The Outlook for Hawaii’s Economy and Labor Market

Dr. Jack Suyderhoud
Shidler College of Business
University of Hawai‘i at Mānoa
suyderho@hawaii.edu

November 4, 2016
Agenda

- Current economic conditions
  - Contributors to GDP
  - Labor market trends
- Forecasts
- Features of the Hawaii labor market
- Things that concern me
  - External
  - Internal
Current Economic Conditions
Hawaii GDP at Record High

Hawaii Real GDP and GDP Growth, 1997-2016

Hawaii GDP=
$80 bil; same as Ecuador

* 2015, 2016 - estimates
Source: US Bureau of Economic Analysis and author's forecast

November 4, 2016  Hawaii Workforce Development Council
Drivers of Hawaii’s Economy

Hawaii Real GDP by Industry: 2013

- Real estate and rental and leasing: 20.2%
- Federal government: 13.2%
- State and local government: 9.7%
- Professional and business services: 9.0%
- Accommodation and food services: 8.2%
- Retail trade: 6.9%
- Health care and social assistance: 6.4%
- Construction: 5.6%
- Transportation and warehousing: 4.0%
- Wholesale trade: 3.1%
- Finance and insurance: 3.0%
- Utilities: 2.9%
- Information: 2.6%
- Other services, except government: 2.2%
- Manufacturing: 1.4%
- Educational services: 1.2%
- Arts, entertainment, and recreation: 1.1%
- Agriculture, forestry, fishing, and hunting: 0.6%
- Mining: 0.1%

Tourism consists of partial of other industries and contributed 16.8% of real GDP in 2013.

Source: U.S. Bureau of Economic Analysis

November 4, 2016
Hawaii Workforce Development Council
Tourism Dependence Varies by County

Relative Importance of Tourism Sector

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2007</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maui</td>
<td>22</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Kauai</td>
<td>16</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Hawaii Island</td>
<td>12</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Oahu</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>State</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Author, using HTA and DBEDT data
Record State Visitor Arrivals 2016

Source: Hawaii Tourism Authority

November 4, 2016
Hawaii Workforce Development Council
State Visitor Spending Increases

Monthly State Visitor Spending Patterns, 2009-2016

Source: Hawaii Tourism Authority

November 4, 2016

Hawaii Workforce Development Council
County Visitor Arrivals

Source: Hawaii Tourism Authority

November 4, 2016
Hawaii Workforce Development Council
State Labor Market Improves

Source: DBEDT & US Dept. of Labor Statistics

November 4, 2016
Hawaii Workforce Development Council
But Underutilization Stays High

Source: Fed Res Bank

November 4, 2016
Hawaii Workforce Development Council
Job Recovery Uneven Across Counties

Job Patterns by Counties (indexed change, Dec. 2007=100%)

Source: DBEDT
Likewise for Unemployment Rate

Unemployment Rate by County
(Seasonally Adjusted)

- Hawaii County
- Kauai County
- Maui County
- Honolulu County

Source: Hawaii Department of Labor & Industrial Relations
Chart by DBEDT
November 4, 2016
Hawaii Workforce Development Council
Job Growth Honolulu

Change in Jobs from Same Month in Prior Year
(Honolulu County, August 2016)

- Nat. Resources, Mining, Constr.
- Professional & Business Services
- Health Care & Social Assistance
- Food Services & Drinking Places
- Accommodation
- Arts, Entertainment & Recreation
- Educational Services
- Federal
- Financial Activities
- Transp., Warehousing, Util.
- Local
- Other Services
- Retail Trade
- Manufacturing
- Information
- Wholesale Trade
- Government
- State

