

Higher Education and the Future of Hawaii

Presented to the

**The Senate Education Committee, and
The House Higher Education Committee**
Honolulu, Hawaii

March 12, 2007

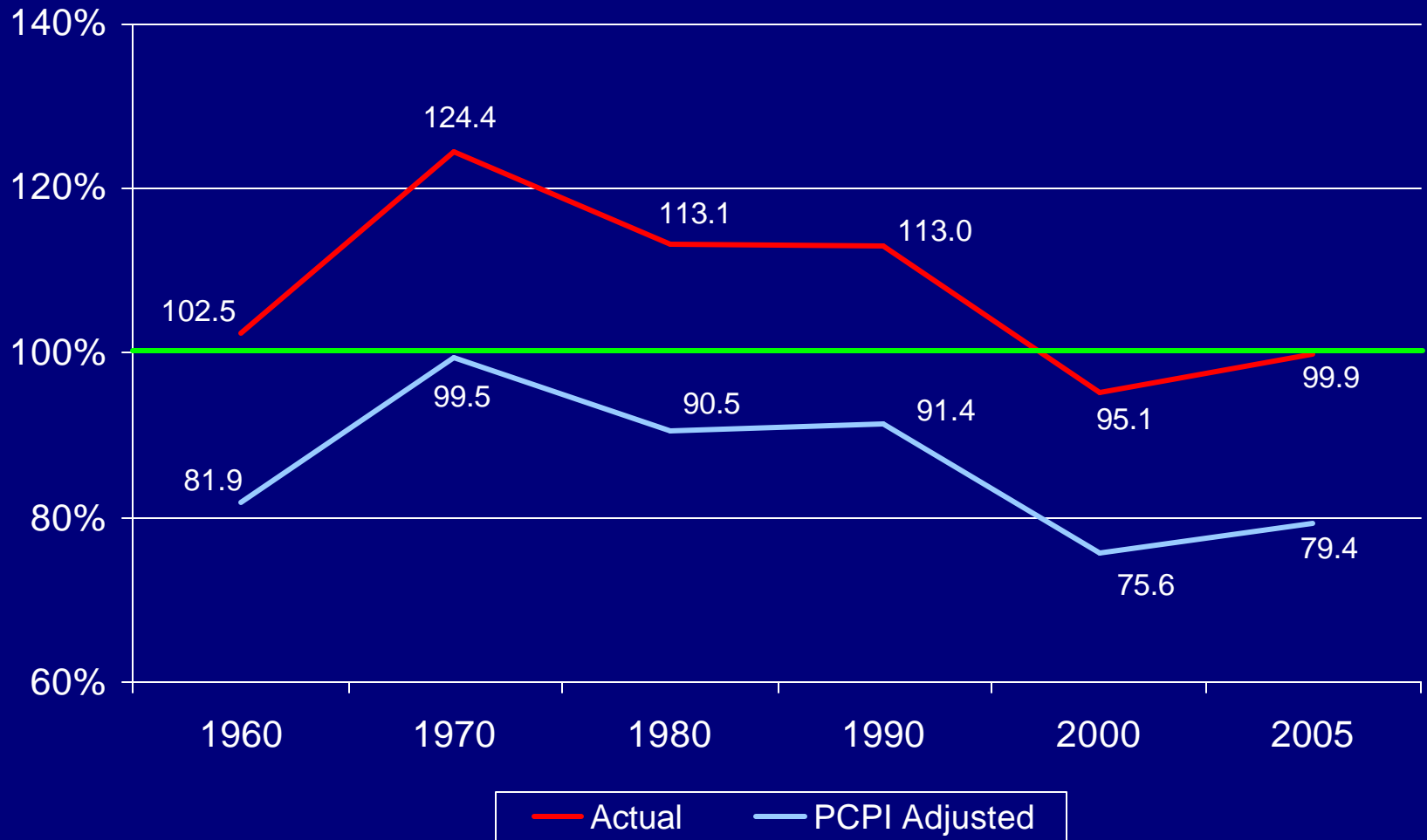


National Center for Higher Education Management Systems
3035 Center Green Drive, Suite 150 Boulder, Colorado 80301-2251

Core Problems Facing Hawaii

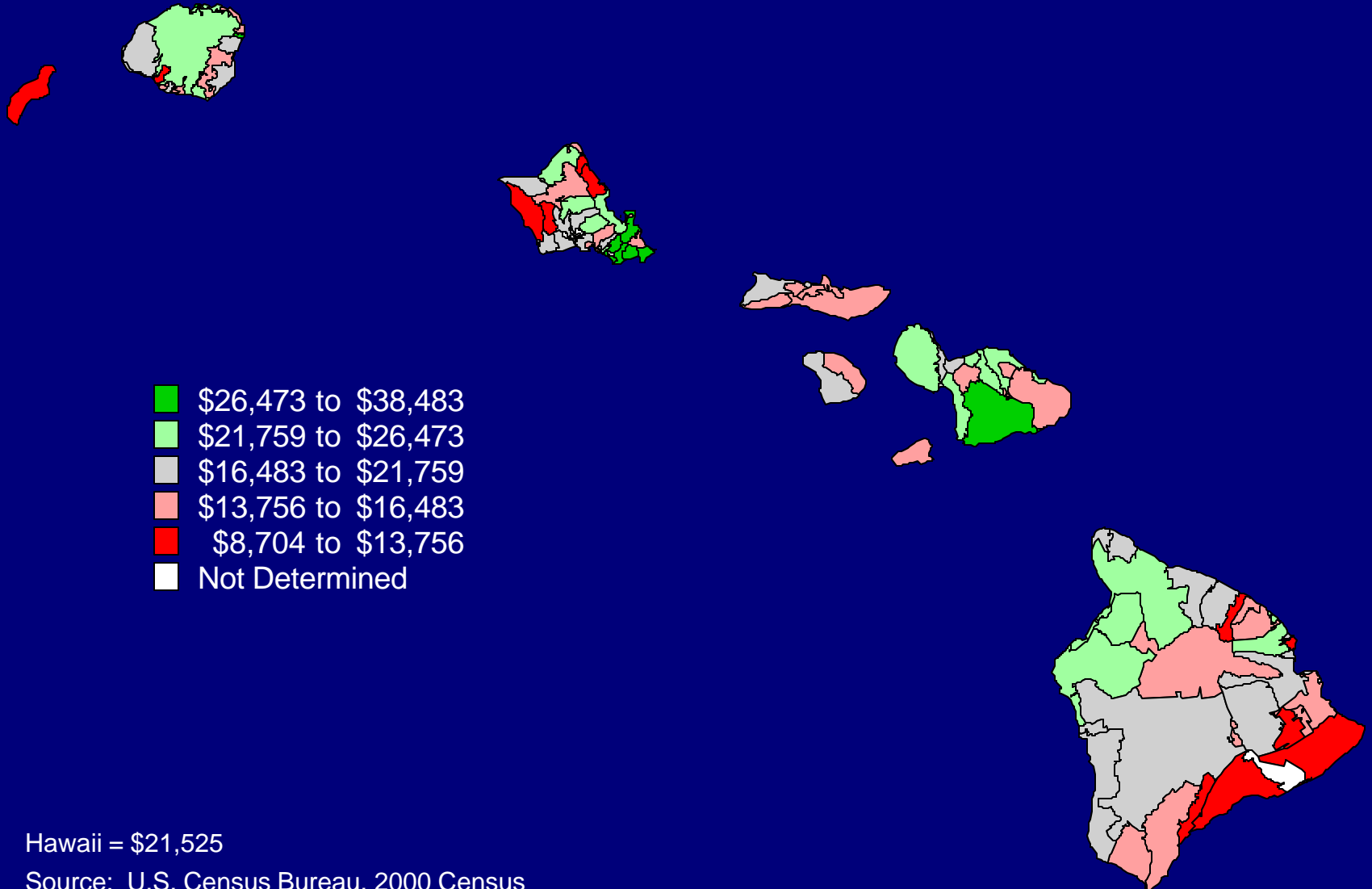
- | Per Capita Income Declining vis-à-vis the Rest of the Country (and Highly Variable Across the State)
- | Heavily Dependent on Service (Especially Visitor) Industry and Government Employment
- | Relatively Low Wage Structure (and High Cost of Living)
- | Aging Workforce
- | Very Low Unemployment and Workforce Shortages in Key Areas—Coupled with Underemployment

Declining Per Capita Personal Income in Hawaii as a Percent of U.S. Average—1960-2005

