills and job readiness skills to participants in the State Department of Human Services First To Work and Vocational Rehabilitation programs. Job club activities reinforce the learning of job search skills.
Contact: Nani Fife, 768-5732

Rent To Work Program
Provides 12 to 24 months of rental assistance to people experiencing homelessness who are willing to enter employment or increase income primarily through employment. Offers career counseling, skill assessment and job search assistance as participants follow an individualized employment and training plan to increase income.

Ticket To Work Program
Oahu WorkLinks is an Employment Network to assist people with disabilities who are receiving social security benefits to obtain employment, vocational rehabilitation, and other support services to return to work.

FOR EMPLOYERS:

Recruitment Assistance to fill job openings
- ✓ Listings with local and national job banks
- ✓ Screening assistance to identify qualified job candidates
- ✓ Hosting a job fair tailored for your company at our one-stop center
- ✓ Information about tax incentives to reduce payroll costs

Employee Training for staff
- ✓ Helping develop cost-effective training programs.
- ✓ Designing training to help workers advance up the career ladder
- ✓ Retraining for workers in response to changing market conditions
- ✓ Funds to subsidize salary/wages for On-the-Job Training positions

✓ Customized training in computer skills, interpersonal skills, team building, customer service, sales, ESL, and more

Outplacement Services for staff reductions

✓ Rapid response sessions – provide your team with information about unemployment benefits and filing procedures
✓ Provide an overview of Oahu WorkLinks Job Seeker Services
✓ Career assessment testing
✓ Job Seeker Workshops
✓ Training resources: tuition help, apprenticeship programs, and more.

2. Are each of the required WIA partners included in your One-Stop delivery system? If a required partner is not involved, explain the reason. **[WIA § 117(b)(2)(A)]**

The mandatory One-Stop partners are involved in the delivery system and contribute their resources to the delivery. They are:

- Hawaii Department of Labor and Industrial Relations, Workforce Development Division, Oahu Branch
  - Wagner-Peyser Act for labor exchange, foreign labor certification and worker re-employment
  - Veterans outreach and training
  - Migrant seasonal farm workers
  - Trade adjustment assistance
  - Work opportunities tax credits
  - Employment training fund
- Honolulu Community Action Program
  - Senior Community Service Employment Program
  - Community Services Block Grant
- ALU LIKE: Native American Employment and Training
- State Department of Human Services, Division of Vocational Rehabilitation
- State Department of Human Services, Respite Companion Service Program
- State Department of Education Adult Community Schools
- Hawaii Job Corps
- University of Hawaii Community Colleges
- State Department of Labor and Industrial Relations, Unemployment Insurance Division

3. Describe how your local area's WIA funds are used to leverage other federal, state, local, and private resources. How do these coordinated resources lead to a more effective local system that expands the involvement of business, employers and individuals? **[WIA § 112(b)(10)]**

Coordination among other federal, state, local and private resources include partner programs funded by various sources:

- Hoala Program to teach job readiness skills, life skills and to implement job clubs funded by State Department of Human Services Temporary Assistance to Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), and Division of Vocational Rehabilitation (DVR)
- Case management and job development assistance for people with disabilities funded by DVR; work ready and independence skills training and blind vendor training funded by Ho'opono
- Family Self-Sufficiency Program funded by Hawaii Public Housing Authority
- Rent To Work Program funded by HUD HOME Tenant Based Rental Assistance to provide rental assistance to families experiencing homelessness
- Creating Employment Opportunities Program for youth ex-offenders funded under a discretionary grant from US Department of Labor
- YouthBuild Honolulu funded under a discretionary grant from US Department of Labor
- Department of Health Alcohol and Drug Abuse Division for LifeSkills Training and "Be A Jerk Campaign" to prevent underage youth from using tobacco, alcohol or drugs
- Department of Justice Juvenile Accountability Block Grant for Juvenile Justice Center to refer first-time minor violators for counseling services
- WorkHawaii is an Employment Network for the Ticket To Work Program for beneficiaries on Supplemental Security Income and Social Security Disability Insurance.
- The City provides General Funds for program matching, supplemental salaries and current expenses.
- Private non-profit organizations such as Catholic Charities, Helping Hands, YWCA etc. provide support services such as first month security deposit, utility assistance, professional clothing, mentoring etc.

Within the programs administered by WorkHawaii, for example, dual enrollment and wraparound case management strategies are implemented to coordinate services to the greatest extent possible. An example is that older youth have more training and post program options available to them through the coordination.

4. Describe and assess how the services provided by each of the One-Stop partners are coordinated and made available in your local One-Stop system. **[WIA §§ 118(b)(2)(B) & 121 (c)(2)]**

Participants receive initial assessment to determine their needs and eligibility for partner programs as part of the intake process at the core service level. Referrals to partner programs are coordinated based on the assessment. In depth assessment continues to take place at the intensive service level, and employment consultants and case managers together with participants develop education and employment goals identifying training partners, potential employers as well as partner agencies that provide support services for each participant's individualized employment plan. For example, there is coordination with DVR-- in the case of a participant with a disability, he may be referred to DVR for services if it is determined that DVR can provide a more comprehensive array of services that better meets the participant's

needs. On the other hand, DVR may also refer and coordinate with the one-stops to provide job placement for a participant that DVR is not yet able to serve as he may be on a low priority. There is also coordination through joint case management and funding, for example, ALU LIKE and WIA may jointly fund a participant who is native Hawaiian.

Each customer completes an "Oahu WorkLinks Initial Partner Intake Form" which helps staff to efficiently guide customers to services which may best fit their needs. Services are presented seamlessly with a no-wrong-door approach to access. They are assisted in completing HireNet registration and use, provided with a monthly calendar of events including the schedule for the initial, mandatory WIA Briefing session.

A few years ago, one-stop leadership developed a concept for a mobile one-stop program that could go out to the communities with the most underserved populations. However, due to budget decreases it was not possible to pursue this idea further.

