

BOARD OF REGENTS, STATE OF IOWA  
STRATEGIC PLANNING WORKSHOP SCHEDULE  
Monday, February 2, 2009  
Courtyard by Marriott – Ankeny, Iowa

8:00 – 8:15 AM	Continental Breakfast
8:15 – 8:30	Welcome by and brief purpose of Strategic Planning Workshop by President David Miles and introduction of Regents
8:30 – 8:40	Comments by Governor (invited)
8:40 – 9:00	Introduction of participants
9:00 – 9:05	Introduction of Facilitator – Dennis Jones – by President Miles
9:05 – 10:00	Recap of key environmental data by Mr. Jones
10:00 – 10:15	Short break
10:15 – 11:00	Large group discussion led by Mr. Jones What are the expectations of stakeholders regarding their workforce and the Regent Enterprise? What's working? What's not working?
11:00 – 11:45	Large group discussion of all strategic issues led by Mr. Jones Closing the educational attainment gap Financing higher education/affordability Demographic challenges and opportunities Role of the Regent Enterprise in economic development
11:45 – 12:00 PM	Wrap up by President Miles
12:00 – 12:45	Lunch
12:45 – 1:00	Convene in separate room for afternoon session
1:00 – 2:30	Mr. Jones reviews key goals/priorities of other BOR/governing board strategic plans
2:30 – 2:45	Short break
2:45 – 4:15	Continued group discussion on key priorities and strategies Make list of key priorities Rank order key priorities Arrive at consensus of key priorities for Board strategic plan
4:15 – 4:30	Wrap-up by Mr. Jones and discussion of next steps by President Miles and Executive Director Bob Donley

**Board of Regents, State of Iowa  
2004-09 Strategic Plan**

**Mission**

***What we do today***

Serving the people of Iowa, the Board of Regents

- Governs and coordinates the activities of Iowa's three public universities and two special schools;
- Advocates for and exercises responsible stewardship of resources;
- Engages capable presidents and superintendents to ensure that the institutions apply knowledge to benefit Iowans;
- Communicates the positive impact and value of the Regent institutions to the state, its citizens and society.

The Board expects the Regent institutions, in accordance with their respective missions, to

- Provide a high-quality accessible education to all students in concert with Iowa's other educational entities;
- Engage in high-quality research, scholarship, and creative activities to enhance the quality of life for Iowans and society in general;
- Provide needed public services;
- Support economic development in partnership with public and private sectors.

**Vision**

***The aspirations we pursue***

The Board of Regents, State of Iowa, expects its public education enterprise to become the best in the United States.

The Board of Regents will become the nation's higher education leader by developing the best educated state in the nation, by creating new knowledge that demonstrably improves the quality of life for Iowans, and by employing the resources of the Regent institutions to serve the needs of Iowa, its citizens, and the world.

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**Values**

***The ideals we uphold***

The Board of Regents, State of Iowa, is committed to:

- intellectual development and creativity;
- academic freedom
- academic quality and access
- civility
- honesty, integrity, and fairness
- ethical behavior
- collaboration
- continuous improvement
- diversity among faculty, staff, and students
- open, effective communication
- public accountability, stewardship and service

**Culture Statement**

***How we do things***

The Board of Regents, State of Iowa, and its institutions nurture cultures, consistent with their values, that are characterized by the following:

- A passion for learning that enables individuals to achieve their full potential and enhances quality of life
- Academic freedom that stimulates creativity, inquiry, and the advancement of knowledge
- Leadership in demonstrating the highest levels of integrity, honesty, ethics, and civil discourse in all activities
- Collaboration and coordination across the Regent enterprise and with other institutions and organizations, both public and private, to meet the needs of Iowans
- A commitment to Iowans, our students, and our employees to seek continuous improvement in applying knowledge, using resources, and responding to needs and opportunities
- Respectful interaction among members of diverse backgrounds, cultures, and beliefs in nurturing environments that promote critical thinking, free inquiry, open communication, and broad participation
- Effective communications that inform citizens of the roles, value and impact of the Board and its institutions
- Governance that demonstrates effective, accountable service to the public through strategic planning, hiring of and delegation to presidents and superintendents, responsible oversight, and effective stewardship of resources

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**Priorities, Objectives, Strategies, and Indicators**

The Board of Regents, State of Iowa, and its institutions serve Iowa, its citizens, and the world by being a recognized leader in these four priorities:

- 1.0. Ensure high-quality educational opportunities for students.
- 2.0. Discover new knowledge through research, scholarship, and creative activities.
- 3.0. Provide needed service and promote economic growth.
- 4.0. Demonstrate public accountability and effective stewardship of resources.

The Board of Regents has identified four sets of objectives that set its course for accomplishing the four priorities. The Board has also defined strategies for meeting these objectives. The success of the plan will be measured by progress in performance indicators or completion of appropriate action steps for each strategy.

Strategies, indicators, and action steps that fulfill more than one priority or objective appear more than once in the strategic plan.

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## **1.0. Educational Opportunities**

*The Board expects the Regent institutions, in accordance with their respective missions, to:*

- 1.1. Offer high-quality programs through ongoing program improvement for undergraduate, graduate, professional, and non-degree students and special school students.**
  - 1.1.1. Utilize continuing quality improvement processes for all academic programs.
    - 1.1.1.1. *Review of all academic programs at least once every seven years, including assessment of student outcomes*
    - 1.1.1.2. *Average undergraduate class size and faculty-to-student ratio*
    - 1.1.1.3. *Percent of undergraduate student credit hours taught by tenured/tenure-track/clinical faculty and lecturers*
  - 1.1.2. Continue to improve efforts to recruit, enroll, and retain a qualified and diverse student population.
    - 1.1.2.1. *Qualifications of new freshmen (e.g., ACT score, high school rank)*
    - 1.1.2.2. *Profile of undergraduate, graduate, and professional student populations by race, ethnicity, gender, disability, and socioeconomic status*
    - 1.1.2.3. *Total financial aid awarded to resident and nonresident undergraduate and graduate/professional students; number and percentage of resident and nonresident undergraduate and graduate/professional students receiving financial aid (1.2.2.1.)*

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- 1.1.2.4. *Retention rates of students by race, ethnicity, gender, disability, and socioeconomic status*
- 1.1.2.5. *Development and implementation of an instrument to assess campus climate related to achieving the educational benefits from having a diverse campus community (1.1.3.4.)*
- 1.1.3. Expand educational experiences for Iowa's future workforce and foster cultural understanding by recruiting and retaining a highly qualified and diverse faculty, staff, and administration.
  - 1.1.3.1. *Profile of faculty, staff, and administrators by race, ethnicity, gender, and disability, and ratio of tenured to non-tenured faculty by college or school*
  - 1.1.3.2. *Retention and tenure rates of faculty by race, ethnicity, gender, and disability*
  - 1.1.3.3. *Faculty and staff salaries as compared to peer institutions*
  - 1.1.3.4. *Development and implementation of an instrument to assess campus climate related to achieving the educational benefits from having a diverse campus community (1.1.2.5.)*
  - 1.1.3.5. *Percent of special school teachers and staff participating in professional development in collaboration with higher education programs (2.1.1.3.)*
- 1.1.4. Provide special school students with skills for lifelong learning and community participation.
  - 1.1.4.1. *Percent of Individual Education Program goals met and progress made, including diploma attainment, as appropriate*
  - 1.1.4.2. *Amount and type of services provided by special school personnel to off-campus students who are blind, visually impaired, deaf, and/or hard of hearing*
  - 1.1.4.3. *Development and implementation of an assessment instrument that tracks special school students' participation in extracurricular and community life activities*

**1.2. Facilitate student access and transitions to the Regent universities.**

- 1.2.1. Monitor and enhance opportunities for qualified Iowans to access postsecondary education.
  - 1.2.1.1. *Percentage of eligible Iowa high school seniors and community college students who apply for admission to the Regent universities and enroll*
  - 1.2.1.2. *Headcount enrollment in credit and non-credit courses offered through distance education and off-campus instruction in Iowa (1.3.2.1.)*
  - 1.2.1.3. *Number of courses and programs offered via distance learning (1.3.2.2.)*

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- 1.2.2. Continue efforts to maintain and enhance affordability of the Regent universities.
  - 1.2.2.1. *Total financial aid awarded to resident and nonresident undergraduate and graduate/professional students; number and percentage of resident and nonresident undergraduate and graduate/professional students receiving financial aid (1.1.2.3.)*
  - 1.2.2.2. *Number of students demonstrating financial need who receive tuition set-aside aid*
  - 1.2.2.3. *Tuition and fees as a percentage of Iowa's per capita income, compared to surrounding states, peer institution states, and the national average*
  - 1.2.2.4. *Comparative analyses of tuition and fees of Board-established peer groups of the Regent universities*
  
- 1.2.3. Collaborate with other education sectors to inform potential students about the preparatory work required to enroll in the Regent universities.
  - 1.2.3.1. *Profile of core/non-core courses taken by Iowa high school students who take the ACT*
  - 1.2.3.2. *Significant collaborative efforts of the Regent institutions with K-12 and community colleges*
  
- 1.2.4. Ease Iowans' access to opportunities of the Regent institutions through enhanced customer service and communication, and clear and simplified admission processes.
  - 1.2.4.1. *Assessment of undergraduate application processes to ensure seamless transitions to the Regent universities from other education sectors*
  - 1.2.4.2. *Creation of an online "gateway" among the Regent institutions, Iowa community colleges, and the Iowa Department of Education, and number of hits on the site*
  
- 1.3. Provide educational experiences that enhance the knowledge, abilities, opportunities, and personal incomes of individual Iowans through educational attainment.**
  - 1.3.1. Determine levels of student program completion and promote degree attainment.
    - 1.3.1.1. *Undergraduate student four-year and six-year enterprise graduation rates*
    - 1.3.1.2. *Undergraduate student length of time to degree*
    - 1.3.1.3. *Undergraduate post-graduation status*
    - 1.3.1.4. *Annual survey of reasons students withdraw from the Regent universities prior to graduation*

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1.3.2. Maintain and create opportunities for distance learning.

