



UNIVERSITY  
*of* HAWAII®  
SYSTEM

# ***MEETING HAWAII'S WORKFORCE CHALLENGES***

**Presentation to the  
Senate Committee on Education**

January 9, 2008

# Act 283 (SLH 2007)

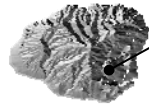
## **SECTION 4. The University of Hawaii shall prepare a report detailing:**

- 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



Kaua'i Community College

University of Hawai'i Center, Kaua'i

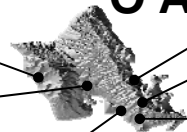
## O'AHU

LCC Wai'anae Ed. Ctr.

University of Hawai'i-West O'ahu

Leeward Community College

Honolulu Community College



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.

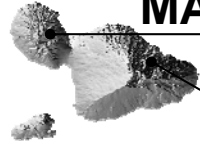
## LANA'I



## MAUI

Maui Community College

University of Hawai'i Center, Maui



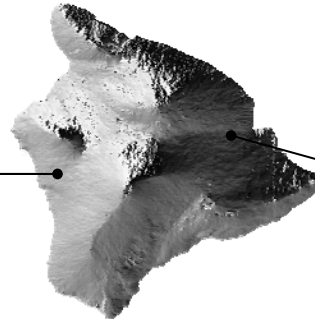
MCC Hana Ed. Ctr.

## HAWAII

University of Hawai'i at Hilo

Hawai'i Community College

University of Hawai'i Center, West Hawai'i





# CREDENTIALS OFFERED - 2006

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



# OPENING ENROLLMENT - FALL 2007

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

# DEGREES EARNED, FY 2006-07

Manoa	4,313
Hilo	592
West O‘ahu	217
Community Colleges	2,713
<b>Total</b>	<b>7,835</b>



*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

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	851
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	604
Community and social services occupations	267	247	514
Computer and mathematical science occupations	217	164	381
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
<b>Total Jobs</b>	<b>7,169</b>	<b>21,446</b>	<b>28,615</b>

# 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
<b>Office and administrative support occupations</b>	<b>101</b>	<b>3,125</b>	<b>3,226</b>
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<b>Military Occupations</b>	<b>(494)</b>	<b>1,322</b>	<b>828</b>
Protective service occupations	128	685	814
<b>Arts, design, entertainment, sports, and media occupations</b>	<b>300</b>	<b>384</b>	<b>684</b>
<b>Healthcare support occupations</b>	<b>335</b>	<b>269</b>	<b>604</b>
<b>Community and social services occupations</b>	<b>267</b>	<b>247</b>	<b>514</b>
<b>Computer and mathematical science occupations</b>	<b>217</b>	<b>164</b>	<b>381</b>
<b>Life, physical, and social science occupations</b>	<b>89</b>	<b>194</b>	<b>283</b>
<b>Architecture and engineering occupations</b>	<b>33</b>	<b>248</b>	<b>281</b>
Farming, fishing, and forestry occupations	(2)	80	78
<b>Legal occupations</b>	<b>(4)</b>	<b>72</b>	<b>68</b>
<b>Total Jobs</b>	<b>7,169</b>	<b>21,446</b>	<b>28,615</b>



# 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)**

# RECOMMENDED KEY INITIATIVES

- 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**
- 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**

(continued)

# RECOMMENDED KEY INITIATIVES

## **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**

# RECOMMENDED KEY INITIATIVES

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 college- and 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.



# RECOMMENDED KEY INITIATIVES

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

# RECOMMENDED KEY INITIATIVES

## 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

# RECOMMENDED KEY INITIATIVES

## 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

# RECOMMENDED KEY INITIATIVES

## 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**

# RECOMMENDED KEY INITIATIVES

## 6. Create and Sustain a Rapid Response Capability

- **Rapid Response Training Fund, e.g.,**
  - **First Line Supervisor Training**
  - **Pearl Harbor Skills Training**
  - **Process Engineering**

# RECOMMENDED KEY INITIATIVES

## 7. Enhance Educational Programs and Support Systems for Entrepreneurs

- **Small Business Development Center**
- **Shidler College of Business**
- **Pacific Business Center Program**