5. Describe and assess how your LWIB ensures continuous improvement of eligible providers of services through the One-Stop system in meeting the employment and training needs of local businesses and job seekers. **[WIA §118(b)(2)(A)]**

OWIB evaluates performance outcomes through quarterly reports. OWIB also monitors Adult, Dislocated Worker and Youth programs. For example, on site monitoring is conducted at OWL Dillingham and Waianae which includes (but not limited to) reviewing client files, interviewing staff, reviewing Standard Operating Procedures and physical inspection of facilities. In addition OWIB visits events such as job fairs, and provides technical assistance such as outreach and marketing to the business community to increase business participation to ensure continuous improvement in meeting the needs of businesses and job seekers.

6. Describe and assess the type of adult and dislocated worker employment and training activities that are available in the local area, including a description of the Individual Training Account (ITA) system and procedures for ensuring that any exceptions to use of ITA's are justified under WIA § 134(d)(4)(G)(ii) and 20 CFR 663.430. **[20 CFR § 661.350(a)(5)]**

Unemployed adult or dislocated worker customers who are unable to find employment through intensive services may be referred to training by an employment consultant as planned in the Individual Employment Plan. Occupational skills training funded by WIA may only be provided through an approved training program offered by an eligible training provider (ETP). The statewide consumer report and list of eligible trainers (Kumu A`O) will be available electronically and in hard copy at each one-stop center. Training services to be provided shall be directly related to employment opportunities in occupations targeted by the OWIB as desired growth industries for O'ahu as well as demand occupations identified by employers and projection models.

Prior to enrolling a customer into training, an employment consultant must determine that the participant is in need of training; assess the individual's interests, abilities, and need for supportive services; establish an appropriate training plan; work with the customer to estimate the full cost of tuition and

other training expenses needed to complete the plan successfully; calculate the amount of total resources available from WIA and other sources –including partner programs; and provide guidance and training in evaluating training provider data in order to select wisely from the list of eligible training providers. The customer will be required to apply for all financial assistance, including Pell Grants, for which they may be eligible. Employment consultants should verify Pell Grant status by obtaining a copy of the customer's letter of award or denial.

Each customer approved for training shall have an Individual Training Account (ITA) established in his or her name. An ITA is an account established by O`ahu WorkLinks on behalf of an eligible customer to finance training costs directly linked to employment opportunities. Currently, only tuition and fees required for attendance/completion (e.g. registration, laboratory, certification) paid to the eligible training provider (ETP) will be charged against the individual's ITA. The maximum amount available through an ITA will vary among customers and will be based on anticipated training costs. However, no ITA may exceed the $8,000 lifetime limit for a single individual enrolled in either the adult program or dislocated worker program without specific approval of the OWIB. If a participant desires to attend a program whose cost exceeds his available ITA balance, that customer must demonstrate his ability to pay the excess cost prior to enrollment in the training program. The customer should also be informed that WIA assistance is affected by program funding levels as well as changes in policy, and there is no guarantee that ITA funds will always be available at the same level as at the initial determination.

The customer chooses which program to attend. However, for charges to be made against an ITA they must first be approved as an allowable training cost by the center's intensive/training service staff, *usually the customer's employment consultant.* In the case of tuition, the approving staff must certify that the training is consistent with the training plan based on the customer's career goals and abilities. Tuition payments may only be made for programs that appear on the state list of approved trainers. Purchases of other training materials must be consistent with the current supportive services policy and will only be approved if the price is reasonable for the items. Payments may be made directly to the vendor or reimbursed to the participant after submitting proof of payment.

Employment consultants will authorize training program registration and tuition, purchase of required training materials, and supportive services by issuing a purchase order to the appropriate vendor.

On-the-job training (OJT) may be provided through a negotiated contract with an employer in the public, private non-profit, or private sector under which the employer hires one or more WIA participants and provides occupational training in exchange for the reimbursement of at least 50 percent of the wage rate to compensate for the employer's extraordinary costs.

After interviewing a person with contracting authority in the potential OJT employer organization, the business developer will conduct a pre-award

survey according to the statewide-standardized requirements. The survey must verify that the employer:

Is in compliance with Hawaii Compliance Express;
Has a General Excise License;
Is registered with the State Department of Commerce and Consumer Affairs to conduct business in Hawaii;
Has the necessary professional or vocational licensing, if applicable;
Has a satisfactory record of integrity and business ethics as determined by reports from the Office of Consumer Protection, the Better Business Bureau, and Chamber of Commerce;
Can demonstrate payment of state and federal taxes;
Maintains a satisfactory working environment, including compliance with OSHA regulations;
Has adequate financial resources or the ability to obtain them; and
Has not moved from another location within the past 120 days if that relocation resulted in loss of jobs at the original site.

Both the business developer and the employer must certify by signature that the pre-award data is accurate. If the survey is acceptable, the business developer will negotiate and prepare a contract for execution by the OWL administrative unit and the employer.

Contracts will not be negotiated with any employer who has previously exhibited a pattern of failing to provide OJT participants with continued long-term employment with wages, benefits, and working conditions that are equal to those provided to other employees who have worked a similar length of time and are doing the same type of work.

An OJT contract must be limited to the period of time required for a participant to become proficient in the occupation for which the training is being provided. Consideration will be given to the academic and occupational skill level, prior work experience, interests and abilities of the potential OJT participant as determined by the initial assessment and IEP, as well as to the occupational skill requirements of the job.

An OJT agreement may not be negotiated for employment or training of participants in sectarian activities, or to carry out the construction, operation or maintenance of any part of any facility that is used or to be used for sectarian instruction or as a place for religious worship.

An OJT agreement may not be negotiated with any business for the purpose of encouraging that business or a part of that business to relocate from another location in the United States if the relocation would result in any employee losing his or her job.

OJT contracts will not be awarded if the contract would result in a violation of

an existing union agreement or in WIA customers displacing other employees.

