UHCC Strategic Plan 2008-2015

Preliminary Analysis of the Planning Context

Hawai`i’s Changing Economy

• Major shifts in the world and U.S. economies have had a substantial impact in Hawai`i.

• These shifts have had a dramatic affect on the type of jobs, the level of personal income, and the quality of life.

Declining Per Capita Personal Income as a Percent of U.S. Average
Hawai`i, 1960-2005

Source: U.S. Census Bureau, Bureau of Economic Analysis
### The Job Quality Gap

**An Insufficient Number of Living Wage Jobs**

#### Employment by Job Type, 2000 (%)

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Percent in Hawaii</th>
<th>Percent in U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources</td>
<td>1.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Factory</td>
<td>9.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Low-Skilled Service</td>
<td>17.3</td>
<td>24.6</td>
</tr>
<tr>
<td>Healthcare</td>
<td>29.6</td>
<td>17.0</td>
</tr>
<tr>
<td>Education, Public Service</td>
<td>17.0</td>
<td>11.5</td>
</tr>
<tr>
<td>Office</td>
<td>11.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Technology</td>
<td>6.8</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Source: Tony Carnevale and Dana Weiner, ETS (PUMS 2000 5% Sample, source data extracted from www.ipums.org at the University of Minnesota)

### The Worker Supply Gap

**An Insufficient Number of Qualified Workers**

#### We Need to Fill 28,000 Jobs Annually

<table>
<thead>
<tr>
<th>SOC Job Cluster</th>
<th>Average Annual Openings</th>
<th>Due to Separations</th>
<th>Due to Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base and related occupations</td>
<td>11,693</td>
<td>1,549</td>
<td>10,144</td>
</tr>
<tr>
<td>Pre-employment and early childhood occupations</td>
<td>216</td>
<td>18</td>
<td>198</td>
</tr>
<tr>
<td>Service and sales occupations</td>
<td>9,327</td>
<td>1,147</td>
<td>8,180</td>
</tr>
<tr>
<td>Conservation and maintenance occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Food preparation and serving related occupations</td>
<td>3,123</td>
<td>397</td>
<td>2,726</td>
</tr>
<tr>
<td>Management occupations</td>
<td>4,770</td>
<td>630</td>
<td>4,140</td>
</tr>
<tr>
<td>Installation, maintenance and repair occupations</td>
<td>2,050</td>
<td>290</td>
<td>1,760</td>
</tr>
<tr>
<td>Transportation and material moving occupations</td>
<td>2,477</td>
<td>327</td>
<td>2,150</td>
</tr>
<tr>
<td>Business and financial operations occupations</td>
<td>1,970</td>
<td>250</td>
<td>1,720</td>
</tr>
<tr>
<td>Computer and mathematical sciences occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Education, training, and library occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Personal and social services occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Production occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Protective service occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports, and media occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Health practitioners and technical occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Healthcare support occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Architecture and engineering occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Social and human service occupations</td>
<td>2,470</td>
<td>320</td>
<td>2,150</td>
</tr>
<tr>
<td>Total jobs</td>
<td>28,615</td>
<td>7,169</td>
<td>21,446</td>
</tr>
</tbody>
</table>

Source: EMSI June 2007
Most Require Education Beyond HS

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We Need to be Ready to Replace Skilled People in Critical Jobs

HS Graduates Supply Less Than 1/2 of the 28,000 Annual Jobs to Fill

We are Exporting the Experienced Core of Our Workforce
Homes on O'ahu—Beyond Affordable

We can no longer depend on an imported workforce.

Median single-family home price on O'ahu
Affordable price*

* Price of an affordable home based on state's median household income, average mortgage rate, and a 30-year mortgage with 20% down.

We Can Expect Continued Difficulty in Filling Job Vacancies Well Into the Future

Projected Change in Population by Age Group, 2000 to 2020

Source: U.S. Census Bureau Population Projections

The Worker Preparation Gap

An Insufficient Number of People with Needed Skills

A Lack of Investment Has Resulted in Shortages in Critical Fields

Number of 2-Year Degrees and Certificates in Health Sciences Awarded (2003) Per 100 HS Graduates Three Years Earlier, 2000

Source: IPEDS-IP2020 Completers 2002-03; WICHE High School Graduates, 2000
Number of 4-Year Degrees in Health Sciences Awarded (2003) Per 100 High School Graduates Six Years Earlier, 2000

Source: NCES-IPEDS Completions 2002-03; WICHE High School Graduates 1997

As Experienced Workers Leave the Workforce, We Need to Get More Incumbent Workers to Enroll in Further Education

Part-Time Undergraduate Enrollment as a % of Population Age 25-44, 2000

Source: NCES-IPEDS, U.S. Census Bureau

Education Pipeline Performance

An Insufficient Number of Individuals Prepared for Further Education or Training
WE NEED BETTER OUTCOMES

- We are falling behind other states in the U.S. and competitors in the Pacific region in the education of our younger workers.
Differences in College Attainment (Associate and Higher) by Age Group—Hawaii, U.S. and Leading OECD Countries, 2004

Source: OECD, Education at a Glance 2005

INNOVATION ROUNDTABLE

Department of Business, Economic Development & Tourism

July 10, 2007
Administration Priority

“Success in the global, information-based economy...means producing a constantly rising standard of living for all Hawaii’s people, while using fewer natural resources—excluding land—and preserving those aspects of life that make our island home so special.