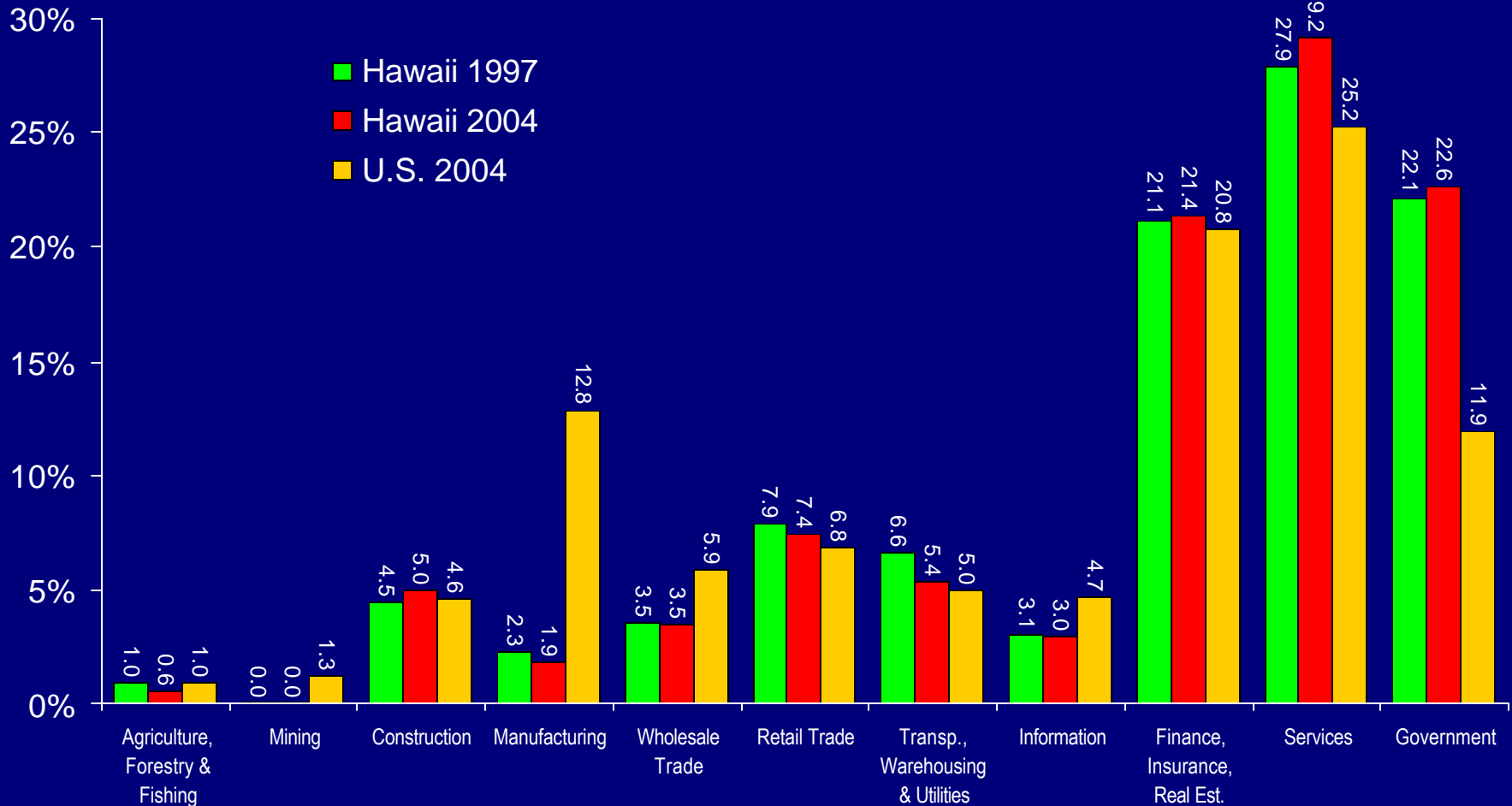


Source: U.S. Census Bureau, Bureau of Economic Analysis

Per Capita Personal Income, 1999

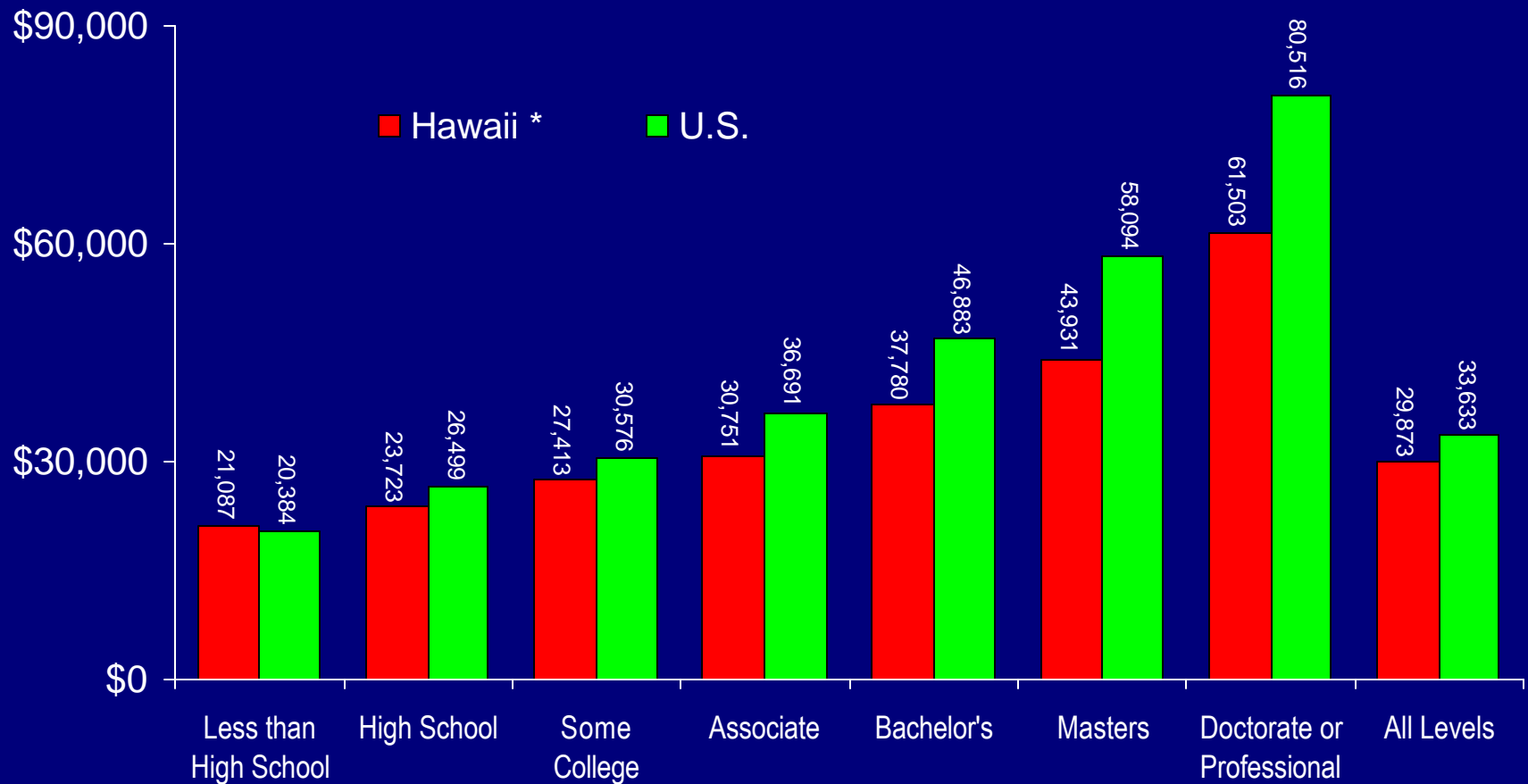


Percent of Total Gross State Product by Industry and Comparison to U.S.



Source: Bureau of Economic Analysis, www.bea.doc.gov

Median Earnings by Education Level for Population Age 18-64, 2005

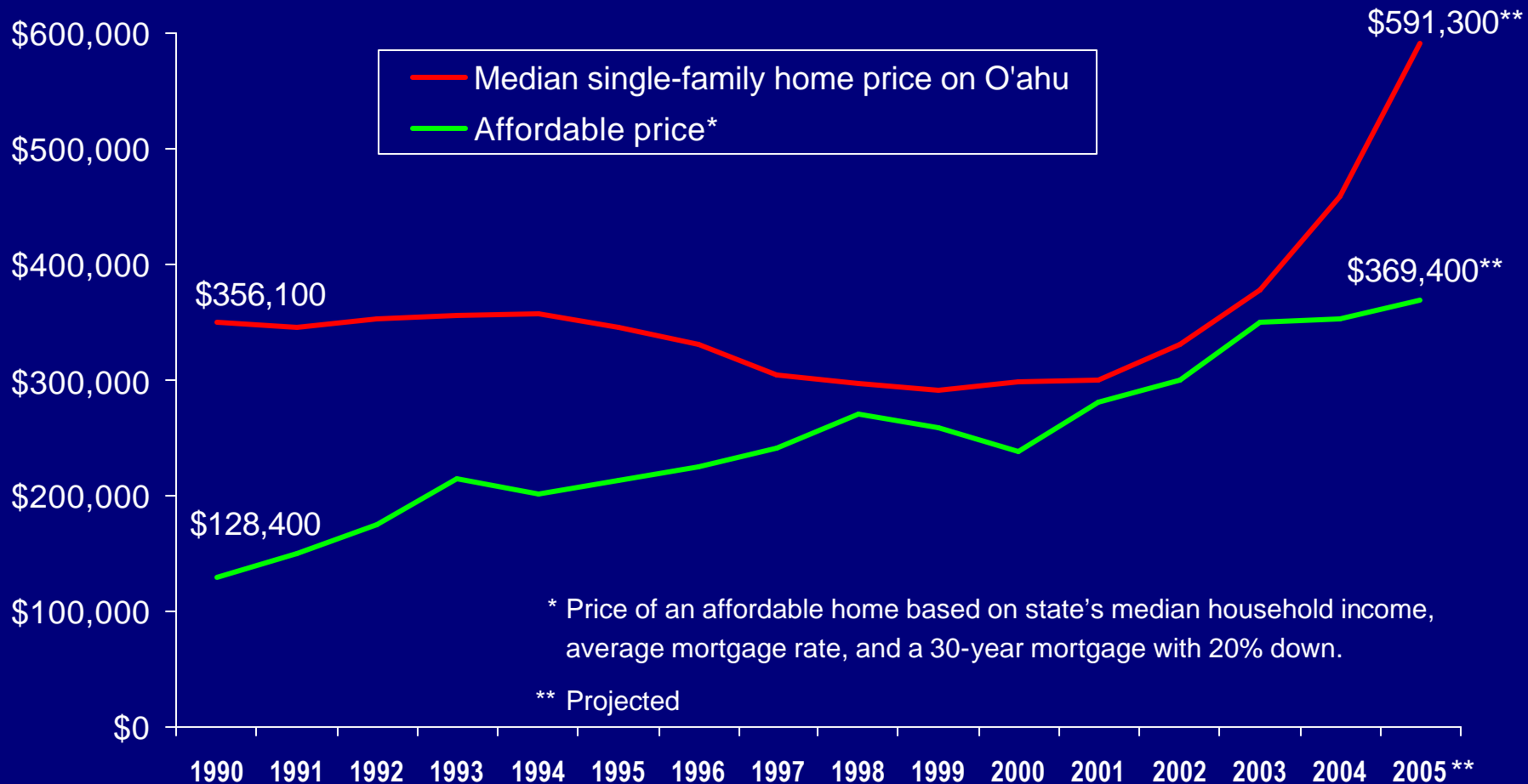


*Hawaii adjusted for cost of living

Source: U.S. Census Bureau, 2005 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File, Berry Cost of Living Index

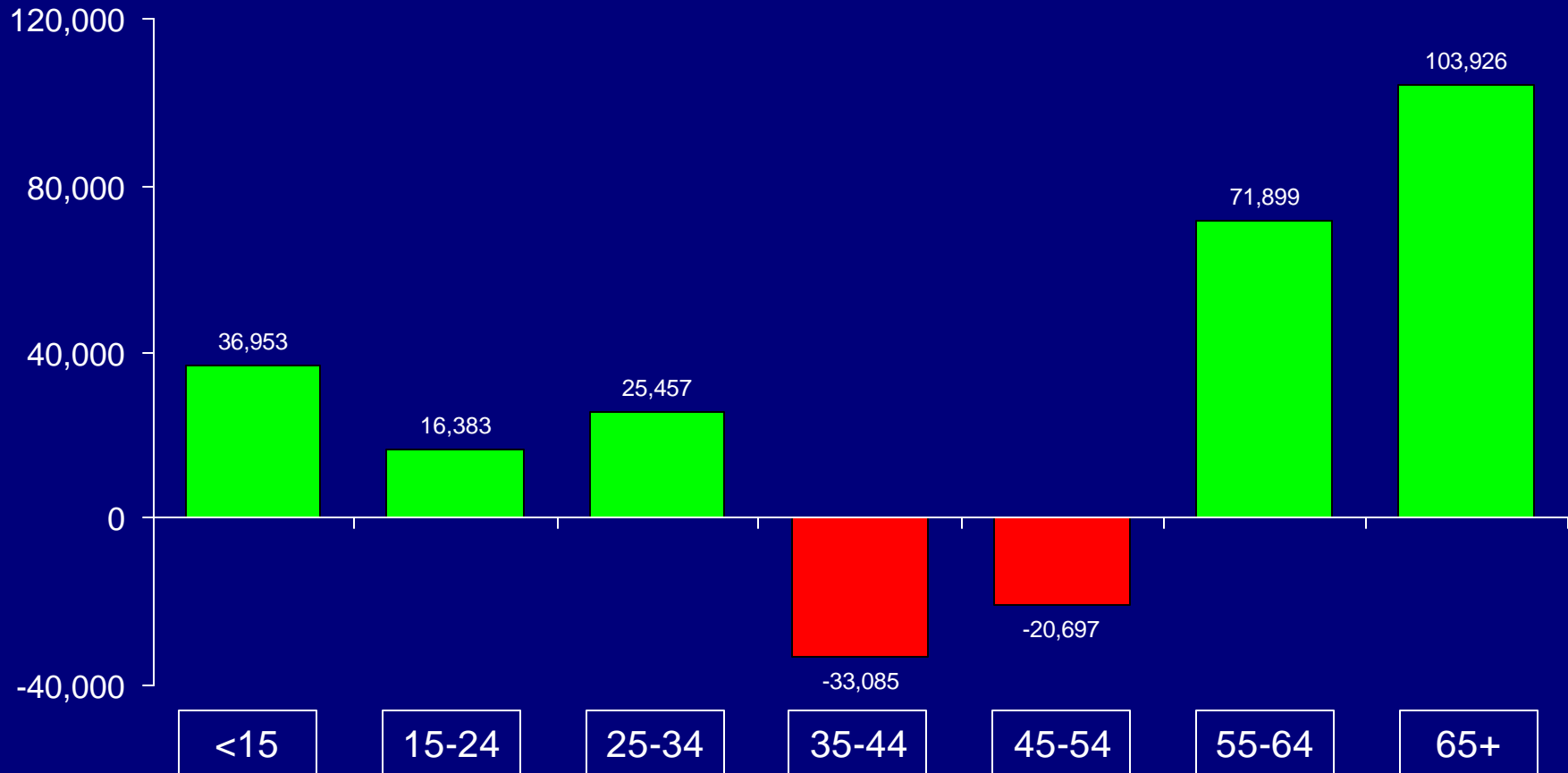
Homes on O'ahu—Beyond Affordable

We can no longer depend on an imported workforce.



