University of Hawai‘i
Second Decade

Linda K. Johnsrud
Vice President for
Academic Planning & Policy
February 2007
Purpose

• To identify the higher education needs of the State of Hawai‘i in the next decade;

• To determine the relative priority of state higher education needs by region of the state

• To use this information to inform the 2007–09 Biennium Budget proposal development.
UH’s Primary Mission

“… to provide environments in which faculty and students can discover, examine critically, preserve and transmit the knowledge, wisdom, and values that will help ensure the survival of the present and future generations with improvement in the quality of life.”

Source: University of Hawai‘i Board of Regents Policies and Bylaws, Chapter 4, Planning, 2002
Guidance from BOR Policy

“The problems left by the tremendous expansion we have already experienced, the needs and aspirations of the citizens of Hawai‘i, and the constraints on resources and time—all these require the University to develop an explicit statement of priorities and an orderly and reasonable plan for its further growth.”

“Not everything desired by the University can be accomplished and, certainly, not all at once.”

Source: University of Hawai‘i Board of Regents Policies and Bylaws, Chapter 4, Planning, 2002
Underlying Principles

- Benefit of a single cohesive system of higher education
A System of Campuses

• Geographically accessible entry points
• Flexibility for students to move within a system
• Cohesive response to state needs
• Coordinated leadership for resource acquisition and allocation

Source: University of Hawai‘i Strategic Plan: Entering the University’s Second Century, 2002-2010
Underlying Principles

• Benefit of a single cohesive system of higher education

• Need for mission differentiation
Mission Differentiation

• UH Mānoa is a doctoral/research university with selective admissions. It offers baccalaureate, master’s, and PhD degrees in an array of liberal arts and professional fields, degrees in law and medicine and carries out organized research activities.

• UH Hilo is a comprehensive, primarily baccalaureate institution with a regional mission, offering baccalaureate degrees in the liberal arts, agriculture, nursing, and business, as well as selected master’s and doctoral degrees.

Source: University of Hawai‘i Board of Regents Policies and Bylaws, Chapter 4, Planning
Mission Differentiation (cont.)

• UH West O‘ahu is a comprehensive, primarily baccalaureate institution founded in the liberal arts, serving professional, career-related, and applied fields, based on state and regional needs, committed to providing access through its partnerships and its distance delivery of programs.

• UH Community Colleges are a system of open-door, low-tuition institutions offering associate degrees and certificate programs in academic, technical, and occupational subjects.

Source: University of Hawai‘i Board of Regents Policies and Bylaws, Chapter 4, Planning
Underlying Principles

• Benefit of a single cohesive system of higher education

• Need for mission differentiation

• Obligation to invest available resources effectively
Level of Current Funding

UH Enrollment and Share of State General Funds

Fiscal Year

Enrollment

% Share of General Funds

Fiscal Year

97-98 98-99 99-00 00-01 01-02 02-03 03-04 04-05 05-06 06-07

Percent Headcount

39,000 41,000 43,000 45,000 47,000 49,000 51,000 53,000

Fall Enrollment

% Share of General Funds

7 8 9 10 11 12 13 14

APP Feb 2007
# State and Local Surplus or Shortfall as a Percent of Baseline Revenues in Year 2013

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Underlying Principles

- Benefit of a single cohesive system of higher education
- Need for mission differentiation
- Obligation to invest effectively available resources
- Need to balance educational mission and economic development
Planning Context

- Population growth (# & %)
- High school graduation rates
- Income
- Workforce participation
- Educational attainment (<HS, HS, bachelor’s)
- College going rate (2-yr, 4-yr)
- Job shortages (workforce needs)
State of Hawai‘i, by Geographic Region

Kaua‘i

Windward

North Shore

Wai‘anae

‘Ewa

East O‘ahu

Central O‘ahu

O‘ahu

Maui

East Hawai‘i

West Hawai‘i

University of Hawai‘i Second Decade

APP Feb 2007
## State of Hawai‘i Regions

<table>
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<tr>
<th>East O‘ahu</th>
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<th>Wai‘anae</th>
<th>Kaau‘i</th>
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<td>Hilo</td>
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<table>
<thead>
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<td>Kurtistown</td>
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<td>Nā‘ālehu</td>
<td></td>
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<td>Laupāhoehoe</td>
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## APP Feb 2007
State Population

2nd Decade
University of Hawai‘i Second Decade

Total Population, 2000

Hawai‘i = 1,211,533

Note: Kalawao included with Maui County.
Source: U.S. Census Bureau, 2000 Census

APP Feb 2007
Projected Change in Population (#), 2000–2020

- 'Ewa: 72,721
- East O'ahu: 54,315
- Maui: 45,481
- West Hawai'i: 31,619
- Central O'ahu: 23,895
- East Hawai'i: 22,804
- Kaua'i: 16,190
- Wai'anae: 6,360
- Windward: 2,270
- North Shore: 1,533