1.3.2.1. *Headcount enrollment in credit and non-credit courses offered through distance education and off-campus instruction in Iowa (1.2.1.2.)*

1.3.2.2. *Number of courses and programs offered via distance learning (1.2.1.3.)*

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## **2.0. Research and Scholarship**

*The Board expects the Regent institutions, in accordance with their respective missions, to:*

### **2.1. Support and increase research, scholarship, and creative activities at the Regent institutions to serve the needs of Iowa and its citizens.**

2.1.1. Continue efforts to increase the quantity and quality of research, scholarship, and creative activities.

2.1.1.1. *Development of specific measures of scholarly productivity*

2.1.1.2. *Library system ranking*

2.1.1.3. *Percent of special school teachers and staff participating in professional development in collaboration with higher education programs (1.1.3.5.)*

### **2.2. Create and pursue opportunities to widely disseminate knowledge to other sectors to enhance applications, including those that stimulate economic growth in Iowa.**

2.2.1. Stimulate commercial application of knowledge and creation of jobs in Iowa through business and technology incubation, relationships with external partners, and services for businesses, entrepreneurs, and communities statewide.

2.2.1.1. *Periodic reports by the Regent institutions on efforts to encourage, support, and/or fund faculty and staff entrepreneurship and outreach to Iowa businesses*

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## **3.0. Service and Economic Growth**

*The Board expects the Regent institutions, in accordance with their respective missions, to:*

### **3.1. Attract investment to Iowa and grow a variety of business opportunities in the state by building on research strengths and increasing technology transfer to commercial and nonprofit entities.**

3.1.1. Increase collaborations that enhance the Regent enterprise's economic impact.

3.1.1.1. *Major economic development collaborative projects with other state agencies, other public education institutions, and community/government entities*

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- 3.1.1.2. *Major economic development collaborative projects with Iowa businesses and entrepreneurs*
- 3.1.1.3. *Economic development appropriations*
- 3.1.1.4. *Number of intellectual property disclosures; number of patent applications filed; number of patents issued; number of license and option agreements executed on institutional intellectual property; number of licenses yielding income and amount of income; number of clients served by the Small Business Development Centers; amount of total sponsored funding for Regent universities; employment in Iowa for incubator tenants, incubator graduates, and research park tenants; number of new start-up companies, annually, utilizing technology developed by a Regent university*

**3.2. Improve the quality of life in Iowa through educational outreach programs, exceptional and accessible health care, cultural and recreational opportunities, and other valued public services in response to the needs of Iowans.**

- 3.2.1. Provide, support, and evaluate outreach services and opportunities that benefit Iowans.
  - 3.2.1.1. *Numbers of individuals, organizations, counties, and communities served annually by educational outreach programs of the Regent institutions, reflecting statewide geographic impact*
  - 3.2.1.2. *Regent institutions' major outreach programs in promoting education, health, agriculture, economic development, community vitality, and other areas*
  - 3.2.1.3. *Number of patients served annually by University of Iowa Hospitals and Clinics, national measures of the quality of care, and increased patient satisfaction with the clinical experiences, reflecting statewide geographic impact*
  - 3.2.1.4. *Number of institution-wide cultural, fine arts, athletic, and other events offered annually, and number of attendees in each category*

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**4.0. Public Accountability**

*Serving the people of Iowa, the Board of Regents and its institutions will:*

**4.1. Utilize management and oversight systems that regularly measure achievements in Board and institution strategic priorities, while pursuing continuous quality improvement in programs and services.**

- 4.1.1. Pursue opportunities to realize greater efficiency in operations, consistent with best practices in the delivery of education and other services.
  - 4.1.1.1. *Periodic evaluation of Board operating processes, including internal reallocations*

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4.1.2. Monitor types and implications of governance reports.

4.1.2.1. *Periodic evaluation of all governance reports, including possible revisions and deletions, to ensure their continued value to the Board*

4.1.3. Periodically review the Board's strategic plan and the Regent institutions' strategic plans and assess progress.

4.1.3.1. *Periodic review of the Board's and institutions' strategic plans*

**4.2. Maximize benefits to Iowans and other citizens by determining and fulfilling appropriate resource needs for education, research and scholarship, service activities, and economic development efforts.**

4.2.1. Advocate for adequate support and optimize funding for Regent institutions from all sources for high-quality educational opportunities accessible to Iowans, research and scholarship, service activities, and economic development efforts.

4.2.1.1. *Submission of regular Board-approved appropriations requests to state elected officials*

4.2.1.2. *Trend data on Regent enterprise share of state appropriations*

4.2.1.3. *Analyses of increased/decreased state higher education appropriations compared to surrounding states, peer institution states, and the national average*

4.2.1.4. *Trend data on external grants and gifts, including federal appropriations*

4.2.1.5. *Trend data on state and federal financial aid resources for undergraduate students*

4.2.1.6. *Trend data on state support for capital projects that support teaching, research, scholarship, and service activities*

**4.3. Expand opportunities for individuals by strengthening Iowa's educational system through collaboration with other education sectors.**

4.3.1. Serve as active partners in developing and implementing statewide education improvement initiatives.

4.3.1.1. *Demonstrated leadership and participation in statewide education improvement initiatives and organizations*

**4.4. Ensure compliance with Board policies and legal mandates through responsible oversight of operations.**

4.4.1. Monitor policies to ensure compliance with legal mandates and other regulations.

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- 4.4.1.1. *Review of audit recommendations and implementation of corrective actions as necessary*
  
- 4.5. Serve as an active and enthusiastic advocate and communicator for the Regent institutions, their students, and the citizens they serve by maintaining positive relationships with elected officials, other education sectors, the media and the public at large.**
  
- 4.5.1. Communicate the opportunities, value, impact on the quality of life in Iowa, and accountability of the Regent enterprise to targeted constituents through cost-effective methods.
  - 4.5.1.1. *Implementation, evaluation, and enhancement of Board's communications plan, including regular online newsletter, web site, news releases, submission of editorials, media responses, and outreach activities with targeted constituents*
  - 4.5.1.2. *Utilization of research and public dialogue to evaluate and enhance awareness and understanding of the Regent enterprise*
  
- 4.5.2. Develop a program of continued interaction and outreach with elected officials.
  - 4.5.2.1. *Number of legislative contacts completed other than those made during the legislative session*

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**2008**

**THE NATIONAL REPORT CARD  
ON HIGHER EDUCATION**



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The *Measuring Up 2008* national and state report cards on higher education were made possible by grants from the Bill and Melinda Gates Foundation and Lumina Foundation for Education.

**The National Center for Public Policy and Higher Education** promotes public policies that enhance Americans' opportunities to pursue and achieve high-quality education and training beyond high school. Established in 1998 by a consortium of national foundations, the National Center is an independent, nonprofit, nonpartisan organization that is not affiliated with any institution of higher education or government agency. It conducts research and analyses of policy issues facing the states and the nation with a particular focus on opportunity and achievement in higher education — including two- and four-year, public and private, for-profit and nonprofit institutions. The National Center communicates findings and recommendations, including information on state and national performance of American higher education, to the public, to civic, business, and higher education leaders, and to state and federal policymakers.

The National Center is solely responsible for *Measuring Up 2008*.

For further information about the National Center and its publications, visit [www.highereducation.org](http://www.highereducation.org).

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## Foreword

By Governor James B. Hunt Jr.

Since 2000, the *Measuring Up* report cards have evaluated the progress of the nation and all 50 states in providing Americans with education and training beyond high school through the bachelor's degree. In their totality, the five editions of the national and state report cards constitute the most extensive assessment ever of the educational performance of American higher education. Our purpose in the *Measuring Up* series is to assist the nation and the states in improving higher education opportunity and effectiveness.

As in the earlier editions, *Measuring Up 2008* focuses exclusively on results, outcomes, and improvement. State performance is evaluated, compared, and graded in six key areas:

- **Preparation for college:** How well are high school students prepared to enroll in higher education and succeed in college-level courses?
- **Participation:** Do young people and working-age adults have access to opportunities for education and training beyond high school?
- **Affordability:** How difficult is it to pay for college when family income, the cost of attending college, and student financial aid are taken into account?
- **Completion:** Do students persist in and complete certificate and degree programs in college?
- **Benefits:** How do college-educated and trained residents contribute to the economic and civic well-being of each state?
- **Learning:** How do college-educated residents perform on a variety of measures of knowledge and skills?

In assessing state and national progress in these areas, *Measuring Up* places the performance of American higher education in a global perspective by incorporating international comparisons wherever possible.

The purpose of providing grades, comparisons, and indicators is to encourage each state to measure its own higher education outcomes against the best performance nationally and internationally. As in past editions of *Measuring Up*, the grades compare each state against benchmarks established by the best-performing states in each area in the current year. The grades give each state and the nation "real world" standards of comparison. In addition, selected indicators in the state report cards track improvement over time by comparing the performance of each state against its own past performance.

As a governor and a leader and participant in educational reform at all levels, I have learned that good intentions are not enough. It is critical that high aspirations for educational improvement be reinforced by monitoring key indicators of progress. The public, education leaders, elected officials, and business and civic leaders must know where we are making headway, where we are stalled, and where we are regressing. Each state's education system is unique, of course. But every state, I believe, can benefit from using *Measuring Up* to monitor its higher education performance in relation to other states, as reflected in grades, and to assess progress as reflected in the change-over-time indicators.

This edition of *Measuring Up* highlights the uneven distribution of higher education opportunity and achievement in the United States. Family wealth and income, race and ethnicity, and geography play too great a role in determining which Americans receive a high school education that prepares them for college, which ones enroll in college, and which ones complete certificate or degree programs. Demographic changes and the pressures of a knowledge-based global economy are already transforming our nation and our states. In facing these early challenges of the 21st century, we must address our educational disparities if we are to achieve a workforce that is competitive internationally and a citizenry that can enhance our democratic institutions.

