

MEETING HAWAI'I'S WORKFORCE CHALLENGES

Presentation to the Senate Committee on Education

January 9, 2008

Act 283 (SLH 2007)

SECTION 4. The University of Hawaii shall prepare a report detailing:

- The current activities on each of its campuses to prepare students with the skills and knowledge needed to successfully enter and progress in the Hawaii workforce;
- The University of Hawaii's current plans to increase the percentage of
 Hawaii high school graduates who continue their education by enrolling at a
 University of Hawaii campus and to increase the percentage of students
 who earn degrees or certificates within one hundred fifty per cent of the
 planned length of the degree, particularly in fields where the State is
 experiencing shortages of qualified employees; and
- Recommendations about additional steps the State needs to consider implementing to increase the number of qualified workers in the State.



A STATEWIDE PRESENCE



Kaua'i Community College University of Hawai'i Center, Kaua'i

LCC Wai'anae Ed. Ctr.

University of Hawai'i-West O'ahu

Leeward Community College

Honolulu Community College

OʻAHU

-Windward Community College

University of Hawai'i at Manoa

Kapi'olani Community College

MCC Moloka'i Ed. Ctr.

MOLOKA'I

MCC Lana'i Ed. Ctr.

LANA'I

MAUI

Maui Community College

University of Hawai'i Center, Maui

MCC Hana Ed. Ctr.

University of Hawai'i Center, West Hawai'i



University of Hawai'i at Hilo

Hawai'i Community College



CREDENTIALS OFFERED - 2006

	Manoa	Hilo	WO	CC ^{1/}	Total
Cert of Achievement				80	80
Associate				116	116
Bachelor's	87	34	6		127
Master's	85	6			91
Doctorate	51	2			53
1st Professional	4				4
Subtotal Deg	227	42	6	196	471
Other Certificates	58	20	5	76	159
Grand Total	285	62	11	272	630



OPENING ENROLLMENT - FALL 2007

Total Credit	<u>50,804</u>
UH Community Colleges	26,219
UH Manoa	20,006
UH Hilo	3,608
UH West Oʻahu	971

DEGREES EARNED, FY 2006-07

Total	7,835
Community Colleges	2,713
West Oʻahu	217
Hilo	592
Manoa	4,313



On average, over 7,000 degrees were awarded per year over the past 10 years.

We Need to Fill 28,000 Jobs Annually

Average Annual Openings

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ealthcare support occupations and social services occupations community and social services occupations computer and mathematical science occupations architecture and engineering occupations arming, fishing, and forestry occupations 300 267 267 268 299 207 208 208 209 209 209 200 200 200	685	814
community and social services occupations 267 computer and mathematical science occupations 217 ife, physical, and social science occupations 89 rchitecture and engineering occupations 33 arming, fishing, and forestry occupations (2)	384	684
ife, physical, and social science occupations 217 ife, physical, and social science occupations 89 rchitecture and engineering occupations 33 arming, fishing, and forestry occupations (2)	269	604
ife, physical, and social science occupations rchitecture and engineering occupations arming, fishing, and forestry occupations (2)	247	514
rchitecture and engineering occupations 33 arming, fishing, and forestry occupations (2)	164	381
arming, fishing, and forestry occupations (2)	194	283
	248	281
egal occupations (4)	80	78
• •	72	68
Total Jobs 7,169	21,446	28,615

Most Require Education Beyond HS

Average Annual Openings

SOC Job Cluster	Due to Growth	Due to Separations	Total
Sales and related occupations	1,199	3,109	4,308
Food preparation and serving related occupations	428	3,180	3,608
Office and administrative support occupations	101	3,125	3,226
Building and grounds cleaning and maintenance occupations	883	982	1,865
Management occupations	650	967	1,618
Personal care and service occupations	806	759	1,565
Education, training, and library occupations	560	923	1,484
Transportation and material moving occupations	268	1,142	1,410
Production occupations	281	952	1,234
Healthcare practitioners and technical occupations	411	582	994
Business and financial operations occupations	352	607	960
Installation, maintenance, and repair occupations	272	687	959
Construction and extraction occupations	87	763	85 ⁻
Military Occupations	(494)	1,322	828
Protective service occupations	128	685	814
Arts, design, entertainment, sports, and media occupations	300	384	684
Healthcare support occupations	335	269	60-
Community and social services occupations	267	247	514
Computer and mathematical science occupations	217	164	38
Life, physical, and social science occupations	89	194	283
Architecture and engineering occupations	33	248	281
Farming, fishing, and forestry occupations	(2)	80	78
Legal occupations	(4)	72	68
Total Jobs	7,169	21,446	28,615