An OJT contract may be written for an employed participant only if the employee is not earning a self-sufficient wage as determined by the OWIB; and the OJT relates to the introduction of new technologies, introduction to new production or service procedures, upgrading to new jobs that require additional skills, workplace literacy, or other purposes identified by the OWIB.

The Business Services unit will evaluate employer efforts to retain their OJT employees before any additional contracts are awarded.

Customized Training may be provided through a negotiated contract with an employer (or a group of employers) in the public, private non-profit, or private sector under which the employer provides training that is designed to meet the special requirements of the employer; is conducted with a prior commitment by the employer to employ, or in the case of incumbent workers, continue to employ, the participants on successful completion of the training; and for which the employer pays for a portion of the cost of the training. Training components may include classroom instruction in the occupational area or in basic skills needed for entry into the occupation, or in simulated or actual job-site instruction in which the trainees do not perform productive work (e.g. job shadowing). The training may be conducted by the employer or be subcontracted to another training provider. An OJT component will be permitted after or concurrent with the classroom or non-productive job-site training; however, participants must actually be hired prior to the OJT. The placement may be within the organization holding the contract for the training, or with another qualified company, provided that the job is directly training-related. Procedures to develop, negotiate and execute Customized Training agreements are similar to OJT.

Other training activities allowable under WIA such as cooperative education, training programs operated by the private sector; skill upgrading and retraining; entrepreneurial training etc. may also be provided.

7. Describe how integrated services to both job seekers and businesses are provided. This includes:

a. Partnering with Temporary Assistance for Needy Families (TANF), Adult Education and other social service programs to implement comprehensive career pathways. **[TEGL No. 21-11, Item 7B, Bullet 1]**

The One-Stops have two customers--businesses and job seekers, and services are integrated to satisfy the needs of both customer groups. Staff perform daily job matching functions such as pre-screening of candidates to match businesses' requirements and expectations before making referrals to the employers. On the other hand, employers who request assistance for recruitment of certain candidates may be assisted by staff in conducting a search in HireNet (in addition to the business' self-service); customized job fairs; and financial incentives such as OJT and tax credits that encourage the hiring of job seekers.

7. a. Partnerships have been established with TANF, TAONF and SNAP programs before the implementation of WIA as WorkHawaii has been the provider of job readiness training, life skills training and job club activities under Ho'ala since the 1990s. Job development services for these public assistance recipients are provided by WDD Oahu Branch. Dual enrollment procedures have recently been piloted to further increase co-enrollment of recipients in WIA services.

Close working relationships have been maintained with the adult education community schools as the WorkHawaii administrator or assistant administrator serves on the statewide Adult Education advisory council. Participants requiring basic education, English as a Second Language, GED, and remedial services are referred to the community schools. Community school instructors who have been interested in using HireNet as an employment resource have been trained how to assist their students in accessing the information. Farrington Community School provided basic skills instruction at the Dillingham One-Stop. In addition, OWL conducts outreach and recruitment at the community schools for discretionary grants such as the State Energy Sector Partnership (SESP) and Community College Career Training (C3T) grants.

The State Director's office of Carl Perkins Career and Technical Education has been working very closely with OWL in promoting better alignment of services based on the career pathway models. Plans to collaborate closely to promote the awareness of career and technical education and workforce development as being an integrated system are under way: for example, CTE is providing training and professional development for One-Stop and Community College staff to gain a better understanding of system issues; advocacy and public relation efforts will be conducted jointly; training programs for special populations such as offenders and entrepreneurs may be developed and conducted jointly.

Coordination is established with an extensive network of community resources and social service providers to address situations that may impede the participants' progress in their employment and training plan such as transportation, child care, housing, health and medical conditions, and legal issues.

b. Improving the connection between WIA, Wagner-Peyser and Unemployment Insurance (UI) systems to enhance reemployment services for unemployed job seekers and shorten the duration of unemployment for UI claimants. **[TEGL No. 21-11, Item 7B, Bullet 2]**

The one-stop consortia lead coordinates Wagner-Peyser per state directives. Her expertise connects the two programs wonderfully. Her coordination means that she is in close communication with the state's Unemployment Insurance Division Administrator.

The DLIR has an innovative "Layoff Aversion" program. Once a company announces a layoff, the DLIR proactively steps in, analyzes the list of positions involved and then matches them with available jobs. This helps employees to continuing working and averts the person's need to file for unemployment insurance. The one-stop assists with job matching and employment counseling services.

Both Wagner-Peyser and WIA staff provide assistance to potential UI claimants by helping them file for unemployment on the phone or online and set up their claims while they are at OWL. There are dedicated work stations for UI applications. OWL staff also performs the "work test" function and help register claimants in HireNet and provide them with Standard Occupational Codes as well as other UI requirements such as an acceptable resume. REA workshops are conducted by Wagner-Peyser staff to facilitate a faster return to work for the claimants. WIA intensive and training services are presented at these workshops as additional resources for claimants to consider enhancing their skills. UI collaborates by sending messages to claimants to inform them of special training opportunities funded under discretionary grants. The innovative VIP program has demonstrated the collaboration between UI, Wagner-Peyser and WIA in securing internship opportunities for claimants to improve their reemployment. OJTs have been used to enable the businesses to hire the claimants on a permanent basis when they complete VIP. UI, WDD and WorkHawaii administrators and staff meet from time to time to problem solve and improve operational efficiency, for example, the procedures to exempt claimants from job search as they attend training (the requirements and procedures for the Training-1 process) were discussed and clarified so that staff from the different agencies had a consistent understanding.

c. Using Registered Apprenticeship to meet training needs for some job seekers as well as employers in need of skilled workers. **[TEGL No. 21-11, Item 7B, Bullet 3]**