The core message of *Measuring Up 2008* is that despite our historical successes in higher education, the preeminence of many of our colleges and universities, and some examples of improvement in this decade, our higher education performance is not commensurate with the current needs of our society and our economy. Our nation and our states can do better. As we have done many times in this nation's history, we must reach higher. We must educate more young people and adults, so that more Americans have the college-level knowledge and skills they need to succeed.

## The 2008 National Report Card: Modest Improvements, Persistent Disparities, Eroding Global Competitiveness

By Patrick M. Callan

**M**easuring Up 2008 is the most recent in the series of national and state-by-state report cards for higher education that was inaugurated in 2000. The key findings this year reveal that the nation and most of the 50 states are making some advances in preparing students for college and providing them with access to higher education. However, other nations are advancing more quickly than the United States; we continue to slip behind other countries in improving college opportunities for our residents. In addition, large disparities in higher education performance by race/ethnicity, by income, and by state limit our nation's ability to advance the educational attainment of our workforce and citizenry — and thereby remain competitive globally.

### College Preparation

Young Americans who graduate from high school on time are now more likely to take courses that prepare them for college and to enroll in college, compared with earlier this decade or in the 1990s. But far too many graduates leave high school unprepared to succeed in college-level courses and need remediation when they enroll. In addition, larger proportions than in the past fail to graduate from high school; some eventually receive alternative high school certification, principally the GED, but they do not enroll in college in large numbers. The reduced high school graduation rate decreases the pool of potential college graduates and college-educated workers.

### Access to College

The likelihood that a high school freshman will enroll in college by age 19 has improved modestly in this decade, from 39% to 42%, and the proportion of 18- to 24-year-olds enrolled in college has grown even more modestly. Meanwhile, the enrollment of working-age adults in college-level education or training has been declining since the early 1990s. Overall, the *Measuring Up* indicators show that access to college is fairly flat in the United States, with mostly small improvements in some states and declines in others.

### College Graduation

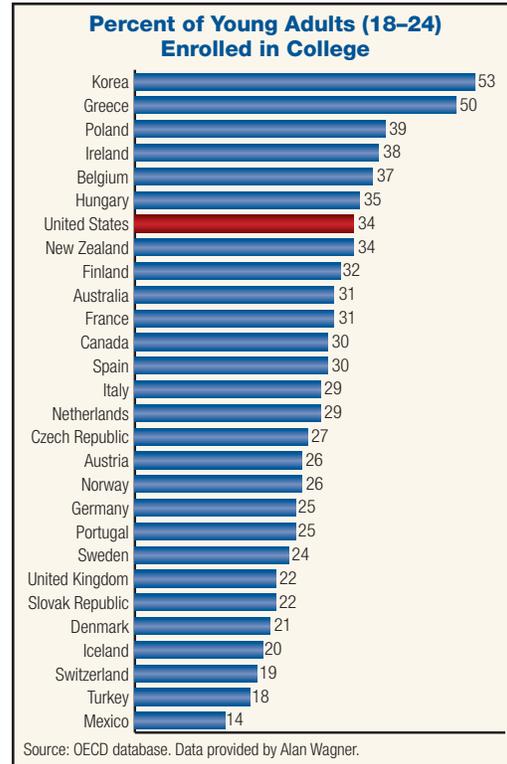
For students who enroll in college, rates of completion of certificate, associate, and baccalaureate programs are poor and have improved only slightly. These low college completion rates — as with the declining rates of high school completion — are depriving the nation of college-educated and trained workers needed to keep the American workforce competitive globally.

### International Comparisons

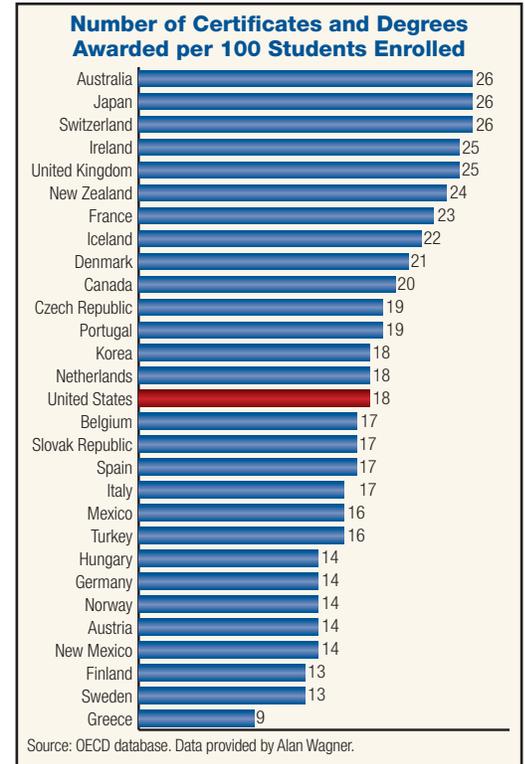
The United States' world leadership in college access has eroded steadily, as reflected in the international comparisons of the proportion of 18- to 24-year-olds enrolled in college (see Figure 1). In college completion, which has never been a strength of American higher education, the U.S. ranks 15th among 29 countries compared (see Figure 2). The U.S. adult population ages 35 and older still ranks among the world leaders in the percentage who have college degrees — reflecting the educational progress of earlier times (see Figure 3). Among 25- to 34-year-olds, however, the U.S. population has slipped to 10th in the percentage who have an associate degree or higher (see Figure 4). This relative erosion of our national “educational capital” reflects the lack of significant improvement in the rates of college participation and completion in recent years.



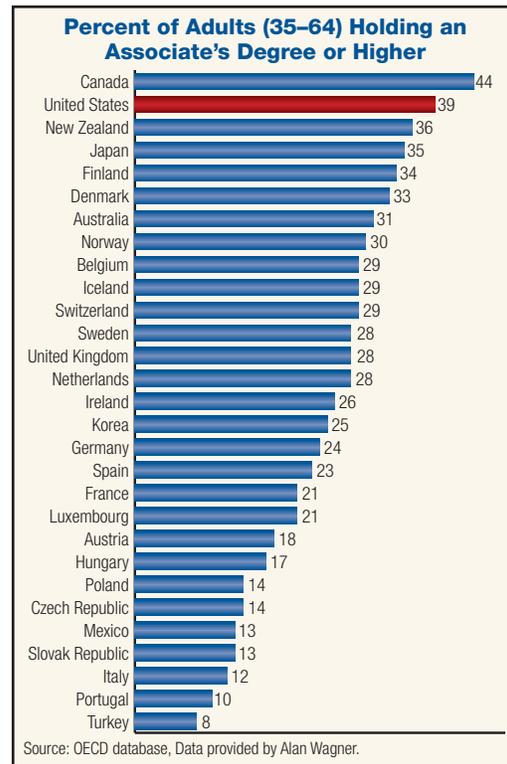
**Figure 1: The U.S. leadership in college enrollment has slipped.**



**Figure 2: College completion has never been a U.S. strength.**



**Figure 3: Educational level of older Americans reflects educational progress of earlier times.**



**Figure 4: Educational level of younger American adults has slipped.**



These cross-national comparisons place the nation's higher education performance in a global context and reflect the gaps that have opened between the United States and other nations. These disparities undermine our national value of individual opportunity and our collective capacity to succeed in the knowledge-based global economy. Addressing these disparities is critical because:

- Education and training beyond high school is a prerequisite for employment that supports a middle-class life. This is a reality for most Americans.
- Seventy-eight million Americans are reaching or approaching retirement age, and this is the best-educated generation in the United States — both currently and historically.
- As the nation's demography changes, large proportions of the younger generations are among those who are least well-served by the U.S. system of education currently: those whose educational opportunity and attainment reflect the disadvantages of race, income, and geography.

### Persistent Disparities

To make significant headway in increasing the educational attainment of its population and thereby its comparative standing internationally, the United States must address disparities in educational opportunity and achievement among Americans. These persistent gaps must be closed if the United States is to meet its workforce needs and compete globally.

First, the high school graduation rate (the percentage of ninth graders who complete a standard high school diploma in four years) has decreased for all racial and ethnic groups over the past two decades, and differences between racial and ethnic groups persist. By the middle of this decade:

- the national on-time high school graduation rate was 77.5%,
- the rate for African Americans was 69.1%, and
- the rate for Hispanics was 72.3%.<sup>1</sup>

Meanwhile, a growing number of high school students are taking longer to complete or are leaving high school without a standard diploma; some who drop out earn GEDs but are less likely to enroll in any form of postsecondary education and those who do enroll are less likely to complete a certificate or degree.

In addition, disparities in college access are closely linked to race/ethnicity and income. While college attendance has increased for all groups over the past three decades, gaps in enrollment among racial/ethnic groups have not diminished. For high school graduates, 73% of whites, 56% of blacks, and 58% of Hispanics enroll in college the next fall.<sup>2</sup> In terms of family income, 91% of high school students from families in the highest income group (above \$100,000) enroll in college. The enrollment rate for student from middle-income families (from \$50,001 to \$100,000) is 78% and for those in the lowest income group (\$20,000 and below) the rate is 52%.<sup>3</sup>

The racial and ethnic disparities that exist in preparation for and access to college are also found in college completion rates. For example, 59% of white students complete a bachelor's degree within six years of enrolling in college. In contrast, 47% of Hispanic students, 41% of African Americans, and 39% of Native American students complete a bachelor's degree within six years.