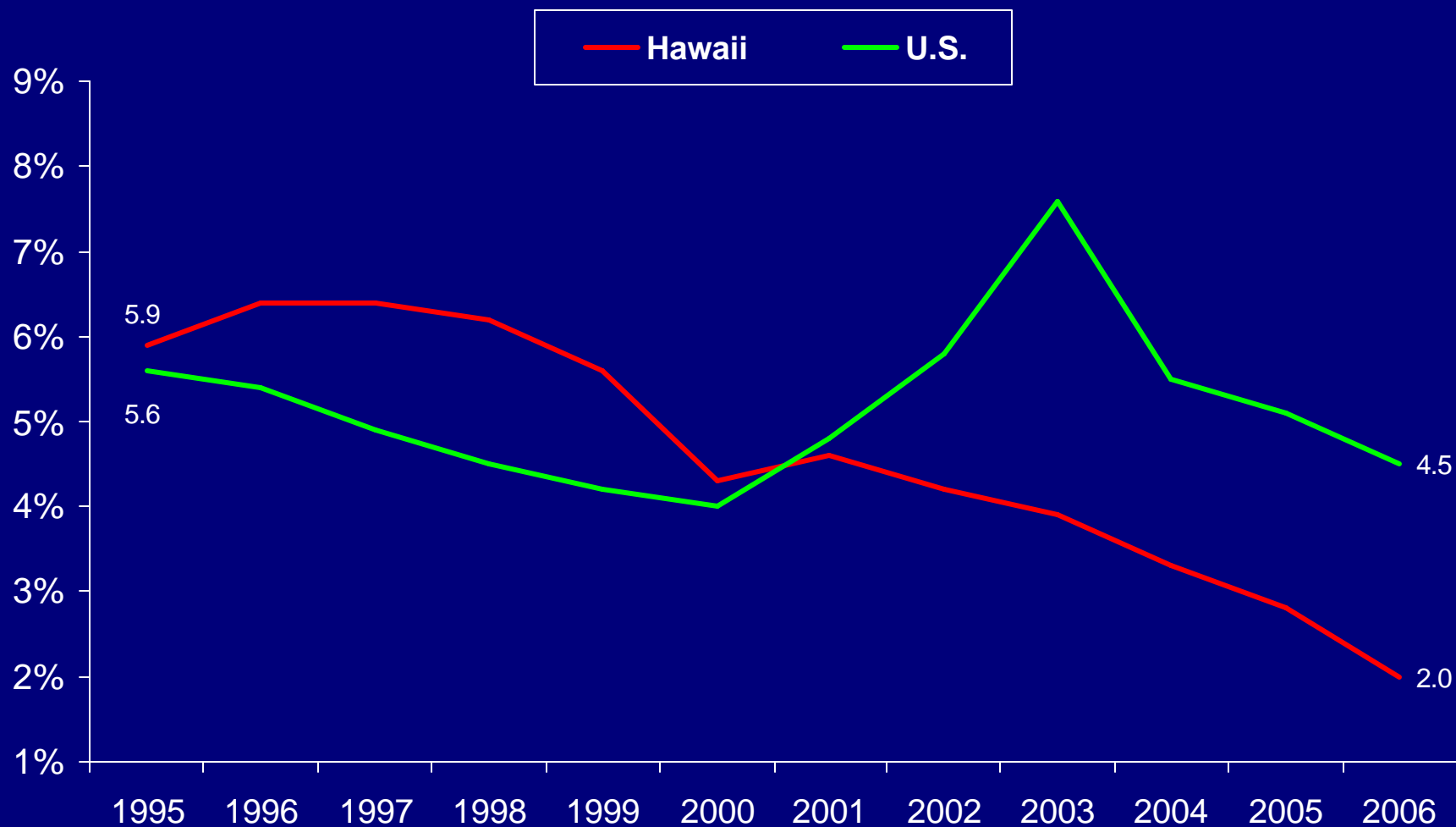
Source: *The Honolulu Advertiser*, University of Hawaii economist Carl Bonham

Projected Change in Population by Age Group, 2000 to 2020



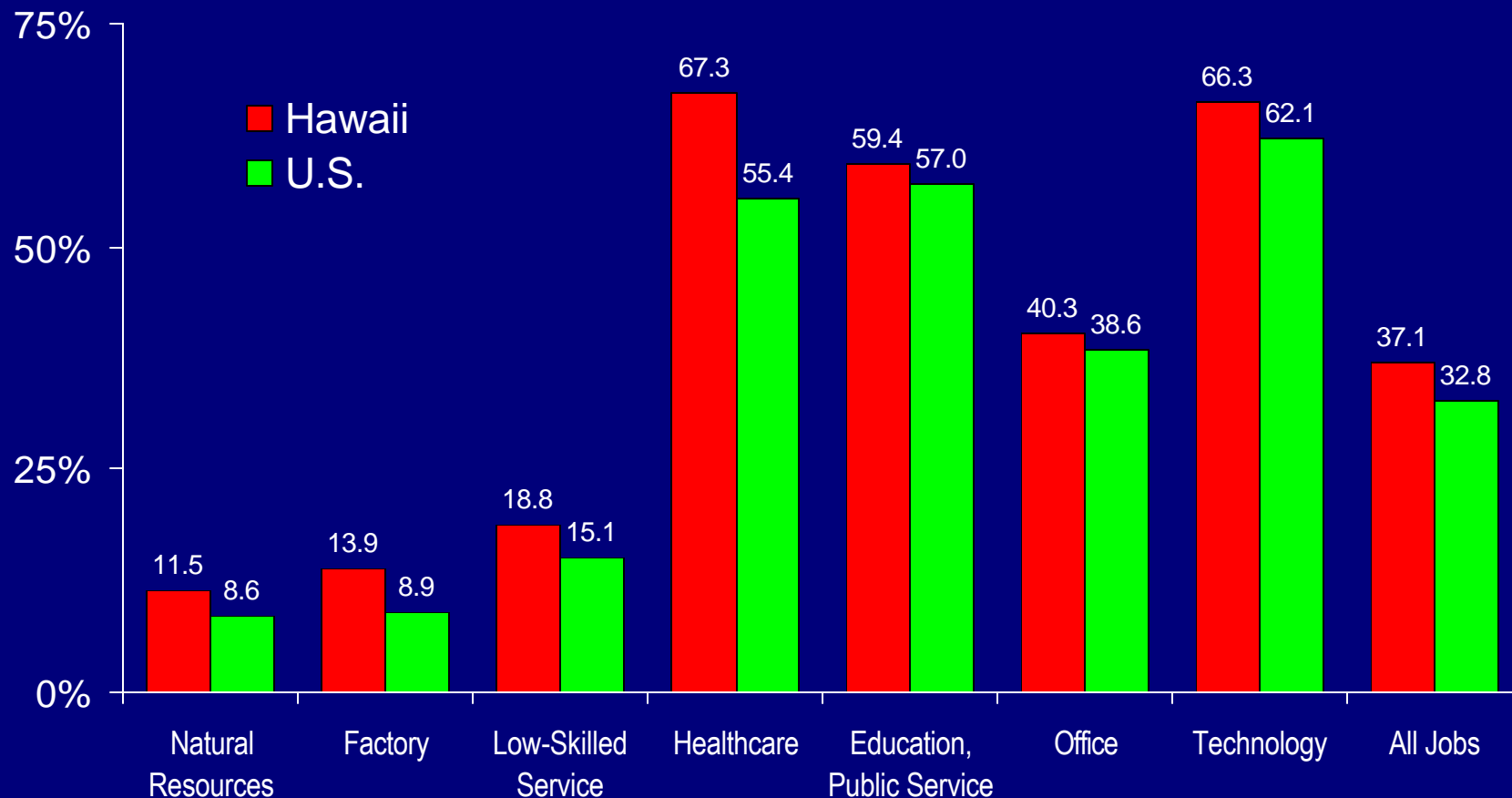
Source: U.S. Census Bureau Population Projections

Unemployment Rates—Hawaii and U.S., 1995-2006



Source: U.S. Bureau of Labor Statistics

Percent of Employees with a College Degree by Job Type, 2000



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

Economic Future of Hawaii

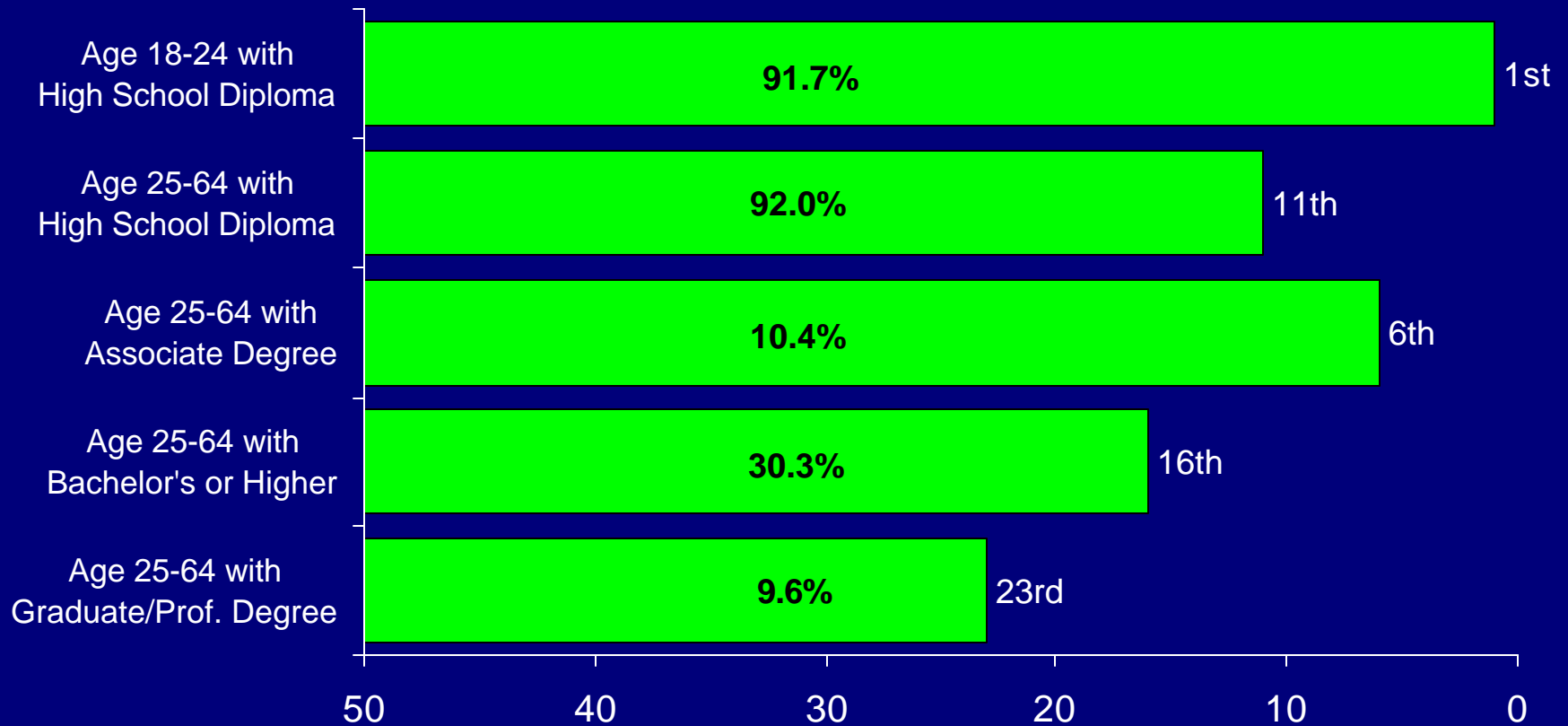
Interviews with Private and Public Sector Leaders Throughout the State Revealed a Common Belief that the Economic Future of Hawaii Depends on:

- | Increasing the Number of High-Wage Jobs—
Expanding and Diversifying the Economy
- | Creating a Skilled Workforce that Can Be
Employed in Such Jobs