The registered apprenticeship program was artfully used by the DLIR in the implementation of their multi-million dollar "green grant." This grant was solidly in line with the Governor's New Day Plan. It provided funds to develop an infrastructure for green jobs training as well as tuition assistance for citizens seeking a job in the emerging green industry. Unions were actively involved in helping their members attain additional skills and several of them participated in the registered apprenticeship program. We will follow DLIR's lead in sustaining and creating opportunities like these for our local area. Partnership with Registered Apprenticeship (RA) programs continues with the One-Stops providing assistance and support to apprenticeship programs for their recruitment events. There has been a closer partnership between WIA and RA since the Apprenticeship Action Clinic conferences in 2009 when collaboration was shown to improve WIA program outcomes for placement and credential attainment. Through the SESP grant, OWL partnered with the Electrician and Plumbers& Pipefitters' apprenticeship programs

to enroll and train about 100 participants by providing training and support services. This partnership is expected to continue under WIA formula grants. Furthermore, as the construction industry rebounds, more opportunities will be pursued with apprenticeship programs in the other trades for both adults and youth.

d. Comprehensively serving dislocated workers (e.g. streamlining assessment and case management to ensure that needed job search and training services are provided) through the WIA Dislocated Worker Program, the Trade Adjustment Assistance (TAA) Program and Rapid Response, including layoff aversion strategies and coordination with statewide rapid response activities. **[TEGL No. 21-11, Item 7B, Bullet 5; WIA § 118(b)(4) & (5); WIA § 121(b)(1)(B)(xii)]**

Although TAA and Rapid Response are managed by the State and WDD is the lead agency, other partner programs like UI and WIA are part of the team implementing rapid response services, which are often provided on site at the employers' request. Comprehensive services to dislocated workers ranging from assessment (which includes collecting feedback from worker surveys), case management, job search and training are provided in a streamlined manner. Any layoff aversion strategies and applications for additional funding through National Emergency Grants or TAA grants are also implemented in partnership.

The DLIR has an innovative "Layoff Aversion" program. Once a company announces a layoff, the DLIR proactively steps in, analyzes the list of positions involved and then matches them with available jobs. This helps employees to continuing working and averts the person's need to file for unemployment insurance. The one-stop assists with job matching and employment counseling services.

e. Coordinating formula with discretionary grantees to ensure that effective practices are shared across programs and case management of participants is coordinated. **[TEGL No. 21-11, Item 7B, Bullet 6]**

OWL coordinates services under formula grants (e.g.Wagner-Peyser, WIA, Native American Employment Training) with discretionary grants that are received by the One-Stop Consortium (e.g.YouthBuild) and one-stop partners (e.g. C3T). Co-enrollment is encouraged to the greatest extent possible; joint case management and pooling of resources is an on-going practice. Effective practices, success stories and lessons learned are shared among the grantees, partner agencies and service providers through meetings, discussions, newsletters or informal communication. For example, the DLIR Director is currently leading a monthly forum of DLIR grantees, WIBs, Community Colleges, and service providers to improve collaboration on grant applications, program administration and dissemination of best practices.

8. Describe partnerships that the LWIB and One-Stops have developed to improve services to customers in the Local Area. In particular, include the local community college(s).

To enhance services to our business customers, the LWIB has been concentrating on its functions of

> ***(7) Employer linkages.**--The local board shall coordinate the workforce investment activities authorized under this subtitle and carried out in the local area with economic development strategies and develop other employer linkages with such activities.*
>
> ***(8) Connecting, brokering, and coaching.**--The local board shall promote the participation of private sector employers in the statewide workforce investment system and ensure the effective provision, through the system, of connecting, brokering, and coaching activities, through intermediaries such as the one-stop operator in the local area or through other organizations, to assist such employers in meeting hiring needs.*

OWIB members created permitted interaction groups to reach out and partner with the business community.

- Marketing and Networking – this group arranged for OWL staff to present information about one-stop services to several professional and trade associations to increase business awareness of OWL and it services for employers and job seekers. The group is also arranging for media and advertising opportunities.
- On-the-job training – this group connected OWL staff with potential OJT company participants. It also worked to create presentation opportunities for OWL staff.
- Veterans outreach -- this is a newly created group. It will be working to encourage businesses to hire veterans.

OWL staff meets with community colleges staff to discuss operational matters including partnering projects focused on curriculum and program design.

Partnerships with the Community Colleges are strong as more than 50% of OWL training services are provided by the Community Colleges, either through the non-credit courses or degree programs. The offices of continuing education have been flexible and responsive to designing programs and developing curricula based on input from OWL. Such coordination is expected to strengthen under C3T. To improve services to ensure trainees meet employer needs, the Community Colleges have also partnered with industry groups to solicit and obtain real time labor market information and validate training standards. Skill panels begun under the SESP grant will continue as Public Policy Work Groups for the Energy, Agriculture and Health sectors under C3T. OWL will also continue to provide feedback to the Community Colleges on the employment and retention outcomes of participants who complete the training. Discussions have also begun to explore co-location of some one-stop and Community College services e.g. establishing a presence for OWL staff on WCC; WCC using Hauula OWL to provide classes; implementing HCC's iCAN program at Dillingham OWL. Improved coordination with the financial aid office at LCC has

started to offer more opportunities for students with financial needs to tap WIA services.

9. Describe and assess how you provide Wagner-Peyser Act services to the agricultural community. Specifically, how do you provide outreach, assessment and other services to migrant and seasonal farm workers, and services to employers? How do you provide appropriate services to this population in the One-Stop system? **[20 CFR § 662.200 (b)(1)(vi)]**

The DLIR provides Wagner-Peyser staff that rotate into the one-stops. Additionally, OWL staff have established relationships with several agencies including the Hawaii State Department of Land and Natural Resources, Tripler Hospital, the Honolulu Police Department, the City Parks Departments and the Neil Blaisdell Center as a part of outreaching services to workers and employers.

The OWL administration also helps the Maui Economic Opportunity (MEO) organization with recruitment and screening of applicants. When MEO staff are on Oahu, they utilize our one stops to conduct interviews and related activities.