Finally, the state-by-state variation in educational performance represents another source of disparity and inequity for Americans. As reflected in the *Measuring Up* state report cards and grades, the likelihood of graduating from high school prepared for higher education, enrolling in college, and graduating from an affordable college or university differs enormously by state of residence. Here are some examples:

- High school freshmen in California, compared with their peers in Massachusetts, are 17% less likely to enroll in college by age 19. High school freshmen in Pennsylvania are 12% less likely to enroll than those in South Carolina or Utah.
- Half of young adults (ages 18 to 24) are enrolled in college in Rhode Island, while only 18% are in Alaska. Young adults are 15% more likely to be enrolled in college in Iowa than in Georgia, and 11% more likely to be enrolled in Massachusetts than in Texas.

Given our relative decline internationally and the gaps in higher education performance within our borders, no state can afford to maintain the status quo. As *Measuring Up 2008* reveals, even the best-performing states have gaps in performance they need to — and can — address. Narrowing those gaps will improve educational and economic opportunity in those states and for the nation as a whole.

### Substantial gaps in performance persist by racial/ethnic group and by state.

#### 18- to 24-Year-Olds with a High School Credential

	Whites	Blacks
Illinois	95%	82%
Kansas	93%	79%
Michigan	91%	80%
New York	95%	85%

	Whites	Hispanics
Arizona	93%	69%
California	95%	75%
North Carolina	92%	56%
Texas	93%	74%

#### 18- to 24-Year-Olds Enrolled in College

	Whites	Blacks
Connecticut	50%	34%
Illinois	45%	29%
New Jersey	47%	32%
New York	50%	34%

	Whites	Hispanics
Arizona	40%	18%
California	45%	27%
North Carolina	41%	12%
Texas	39%	24%
Utah	45%	16%

	Whites	Native Americans
Washington	36%	13%
Alaska	33%	11%
Arizona	40%	18%

#### First-time, Full-time Students Completing a Bachelor's Degree within Six Years of College Entrance

	Whites	Blacks
Delaware	73%	41%
Illinois	65%	34%
Maryland	73%	42%
Michigan	58%	32%

	Whites	Hispanics
Illinois	65%	45%
New Jersey	66%	49%
New York	63%	43%
Texas	56%	38%

	Whites	Native Americans
New Mexico	47%	25%
North Dakota	48%	17%
Washington	65%	41%

Source: *Measuring Up 2008*.

### Dimensions of the National Deterioration of College Affordability

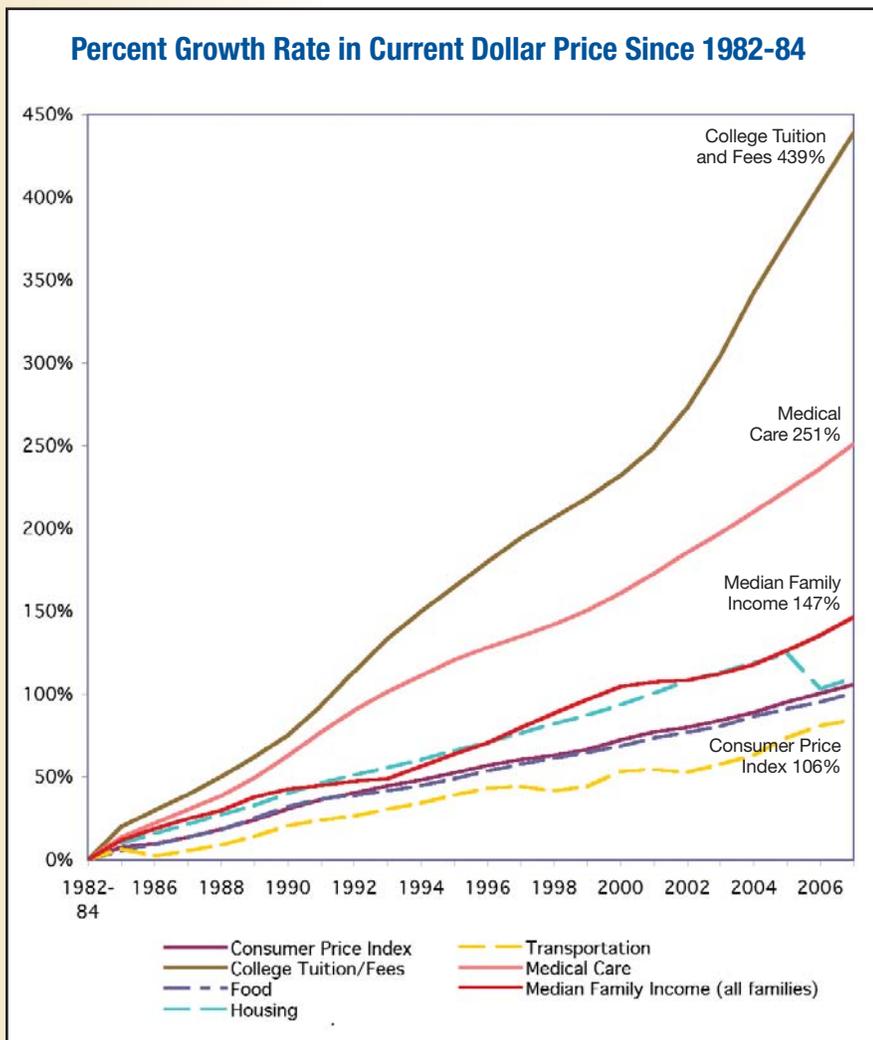
The deterioration of college affordability throughout the United States has contributed to the disparities in higher education opportunity and attainment. There are several dimensions to this national and state problem.

First, college tuition continues to outpace family income and the price of other necessities, such as medical care, food, and housing (see Figure 5). Whatever the causes of these tuition increases, the continuation of trends of the last quarter century would place higher education beyond the reach of most Americans and would greatly exacerbate the debt burdens of those who do enroll.

**Figure 5: Increases in college tuition have outpaced price increases in other sectors of the economy.**

Sources: Bureau of Labor Statistics, Consumer Price Index, All Urban Consumers. Median Family Income is from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, and American Community Survey.

Notes: Growth rate is calculated from a baseline average of 1982, 1983, and 1984. Data are from 1982 to 2007. All industries, except median family income, are components of the CPI.



Second, the erosion of college affordability has been exacerbated not only by increased tuition, but also by relatively flat or declining family incomes. As a result of these trends, the financial burden of paying for college costs has increased substantially, particularly for low- and middle-income families, even when scholarships and grants are taken into account (see Table 1).

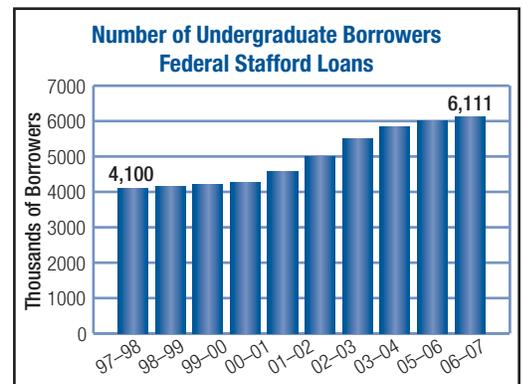
**Table 1: The burden of paying for college has increased for all families, but has increased more for middle- and low-income families.**

Net College Costs* as a Percent of Median Family Income			
At public four-year colleges and universities	1999-00	2007-08	% pts increased
Lowest income quintile	39%	55%	16%
Lower-middle income quintile	23%	33%	10%
Middle income quintile	18%	25%	7%
Upper-middle income quintile	12%	16%	4%
Highest Income quintile	7%	9%	3%
At public two-year colleges			
Lowest income quintile	40%	49%	9%
Lower-middle income quintile	22%	29%	7%
Middle income quintile	15%	20%	5%
Upper-middle income quintile	10%	13%	3%
Highest Income quintile	6%	7%	2%

\* Net college costs equal tuition, room, and board, minus financial aid. The numbers may not add exactly due to rounding. Source: *Measuring Up 2008*.

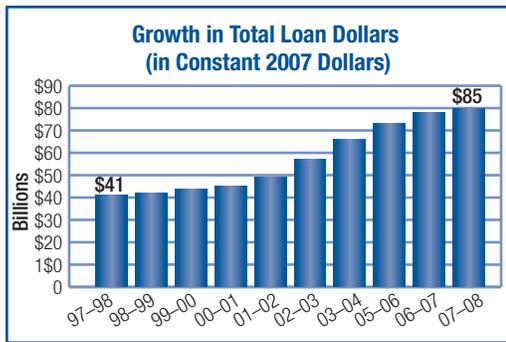
Third, students who do enroll in college are taking on more debt to maintain their college access. More students are borrowing (see Figure 6), and they are borrowing more. Over the last decade, student borrowing has more than doubled (see Figure 7).

**Figure 6: More students are borrowing.**



Source: The College Board, *Trends in Student Aid 2008*.

Figure 7: Student borrowing has more than doubled.



Source: The College Board, Trends in Student Aid 2008.

Another dimension of the problem of college affordability involves the financial aid priorities of colleges and universities, which are not in synch with public policy priorities. Currently, students from middle- and upper-income families receive larger grants from colleges and universities than students from low-income families receive (see Table 2).

Table 2: Compared with middle- and upper-income families, low-income families receive lower grants from colleges and universities.

Full-time Dependent Undergraduates Receiving Financial Grant Aid, By Income (2003-04)						
Provider	Federal Government		State Government		Institutions	
Parental Income (2002)	% receiving grant aid	Average Award	% receiving grant aid	Average Award	% receiving grant aid	Average Award
Below \$20,000	73%	\$4,000	36%	\$2,900	36%	\$4,700
\$20,000-\$39,999	63%	\$2,900	38%	\$2,700	40%	\$5,000
\$40,000-\$59,999	22%	\$1,700	28%	\$2,300	35%	\$5,500
\$60,000-\$79,999	4%	\$1,500	19%	\$2,000	34%	\$5,700
\$80,000-\$99,999	1%	\$2,300	14%	\$2,100	34%	\$6,100
\$100,000 or more	1%	\$1,700	8%	\$2,400	29%	\$6,200

Source: NCES (2005), "2003-04 NPSAS: Student Financial Aid Estimates for 2003-04."