Some Key Facts About the State's Workforce

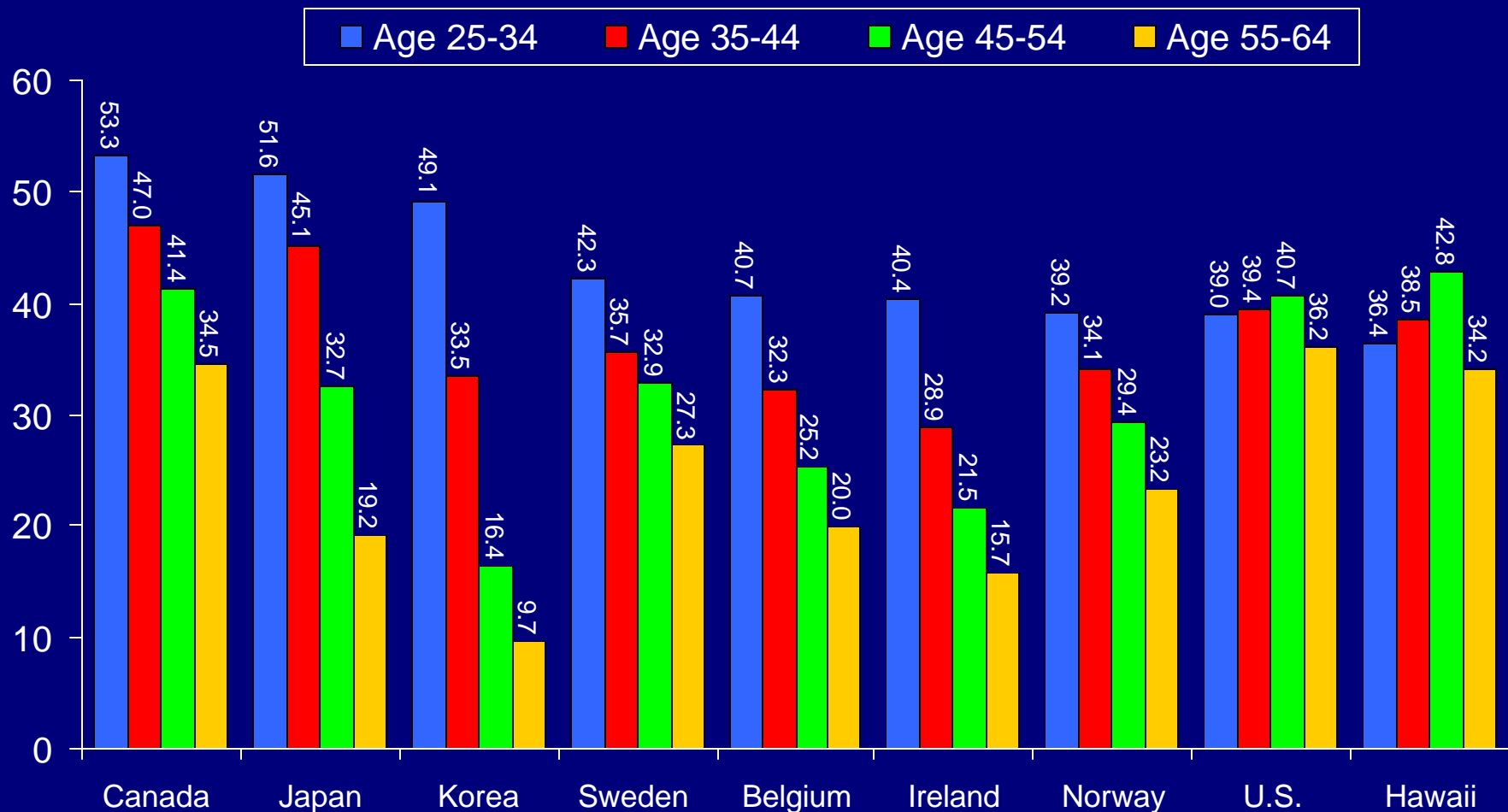
- | Generally High Educational Attainment—But Losing Ground
- | Aging
- | Workforce Participation Is About Average in Spite of Very Low Unemployment Rates—and Varies by:
 - > Region of State
 - > Education Attainment Levels
- | Reliant on In-Migration to Fill Positions in Key Areas and Exporting in Other Key Fields
- | Fewer High School Graduates than Open Positions

Educational Attainment and Rank Among States— Hawaii, 2005



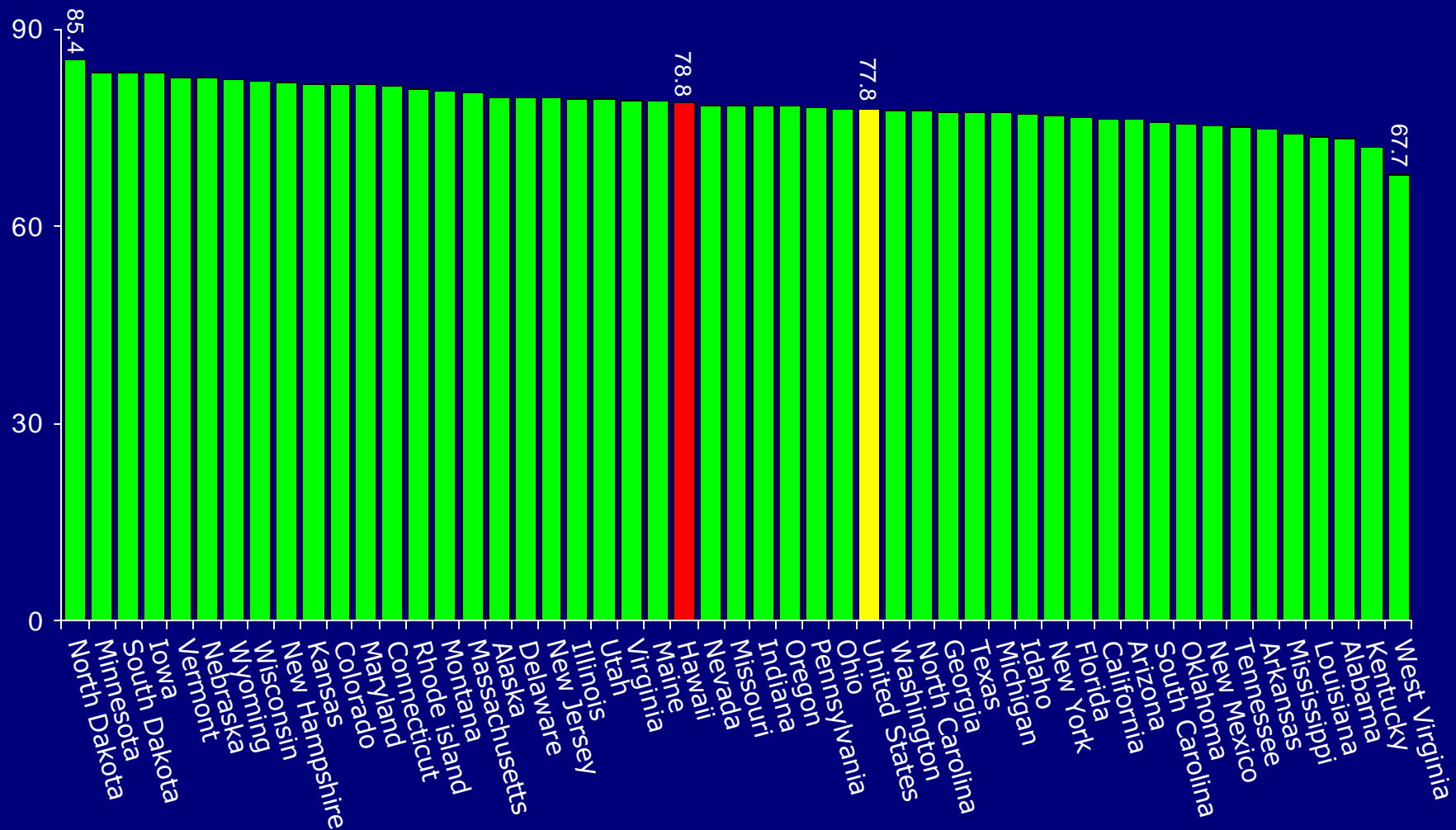
Source: U.S. Census Bureau, 2000 Census

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*

Percent of Civilian Population Age 25-64 Participating in the Workforce, 2005



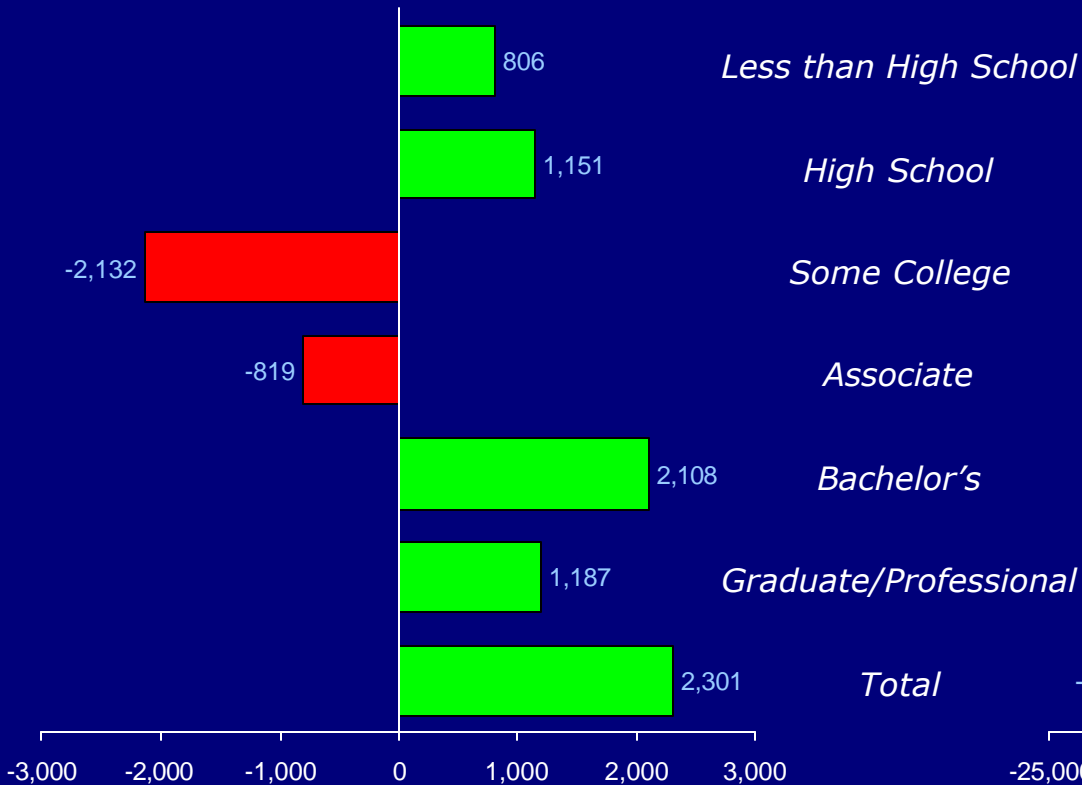
Hawaii Civilians Age 25-64 in the Workforce by Education Attainment, 2005

| | In Civilian Workforce | | Not in Civilian Workforce | |
|---------------------------------|-----------------------|----------------|---------------------------|----------------|
| | <u>Number</u> | <u>Percent</u> | <u>Number</u> | <u>Percent</u> |
| Less than High School | 34,623 | 63.8 | 19,658 | 36.2 |
| High School Diploma or GED | 144,239 | 75.4 | 46,967 | 24.6 |
| Some College, No Degree | 104,974 | 78.1 | 29,469 | 21.9 |
| Associate Degree | 55,994 | 81.1 | 13,074 | 18.9 |
| Bachelor's Degree | 111,765 | 83.9 | 21,485 | 16.1 |
| Graduate or Professional Degree | 53,100 | 84.5 | 9,724 | 15.5 |