Chart by DBEDT

November 4, 2016
Hawaii Workforce Development Council
### Job Growth Maui County

**Change in Jobs from Same Month in Prior Year**

(Maui County, August 2016)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td></td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td></td>
</tr>
<tr>
<td>Food Services &amp; Drinking Places</td>
<td></td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
</tr>
<tr>
<td>Transp., Warehousing, Util.</td>
<td></td>
</tr>
<tr>
<td>Financial Activities</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>Nat. Resources, Mining, Constr.</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td></td>
</tr>
<tr>
<td>Educational Services</td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td></td>
</tr>
<tr>
<td>Accommodation</td>
<td></td>
</tr>
</tbody>
</table>

Source: Hawaii Department of Labor & Industrial Relations

Chart by DBEDT
Job Growth Hawaii Island

Change in Jobs from Same Month in Prior Year
(Hawaii County, August 2016)

Food Services & Drinking Places
Health Care & Social Assistance
State
Nat. Resources, Mining, Constr.
Government
Accommodation
Information
Educational Services
Transp., Warehousing, Util.
Manufacturing
Federal
Other Services
Professional & Business Services
Retail Trade
Wholesale Trade
Local
Financial Activities
Arts, Entertainment & Recreation

Chart by DBEDT

November 4, 2016
Hawaii Workforce Development Council
Job Growth Kauai

Change in Jobs from Same Month in Prior Year
(Kauai County, August 2016)

Food Services & Drinking Places
Health Care & Social Assistance
Nat. Resources, Mining, Constr.
State
Government
Accommodation
Other Services
Information
Local
Federal
Educational Services
Transp., Warehousing, Util.
Retail Trade
Manufacturing
Financial Activities
Wholesale Trade
Professional & Business Services
Arts, Entertainment & Recreation

Chart by DBEDT

November 4, 2016
Hawaii Workforce Development Council
Counsel on Revenues GDP Forecast

Hawaii Real GDP Growth, 2005-2019

Percent Per Year

05 06 07 08 09 10 11 12 13 14 15 16 17 18 19

November 4, 2016 Hawaii Workforce Development Council
Visitor Arrival Forecast

DBEDT Forecasts (3Q 2016) : Visitor Arrivals

<table>
<thead>
<tr>
<th>Year</th>
<th>Air only</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>person</td>
<td>person</td>
</tr>
<tr>
<td></td>
<td>annual growth (%)</td>
<td>annual growth (%)</td>
</tr>
<tr>
<td>2005</td>
<td>7,416,574</td>
<td>7,496,236</td>
</tr>
<tr>
<td>2006</td>
<td>7,528,103</td>
<td>7,628,117</td>
</tr>
<tr>
<td>2007</td>
<td>7,496,826</td>
<td>7,699,019</td>
</tr>
<tr>
<td>2008</td>
<td>6,713,436</td>
<td>6,822,912</td>
</tr>
<tr>
<td>2009</td>
<td>6,420,448</td>
<td>6,517,054</td>
</tr>
<tr>
<td>2010</td>
<td>6,916,894</td>
<td>7,018,133</td>
</tr>
<tr>
<td>2011</td>
<td>7,174,398</td>
<td>7,299,048</td>
</tr>
<tr>
<td>2012</td>
<td>7,857,143</td>
<td>8,028,742</td>
</tr>
<tr>
<td>2013</td>
<td>8,003,474</td>
<td>8,174,460</td>
</tr>
<tr>
<td>2014</td>
<td>8,196,342</td>
<td>8,330,785</td>
</tr>
<tr>
<td>2015</td>
<td>8,563,018</td>
<td>8,679,564</td>
</tr>
<tr>
<td>2016</td>
<td>8,737,583</td>
<td>8,844,176</td>
</tr>
<tr>
<td>2017</td>
<td>8,885,446</td>
<td>8,937,040</td>
</tr>
<tr>
<td>2018</td>
<td>9,044,986</td>
<td>9,156,579</td>
</tr>
<tr>
<td>2019</td>
<td>9,205,102</td>
<td>9,316,696</td>
</tr>
</tbody>
</table>

Chart by DBEDT

November 4, 2016
Hawaii Workforce Development Council
### Visitor Spending Forecast