**Conclusion**

Measuring Up 2008 identifies clearly the key areas of improvement and decline in higher education performance in the United States. States have made some modest advances, but these improvements are overshadowed by larger gains by other countries, and by the deterioration of college affordability throughout the United States. The relative erosion of our national "educational capital" has occurred at a time when we need more people to be college educated and trained because of Baby Boomer retirements and rising skill requirements for new and existing jobs.

Meanwhile, states are grappling with substantial budget shortfalls. In this fiscal cycle, state leaders face a crucial choice in determining state policy for higher education. They can respond to their current budget crises in the usual patterns of the past, by allowing tuition and student aid policy to play second fiddle to institutional finance. States that select this course will most likely see

precipitous tuition increases, cuts in student financial aid, and drops in college access. Further, if states take this path in being passive and complicit in allowing the brunt of the financial distress to be passed to students and families, then our national and state gaps in college access and completion will worsen, and college affordability will continue to deteriorate.

But states have another option: to establish state policies for tuition and student aid that balance the financial burden for higher education among states, the institutions of higher education, and students and families. This is both a short- and long-term strategy that makes state policy more transparent, grounds it in the needs and financial circumstances of state residents, establishes college affordability as a priority, protects educational opportunity, and in the process helps to meet the needs of states and the nation for a well-educated workforce and citizenry.

1 James J. Heckman and Paul A. LaFontaine, "The American High School Graduation Rate: Trends and Levels," Institute for the Study of Labor, *IZA Discussion Paper Series*, No. 3216 (December 2007). Table 1, p. 42.

2 Snyder, T.D., Dillow, S.A., and Hoffman, C.M. (2008). *Digest of Education Statistics 2007* (NCES 2008-022). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Table 192, p. 284-285.

3 Bozick, R., and Lauff, E. (2007). *Education Longitudinal Study of 2002 (ELS:2002): A First Look at the Initial Postsecondary Experiences of the Sophomore Class of 2002* (NCES 2008-308). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Table 6, p. 16.

## The National Picture: 2008 Snapshot Preparation

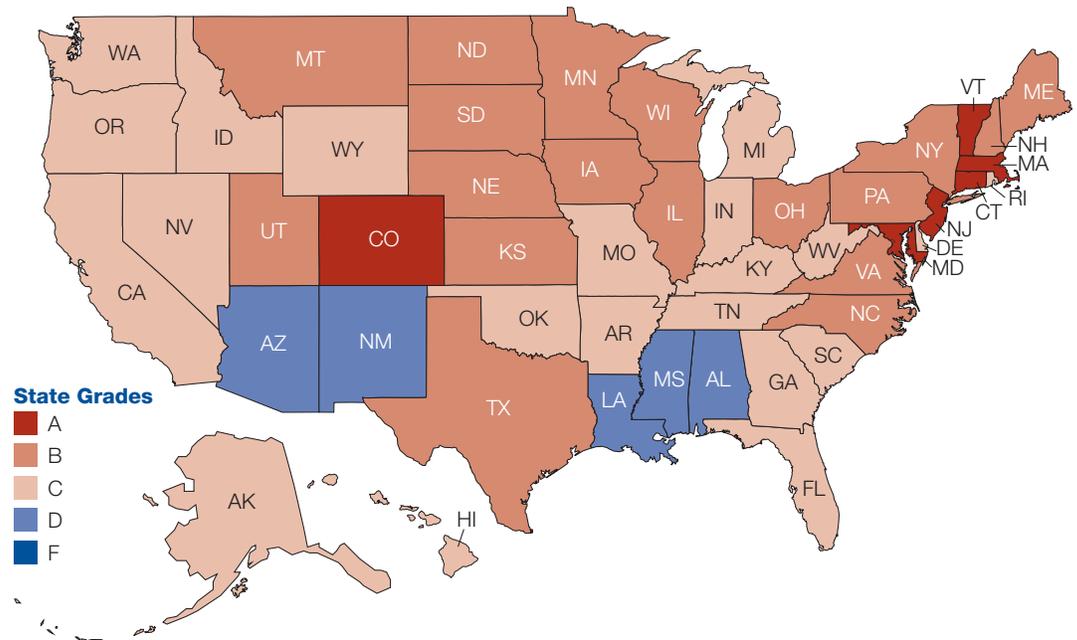
### Preparation

**High School Completion**  
High School Credential

**K-12 Coursetaking**  
Math Course Taking  
Science Course Taking  
Algebra in 8th Grade

**K-12 Student Achievement**  
Math Proficiency  
Reading Proficiency  
Science Proficiency  
Writing Proficiency  
Math Proficiency among  
Low-Income  
College Entrance Exams  
Advanced Placement Exams

**Teacher Quality**  
Students Taught by Qualified  
Teachers



**A** Colorado, Connecticut, Maryland, Massachusetts, New Jersey, Vermont. **B** Illinois, Iowa, Kansas, Maine, Minnesota, Montana, Nebraska, New Hampshire, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Texas, Utah, Virginia, Wisconsin. **C** Alaska, Arkansas, California, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Kentucky, Michigan, Missouri, Nevada, Oklahoma, Oregon, Rhode Island, South Carolina, Tennessee, Washington, West Virginia, Wyoming. **D** Alabama, Arizona, Louisiana, Mississippi, New Mexico. **F** None.

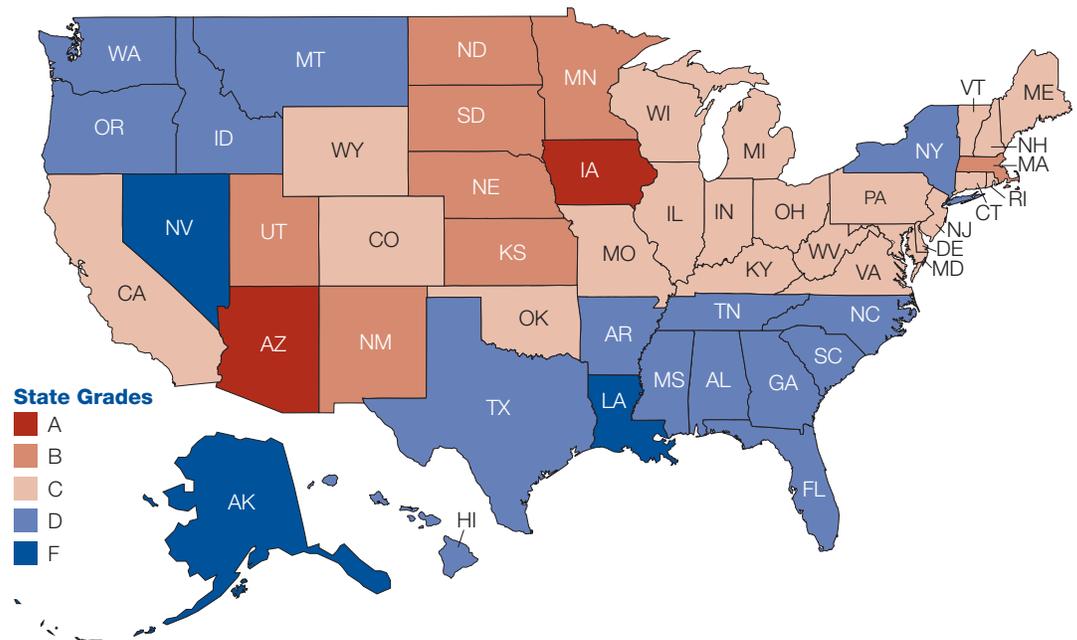
*Massachusetts is the top-performing state in preparation.*

## Participation

### Participation

**Young Adults**  
Chance for College  
Young Adult Enrollment

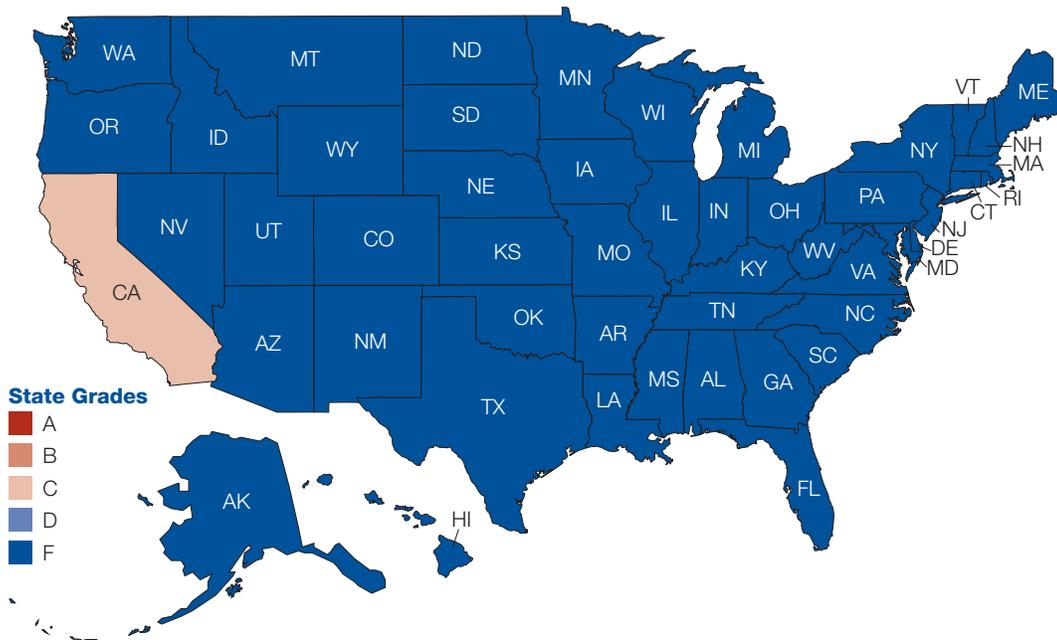
**Working-Age Adults**  
Working-Age Adult Enrollment



**A** Arizona, Iowa. **B** Kansas, Massachusetts, Minnesota, Nebraska, New Mexico, North Dakota, South Dakota, Utah. **C** California, Colorado, Connecticut, Delaware, Illinois, Indiana, Kentucky, Maine, Maryland, Michigan, Missouri, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin, Wyoming. **D** Alabama, Arkansas, Florida, Georgia, Hawaii, Idaho, Mississippi, Montana, New York, North Carolina, Oregon, South Carolina, Tennessee, Texas, Washington. **F** Alaska, Louisiana, Nevada.