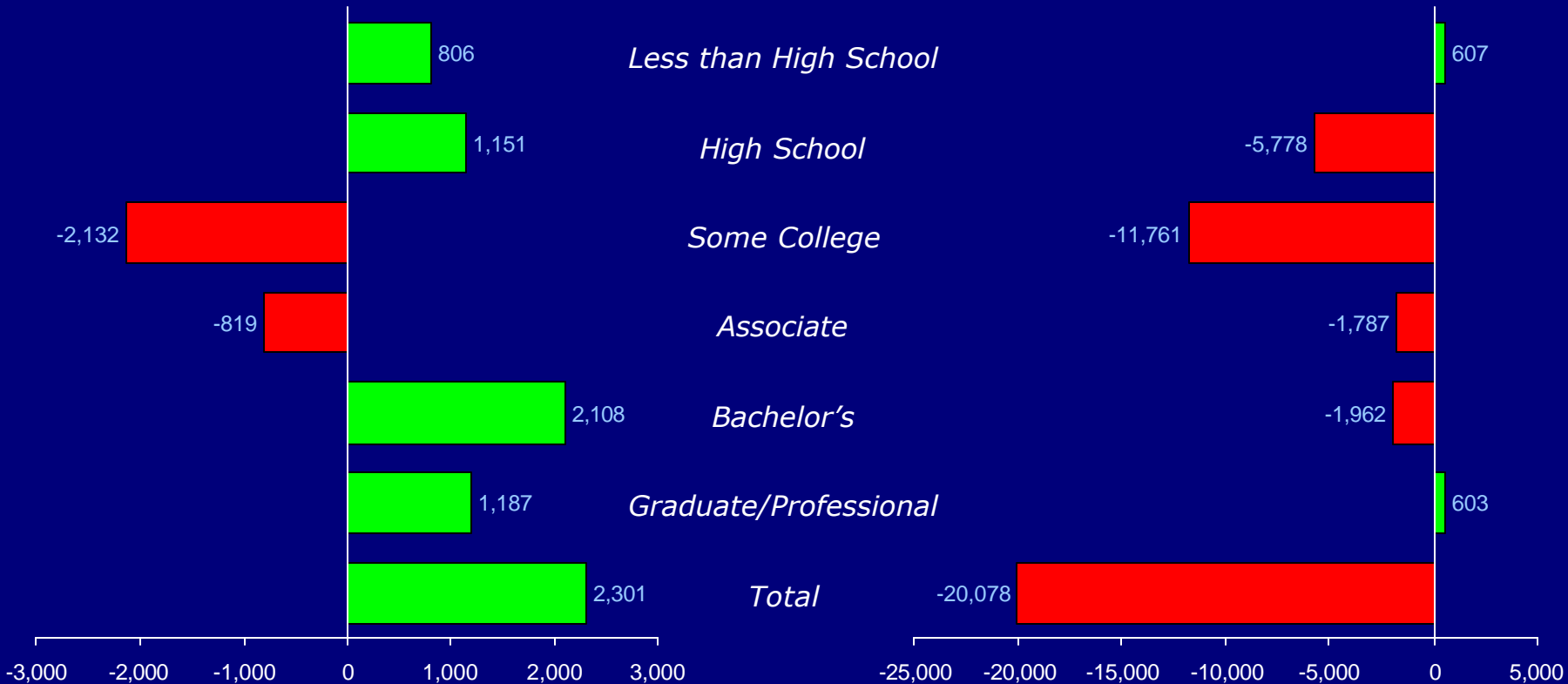
Source: U.S. Census Bureau, 2005 ACS PUMS File

Net Migration by Degree Level and Age Group— Hawaii

22- to 29-Year-Olds



30- to 64-Year-Olds



Source: U.S. Census Bureau, 2000 Census; 5% Public Use Microdata Sample (PUMS) Files

Occupations with High Net Imports and Exports, 1995-2000

22- to 29-Year-Olds with College Degrees



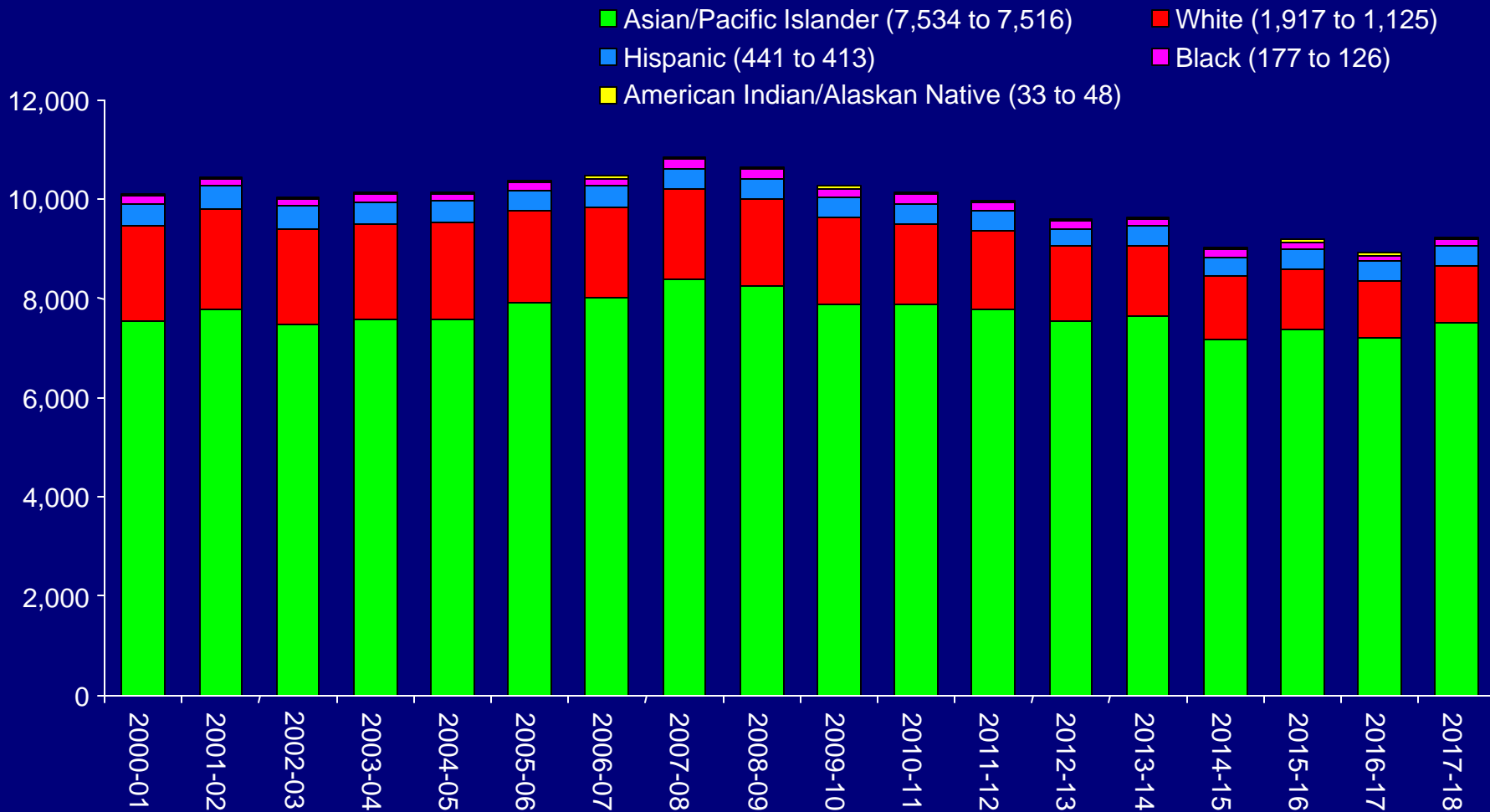
Occupations with High Net Imports and Exports, 1995-2000

30- to 64-Year-Olds with College Degrees



Projections of High School Graduates to 2018

By Race/Ethnicity—Hawaii



Summary—The Good News

- | Relatively Well Educated Workforce in Full Range of Current Employment—Underemployment??
- | Relative High Salaries at All Levels of Education (but not When Adjusted for Cost of Living)
- | There Are Jobs (of Some Sort) for Those Seeking Employment
- | Many States Have Worse Problems than Hawaii

Summary—The Bad News

- | Losing Ground RAPIDLY in Education Attainment
- | Not Producing Enough Graduates to Replenish Retiring Workforce
- | Hawaii Compares Unfavorably to Global Competitors

A Conclusion

In Order for the Economic Circumstances of Hawaii and its Citizens to Be Sustained and Improved, the State Must Simultaneously Address the Twin Challenge of:

- | Workforce Development
- | Workplace Development

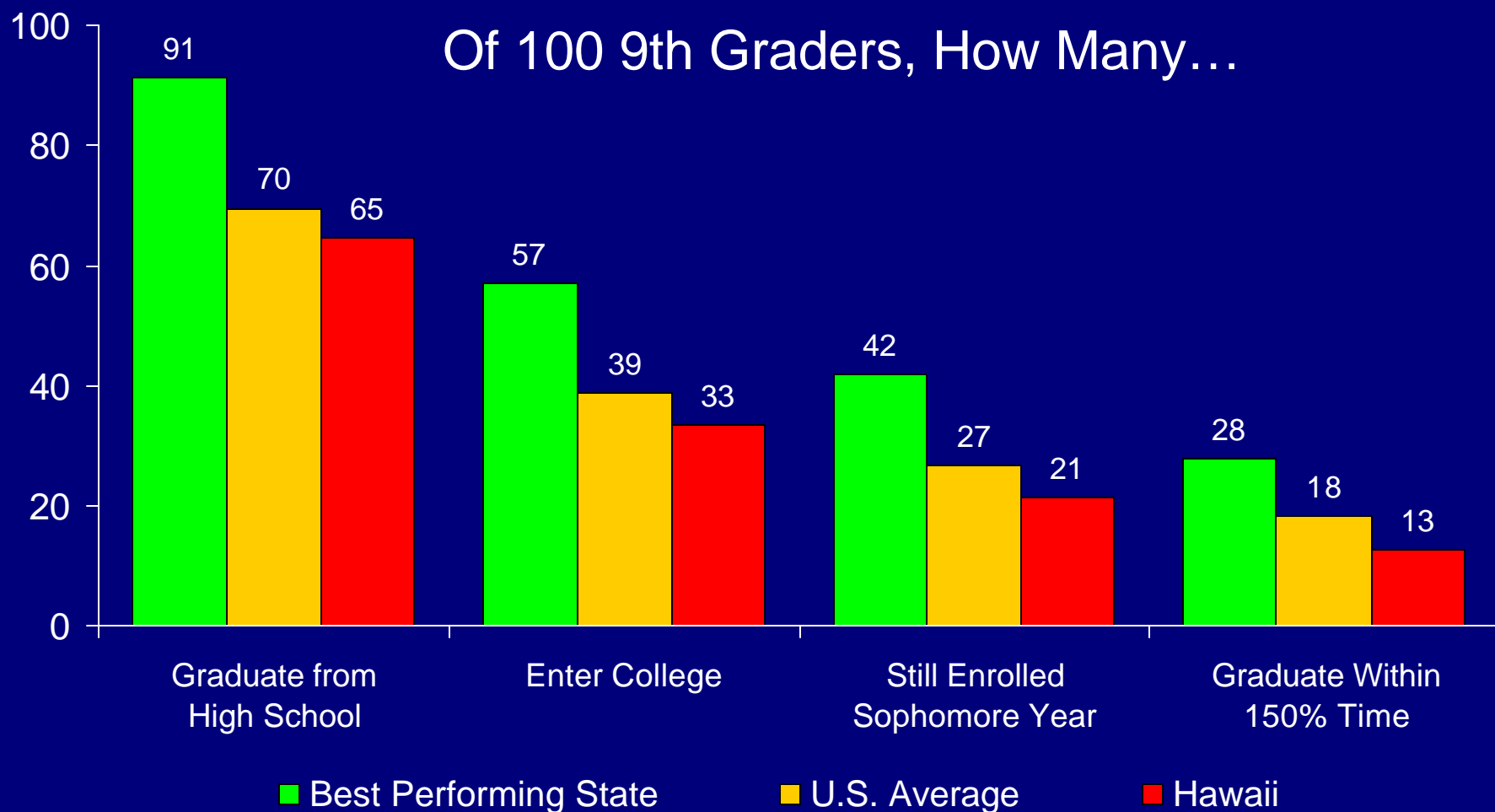
And It Must Effectively Engage the Higher Education System in This Process