SEEKING BETTER OUTCOMES

- The Hawai`i Millennium Workforce Initiative (2000)
- The Hawai`i-NGA Policy Academy Workforce Project (2004)
- The Hawai`i-WICHE Escalating Engagement Project (2006)
- UH System Second Decade Project (2006)
- Dennis Jones analysis presented to the Act 283 workgroup (2007)

- Better Align K-12 Learning Outcomes and Assessment with Higher Education Expectations—Ensure Students Leave High School Prepared for Further Education and for Work
- 2. Significantly Increase Numbers of Adults Acquiring Workplace Literacy Skills
- 3. Provide Higher Education Access in Areas of Greatest Need
 - Waianae
 - 'Ewa
- 4. Improve Retention

- 5. Expand Degree Production in Key Areas
 - Nursing/Allied Health
 - Teacher Education
 - Computer Science (Oriented to Engineering Applications)
 - Science Technologies
- 6. Create and Sustain a Rapid Response Capability
- 7. Enhance Educational Programs and Support Systems for Entrepreneurs
- 8. Promote Technology Transfer

- 1. Better Align K-12 Learning Outcomes and Assessment with Higher Education Expectations—Ensure Students Leave High School Prepared for Further Education and for Work
 - American Diploma Project
 - Construction academies, STEM academies
 - GEAR-UP
 - Career Pathways
 - Middle College pilot

American Diploma Project

- Align high school standards with college and work expectations.
- Require all students to take more challenging collegeand work-prep courses.
- Administer tests that measure readiness for college and work to all high school students.
- Collect data and hold high school and postsecondary institutions accountable for student success.









- 2. Significantly Increase Numbers of Adults Acquiring Workplace Literacy Skills
 - Community College enrollment initiative
 - Work with Adult Schools

- 3. Provide Higher Education Access in Areas of Greatest Need
 - Waianae
 - 'Ewa
 - UH-West Oahu
 - UH-West Hawai'i
 - Distance Education and University Centers
 - Native Hawaiian programs
 - Financial Aid

4. Improve Retention

- Achieve the Dream
- Increased \$ for scholarships
- NASH (National Associate of System Heads) Initiative
- Career Connections Website

Achieving the Dream

Achieving the Dream is a national initiative to help more community college students succeed (complete courses, earn certificates and earn degrees).

The initiative is particularly concerned about student groups that have faced the most significant barriers to success, including low-income students and Native Hawaiian students.

Achieving the Dream

Examining data on student achievement;

Basing decisions on data;

Confronting and addressing achievement gaps;

Monitoring progress closely; and sharing findings broadly.





NASH Initiative

Reduce the gap in achievement for low income and minority students by 50% by 2015 through

- Focusing on financial aid policies
- Focusing on two to four year transfer rates
- Focusing on remedial/developmental education
- Focusing on cost management

5. Expand Degree Production in Key Areas

- Nursing/Allied Health
- Teacher Education
- Computer Science (Oriented to Engineering Applications)
- Science Technologies
- UH Nursing Consortium
- UH Teacher Ed. Task Force
- UH Hospitality Industry Consortium
- IT Industry Skills Assessment

- 6. Create and Sustain a Rapid Response Capability
 - Rapid Response Training Fund, e.g.,
 - First Line Supervisor Training
 - Pearl Harbor Skills Training
 - Process Engineering

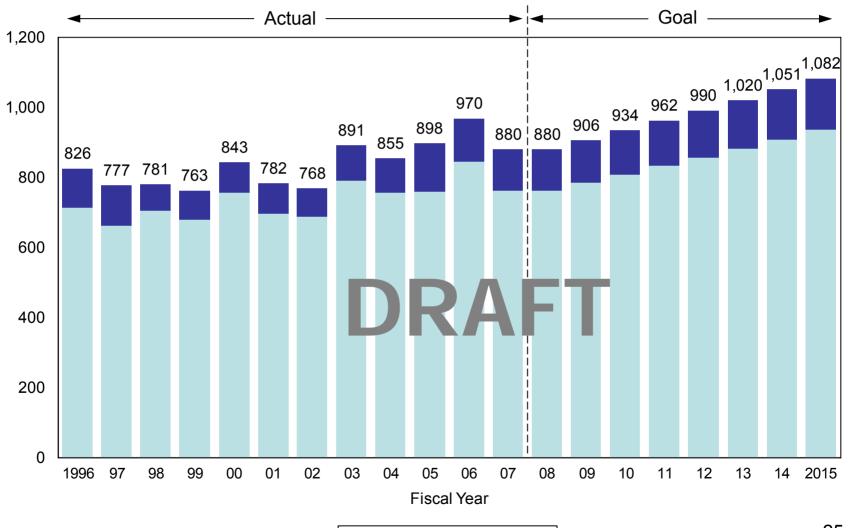
- 7. Enhance Educational Programs and Support Systems for Entrepreneurs
 - Small Business Development Center
 - Shidler College of Business
 - Pacific Business Center Program