State Total = 277,188

Relative Need for Postsecondary Ed & Training
Based on Projected Change in Population (#), 2000–2020

State Total = 277,188

City and County of Honolulu, Department of Planning and Permitting, 2004.
County of Hawai‘i General Plan, February 2005.
Relative Need for Postsecondary Ed & Training
Based on Projected Change in Population (%), 2000–2020

'īwia
West Hawai'i
Maui
Kaua'i
East Hawai'i
Central O'ahu
Wai'anae
East O'ahu
North Shore
Windward

State Average = 22.9%

City and County of Honolulu, Department of Planning and Permitting, 2004.
County of Hawai'i General Plan, February 2005.
Projected Change in Population of Hawai‘i by Age Group from 2000 to 2020

Source: U.S. Census Bureau's Population Projections and Census 2000
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Population Growth, Age 65+, State & County, 2001–2005

Note: Kalawao County not shown.
Source: U.S. Census population estimates.
Projected Hawai‘i High School Graduates, 2006–07 Through 2017–18

Relative Need for Postsecondary Ed & Training
Based on Projected Hawai‘i High School Graduates, 2007–2018

State Average = -0.63%

‘Ewa 1.63%
Wai‘anae 0.72%
West Hawai‘i 0.07%
East Hawai‘i -0.49%
Maui -0.69%
East O‘ahu -0.74%
Central O‘ahu -0.80%
North Shore
Kaua‘i
Windward

Note: Percentages based on an average of annual changes from 2007 to 2018.
UH IRO calculations based on DOE actual enrollments.
Per Capita Personal Income, 2000

Hawaiʻi = $21,525

Note: Kalawao not shown.
Source: U.S. Census Bureau, 2000 Census

APP Feb 2007
Relative Need for Postsecondary Ed & Training
Based on Per Capita Personal Income 2000

State Average = $21,525

- Wai'anae: $13,802
- North Shore: $14,386
- East Hawai'i: $16,550
- 'Ewa: $18,751
- Kaua'i: $20,301
- Maui: $22,033
- Central O'ahu: $22,174
- West Hawai'i: $22,179
- Windward: $23,386
- East O'ahu: $24,895

Source: U.S. Census Bureau, 2000 Census.
Declining Per Capita Personal Income as a Percent of U.S. Average, 1960–2000

Source: U.S. Census Bureau
University of Hawai‘i Second Decade

Percent of Civilian Population Age 16 and Older Participating in the Workforce, 2000

Hawai‘i = 60.4%

Note: Kalawao included with Maui County.
Source: U.S. Census Bureau, 2000 Census

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Relative Need for Postsecondary Ed & Training Based on Workforce Participation, Age 16 and Older

North Shore: 42.1%
Waiʻanae: 57.8%
East Hawaiʻi: 58.1%
East Oʻahu: 58.9%
Central Oʻahu: 59.7%
Windward: 60.6%
Kauaʻi: 63.0%
ʻEwa: 63.8%
Maui: 66.6%
West Hawaiʻi: 66.8%

State Average = 60.4%

Source: U.S. Census Bureau, 2000 Census.

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Educational Attainment
Relative Need for Postsecondary Ed & Training
Based on Population Age 18–24 with <HS Diploma

Source: U.S. Census Bureau, 2000 Census.
Relative Need for Postsecondary Ed & Training
Based on Population Age 18–64 with Only a HS Diploma

<table>
<thead>
<tr>
<th>Location</th>
<th>Need Level</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Wai‘anae</td>
<td>Very High Need</td>
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<td>North Shore</td>
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<td>Maui</td>
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<td>East O‘ahu</td>
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<td>23.8%</td>
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State Average = 29.0%

Source: U.S. Census Bureau, 2000 Census.
Relative Need for Postsecondary Ed & Training
Based on Population Age 25–64 with at Least a Bachelor’s Degree

State Average = 28.7%

- Wai'anae: 10.1%
- North Shore: 17.8%
- Kaua'i: 22.0%
- East Hawai'i: 23.0%
- ‘Ewa: 23.2%
- Maui: 24.0%
- West Hawai'i: 24.9%
- Central O‘ahu: 30.4%
- Windward: 35.1%
- East O‘ahu: 36.2%

Source: U.S. Census Bureau, 2000 Census.