Workforce Development— The Education Pipeline

Key Transition Points in the Education Pipeline

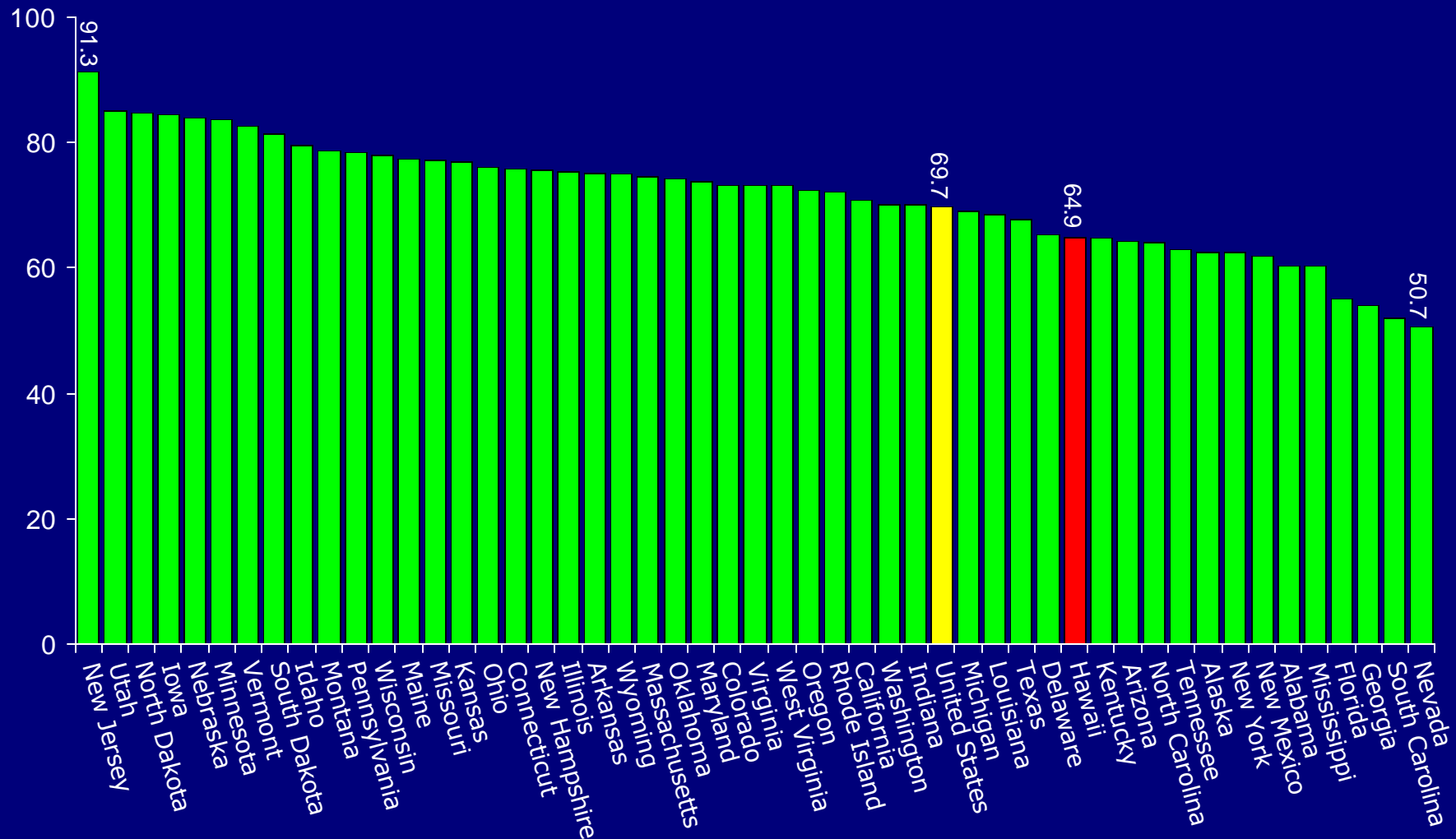
- | Complete High School
- | Enter College
- | Finish College
- | Enter the Workplace

Student Pipeline—Hawaii, 2004



Source: NCES Common Core Data, NCES IPEDS 2004 Residence and Migration Survey, NCEC IPEDS 2004 Fall Enrollment Survey and Graduation Rate Survey

High School Graduation Rates—Public High School Graduates as a Percent of 9th Graders Four Years Earlier, 2004



Source: Tom Mortenson, Postsecondary Opportunity (rev. 071106)

MEASURING UP

2006

THE STATE REPORT CARD ON HIGHER EDUCATION

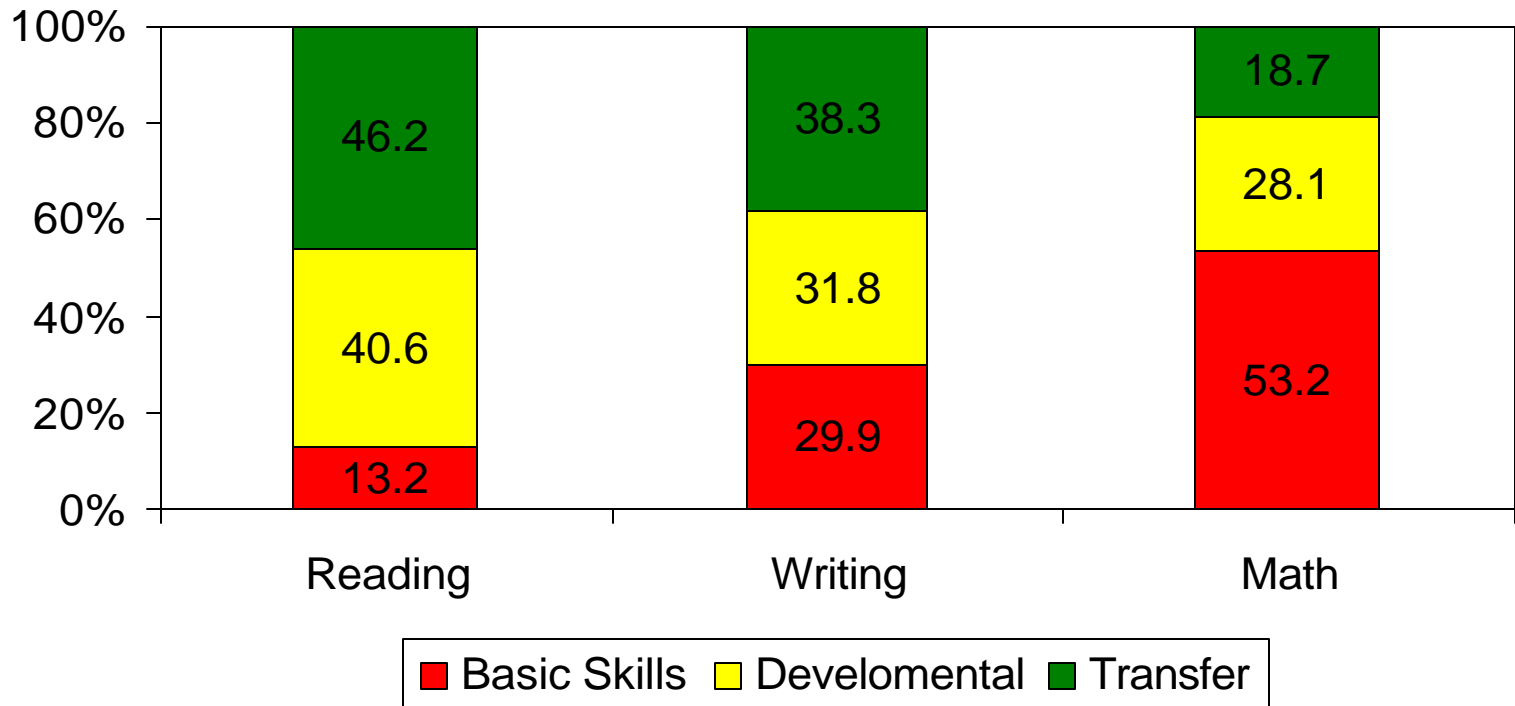
| PREPARATION | HAWAII | | Top States 2006 |
|---|--------|------|-----------------|
| | 1992* | 2006 | |
| High School Completion (20%) | | | |
| 18- to 24-year-olds with a high school credential | 94% | 94%† | 94% |
| K–12 Course Taking (35%) | | | |
| 9th to 12th graders taking at least one upper-level math course | 22% | n/a | 64% |
| 9th to 12th graders taking at least one upper-level science course | 18% | n/a | 40% |
| 8th grade students taking algebra | n/a | n/a | 35% |
| 12th graders taking at least one upper-level math course | n/a | n/a | 66% |
| K–12 Student Achievement (35%) | | | |
| 8th graders scoring at or above “proficient” on the national assessment exam: | | | |
| in math | 14% | 18% | 38% |
| in reading | 19% | 18% | 38% |
| in science | 15% | 15% | 41% |
| in writing | 15% | 18% | 41% |
| Low-income 8th graders scoring at or above “proficient” on the national assessment exam in math | 7% | 7% | 22% |
| Number of scores in the top 20% nationally on SAT/ACT college entrance exam per 1,000 high school graduates | 110 | 153 | 237 |
| Number of scores that are 3 or higher on an Advanced Placement subject test per 1,000 high school juniors and seniors | 92 | 112 | 217 |
| Teacher Quality (10%) | | | |
| 7th to 12th graders taught by teachers with a major in their subject | 58% | 73% | 81% |

*The indicators report data beginning in 1992 or the closest year for which reliable data are available. See the *Technical Guide for Measuring Up 2006*.

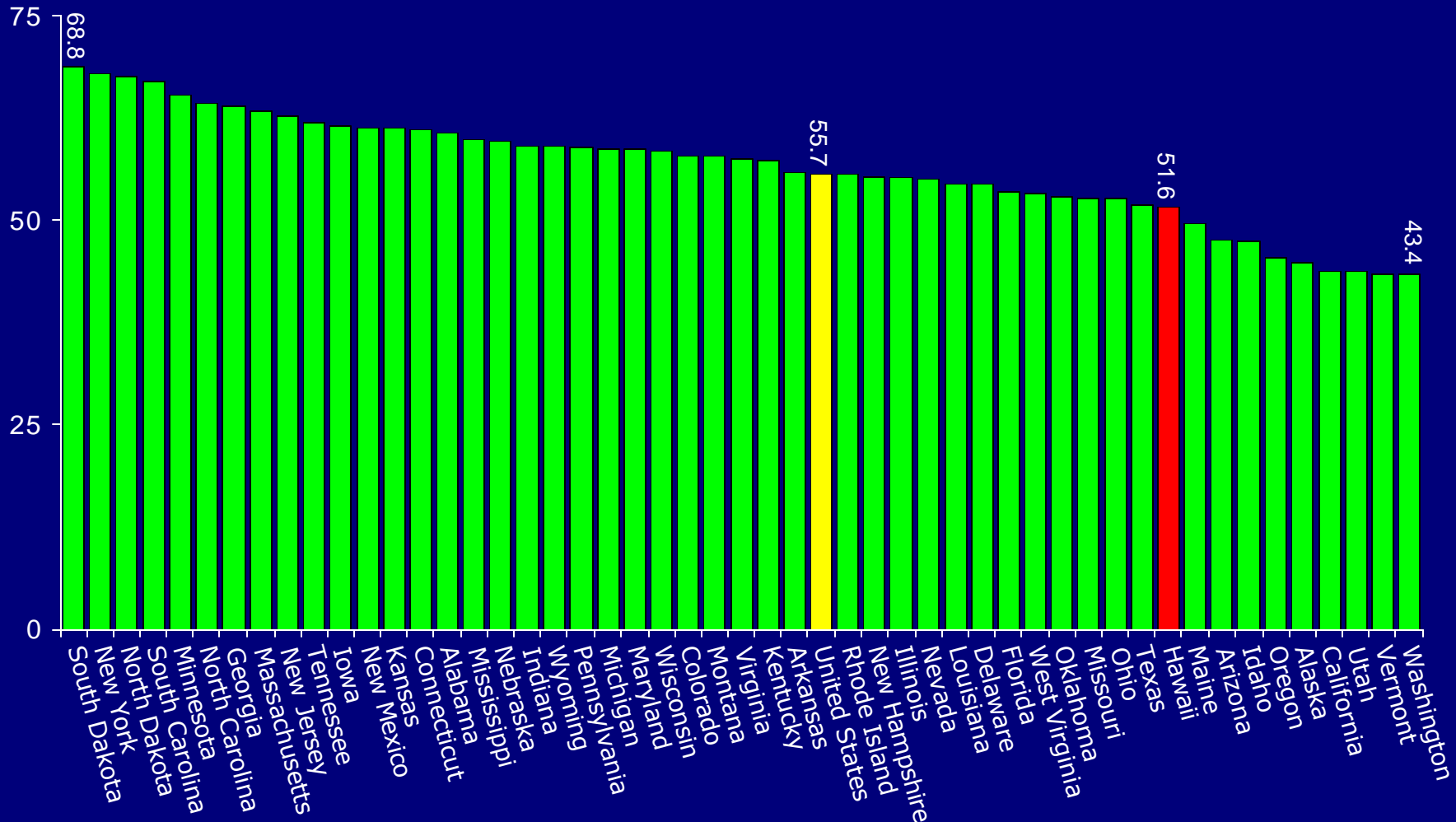
†Ninety percent of 18-24-year-olds have a regular high school diploma; 4% have a GED. The numbers shown for a regular high school diploma and a GED may not exactly equal the number for a high school credential due to rounding.