*Iowa is the top-performing state in participation.*

## Affordability



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

*California is the top-performing state in affordability.*

### Affordability

#### Family Ability to Pay

At Community Colleges  
At Public 4-Year Colleges  
At Private 4-Year Colleges

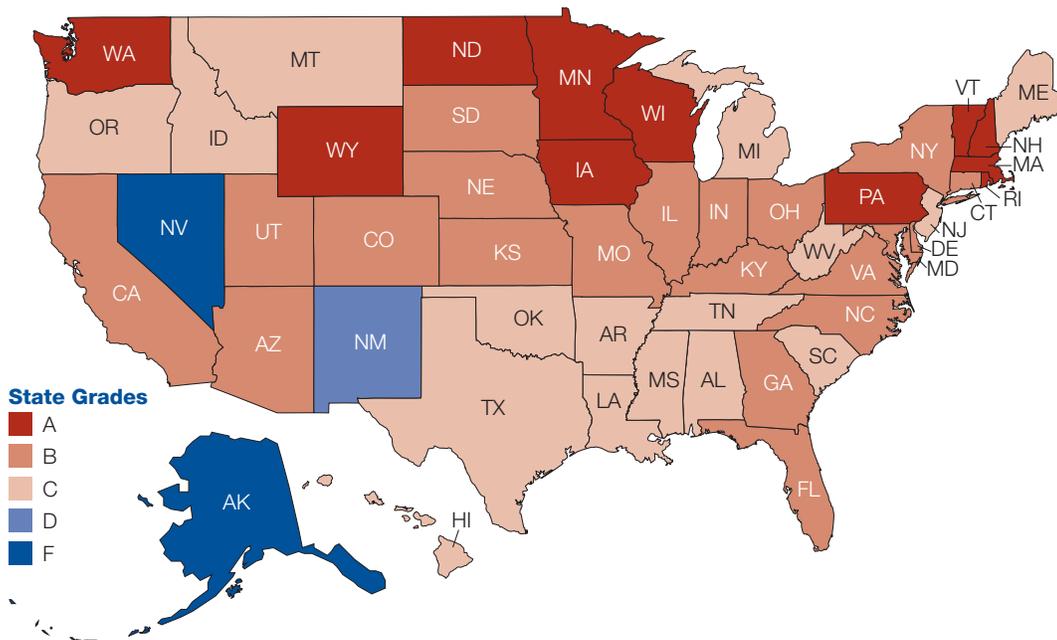
#### Strategies for Affordability

Need-Based Financial Aid  
Low-Priced Colleges

#### Reliance on Loans

Low Student Debt

## Completion



**A** Iowa, Massachusetts, Minnesota, New Hampshire, North Dakota, Pennsylvania, Rhode Island, Vermont, Washington, Wisconsin, Wyoming. **B** Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Maryland, Missouri, Nebraska, New York, North Carolina, Ohio, South Dakota, Utah, Virginia. **C** Alabama, Arkansas, Hawaii, Idaho, Louisiana, Maine, Michigan, Mississippi, Montana, New Jersey, Oklahoma, Oregon, South Carolina, Tennessee, Texas, West Virginia. **D** New Mexico. **F** Alaska, Nevada.

*Iowa is the top-performing state in completion.*

### Completion

#### Persistence

Students Returning at 2-Year  
Colleges  
Students Returning at 4-Year  
Colleges

#### Completion

Bachelor's Degree Completion  
in 6 Years  
All Degree Completions  
per 100 Students  
All Degree Completions per  
1,000 Adults with No Degree

## Benefits

### Benefits

#### Educational Achievement

Adults with Associate's Degree or Higher  
Adults with Bachelor's Degree or Higher

#### Economic Benefits

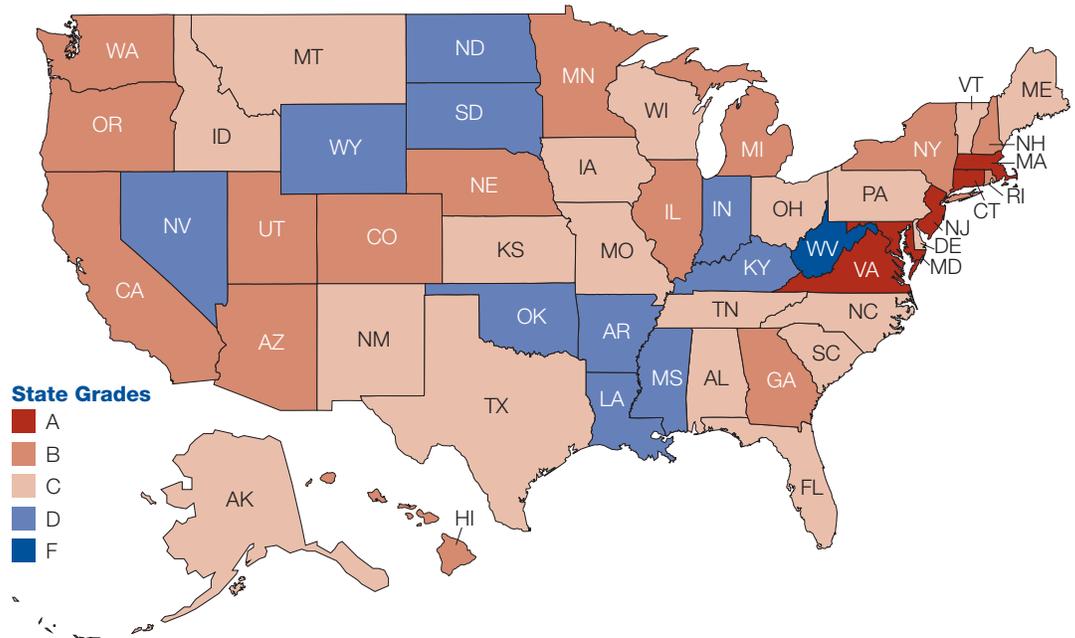
Increased Income from Some College  
Increased Income from Bachelor's Degree

#### Civic Benefits

Population Voting  
Charitable Contributions  
Volunteering

#### Adult Skill Levels

Quantitative Literacy  
Prose Literacy  
Document Literacy

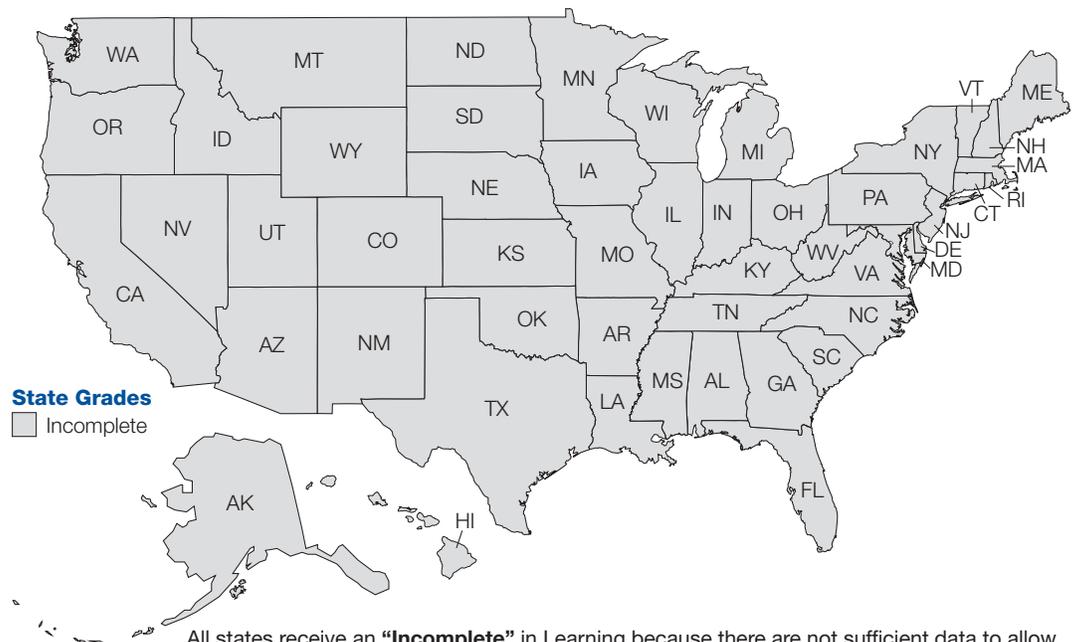


**A** Connecticut, Maryland, Massachusetts, New Jersey, Virginia. **B** Arizona, California, Colorado, Georgia, Hawaii, Illinois, Michigan, Minnesota, Nebraska, New Hampshire, New York, Oregon, Rhode Island, Utah, Washington. **C** Alabama, Alaska, Delaware, Florida, Idaho, Iowa, Kansas, Maine, Missouri, Montana, New Mexico, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Wisconsin. **D** Arkansas, Indiana, Kentucky, Louisiana, Mississippi, Nevada, North Dakota, Oklahoma, South Dakota, Wyoming. **F** West Virginia.

*Maryland is the top-performing state in benefits.*

## Learning

### Learning



All states receive an "Incomplete" in Learning because there are not sufficient data to allow meaningful state-by-state comparisons.

## Improvements and Declines\*

### Preparation

Since the early 1990s, most states have improved in many areas of preparing students for college, including increasing the percentage of eighth graders scoring well on national math, science, and writing exams. However, not all states have improved on these national exams, and many states have declined on the national reading tests. In addition, improvement has not occurred in other important areas, such as the percentage of young adults graduating from high school within four years. The nation continues to experience disparities in educational performance by race/ethnicity and by state of residence.

