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

The Worker Supply Gap
An Insufficient Number of Qualified Workers

Employment by Job Type, 2000 (%)

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources</td>
<td>1.7</td>
</tr>
<tr>
<td>Factory</td>
<td>9.2</td>
</tr>
<tr>
<td>Low-Skilled Service</td>
<td>24.6</td>
</tr>
<tr>
<td>Healthcare</td>
<td>24.6</td>
</tr>
<tr>
<td>Education, Public Service</td>
<td>11.5</td>
</tr>
<tr>
<td>Office</td>
<td>42.2</td>
</tr>
<tr>
<td>Technology</td>
<td>6.8</td>
</tr>
</tbody>
</table>

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

We Need to Fill 28,000 Jobs Annually

<table>
<thead>
<tr>
<th>Average Annual Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
</tr>
<tr>
<td>28,000</td>
</tr>
</tbody>
</table>

Source: EMSI June 2007
Most Require Education Beyond HS

<table>
<thead>
<tr>
<th>SOC Job Cluster</th>
<th>Average Annual Openings</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare Practitioners &amp; Technical</td>
<td>3,125</td>
<td>10.2</td>
</tr>
<tr>
<td>Computer, Math., Architecture &amp; Engineering</td>
<td>2,709</td>
<td>9.1</td>
</tr>
<tr>
<td>Management, Business &amp; Financial Operations</td>
<td>1,726</td>
<td>5.9</td>
</tr>
<tr>
<td>Education, Training &amp; Library</td>
<td>1,618</td>
<td>5.5</td>
</tr>
<tr>
<td>Healthcare Practitioners &amp; Technical</td>
<td>1,187</td>
<td>4.0</td>
</tr>
<tr>
<td>Sales &amp; Related</td>
<td>1,187</td>
<td>4.0</td>
</tr>
<tr>
<td>Community &amp; Social Services</td>
<td>1,151</td>
<td>3.9</td>
</tr>
<tr>
<td>Business &amp; Financial Operations</td>
<td>1,142</td>
<td>3.9</td>
</tr>
<tr>
<td>Installation, Maintenance &amp; Repair</td>
<td>1,131</td>
<td>3.8</td>
</tr>
<tr>
<td>Education, Training &amp; Library</td>
<td>1,125</td>
<td>3.8</td>
</tr>
<tr>
<td>Protective Service Occupations</td>
<td>1,125</td>
<td>3.8</td>
</tr>
<tr>
<td>Production Occupations</td>
<td>1,125</td>
<td>3.8</td>
</tr>
<tr>
<td>Total</td>
<td>6,500</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: EMSI June 2007

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

We are Exporting the Experienced Core of Our Workforce

Source: U.S. Census Bureau, 2000 Census; 5% PUMS Files
Homes on O'ahu—Beyond Affordable
We can no longer depend on an imported workforce.

Source: The Honolulu Advertiser, University of Hawaii economist Carl Bonham

The Worker Preparation Gap
An Insufficient Number of People with Needed Skills

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

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: NCES-IPEDS Completions 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

Number of 4-Year Degrees 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

Education Pipeline Performance

An Insufficient Number of Individuals Prepared for Further Education or Training

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

The Public Agenda
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: including 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 post-secondary education by 50%.

- 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.
A Significant Number of Underprepared Students

Students are not prepared to begin college level work

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Entire Workforce</th>
<th>Age 55-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life, Physical &amp; Social Science</td>
<td>12.0</td>
<td>11.5</td>
</tr>
<tr>
<td>Office &amp; Administrative Support</td>
<td>19.3</td>
<td>16.3</td>
</tr>
<tr>
<td>Sales &amp; Related</td>
<td>9.4</td>
<td>11.5</td>
</tr>
<tr>
<td>Computer, Math, Architecture &amp; Engineering</td>
<td>12.0</td>
<td>11.5</td>
</tr>
<tr>
<td>Healthcare Support</td>
<td>12.0</td>
<td>11.5</td>
</tr>
<tr>
<td>Production, Installation, Maintenance &amp; Repair</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Healthcare Practitioners &amp; Technical</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Education, Training &amp; Library</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Construction &amp; Maintenance</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Management, Business &amp; Financial Operations</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Production, Installation, Maintenance &amp; Repair</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Community &amp; Social Services</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Life, Physical &amp; Social Science</td>
<td>12.0</td>
<td>11.5</td>
</tr>
</tbody>
</table>

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.

OVPCC-AA  Sept 2007
Graduation, Transfer, or Continuation in 150% time

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