University of Hawaii Community Colleges—

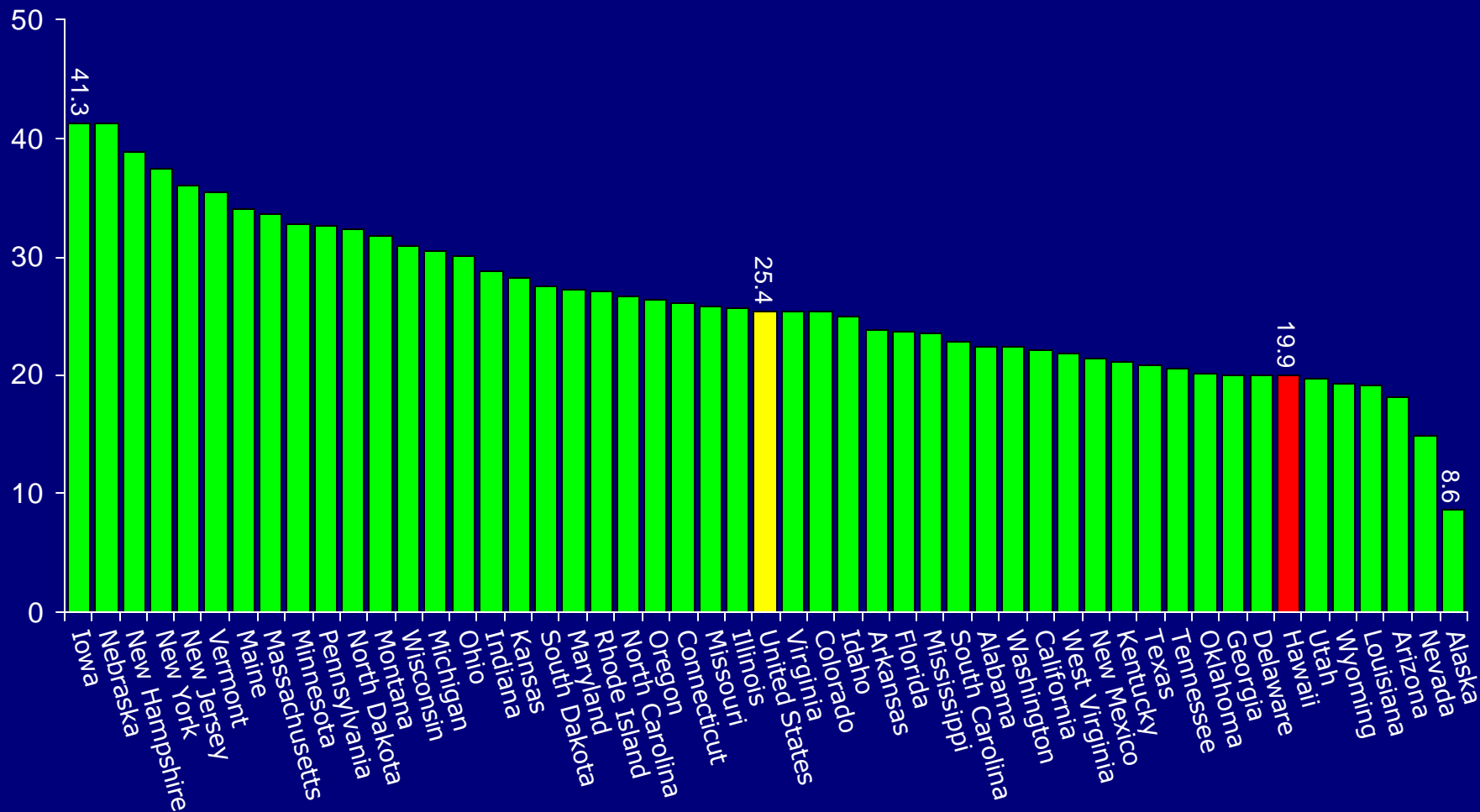
Fall 2006 Recent High School Graduates COMPASS Test Takers



College Going Rates—First-Time Freshmen Directly Out of High School as a Percent of Recent High School Graduates, 2004

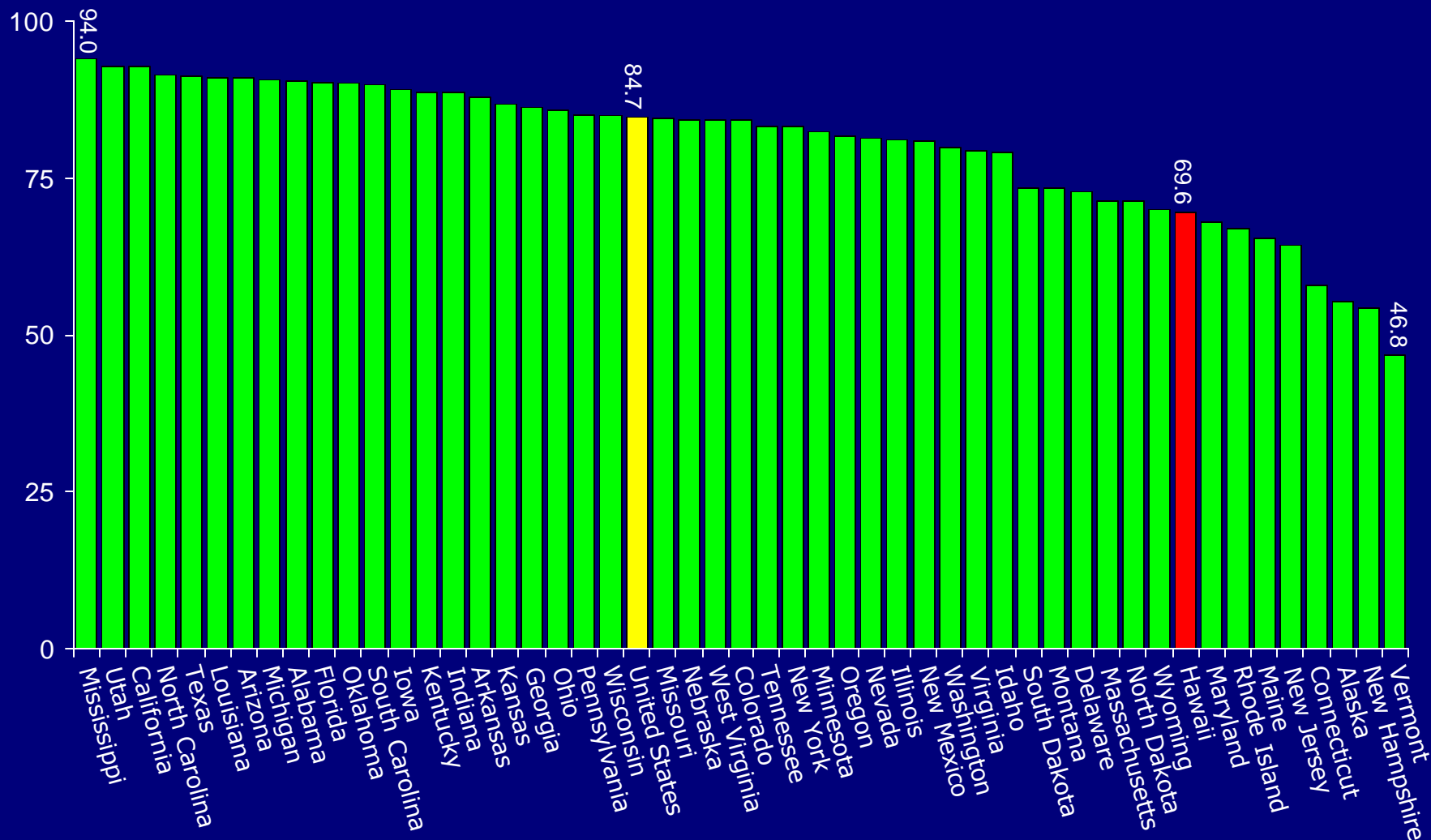


College Participation Rates by State for Students from Low-Income Families, 2005 (Percent)



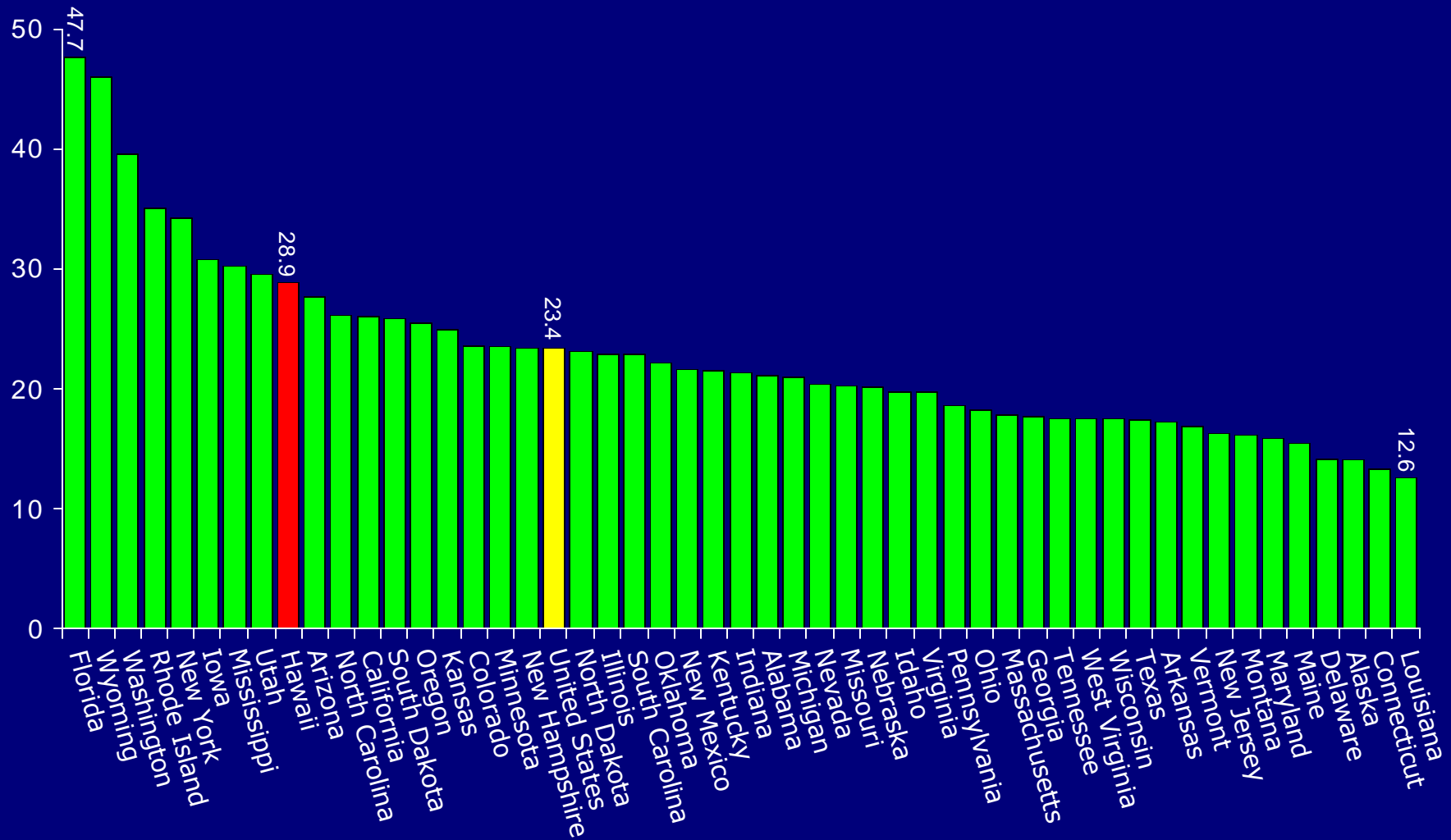
Source: Postsecondary Education Opportunity, 2007