...we need to ensure that our workforce has the skills and knowledge required to compete effectively in the 21st century.

...we must create an environment in which innovation, entrepreneurship, and risk-taking are encouraged, nurtured, and rewarded.

...we need to enable all our citizens—regardless of their economic circumstances—to be fully involved in the digital revolution that is sweeping the world.”

Governor Linda Lingle, State of the State Address, January 22, 2007

Legislative Priority

“This is not something new to us. We’ve been in this innovation area for a number of years, so I’m glad the governor’s finally on board with this.”

State Senator Roz Baker, Chairwoman, Senate Ways and Means Committee

Quoted in PBN, February 23, 2007

Why Innovation?

Innovation is the basis of “sustainability”.

Innovation is the basis of “economic diversification”.

Innovation will grow Hawaii’s traditional industries with increased productivity and lead to higher-paying jobs.

Innovation will increase Hawaii’s standard of living through steady growth in productivity.

Innovation will enable Hawaii to catch the Global Economic Wave.

Results of an Innovation Economy
Results of an Innovation Economy

By the year 2020, Hawaii will achieve:

- Increase in standard of living, measured by average wage. In 2005, Hawaii’s average wage was $37,092, ranking below the U.S. average and 26th among all the states. 2020 target: 10% above U.S. average and ranking among the top 20 states.

- Increase number of high wage jobs, benchmarked by $50,000 wage level. In 2005, the percentage of full-time workers making more than $50,000 was less than 30%. 2020 target: Increase to 50% number of workers earning inflation-adjusted $50,000.

- By 2020, percentage of population 25 years or above with at least a Bachelor’s degree increase to 30% and ranking among the top 15 states in the nation.

- In 2006, only 32% of secondary school graduates in post-secondary education by age 19, as compared to 53% among top states. 2020 target: Increase to 60%.

- By 2020, decrease in remediation needed for Hawaii’s secondary school graduates enrolled in post secondary education by 50%.

- In 2006, Hawaii had 3.6% of its 25-to-49 year olds enrolled in part-time post-secondary education, compared with the top States at 5.1%. 2020 target: Triple Hawaii’s percentage.

- In 2005 Hawaii GDP per worker was $64,694, or 9% below U.S. average and 32nd among all the states. 2020 target: 5% above U.S. average and ranking among the top 25 states.

- In 2005, Hawaii’s global competitiveness, measured by merchandise exports per worker was $2,131, as compared to the US average of $8,099. 2020 target: Triple Hawaii’s exports per worker.

- Using 2006 as a base, hold growth in use of natural resources to one-half the growth rate of productivity.

- Increase % contribution of technology to GDP growth.

- Create 5 nationally recognized “centers of excellence” in innovation areas natural to Hawaii.

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A Significant Number of Underprepared Students

In 2006, most recent Hawai'i public high school graduates who took the UHCC placement test were not ready to begin English 100 and/or Math 100.

Our Aging Workforce

We Need to be Ready to Replace Skilled People in Critical Jobs

Source: U.S. Census Bureau, 2000 Census, 5% PUMS Files
Our Leaky Education Pipeline

**Continuation:** If they don’t come back they don’t complete

In the top performing states, 62% of entering community college students return their second year. In the UH Community College System, 45% return.

Source: Measuring Up 2006 Completion & IPEDS

**Graduation rates vary by ethnicity**

Source: IPEDS Graduation Rate Survey for first time, full time students who entered fall 2002 and completed degree by fall 2005.
Graduation, Transfer, or Continuation in 150% time

Source: IPEDS Graduation Rate Survey for first time, full-time students who entered Fall 1998.

Need to Increase Supply of Technical Graduates

Jobs & Education Demand/Supply Gap

Infrastructure Needs Continued Attention
Including:

- Support for data analysis capacity to develop a culture of evidence;
- Repair and maintenance of aging facilities;
- Replace aging and obsolete equipment;
- Continuous education of faculty, staff, and administrators;
- Etc.

**UHCC Strategic Plan 2008-2015**

**STRATEGIC GOALS FOCUS OUR EFFORTS**

- Increasing the Educational Capital of the State
- Meeting Workforce Development Needs
- Diversifying the State’s Economy
- Serving Underrepresented Regions and Populations
- Creating an Efficient, Sustainable Organization

For each goal, a small number of objectives will be set that will:

- Be clearly defined
- Be quantifiable
- Have a baseline
- Have a best practice benchmark
- Have a target
- Have a progress report
- Be derivative to the campus
- Be integrated with other UH benchmarking/goal setting projects