#### Key Indicator: Percentage of 18- to 24-year-olds with a high school credential



34 states improved or stayed the same on the key indicator



16 states declined on the key indicator

#### Other Improvements

9th to 12th graders taking at least one upper-level science course

Texas	20% to 56%
West Virginia	24% to 46%
South Carolina	21% to 36%
Iowa	28% to 47%

8th graders scoring at or above “proficient” on the national assessment in math

North Carolina	12% to 34%
Louisiana	7% to 19%
Arkansas	10% to 24%
Mississippi	6% to 14%
Massachusetts	23% to 51%
South Carolina	15% to 32%

8th graders scoring at or above “proficient” on the national assessment in science

Louisiana	13% to 19%
Delaware	21% to 29%
South Carolina	17% to 23%
Kentucky	23% to 31%

Low-income 8th graders scoring at or above “proficient” on the national assessment in math

Georgia	3% to 12%
Kentucky	4% to 15%
Louisiana	3% to 11%
South Carolina	5% to 18%
Massachusetts	7% to 25%
Mississippi	2% to 7%
Texas	6% to 21%

Number of scores in the top 20% nationally on SAT/ACT college entrance exams per 1,000 high school graduates

South Carolina	67 to 152
Massachusetts	138 to 263
Vermont	114 to 216
Georgia	94 to 177
West Virginia	84 to 157

Number of scores that are 3 or higher on an Advanced Placement subject test per 1,000 high school juniors and seniors

South Dakota	14 to 108
Arkansas	18 to 99
North Dakota	14 to 72
Minnesota	31 to 137
Wisconsin	42 to 164

#### Declines

8th graders scoring at or above “proficient” on the national assessment in reading

New Mexico	24% to 17%
West Virginia	27% to 23%
Arizona	28% to 24%
Connecticut	42% to 37%
Maine	42% to 37%

\* These indicators enable states to compare their current performance with past performance.

## Participation

The nation as a whole has made progress since the early 1990s in enrolling young adults (ages 18 to 24) in education or training beyond high school. During this time, 35 states increased the likelihood of ninth graders enrolling in college within four years. However, most states declined in enrolling working-age adults in college-level education or training. Furthermore, participation in higher education varies by race/ethnicity and by state of residence.

### Key Indicator: Percentage of 18- to 24-year-olds enrolled in college



43 states improved or stayed the same on the key indicator



7 states declined on the key indicator

#### Improvements

Likelihood of high school freshmen enrolling in college within four years

South Carolina	25% to 36%
South Dakota	44% to 59%
Tennessee	32% to 42%
Louisiana	29% to 38%

Percentage of 18- to 24-year-olds enrolled in college

Michigan	25% to 37%
Maine	25% to 35%
New York	25% to 34%
Massachusetts	29% to 41%
Arkansas	24% to 32%

#### Declines

Percentage of 25- to 49-year-olds (without a bachelor's degree or higher) enrolled in higher education

Connecticut	8.2% to 3.9%
New Hampshire	7.1% to 3.4%
Rhode Island	9.3% to 4.8%
Massachusetts	8.2% to 4.8%
Colorado	12.2% to 7.3%
Nebraska	10.5% to 6.3%

## Affordability

The nation's colleges and universities have become less affordable for students and their families since the early 1990s. This year continues the trend in deteriorating college affordability in the majority of states. Although many states increased their investment in need-based financial aid, tuition increases outpaced growth in financial aid. In all but two states, the percentage of family income, after financial aid, needed to pay for a public four-year college has increased since 2000. On average, students from working and poor families must pay 40% of family income to enroll in public four-year colleges. Students from middle-income families and upper-income families must pay 25% and 13% of family income, respectively, to enroll in public four-year colleges.

### Key Indicator: Percentage of income (average of all income groups) needed to pay for college expenses at public four-year institutions



2 states improved or stayed the same on the key indicator



48 states declined on the key indicator

#### Declines in Family Ability to Pay\*

Percentage of income needed to pay for college expenses minus financial aid at community colleges

North Dakota	16% to 27%
West Virginia	20% to 29%
Massachusetts	18% to 26%
Florida	18% to 25%
Texas	15% to 21%
Illinois	19% to 24%
Washington	20% to 25%
Arizona	17% to 21%

Percentage of income needed to pay for college expenses minus financial aid at public four-year institutions

Illinois	19% to 35%
New Jersey	19% to 34%
Delaware	23% to 37%
Minnesota	17% to 30%
Oklahoma	12% to 25%
Pennsylvania	29% to 41%

Percentage of income needed to pay for college expenses minus financial aid at private four-year institutions

Arizona	50% to 79%
Missouri	44% to 69%
Texas	42% to 67%
Pennsylvania	69% to 87%
New York	72% to 87%

#### Improvements in State Investment

State investment in need-based financial aid as a percentage of the federal investment

Nevada	2% to 48%
North Carolina	3% to 70%
Virginia	6% to 50%
Montana	1% to 9%
Utah	1% to 8%
Washington	24% to 108%
Texas	7% to 32%
Delaware	13% to 49%
Missouri	8% to 29%
West Virginia	12% to 43%

#### Declines in State Investment

State investment in need-based financial aid as a percentage of the federal investment

Georgia	4% to 0%
Hawaii	8% to 5%
Rhode Island	36% to 28%
Iowa	40% to 33%
Michigan	33% to 28%
Illinois	89% to 82%

\*For these indicators, an increase (in the percentage of income needed to pay for college expenses) represents a decline in affordability.

## Completion

Since the early 1990s, most states have increased the number of students earning certificates and degrees as a proportion of state residents without a college degree. However, overall rates of completion have remained fairly low and even the performance of the best states in this area is not impressive. For example, in the top states only 68% of students at four-year institutions complete a bachelor's degree within six years of enrolling.

**Key Indicator: All degree completions per 100 students**



48 states improved or stayed the same on the key indicator



2 states declined on the key indicator

### Improvements

First-time, full-time students completing a bachelor's degree within six years of college entrance

Idaho	33% to 43%
Louisiana	33% to 42%
Nebraska	44% to 56%
Kentucky	37% to 47%

Certificates and degrees awarded at all colleges and universities per 1,000 state residents (ages 18 to 44) without a college degree

Kentucky	15 to 32
Georgia	15 to 27
Arkansas	15 to 24
West Virginia	18 to 27

## Benefits

Since the early 1990s, most states have increased their “educational capital” as measured by the percentage of adults with an associate’s degree, a bachelor’s degree, or higher. However, the benefits of higher education still vary by race/ethnicity and by state of residence.

### Key Indicator: Percentage of 25- to 64-year-olds with a bachelor’s degree or higher



50 states improved or stayed the same on the key indicator



0 states declined on the key indicator

#### Improvements

Percentage of 25- to 64-year-olds with a bachelor’s degree or higher

Kentucky	15% to 22%
South Dakota	20% to 28%
North Carolina	19% to 27%
Iowa	20% to 27%
North Dakota	21% to 29%

#### Gaps in Performance

Percentage of 25- to 64-year-olds with a bachelor’s degree or higher:

Massachusetts:	43% (whites), 22% (blacks)
Virginia:	38% (whites), 19% (blacks)
California:	40% (whites), 10% (Hispanics)
New Mexico:	40% (whites), 13% (Hispanics)
Alaska:	32% (whites), 8% (Native Alaskans)

## Learning

All states receive an “Incomplete” in Learning because there are not sufficient data to allow meaningful state-by-state comparisons.

## State Grades 2008

	Preparation	Participation	Affordability	Completion	Benefits	Learning
Alabama	D+	D+	F	C-	C	I
Alaska	C+	F	F	F	C+	I
Arizona	D	A	F	B	B-	I
Arkansas	C-	D+	F	C-	D+	I
California	C+	C	C-	B-	B+	I
Colorado	A-	C+	F	B-	B+	I
Connecticut	A	C-	F	B-	A-	I
Delaware	C+	C-	F	B	C+	I
Florida	C	D	F	B+	C	I
Georgia	C+	D-	F	B-	B	I
Hawaii	C-	D	F	C	B-	I
Idaho	C	D	F	C	C-	I
Illinois	B	C	F	B+	B	I
Indiana	C	C	F	B-	D+	I
Iowa	B	A	F	A	C+	I
Kansas	B	B-	F	B	C+	I
Kentucky	C	C	F	B	D+	I
Louisiana	D-	F	F	C+	D	I
Maine	B-	C-	F	C+	C	I
Maryland	A-	C	F	B-	A	I
Massachusetts	A	B-	F	A	A	I
Michigan	C	C	F	C+	B+	I
Minnesota	B	B	F	A	B	I
Mississippi	D	D+	F	C	D	I
Missouri	C+	C	F	B	C+	I
Montana	B-	D+	F	C-	C+	I
Nebraska	B-	B	F	B+	B	I
Nevada	C	F	F	F	D	I
New Hampshire	B	C-	F	A-	B	I
New Jersey	A-	C	F	C+	A-	I
New Mexico	D-	B-	F	D+	C+	I
New York	B	D+	F	B+	B	I
North Carolina	B-	D+	F	B-	C+	I
North Dakota	B-	B+	F	A	D	I
Ohio	B-	C-	F	B-	C+	I
Oklahoma	C-	C-	F	C	D+	I
Oregon	C+	D	F	C+	B+	I
Pennsylvania	B-	C-	F	A	C	I
Rhode Island	C+	C+	F	A	B-	I
South Carolina	C+	D-	F	C+	C	I
South Dakota	B	B	F	B	D+	I
Tennessee	C	D	F	C	C	I
Texas	B	D-	F	C-	C+	I
Utah	B	B-	F	B+	B	I
Vermont	A-	C	F	A-	C+	I
Virginia	B+	C	F	B	A	I
Washington	C+	D	F	A-	B	I
West Virginia	C	C	F	C	F	I
Wisconsin	B	C+	F	A-	C	I
Wyoming	C	C	F	A	D-	I