# RECOMMENDED KEY INITIATIVES

## 8. Promote Technology Transfer

- **Office of Technology Transfer and Economic Development**

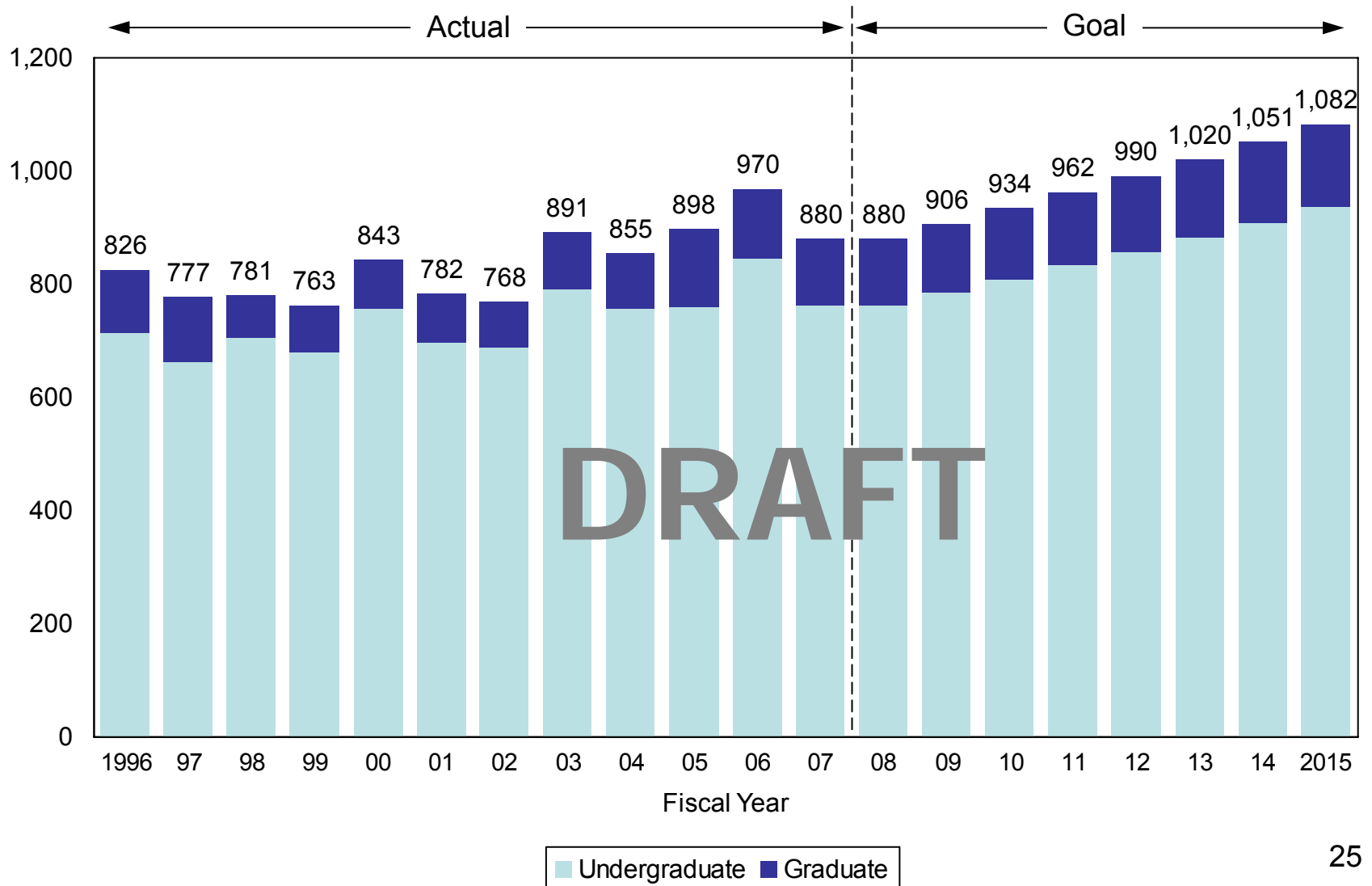