#### DBEDT Forecasts (3Q 2016): Visitor Expenditure

<table>
<thead>
<tr>
<th>Year</th>
<th>Air only</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>$11,650</td>
<td>$11,904</td>
</tr>
<tr>
<td>2006</td>
<td>$12,243</td>
<td>$12,492</td>
</tr>
<tr>
<td>2007</td>
<td>$12,578</td>
<td>$12,811</td>
</tr>
<tr>
<td>2008</td>
<td>$11,182</td>
<td>$11,398</td>
</tr>
<tr>
<td>2009</td>
<td>$9,794</td>
<td>$9,993</td>
</tr>
<tr>
<td>2010</td>
<td>$10,867</td>
<td>$11,066</td>
</tr>
<tr>
<td>2011</td>
<td>$12,047</td>
<td>$12,180</td>
</tr>
<tr>
<td>2012</td>
<td>$14,193</td>
<td>$14,365</td>
</tr>
<tr>
<td>2013</td>
<td>$14,352</td>
<td>$14,521</td>
</tr>
<tr>
<td>2014</td>
<td>$14,809</td>
<td>$14,973</td>
</tr>
<tr>
<td>2015</td>
<td>$14,938</td>
<td>$15,111</td>
</tr>
<tr>
<td>2016</td>
<td>$15,420</td>
<td>$15,598</td>
</tr>
<tr>
<td>2017</td>
<td>$15,944</td>
<td>$16,124</td>
</tr>
<tr>
<td>2018</td>
<td>$16,610</td>
<td>$16,793</td>
</tr>
<tr>
<td>2019</td>
<td>$17,268</td>
<td>$17,684</td>
</tr>
</tbody>
</table>

#### Visitor Expenditure—Annual growth rate (%)  

- **2005:** 9.4%  
- **2006:** 5.1%  
- **2007:** 2.7%  
- **2008:** -11.1%  
- **2009:** -12.4%  
- **2010:** 10.9%  
- **2011:** 10.9%  
- **2012:** 17.8%  
- **2013:** 1.1%  
- **2014:** 3.2%  
- **2015:** 0.9%  
- **2016:** 5.2%  
- **2017:** 3.8%  
- **2018:** 4.2%  
- **2019:** 4.1%

**Chart by DBEDT**

November 4, 2016  
Hawaii Workforce Development Council
COR Visitor Forecast

Hawaii Visitor Arrivals and Expenditures, 2005-2019

- Visitor arrivals by air
- Visitor expenditures

Percent Per Year

05 06 07 08 09 10 11 12 13 14 15 16 17 18 19

November 4, 2016
Hawaii Workforce Development Council
COR Construction Forecast

Hawaii Construction Completed, 2005-2019

November 4, 2016
Hawaii Workforce Development Council
COR TPI Forecast

Hawaii Real Personal Income, 2005-2019

Percent Per Year

05 06 07 08 09 10 11 12 13 14 15 16 17 18 19

November 4, 2016  Hawaii Workforce Development Council
Long-range Job Forecast

Figure 1-3. Average Annual Growth of Total Civilian Jobs for the State
Long-range Income Forecast

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

![Chart showing average annual growth of real personal income from 1970 to 2035. The chart compares actual and projected growth rates, with a trend showing a decrease in growth rates over time.]
Features of Hawaii’s Labor Market
Our "Thin" Labor Market

Labor Force in Selected Markets, 2015

<table>
<thead>
<tr>
<th>Area</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA Area</td>
<td>10</td>
</tr>
<tr>
<td>SF&amp;SouthBay</td>
<td>3</td>
</tr>
<tr>
<td>Seattle Area</td>
<td>2</td>
</tr>
<tr>
<td>Portland</td>
<td>1</td>
</tr>
<tr>
<td>Hawaii</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: US BLS
High Cost of Housing

Monthly Owner Cost ≥ 35% of Household Income: 2014
(percentage of owner-occupied households with mortgage)

Source: U.S. Census Bureau, 2014 American Community Survey 1-Year Estimates

Chart by DBEDT

November 4, 2016
Hawaii Workforce Development Council
High Cost of Renting

Monthly Gross Rent > 35% of Household Income: 2014
(percentage of total renter-occupied units paying rent)

Source: U.S. Census Bureau, 2014 American Community Survey 1-Year Estimates

Chart by DBEDT
"We make up for the high cost of living ..."