OWL coordinates with Maui Economic Opportunity Inc. who administers the grant for Migrant and Seasonal Farm Workers and Employers. OWL has given MEO a letter of support describing the offer of the resources and services to support the outreach, assessment and implementation of the program. For example, MEO program staff uses OWL facility as a home base to meet with Oahu participants or employers and OWL conducts basic skills testing for participants of the program.

10. Describe and assess your local area's delivery of services to people with disabilities. What partnerships and collaborations exist to provide services to this population? What training services and employment opportunities are available to this population in your local area? **[WIA §§ 112(b)(17)(A)(iv) & 408]**

All customers are asked if they have any special needs. The one-stop's partner the Hawaii State Department of Human Services – Division of Vocational Rehabilitation is onsite full-time. They have excellent services for persons with special needs and more flexibility in how their training funds can be used. This enables the one-stop to provide options for customers that otherwise may not be possible. DVR also has job development staff as well as contracts with job coaching organizations. The one-stop also provides connections to non-profits that provide additional services such as ESL courses.

If your local area received funds to operate a reentry program to provide parolees support in seeking, securing and maintaining employment as they transition from prison to their home communities, describe and assess your service delivery and partnerships in serving this population group. Describe what changes in your local area may be necessary to improve the level of service. **[WIA §§ 134(d)(4)(G)(iv)(II & 188(a)(5)]**

The re-entry program begins before the customer is released. The Oahu Community Correctional Center (OCCC), Halawa Correctional Facility and Waiawa Correctional Facility access the services at our Dillingham One-Stop Center. Customers attend workshops at the one-stop and are able to ask staff for guidance. The One-Stop realized that one of the barriers to smooth re-entry was that customers lacked social security cards, ID cards and related documents necessary to re-establish themselves in the community. To overcome this barrier, the one-stop initiated a program to have customers procure all necessary documents prior to their release. This made activities such as job training, job searching and setting up bank accounts much easier to accomplish. Customers are provided with "starting off" money and staff works with them one-on-one with the goal of reducing recidivism.

Priority of Service to Low-Income Individuals in the WIA Adult Program

11. Describe the criteria used under 20 CFR § 663.600 to determine whether funds are limited for adult employment and training activities and the process by which any priority will be applied by the One-Stop operator. **[20 CFR § 661.350(a)(11)]**

The Board has set a $8,000 per individual, lifetime limit on funds for adult employment and training activities.

Per TEGL 10-09, veterans and eligible spouses have priority over other customer groups.

Priority is given to low income and public assistance recipients. We also serve the underemployed. Whenever possible, we endeavor to make all services as accessible as possible to persons who may not technically fall within these groups.

12. Describe how priority of service to low-income individuals is carried out while still allowing universal access to Core Services. Include this policy as Appendix 5. How do you ensure that all staff are aware of and using this policy in daily operations?

Following guidance from the State plan that has determined funds are limited, priority for intensive and training services under adult employment and training activities is given to veterans and eligible spouses, recipients of public assistance and low income individuals (70% LLSIL). Under-employed individuals whose income is at or below 225% LLSIL also receive priority for intensive and training services. If there is no waiting list of anyone from these priority groups, and OWL can determine that the existing priority groups' training needs can be met, and there is surplus funds available, other individuals may be served.

13. Describe the method(s) that is used to identify an individual as a priority customer:

a. The parameters used to qualify someone as low-income.

b. List of acceptable types of documentation to collect and maintain when an individual self-identifies as a public assistance recipient or other low-income individual.

Registration into specific programs, such as for a priority customer, is done via self-identification in HireNet. Employment Counselors also offer guidance and assistance to customers.

OWL staff has the knowledge and understanding that Core Services such as using the computers in the resource rooms for job search allow for universal access, i.e. everyone is welcome and participants do not have to meet any program eligibility requirement at this point. This universal access to Core Services policy has been an on-going practice enforced from the beginning of WIA in 2000. When the participant is interested in accessing intensive and training services, eligibility determination will take place.

The following forms are used to establish service priorities:

1. **Training and Employment Programs Enrollment Eligibility**
2. **Tuition Assistance from Oahu WorkLinks**

ACCEPTABLE DOCUMENTS:

Eligibility **Training and Employment Programs Enrollment**

Are you a **dislocated worker**?
Bring one acceptable document for each eligibility item to your counselor

Eligibility Item	Verification Source Used
Social Security Number	___ Social Security card ___ Employment records ___ DD-214 * ___ Pay stub ___ W-2 form
Citizenship / Alien Status	___ Birth certificate ___ Native American tribal card ___ US or foreign passport ___ Alien registration card ___ Naturalization certificate ___ DD-214 *
Selective Service (Male)	___ SS registration card ___ SS acknowledgement letter ___ SS registration record ___ SS advisory opinion letter
Termination Verification	___ Letter from employer ___ UI determination letter ___ Layoff notice ___ Applicant statement
Unemployment Insurance Verification	___ UI check stub ___ UI determination letter ___ Printout from UI office
Displaced Homemaker	___ Divorce papers ___ Spouse's layoff notice ___ Court records ___ Public assistance records ___ Spouse's death record ___ Bank records ___ Applicant statement
Applicant Statement	___ Self-attestation unlikely to return to previous industry or occupation

Are you an **adult** seeking eligibility under income guidelines?
Bring one acceptable document for each eligibility item to your counselor.