# THE POLICY ENVIRONMENT

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

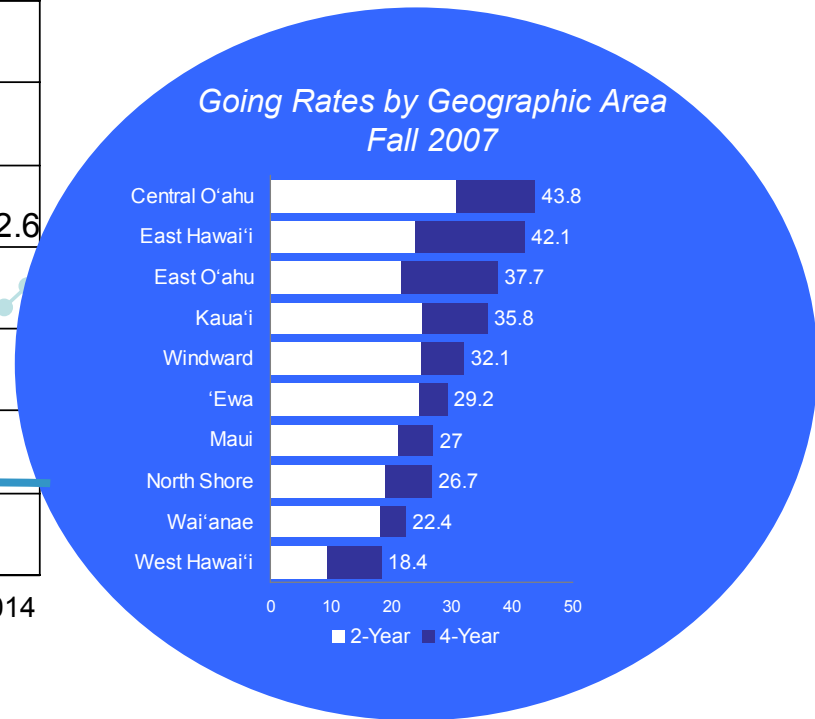
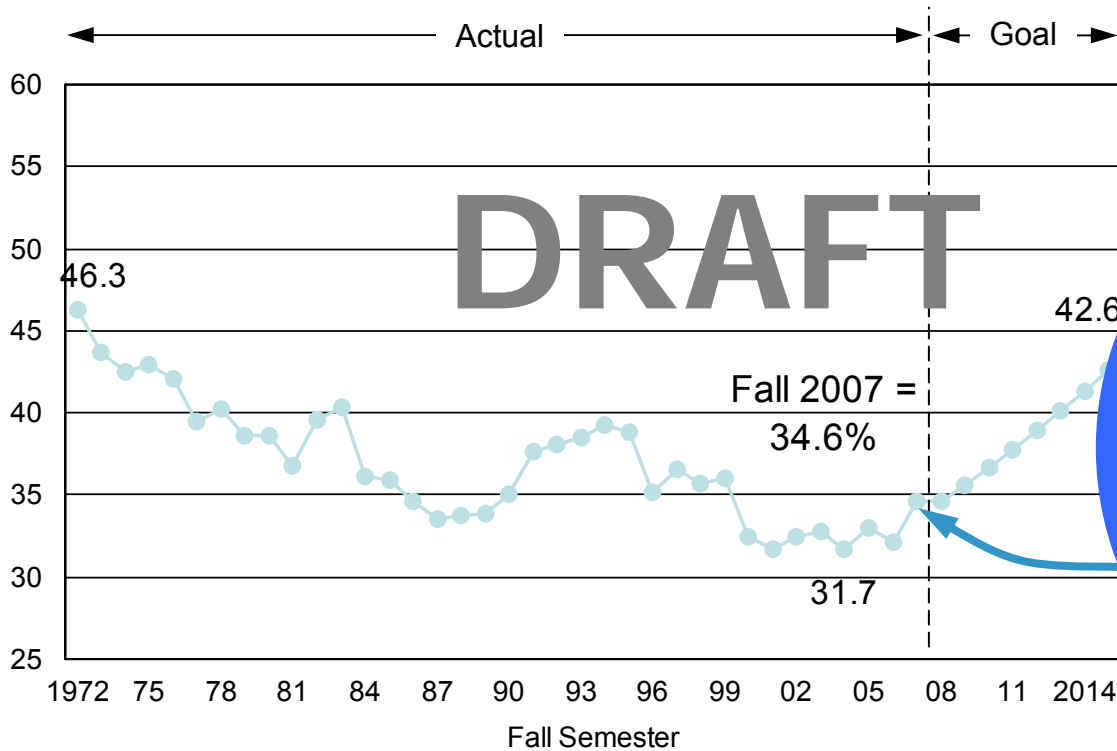
GOAL: INCREASE 3% PER YEAR