Percent of First-Time Freshmen Who Attend College Within Their Reported State of Residence, Fall 2002



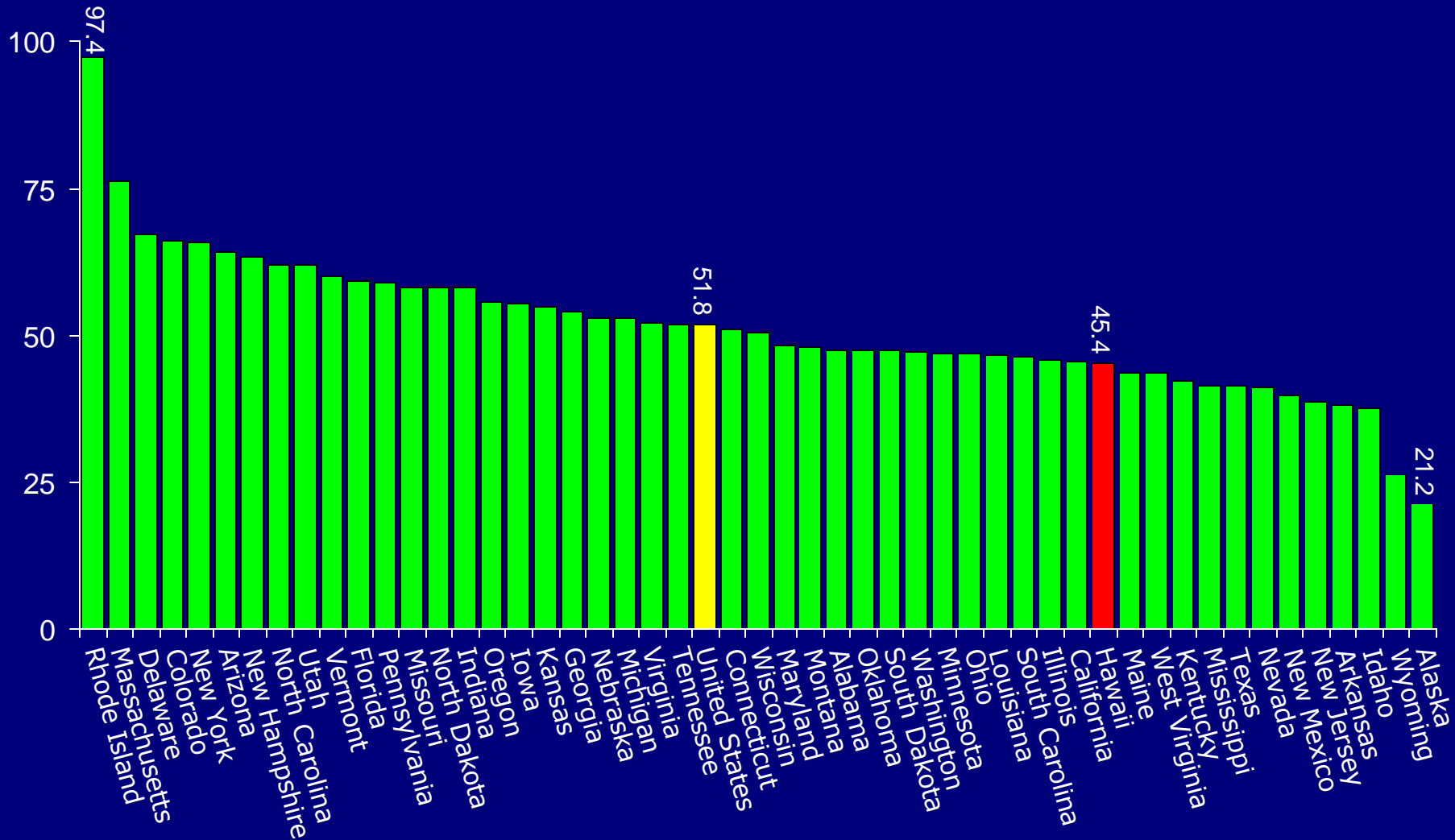
Source: NCES, IPEDS Fall 2002 Residency and Migration File

Associate Degrees Awarded per 100 High School Graduates Three Years Earlier, 2004



Source: NCES-IPEDS Completions Survey, WICHE

Bachelor's Degrees Awarded per 100 High School Graduates Six Years Earlier, 2004



Workplace Development—What Can Be Expected of the Higher Education System?

- | R&D that Leads to Expanded High-Wage Employment
 - > At the University
 - > In Spin-Off Companies
- | Entrepreneurial Training—and the Modeling of Entrepreneurial Behaviors
- | Rapid Response Training for Employers Seeking to Fill Living-Wage Jobs

The Bottom Line

- | Enhance the State's Stock of Human Capital
 - > Improved Competencies of High School Graduates
 - > Increased Skills of Adults with Less than a High School Education
 - > Improve Participation and Graduation Rates of College Students

(continued)

The Bottom Line (continued)

- | Provide Skilled Workers in Critical Need Areas
 - > Nursing/Allied Health
 - > Teachers
 - > Science/Industrial Technologies

- | Help to Expand and Diversify the State's Economy
 - > Technology Transfer
 - > Rapid Response to Employer's Training Needs

Address These Issues
as Appropriate in
All Parts of the State

Relative Need for Postsecondary Education/ Training by Region

| | East | Cent | 'Ewa | Wai | N Sh | Win | E HI | W HI | Mau | Kau |
|------------------------------------|------|------|------|-----|------|-----|------|------|-----|-----|
| Population Growth (Numbers) | H | M | VH | L | L | L | M | M | H | M |
| Population Growth (Percent) | L | L | VH | L | L | L | M | M | H | M |
| Projected HS Graduates (Average %) | M | M | VH | H | L | L | L | H | L | L |
| Income | L | M | H | VH | VH | M | VH | M | M | H |
| Workforce Participation (%) | H | H | M | H | VH | H | H | L | L | M |
| Education Attainment (<HS Diploma) | L | M | M | H | L | L | H | VH | H | H |
| Education Attainment (HS Diploma) | L | L | M | VH | H | M | M | M | M | M |
| Education Attainment (Bachelor's) | L | L | M | VH | H | L | M | M | M | M |
| Going Rates (2-Yr) | H | L | M | H | H | M | H | VH | H | L |
| Going Rates (4-Yr) | L | M | VH | VH | VH | VH | M | H | VH | VH |
| Skilled Workforce Needs | VH | VH | VH | VH | VH | VH | VH | VH | VH | VH |
| RELATIVE NEED | 31 | 31 | 55 | 57 | 47 | 33 | 45 | 49 | 43 | 41 |

VH = Very High

H = High

M = Medium

L = Low

Key Short-Term Initiatives

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

(continued)

Key Short-Term Initiatives (continued)

- | Expand Degree Production in Key Areas
 - > Nursing/Health Sciences
 - > Teacher Education
 - > Computer Science (Oriented to Engineering Applications)
 - > Science/Industrial Technologies
- | Create and Sustain a Rapid Response Capability
- | Enhance Educational Programs and Support Systems for Entrepreneurs
- | Promote Technology Transfer

The Policy Environment

Create a Policy Environment that Encourages Pursuit of These Initiatives—Realizing that the Policy Environment You Have Yields the Results You're Getting.

- | Formally Adopt a Set of Goals that Is Agreed to by Executive and Legislative Branches and UHS—a Compact
- | Develop an Agreed-Upon Set of Accountability Measures by Which Progress Toward Goal Achievement Can Be Monitored

(continued)

The Policy Environment (continued)

- | Create New Funding Relationship Between the State and UHS
 - > Eliminate Line Items (focus on What to do, not How to do)
 - > Calibrate Funding Against External Benchmarks
 - > Align Investment Funds Explicitly with Items Identified in the “Compact”

- | Conduct a More Detailed “Policy Audit” to Identify Policies/Procedures that Create Barriers to Pursuit of the Agreed-Upon Public Agenda

An Action Agenda

Accomplishment of the Objectives Identified Will Require Action on the Part of All Parties.

Executive Branch

- | Join with Legislature and UHS in Developing and Ratifying a Compact and Associated Accountability Measures
- | Promulgate the List of Priorities to All Appropriate Executive Branch Agencies—Use the Bully Pulpit
- | Support K-20 Initiatives Focused on Alignment
- | Establish a Policy Leadership Focus for Adult/Workplace Literacy Education
- | Submit a Higher Education Budget Aligned with Priorities

(continued)

An Action Agenda (continued)

Legislative Branch

- | Join with Executive Branch and UHS in Developing and Ratifying a Compact and Associated Accountability Measures

- | Develop a New Approach to Allocation of Resources to UHS
 - > Allocation Based on Core Funding and Investment in Priorities
 - > Autonomy with Accountability

- | Establish Expectations Concerning Delivery of:
 - > Long-Range Financing Plan for Higher Education
 - > A Policy Audit

(continued)

An Action Agenda (continued)

UHS

- | Join with Executive and Legislative Branches in Developing and Ratifying a Compact and Associated Accountability Measures
- | Pursue the Priority Items Identified
- | Take the Leadership in Proposing a Long-Range Financing Plan for Higher Education for Submission to Executive and Legislative Branches
- | Take the Leadership in Conducting a Policy Audit

(continued)

An Action Agenda (continued)

Private Sector

- | “Pull” Improvements in Education Attainment/Learning
 - > Require Employees Lacking Basic Skills to Engage in Workplace Literacy Training
 - > Screen New Employees for Requisite Skills
 - > Require High School Students Who Are Employed to Take a Rigorous (SSI) Curriculum and Make Satisfactory Academic Progress as a Condition of Employment
- | Support a Publicly Funded Venture Capital Fund
- | Support the Public Agenda—Push Government and Education Leaders to Adopt and Sustain the Recommendations Made for Their Action



NATIONAL
CONFERENCE OF
STATE
LEGISLATURES

A Framework for Higher Education
Reform

Recommendations of the NCSL Blue Ribbon
Commission on Higher Education

Legislator Roles and Responsibilities

- | Budgets and Appropriations
- | Goals and Expectations for Higher Education
- | Higher Education as a Legislative Priority
- | Legislative Leadership

Recommendations

- | Define Clear State Goals—A Public Agenda for Higher Education
- | Identify Your State Strengths and Weaknesses
- | Know Your Demographic Trends for Next 10-30 Years
- | Identify a Place to Sustain the Public Agenda
- | Hold Institutions Accountable

(continued)

Recommendations (continued)

- | Rethink Funding
 - > Link Appropriations, Tuition and Financial Aid Policy
 - > Be Results/Performance Oriented in Funding
 - > Focus on Productivity
- | Recommit to Affordability
 - > Help Reduce Borrowing and Debt
 - > Rethink Student Aid
- | Recommit to Access
- | Recommit to Success

(continued)

Recommendations (continued)

- | Don't Forget About Adult Learners
- | Embrace Innovation
- | Transform the 12th Grade
- | Build Partnerships with K-12
- | Build Partnerships with Business