Eligibility Item	Acceptable Documentation
Social Security Number	___ Social security card ___ Letter from soc svc agency ___ Pay stub ___ DD-214 * ___ W-2 form
Citizenship/Alien Status	___ Birth certificate ___ Naturalization certificate ___ U.S. passport ___ Alien registration card ___ Native American tribal card ___ Foreign passport
Selective Service (Male)	___ SS registration card ___ SS acknowledgement letter ___ SS registration record ___ SS advisory opinion letter
Birthdate / Age	___ Birth certificate ___ Driver's license ___ U.S. or foreign passport ___ DD-214 * ___ Federal/State/local government ID card

Individual/Family Income (for all family members with income)	___ Most recent tax return ___ Public assistance records ___ Pay stubs (if within 6 months)
Individual Status / Family Size	___ Most recent tax return ___ Public assistance records ___ Birth certificate ___ Marriage / divorce documents ___ Individual with disability
Priority Item	___ Current public assistance record, letter or printout

**NOTE: Applicants identifying as U.S. military veterans must provide military service verification, i.e., DD-214 or letter from Veterans Administration.*

Tuition Assistance from Oahu WorkLinks

Are you committed to completing your training and enthusiastic about going to work?

If your answer is yes, Oahu WorkLinks is offering tuition assistance to **eligible** participants to cover tuition and books for **approved** training.

You may be eligible for Workforce Investment Act (WIA) services if

- You have been laid off, and are receiving unemployment insurance benefits (dislocated worker)
- You are unemployed and your family income is below 70% of the lower living standard income level (adult) guidelines as indicated below
- You are employed and your family income is below 225% of the lower living standard income level (adult) guidelines as indicated below

	FAMILY INCOME	
FAMILY SIZE	**70% LLSIL**	**225%LLSIL**
1	$ 12,860*	$ 40,594
2	$ 20,689	$ 66,501
3	$ 28,406	$ 91,305
4	$ 35,062	$ 112,700
5	$ 41,377	$ 132,997
6	$ 48,393	$ 155,549
For each additional family member add:	$ 7,016	$22,552

Bring the documents listed to expedite enrollment into WIA.

Call 768-5700 or 768-5800 for more information.

WorkHawaii is an equal opportunity employer/program
Auxiliary aids and services are available upon request to individual with disabilities
A TDD/TYY or relay service telephone number is available: 808-768-3489 (TYY-City's Information Of

Priority of Service to Veterans and Eligible Spouses

14. Local Areas must incorporate priority of service for veterans and eligible spouses in accordance with the provisions of Training and Employment Notice 15-10 (11/10/10). Describe what processes your Local Area is using to achieve these goals. **[WIA §112(b)(17)(B) & §121(b)(1)(B)(1)]**

See attached from the SOP Manual. Appendix 6.

15. Describe or attach the policies that ensure veterans and eligible spouses are identified at the point of entry, allowing them to take full advantage of priority of service. This includes both in-person and virtual access service delivery points.

TEGL 15-10 and 15-11 are part of the center's SOP Manual. Prior to January, veterans representatives were located at the Punchbowl or Waipahu one-stop centers run by the State. Now, information is available onsite at each one-stop. The DD2-14 (discharge form) is required in order to access VWRAP funds for training. For questions regarding the GI Bill, staff call the Punchbowl one-stop for assistance. If a veteran's spouse would like to access services, then they need to provide a copy of their marriage license.

Following guidelines from TEN 15-10, WIA Bulletin No. 07-05
and Job Service Bulletin No.12-13, priority of service for veterans and eligible spouses is implemented starting with the point of entry (whether online access or on site), identifying the participant as a veteran or eligible spouse. Posters are displayed to alert veterans and eligible spouses to their priority status. At Dillingham OWL, for example, a priority of service table is located at the front door to draw the attention of veterans and eligible spouses. At the reception desk, customers are asked if they are veterans or eligible spouses. Once identified, they have priority of access to computers and core services, as well as any workshops, briefings and assessments. They have priority to receive intensive services and training services. Training funds will be made available first to them, and it has been clarified that they do not have to exhaust training benefits from other veteran programs before taking advantage of WIA training funds.

16. Describe the methods of communication and training that ensure all impacted staff members are aware of and using priority of service for veterans and eligible spouses in daily operations and the internal monitoring process that will be initiated to ensure that these requirements are successfully implemented.

A priority of service table is located at the front entrance for veterans and eligible spouses. When they self-identify their veterans' status to the front desk, they will be provided with priority services.

All job orders are held for 48 hours before being released for viewing by the general public. The 48 hours provides advance, exclusive viewing of job opportunities for veterans and their spouses.

OWL administrators and staff attended the Jobs for Veterans State Grant Conference in 2012 to receive training on priority of service policies. A Protocol for Implementing Priority of Service prepared by ETA and VETS is utilized as a resource handbook. The change of roles of DVOP and LVER has also been clarified. Furthermore, OWL supervisors and staff have received training from program specialists that Wagner-Peyser and WIA funded staff are responsible for providing priority of service to veterans and eligible spouses and should not depend on referrals to veteran staff to serve these individuals. All One-Stops are trained in the implementation of veteran initiatives such as Gold Card Services and VRAP.

Youth Strategies

17. Describe connections to human service agencies to support summer employment and educational work experiences throughout the year and, if applicable, development of pre-apprenticeship programs leading to placement with Registered Apprenticeship. **[TEGL No. 21-11, Item 7B, Bullet 4]**

Since the City's One Stop Centers are part of a department that provides employment services, job training, alternative secondary education, housing assistance and more for various disadvantaged adults and youth, the One Stop staff works closely with the Department's Community Assistance Division (CAD) and Elderly Affairs Division (EAD) to identify individuals that can be co-enrolled or consecutively enrolled into different division programs.

For example, team members are working on enrolling youth in the CAD's Foster Unification Program into our HUD-funded Rent To Work program that assists homeless individuals. OWL core services and/or WIA resources are used as leveraged resources to assist these homeless youth.

Another example is we co-enroll 85% to 90% of our YouthBuild (YB) participants into the WIA Youth Program. The staff plan to consecutively enroll YB participants, ages 22 to 24, into the WIA Adult program after they complete YB training. This type of enrollment has been on-going for the past two years.

Also One Stop staff work closely with external program partners to refer youth into programs outside of the City government. Referral connections have been made with Job Corps and ALU LIKE.