Source: UH Institutional Research Office

# Going Rates of Public and Private High Schools, UH System

GOAL: INCREASE 3% PER YEAR

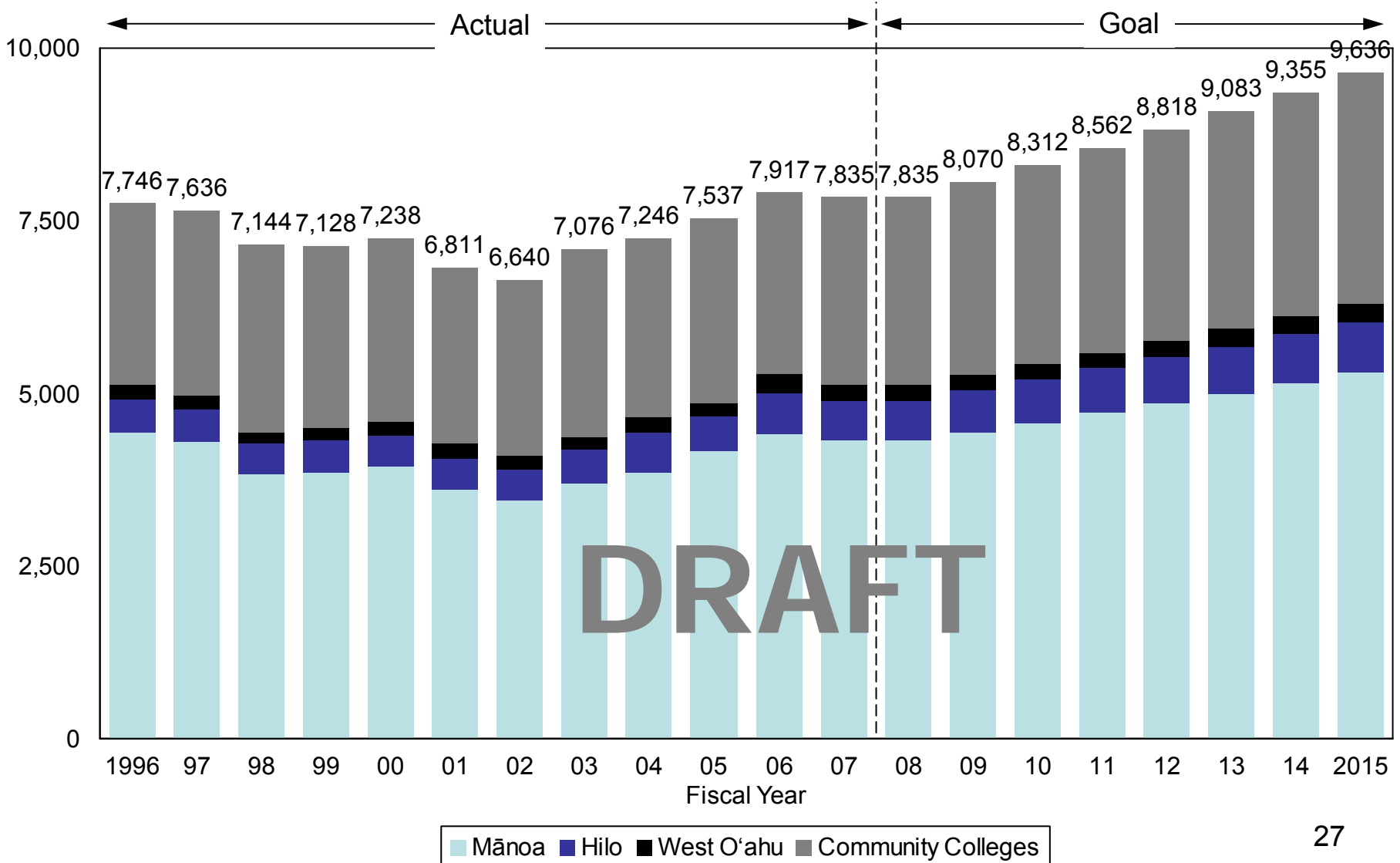


Notes: The going rate is the percentage of Hawai'i high school graduates entering the University of Hawai'i without delay upon graduation from high school.