- 8. Promote Technology Transfer
 - Office of Technology Transfer and Economic Development

THE POLICY ENVIRONMENT

- 9. Formally Adopt a Set of Goals that Is Agreed to by Executive and Legislative Branches and UH System—a Compact
- 10. Develop an Agreed-Upon Set of Accountability Measures by Which Progress Toward Goal Achievement Can Be Monitored
 - UH Second Decade Project
 - UH Strategic Planning Updating Outcomes

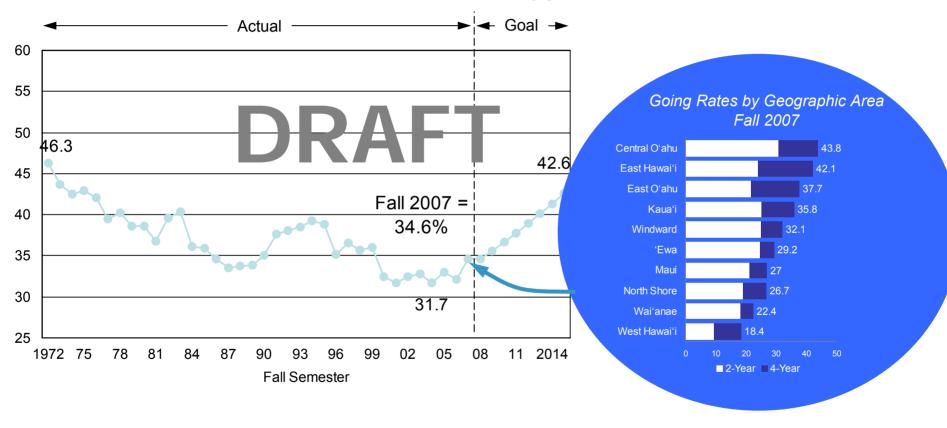
Degree Attainment of Native Hawaiians at UH GOAL: INCREASE 3% PER YEAR



■ Undergraduate
■ Graduate

Going Rates of Public and Private High Schools, UH System

GOAL: INCREASE 3% PER YEAR

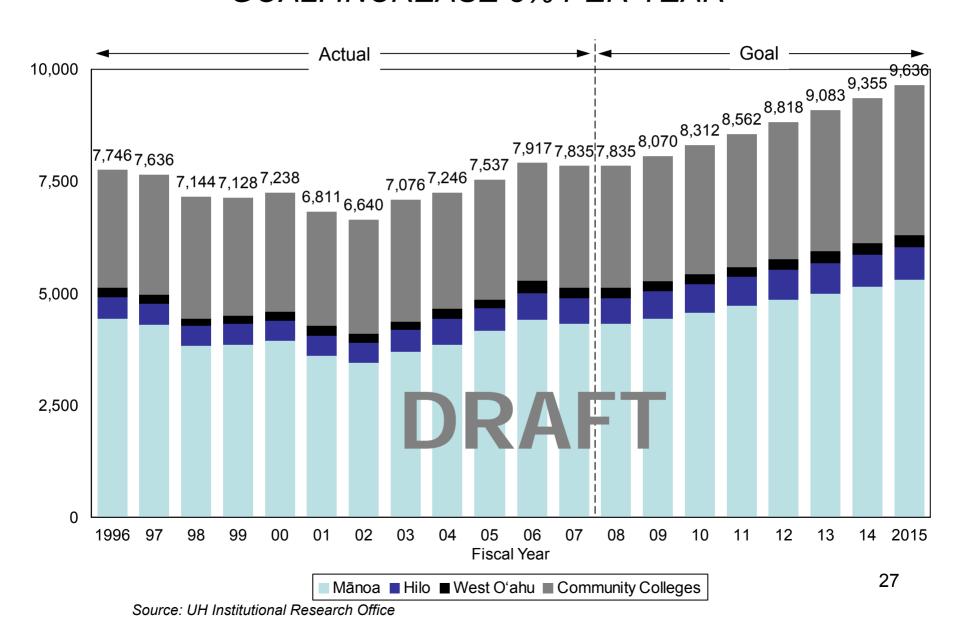


Notes: The going rate is the percentage of Hawai'i high school graduates entering the University of Hawai'i

without delay upon graduation from high school.