Staff has received training from program specialists and consultants and communication procedures are in place for on-going advisement. For centers that do not have the presence of senior staff, the staff can confer with the senior staff immediately for assistance and consultation if they have any questions. OWL supervisors monitor staff performance, review briefing and workshop sign-up sheets and attendance records, and review client files or notes etc. to ensure compliance with priority of service.

18. Describe how the Local Area is coordinating the expenditure of WIA formula funds with other available youth funding in order to integrate the services to this group. Does the Local Area work with Job Corps and Youth Build? If yes, please describe the relationship and the process of coordination. If not, please describe why not and if there are plans to begin and expand the relationship. **[TEGL No. 21-11, Item 7B, Bullet 4]**

An example of how we coordinate and leverage WIA funds is our $1.5 million Young Adult Ex-Offender grant that co-enrolls or will consecutively enroll participants into WIA programs. Grant partners are the Honolulu Community Action Program and Leeward Community College for educational and occupational skills training, the Department of Education, the Office of Youth Services, the Judiciary, the Department of Human Services, First to Work and the Hawaii Human Development Corporation as referral agencies and numerous non-profits and government agencies for work experience and service learning projects (e.g. Foodbank, Institute for Human Services, and the Department of Land and Natural Resources).

For the Young Adult Ex-Offender Program, Leeward Community College offers training that leads to industry recognized credentials such as:

- nurse aide training and state certification
- commercial driver's training and licensing

- introduction to office administration and technology
- retail sales associate, national retail foundation
- security guard training for PSTN National
- serve safe training national certification

YouthBuild also partners with the Building Industries Association where youth participate in the "pre-apprenticeship construction training" program. Upon successful completion they receive an industry recognized credential certified by the Home Builder Institute.

Job Corps and YouthBuild had the opportunity to talk with federal staff in their national office about recommendations on the advantages and challenges of collaboration between the two programs. Soon after, the national office issued a TEGL regarding collaboration which incorporated our suggestions.

Until recently, an outreach admissions specialist went to the Dillingham One Stop once per month to provide services in the Resource Center and to promote Job Corps services. Site visits were also arranged for One Stop staff to visit the Waimanalo Center. In addition, Job staff bring their participants to our Youth Center. This allows everyone to be more familiar with each other's services and programs. Unfortunately, the US Department of Labor recently put a hold on Job Corps enrollment pending the outcome of developing budget issues.

19. Describe the Local Area's policy to co-enroll into the Older Youth and Adult Programs. If this effort has not been successful, please indicate any barriers to increase this practice. What actions would reduce these barriers?

We plan to consecutively enroll YouthBuild participants ages 22 to 24 into the WIA Adult program after they complete YouthBuild training. This type of enrollment has been ongoing for the last two years.

20. Describe how youth data is managed in your Local Area. Explain how often the data is reviewed and who reviews it.

All supervisors, managers and administration meet every other week to review and discuss data and program services. This is called the Division Lead meeting. At this meeting, each attendee shares data and information on their program including services that may benefit participants of other programs.

There is a case management database that is shared among the Division's 5 primary youth programs. There five are: WIA Youth, Juvenile Justice Center, YouthBuild, Young Parents, and the Young Adult Ex-Offender programs. Staff who work with youth who are co-enrolled into 2 or more programs are able to review services, activities and more that are available for youth. The program allows staff to track their progress within the various programs via the case management database.

Co-enrollment of youth among formula and discretionary grants and older youth in the adult program is encouraged to the greatest extent possible to offer service options to the participants. (The data entry issue of using HireNet to do the co-enrollment of older youth into the adult program has been resolved and staff has been trained how to enter the activities and services correctly.) Once older youth complete training with the youth program, they are transitioned to the adult program. Youth case managers continue to provide follow up with these individuals and work closely with the adult program staff.

21. Describe the process by which you evaluate the Local Area's youth providers. Explain the process regarding providers you have found to be unsatisfactory (if any). Please use specific examples. Conversely, describe and assess the types of locally available youth activities including how successful providers of such activities are identified. **[WIA §118(b)(6)]**

Youth providers are evaluated via the RFP process. A set criteria and weighting system is used to assess providers. The initial assessment is performed by staff. Thereafter, the Youth Council members review the providers. None have found to be unsatisfactory.

22. Youth Provider Evaluation.

The success of youth service providers is evaluated and monitored in several ways: Invoices must be submitted with appropriate source documentation (e.g. attendance records, progress reports) that validates services were provided to youth and progress was made. In addition to desk monitoring, random visits by staff to training sites/facilities are conducted to observe the classes and services being provided. Youth are also interviewed to gauge their satisfaction with the training and services.

B. Performance Levels

Reference **Appendix 1** and discuss strategies to meet performance goals.

Program managers and staff are trained and knowledgeable about the definition of negotiated performance goals, whether they are Core or Common measures, and how service strategies and program designs will impact performance outcomes. Staff is trained on how performance levels are calculated and tied to their daily work with participants and the data entered into HireNet. They use tools like Predictive Reports in HireNet to monitor the progress of reaching the goals.

Communication procedures have been implemented to ensure guidance from DLIR is available to assist staff.

C. Procurement

1. Identify the fiscal agent, or entity responsible for disbursal of grant funds described in section 117(d)(3)(B)(i)(III) as determined by the Mayor under section 117(d)(3)(B)(i). **[WIA § 118 (b)(8); 20 CFR § 661.350 (a)(9)]**

Department of Budget and Fiscal Services; City & County of Honolulu

2. Describe the process used to award grants and contracts in your Local Area, including how vendors are made aware of opportunities to compete for funding opportunities including the process used to procure training services made as exceptions to the Individual Training Account process. How is the process documented? **[WIA § 118 (b)(9); 20 CFR § 661.350(a)(10)]**

The procurement process is contained in the Hawaii Revised Statutes, Chapter 103.