Source: UH Institutional Research Office

# UH Degrees & Certificates of Achievement Earned

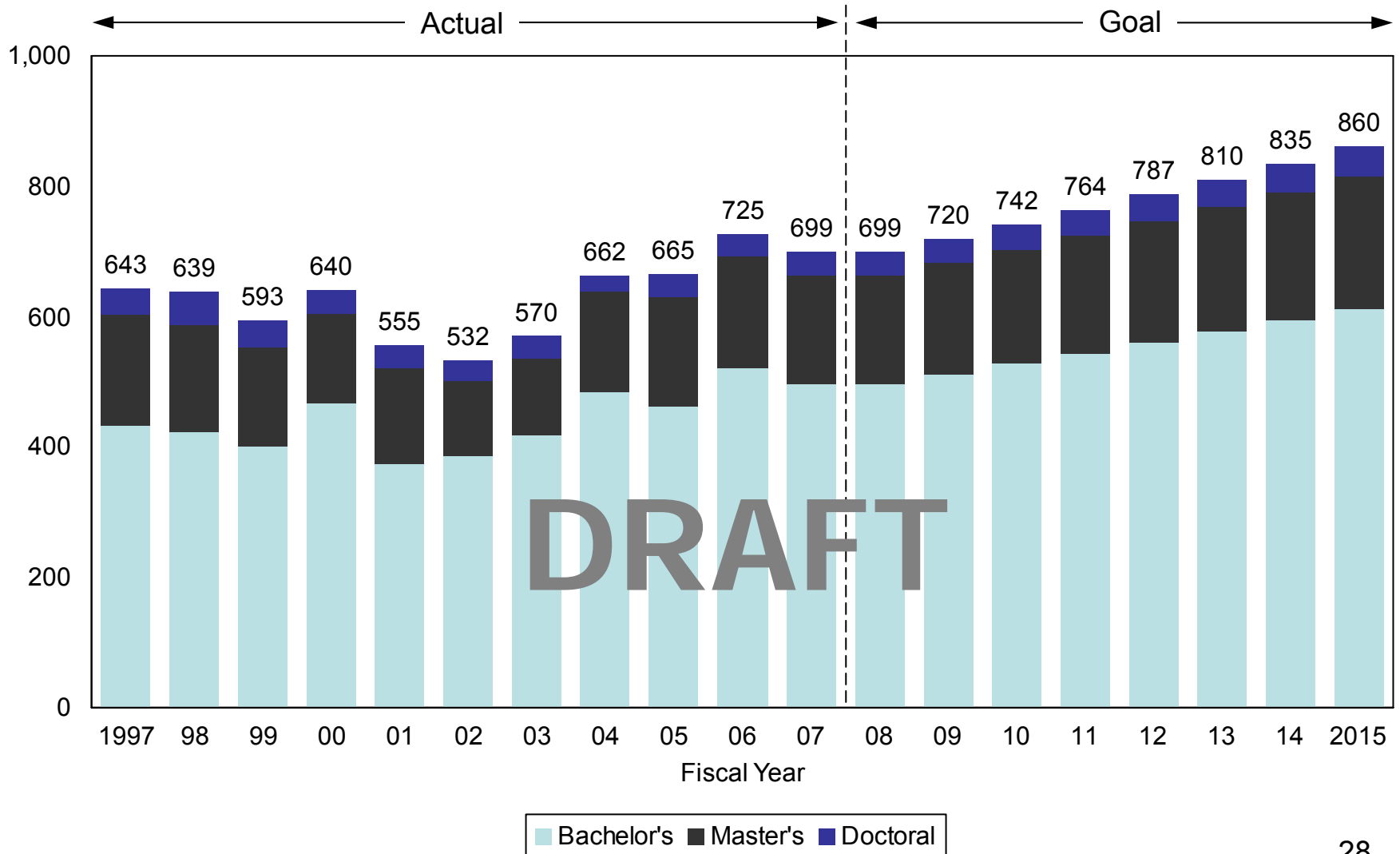
GOAL: INCREASE 3% PER YEAR



Source: UH Institutional Research Office