FACTOR #8
Going Rates of Public and Private High Schools, UH System, State of Hawai‘i, and the Nation

Note: The going rate is the percentage of Hawai‘i high school graduates entering the University of Hawai‘i without delay upon graduation from high school. As an upper division institution, UH West O'ahu is not included.

Sources: IRO (UH); NCES IPEDS (state); NCHEMS (national).
Relative Need for Postsecondary Ed & Training
Based on UH 2-Yr Going Rates, Fall 2006

State Average = 21.5%

- Wai'anae: 12.0
- West Hawai'i: 12.0
- East O'ahu: 19.2
- Maui: 19.5
- Windward: 21.5
- East Hawai'i: 21.7
- North Shore: 22.0
- 'Ewa: 23.3
- Kaua'i: 28.0
- Central O'ahu: 29.6

Legend:
- Very High Need
- High Need
- Medium Need
- Low Need
University of Hawai‘i Second Decade

UH COMPASS Placement: English-R
Fall 2001–2005

Source: UH Institutional Research Office
University of Hawai'i Second Decade

UH COMPASS Placement: Math
Fall 2001–2005

Source: UH Institutional Research Office
<table>
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<tr>
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<th>Hawai‘i 2006</th>
<th>Top States 2006</th>
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<tr>
<td>in math</td>
<td>14%</td>
<td>18%</td>
<td>38%</td>
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<tr>
<td>in reading</td>
<td>19%</td>
<td>18%</td>
<td>38%</td>
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<tr>
<td>in science</td>
<td>15%</td>
<td>15%</td>
<td>41%</td>
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<tr>
<td>in writing</td>
<td>15%</td>
<td>18%</td>
<td>41%</td>
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<td>Number of scores in the top 20% nationally on SAT/ACT college entrance exam per 1,000 high school graduates</td>
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<td>Number of scores that are 3 or higher on an Advanced Placement subject test per 1,000 high school juniors and seniors</td>
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<td>92</td>
<td>112</td>
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Relative Need for Postsecondary Ed & Training
Based on UH 4-Yr Going Rates, Fall 2006

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<td>West Hawai‘i</td>
<td>8.4</td>
</tr>
<tr>
<td>Central O‘ahu</td>
<td>12.3</td>
</tr>
<tr>
<td>East O‘ahu</td>
<td>15.5</td>
</tr>
<tr>
<td>East Hawai‘i</td>
<td>18.0</td>
</tr>
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</table>

State Average = 10.6%

FACTOR #10
Bachelor’s Degrees Awarded per 100 High School Graduates Six Years Earlier, 2002

Source: NCES-IPEDS Completions Survey, WICHE
University of Hawai'i Second Decade

Associate Degrees Awarded per 100 High School Graduates Three Years Earlier, 2002

Florida
Rhode Island
Washington
Arizona
New York
Utah
Idaho
California
Mississippi
Hawaii
Kansas
Massachusetts
North Carolina
New Mexico
North Dakota
Colorado
Illinois
Oklahoma
South Carolina
Minnesota
South Dakota
Nebraska
Michigan
Indiana
Pennsylvania
Nevada
South Dakota
Alabama
Wisconsin
Kentucky
Virginia
New Jersey
Ohio
Texas
Arkansas
Tennessee
West Virginia
Delaware
Maryland
Maine
Alaska
Montana
Connecticut
Georgia
Louisiana

Source: NCES-IPEDS Completions Survey, WICHE
Is Hawai‘i Benefiting from the Migration of College Graduates?

Recent Annual Degree-Production and Migration Patterns

For Every 100 Associate Degrees Produced Annually in Hawai‘i...

61 Associate Degree Holders (ages 22-64) Enter the State

A Net Loss of 15 Associate Degrees Per 100 Produced

76 Associate Degree Holders (ages 22-64) Leave the State

For Every 100 Bachelor’s Degrees Produced Annually in Hawai‘i...

110 Bachelor’s Degree Holders (ages 22-64) Enter the State

A Net Gain of 1 Bachelor’s Degree Per 100 Produced

109 Bachelor’s Degree Holders (ages 22-64) Leave the State

Source: Excerpted from NCHEMS “Investment in State PostSecondary Education: Hawai‘i”
NCHEMS sources = NCES IPEDS Completions Survey (3-year average degree production from 2001–2003); US Census Bureau (2000 5% Public Use Microdata Samples)
Workforce Development Needs
Projected Average Annual Job Openings Through 2012

- Annual Job Openings: 28,266
- Needing Education Beyond HS: 13,266 (47%)
- Avg Annual Degrees / Certificates Awarded: 10,415 (79%)
  - Non-UH: 3,428 (26%)
  - UH: 6,987 (53%)