Regional Price Parities: 2013
(U.S.=100)

Source: U.S. Bureau of Economic Analysis

November 4, 2016
Hawaii Workforce Development Council
"...by paying you less."

Average Annual Wages*: 2014
(totall covered employees*)

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

November 4, 2016
Hawaii Workforce Development Council
Rewards for Education?

Earnings in Hawaii Versus US

Source: U.S. Census Bureau, 2014, American Community Survey
Hawaii’s Aging Population

Hawaii Population Distribution, 2015 - 2025

% of Total Population

Dependency ratio:
2015 = 35%
2025 = 40%

Author’s calculations using DBEDT data
Labor Force Participation Decline

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

Chart by DBEDT
November 4, 2016 Hawaii Workforce Development Council
Concerns
External Risk Factors

- Labor market shifts
  - Role of technology/education
  - Income inequality
- Anti-globalization
  - Disillusion with free trade
  - Resistance to migration
  - Brexit
- Political uncertainties
  - Declining role of US
  - Political hotspots
Internal Risk factors

- Insular mentality
  - Focus on self-sufficiency
  - "Brain drain" or "brain gain"?
- Uncertainty about Hawaiian sovereignty
  - TMT and other issues
- Debt and unfunded liabilities
- Deciding who we want to be
  - Singapore or Molokai?
  - Are they mutually exclusive?
Unfunded Liabilities: Hawaiian Style

- Unfunded liabilities are **future debts**.
  - Public employee retirement benefits:
    - $8.2 billion in total ($5,236 per Hawaii resident)
  - Public employee retiree health benefits:
    - $13.6 billion in total ($9,973 per Hawaii resident)

Source: Kalbert Young, Dir. of B&F, "Overview of the State's General Fund Fiscal Condition", Dec. 2012
Lessons for Labor Market

- Uphill battle to expand our job opportunities
- To succeed we need to find niches...
  - ...but which niches?
- Need policies that
  - Are pro-jobs
  - Encourage, embrace, and reward change
Thanks. Questions?
Extra slides
Upside Potential?

Patents per 100,000 Population: 2014

Source: U.S. Patent and Trademark Office (patent statistics) and U.S. Census Bureau (population estimates)
Hawaii Job Growth by Sector

Leisure and Hospitality
Professional & Business Services
Trade, Transportation, Utilities
Education & Health Services
Construction
Financial Activities
Manufacturing
Other Services
Government

Jobs Added 2010-2015

Source: DBEDT

November 4, 2016
Hawaii Workforce Development Council
Hawaii Personal Income

Per Capita Personal Income, US and Hawaii

Source: US Bureau of Economic Analysis
State Government Revenues Grow

State General Fund Revenue Growth, 2006-16, change from prior year (%)

Source: Hawaii State Department of Taxation

November 4, 2016
Hawaii Workforce Development Council
Likewise for Counties

Sources: County annual financial reports

November 4, 2016
Hawaii Workforce Development Council
Real Estate Prices Slow Recovery

Sources: Hawaii Info Serv, Realtor Assoc Maui, Honolulu Board of Realtors

November 4, 2016
Hawaii Workforce Development Council
Construction Sectors Improves

Statewide Monthly Construction Jobs and Permits

Source: DBEDT

November 4, 2016
Hawaii Workforce Development Council
Completed Construction Grows

Statewide Construction General Excise Tax Base

Source: Hawaii State Department of Taxation

November 4, 2016
Hawaii Workforce Development Council