Vendors or training providers for both adult and youth services are recruited and apply through an open online process, which is transparent to the public. Eligible Training Providers apply on the OWIB website. Personal outreach has been conducted to encourage the participation of new providers such as UH Manoa.

Procurement notices to establish the youth vendor list is implemented through the City Department of Budget and Fiscal Services, Purchasing Division. An application is available throughout the year for interested parties to apply to be considered a youth vendor. Included with the application is the process and procedures to execute an agreement with the City.

3. Has the Local Area entered into contracts with institutions of higher education or other eligible training providers to facilitate training of individuals for high-demand occupations? If not, how is such training arranged?

The Local Area has listed as eligible training providers institutions of higher education and other training programs. These institutions and providers follow the Eligible

Training Program (ETP) application process of the Hawaii State Department of Labor & Industrial Relations.

OWL is using the ETP process and has not entered into any separate contract with any education agency. Training providers follow trends identified by labor market information and input from businesses as well as feedback from OWL to ensure that training for high demand occupations is offered. For example, healthcare is a high demand industry. Windward Community College is a youth vendor specifically for Nurse's Aide training, a high demand occupation.

D. LWIB Membership

*Complete **Appendix 2** and insert into your plan. Answer the next three questions based on the table.*

1. Describe the nomination process for appointing members to the LWIB. Are there any members missing from WIA-designated categories? ___x_ Yes (in process) ____ No

As with all public boards and commissions, any citizen may apply to serve on a board. Membership criteria is per the Workforce Investment Act of 1998.

One mandatory partner is in the process of being appointed – Hawaii State Department of Human Services-Vocational Rehabilitation representative.

2. If yes, what are the categories and when are the new members anticipated to be nominated to the LWIB?

Membership category: Mandatory Partner
Appointment in process. This means a person must be appointed via the City & County of Honolulu's Mayoral appointment process for Boards and Commissions.

3. If no, do you certify that the LWIB is in compliance regarding membership? __x__ Yes ____ No

4. Discuss any applicable changes to the local board structure (do not include changes to specific individuals on the board). Attach a copy of your local bylaws that reflect these changes. **[20 CFR § 661.355]**

Please see Appendix 11 for a copy of our by-laws.

E. Memorandums of Understanding (MOU), Resource Sharing Agreements and Contracts

See attached MOUs with their Resource Sharing Agreements.

The WIA requires execution of a Memorandum of Understanding (MOU) between the LWIB and each One-Stop partner concerning the operation of the One-Stop delivery system. The MOUs may be developed as a single umbrella document, or as singular agreements between the partners and the LWIB [20 CFR § 662.310(a)]. The MOUs should present in specific terms, member contributions and the mutual methodologies used in overseeing the operations of the One-Stop system. Copies of all MOU must be included with the plan modification. [WIA § 118(b)(2)(B); 20 CFR § 661.350(a)(3)(ii)]. The MOU must describe [WIA § 121(c)(1) &(2)]:

a. What services will be provided through the One-Stop system.
b. How the costs of services and operating costs will be funded, including cost-sharing strategies. This is done in Resource Sharing Agreements.
c. What methods will be used for referral of individuals between the One-Stop operator and the partners.
d. How long the MOU will be in effect.
e. What procedures have been developed for amending the MOU.
f.
g. Other provisions, consistent with WIA, that parties to the agreement decide are appropriate.

1. Are all components of each Memorandum of Understanding, Resource Sharing Agreement and/or Contract for the Local Area up to date? If not, please itemize and indicate when each will be updated.

2. Describe your Resource Sharing Agreements, including the agencies with which you have agreements. Are there resource sharing agreements with all partners who provide services to clients? Explain how the resource agreements contribute financially to the operation of the One-Stop Center and its activities.

F. Use of Public Comments in Local Plan Development

1. Describe the process used to ensure public comment on and input into the development of the Local Plan. Include a description of specific steps taken to include input from members of businesses and labor organizations. Describe how comments were considered in the plan development process. Include evidence of the duration of the period for public comments. **[WIA §118(b)(7)]**

OWIB will use the exact same process used by the WDC. Drafts of the plan will be made available on our website. As evidence of its duration, a print-out of the website with its auto-date will be attached to the plan.
See Appendix 9 for copy of the Legal Notice and posting of Draft Local Plan at owib@honolulu.gov

2. Summarize and include as an attachment public comments on the draft Local Plan, particularly those that express disagreement with the plan. Please include information on LWIB response to the comments. **[WIA §118(c)]**

G. Required Appendices (Please check off each appendix)

___x___ Appendix 1: Negotiated Levels of Performance – negotiated State goals for Program Year 2012 were adopted by all local areas at a meeting on February 14, 2013.

___x___ Appendix 2: Composition of Local Workforce Investment Board (LWIB)

___x___ Appendix 3: Current LWIB Youth Council roster

___x___ Appendix 4: Your current One-Stop consortium agreement

___x___ Appendix 5: Policy regarding Priority of Service for Low-Income Individuals in the WIA Adult Program

___x___ Appendix 6: Policy regarding Priority of Service for Veterans and Eligible Spouses

___x___ Appendix 7: List and attach all Memoranda of Understanding or other contracts with partners and/or vendors. **[WIA Section 118(b)(2)(B)]**

___x___ Appendix 8: List and attach Resource Sharing Agreements with partners at One-Stop Centers. (Please see Appendix 7. They are appended to each MOU).

__x__ Appendix 9: Public Comments to Local Plan - None

Attach any public comments regarding the draft Local Plans, including those that express disagreement with this Local Plan and information regarding the LWIB's actions towards addressing them.

__x__ Appendix 10: Disability Statistics

__x__ Appendix 11: Oahu WIB By-Laws

__x__ Appendix 12: Oahu WorkLinks Standard Operating Procedures

__x__ Appendix 13: Oahu WorkLinks Discrimination & Complaints Procedures

__x__ Appendix 14: Sunshine Law: Accessibility of board meeting minutes