# UH Degrees in STEM Fields

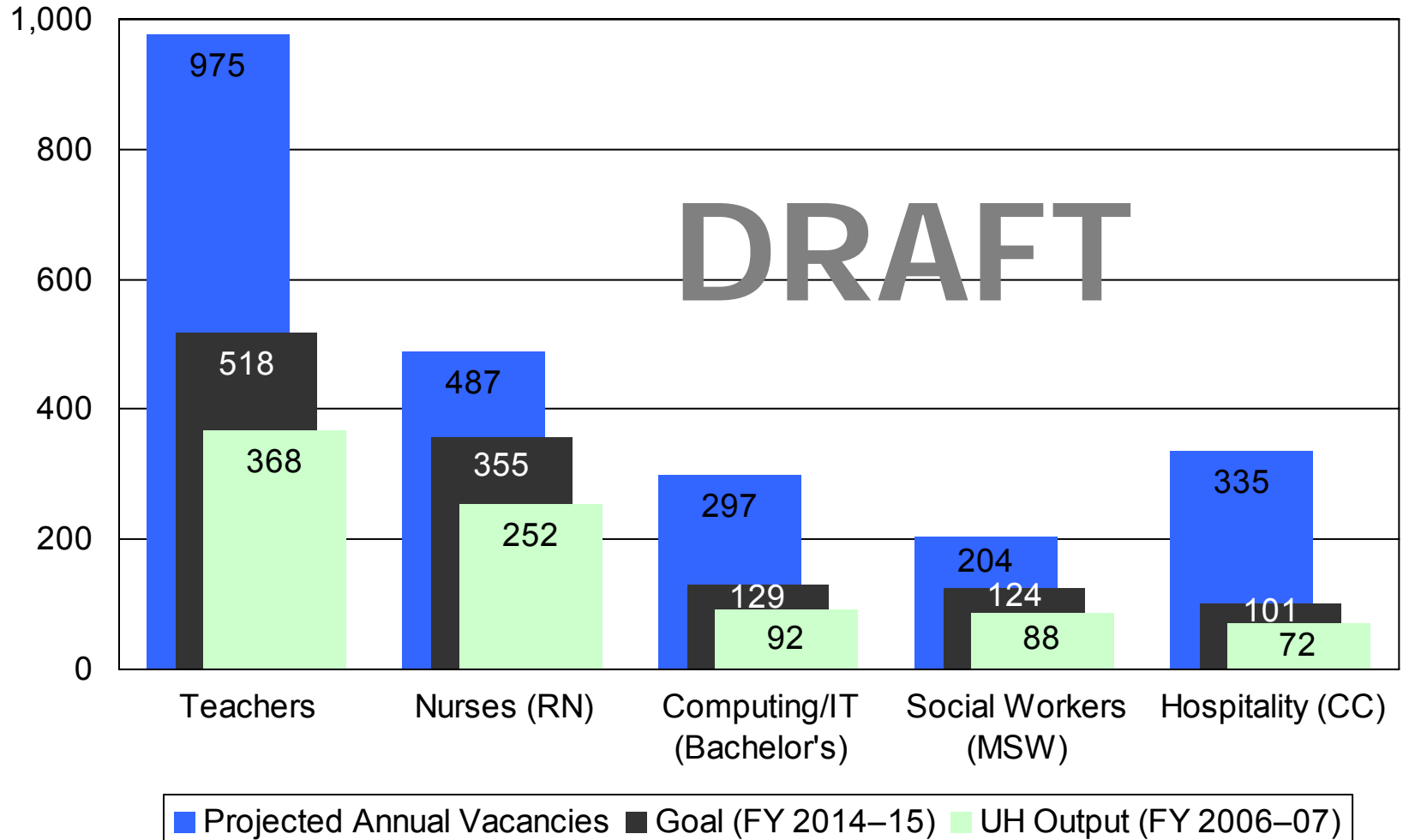
## GOAL: INCREASE 3% PER YEAR



Notes: 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.



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SYSTEM