Projected Annual Vacancies in Shortage Areas Statewide, 2002–12 and Average UH Output, 2004–06

Source: Economic Modeling Specialist Inc (EMSI), June 2005; MAPS Degrees & Certificates Earned, FY 2004–06.
Projected Annual Vacancies in Shortage Areas Statewide, 2002–12 and Average UH Output, 2004–06

Source: State of Hawaii, Department of Labor and Industrial Relations, Research & Statistics Office; Economic Modeling Specialist Inc (EMSI), June 2005; MAPS Degrees & Certificates Earned, FY 2004–06.
Hawai‘i: Emerging Opportunities

Enterprise Honolulu Projections:

• Life Sciences / Biotechnology
• Information Technology
• Telecommunications
• Film & Digital Media
• Diversified Agriculture

Source: Enterprise Honolulu
Number of Baccalaureate Degrees Awarded (2003) Per 100 High School Graduates Six Years Earlier, 1997

Source: NCES-IPEDS Completions 2002-03; WICHE High School Graduates, 1997
University of Hawai‘i Second Decade

Number of Associate Degrees and Certificates Awarded (2003)
Per 100 High School Graduates Three Years Earlier, 2000

Source: NCES-IPEDS Completions 2002-03; WICHE High School Graduates, 2000
Number of Baccalaureate Degrees Awarded (2003) Per 100 High School Graduates Six Years Earlier, 1997

Health Sciences
Summary of Planning Factors

• Population growth (# & %)
• High school graduation rates
• Income
• Workforce participation
• Educational attainment (<HS, HS, bachelor’s)
• College going rate (2-yr, 4-yr)
• Job shortages (workforce needs)
Relative Need for Postsecondary Ed/Training by Region

<table>
<thead>
<tr>
<th>Factors</th>
<th>East</th>
<th>Cent</th>
<th>‘Ewa</th>
<th>Wai</th>
<th>N Sh</th>
<th>Win</th>
<th>E HI</th>
<th>W HI</th>
<th>Mau</th>
<th>Kau</th>
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</thead>
<tbody>
<tr>
<td>Pop Growth (%)</td>
<td>Low</td>
<td>Low</td>
<td>Very High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Med</td>
<td>High</td>
<td>Med</td>
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<tr>
<td>Proj HS Grad (Avg %)</td>
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<td>Med</td>
<td>Very High</td>
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<td>Low</td>
<td>Low</td>
<td>Med</td>
<td>High</td>
<td>Med</td>
<td>Low</td>
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<tr>
<td>Workforce Particip %</td>
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<td>High</td>
<td>Med</td>
<td>High</td>
<td>Very High</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Med</td>
</tr>
<tr>
<td>Ed Attain (&lt;HS Dipl)</td>
<td>Low</td>
<td>Med</td>
<td>Med</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Very High</td>
<td>High</td>
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</tr>
<tr>
<td>Going Rates (4-Yr)</td>
<td>Low</td>
<td>Med</td>
<td>Very High</td>
<td>Very High</td>
<td>Very High</td>
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<td>High</td>
<td>Low</td>
<td>Very High</td>
<td>High</td>
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<tr>
<td>Skilled Workforce Needs</td>
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<td>Very High</td>
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<td><strong>RELATIVE NEED</strong></td>
<td><strong>31</strong></td>
<td><strong>31</strong></td>
<td><strong>55</strong></td>
<td><strong>59</strong></td>
<td><strong>45</strong></td>
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<td><strong>43</strong></td>
<td><strong>49</strong></td>
<td><strong>45</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

APP Feb 2007
Relative Need for Postsecondary Ed & Training
4 Cluster Analysis

- Wai'anae: Very High Need
- 'Ewa: High Need
- West Hawai'i: High Need
- Maui: High Need
- North Shore: High Need
- East Hawai'i: High Need
- Kaua'i: Medium Need
- Windward: Low Need
- Central O'ahu: Low Need
- East O'ahu: Low Need
Hawai‘i’s Higher Education Needs

1. Increase the educational capital of the state
2. Expand workforce development initiatives
3. Assist in diversifying the economy
4. Address underserved regions and populations of the state, particularly Native Hawaiians
Biennium Budget Planning

• How can UH expand service to better meet state needs?
• How can UH increase student participation and success?
• How will we know we have succeeded?
• How will we pay for these initiatives?
UH Priorities for the Next Decade…

• Focus our resources more sharply to meet state needs

• Partner with K–12 and early childhood education providers

• Access with Success
Web / E-mail

Website
http://www.hawaii.edu/offices/app/seconddecade/

E-mail
johnsrud@hawaii.edu