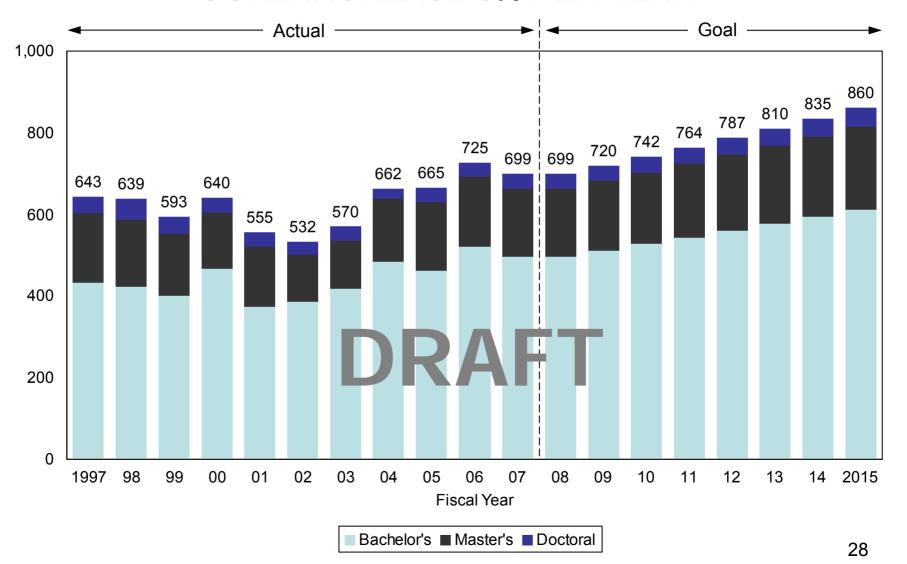
Source: UH Institutional Research Office

UH Degrees & Certificates of Achievement Earned GOAL: INCREASE 3% PER YEAR



UH Degrees in STEM Fields

GOAL: INCREASE 3% PER YEAR

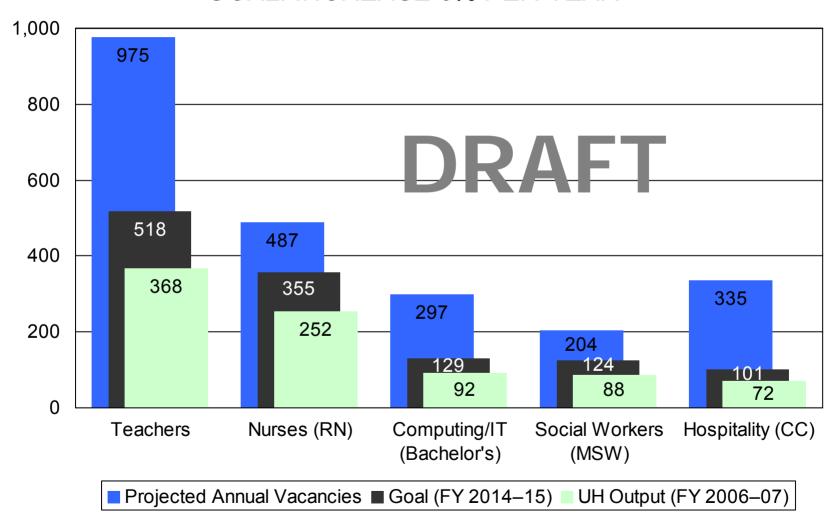


Degrees from Mānoa (Natural Sciences, SOEST, and Engineering) and Hilo (Natural Sciences) included.

Source: UH Institutional Research Office

Projected Annual Vacancies in Shortage Areas Statewide, 2006–17 and Total UH Output, 2006–07

GOAL: INCREASE 5% PER YEAR



THE POLICY ENVIRONMENT

11. Create New Funding Relationship Between the State and UH System

- Eliminate Line Items
- Calibrate Funding Against External Benchmarks
- Align Investment Funds Explicitly with Items Identified in a "Compact"
- 12. Conduct a More Detailed "Policy Audit" to Identify Policies/Procedures that Create Barriers to Pursuit of the Agreed-Upon Public Agenda



ADDITIONAL STEPS TO CONSIDER

- Incentives to promote new behaviors;
 - Parents, students, employers, educational institutions
- A social marketing campaign to inform the community about our changing economy, new opportunities, and the importance of education;
- Financial support focused on closing the identified access and program capacity gaps.



UNIVERSITY of HAWAI'I®

SYSTEM