## State Change Over Time on Key Indicators

State	Preparation	Participation	Affordability	Completion	Benefits
Alabama	▲	▲	▼	▲	▲
Alaska	▲	▼	▼	▲	▲
Arizona	▲	▲	▼	▲	▲
Arkansas	▲	▲	▼	▲	▲
California	▲	▲	▼	▲	▲
Colorado	▼	▼	▼	▲	▲
Connecticut	▲	▲	▼	▲	▲
Delaware	▼	▲	▼	▲	▲
Florida	▲	▲	▼	▲	▲
Georgia	▼	▲	▼	▲	▲
Hawaii	▲	▲	▼	▲	▲
Idaho	▲	▼	▼	▲	▲
Illinois	▲	▲	▼	▲	▲
Indiana	▼	▲	▼	▲	▲
Iowa	▼	▲	▼	▼	▲
Kansas	▼	▲	▼	▲	▲
Kentucky	▲	▲	▼	▲	▲
Louisiana	▼	▲	▼	▲	▲
Maine	▲	▲	▼	▲	▲
Maryland	▲	▲	▼	▲	▲
Massachusetts	▲	▲	▼	▲	▲
Michigan	▲	▲	▼	▲	▲
Minnesota	▼	▲	▼	▲	▲
Mississippi	▼	▲	▼	▲	▲
Missouri	▲	▲	▼	▲	▲
Montana	▼	▲	▼	▲	▲
Nebraska	▼	▲	▼	▲	▲
Nevada	▲	▲	▼	▲	▲
New Hampshire	▲	▲	▼	▲	▲
New Jersey	▲	▲	▼	▲	▲
New Mexico	▲	▲	▼	▲	▲
New York	▲	▲	▲	▲	▲
North Carolina	▲	▲	▼	▲	▲
North Dakota	▲	▼	▼	▼	▲
Ohio	▲	▲	▼	▲	▲
Oklahoma	▲	▼	▼	▲	▲
Oregon	▼	▲	▼	▲	▲
Pennsylvania	▲	▲	▼	▲	▲
Rhode Island	▲	▲	▼	▲	▲
South Carolina	▲	▲	▼	▲	▲
South Dakota	▲	▲	▼	▲	▲
Tennessee	▲	▲	▲	▲	▲
Texas	▲	▲	▼	▲	▲
Utah	▼	▼	▼	▲	▲
Vermont	▲	▲	▼	▲	▲
Virginia	▲	▲	▼	▲	▲
Washington	▼	▲	▼	▲	▲
West Virginia	▲	▲	▼	▲	▲
Wisconsin	▼	▲	▼	▲	▲
Wyoming	▼	▼	▼	▲	▲

▲ Indicates that the state has increased or remained stable on the key indicator in the category.

▼ Indicates that the state has declined on the key indicator in the category.

Note: Performance is based on the state's improvement or decline on the key indicator in that category.

For a list of key indicators by category, please see *Improvements and Declines* starting on page 13.



## The Information Gap: Much Talk, Little Progress

By Dennis P. Jones

Over the past decade, states have used *Measuring Up* to evaluate and compare their performance in higher education. Policymakers and the public have tracked their state’s progress and setbacks in preparing students for education beyond high school, enrolling them in college, trying to keep college affordable, and conferring degrees. During this time, one trend has held constant: not all the information needed by policymakers is available to them.

When first published in 2000, *Measuring Up* identified the key areas where comparative, objective information was not available across states. Most of the deficiencies noted at that time persist today (see table). In fact, in many areas there is less information available now. In some cases, states have not participated in national assessments that would have provided important state-level data; in other cases, national groups have not collected sufficient data from each of the states. The result is a failing grade — an F — for the nation’s performance in developing data resources for state-by-state comparisons in higher education.

### Preparation

There has been some improvement in assessing how well states prepare students for college. The Census Bureau’s new American Community Survey (ACS) now provides more timely and accurate data about high school completion. However, this improvement does not affect two important areas: advanced course taking and student achievement.

**Advanced K-12 Course Taking.** Enrollment levels in advanced courses can help to indicate preparedness for college. Since 2000, substantially fewer states participate in national surveys that indicate how many eighth graders take algebra and how many high school students enroll in advanced math and science.

**Student Achievement in the 12th Grade.** Most states — but not all — continue to participate in the National Assessment of Educational Progress (NAEP) for eighth graders. For high school seniors, there is a comparable national assessment but it does not provide data at the state level. Information about the “stock of learning” that students acquire in high school and carry into college continues to be missing in the states.

### Participation

There has been no progress in assessing the extent to which states provide opportunities for residents to enroll in higher education.

**College Enrollment Rates for Recent High School Graduates, by Income.** At the national level, rates of college enrollment are available by racial group and by income. At the state level, these rates are available by racial group, but not by income. Data about student financial aid

Progress in Developing Data Resources Nationwide: F	
<b>Preparation</b>	
Advanced K-12 course taking	Not Improved
Student achievement in 12th grade	Not Improved
<b>Participation</b>	
College enrollment rates by income	Not Improved
Migration of students across states	Not Improved
<b>Affordability</b>	
Unmet financial need for qualified students	Not Improved
Distribution of student aid	Improved Somewhat
Undergraduate student loans	Improved
<b>Completion</b>	
Progression of students across systems	Not Improved
Degree completion in 6 and 10 years	Improved Somewhat
<b>Benefits</b>	
Educational attainment	Improved
Civic engagement	Improved
<b>Learning</b>	
Adult skill levels	Regressed
Cost effectiveness	Not Improved

packages for college freshmen have improved, but nothing is known at the state level about the family incomes of students who do not apply for (or receive) such aid. Given the changing demographics of college students, information about the family incomes of college-eligible individuals and those who actually enroll is crucial for effective state policymaking. Its absence represents one of the most notable of all the information gaps.

**Migration of Students Across States.** Information about the state of origin of college freshmen continues to be available. As a result, state-to-state migration of entering students can be determined. Once students enroll, however, federal data collection does not offer a way to track their progress or geographic location. The National Student Clearinghouse (NSC) could be used for this purpose if the protocols for use could be agreed upon nationally. Matching records from multiple state-level record systems has proven possible but arduous. At a time when workforce development is particularly important to state policymakers, the inability to assess migration patterns beyond the freshman year represents a severe handicap.

### Affordability

There has been some progress in tracking the affordability of higher education for students and families, but this progress has not gone nearly far enough.

**Unmet Financial Need for Eligible and Qualified Students.** The available data estimate unmet financial need on a national basis, but not at the state level. As a consequence, there is still no state-by-state assessment of the extent to which financial factors affect college participation.

**Distribution of Student Aid.** Since 2000, some progress has been made in calculating financial aid patterns, though the improvements are far from adequate. Data on the amounts of different kinds of aid distributed to freshmen is now available by campus. Still missing, however, are data about the economic circumstances of aid recipients and the extent to which aid packages change as students advance in their college careers. For example, do loans supplant grants after the freshman year in some states more than others? An oversample of 12 states by the National Postsecondary Student Aid Survey in 2004 provided this kind of in-depth information.

Until this information is available for all 50 states, however, policymakers will not be able to have a clear picture of college affordability.

**Undergraduate Student Loans.** In 2000, data about borrowing by graduate and undergraduate students were combined, making it impossible to determine levels of undergraduate borrowing. This problem has been remedied — one of the few areas of clear progress.

### Completion

Problems remain in assessing whether students are completing their educational programs in a timely manner.

**Progression of Individual Students Across Systems and States.** Since many students transfer among colleges, it is important to track students across institutions. Many states have data systems that allow such tracking across public institutions in-state, but not across state lines. Data from the National Student Clearinghouse have been analyzed through a pilot effort. While this resource has limitations, it has proven capable of yielding good information for most states. Not all institutions participate, although a majority in most states do. Key data elements have not been available, such as whether a student is enrolled for the first time in college. Since protocols have not been agreed upon nationally to continue the pilot analysis, it must be concluded that no lasting progress has been made in this area.

**Degree Completion in Six and Ten Years.** Unlike in 2000, all institutions of higher education now report information on the proportion of full-time, first-time students who complete their programs within 150% of program length (six years for bachelor's degrees). Completion rates are also provided for students after four and five years. This is clearly an improvement, but there are still major shortcomings. Six years is too short a time period for many students, particularly working adults. The data cannot track students who transfer between institutions, both in-state and out-of-state. And the data are particularly flawed for community colleges because they fail to account for students who start part-time (the majority of enrollments at many community colleges) and students who transfer to four-year institutions. This is an area where most of the data are available in many states, but not in a way that allows national comparisons. In sum, progress has been made but remains inadequate.

## Benefits

There has been some improvement in tracking the benefits that accrue to states as a result of having an educated population.

**Educational Attainment.** Two improvements have occurred in assessing whether state residents have a bachelor's degree. First, the U.S. Census Bureau's American Community Survey (ACS) now provides much more accurate data about the educational attainment of adults. Secondly, it is now possible to calculate the percentage of college degree holders who were born in the state in which they are living. This provides a basis for comparing states in developing home-grown talent.

**Civic Engagement.** New information about volunteerism is now available, including comparisons of volunteerism for college graduates and for those without college degrees. Although these data have rather large sampling errors at the state level, some progress has been made.

## Learning

As in 2000, there are still no common benchmarks that would permit state comparisons of the knowledge and skills of college students. There are isolated instances in which learning outcomes are assessed, such as South Dakota's mandatory exam of rising college juniors. There are assessments that cover portions of the population, such as Graduate Record Examinations (GREs), which test those pursuing graduate study. And there are assessments in selected fields, such as licensure exams in nursing or WorkKeys in selected vocational fields. But there is no nationwide approach to assessing learning that would allow state-to-state comparisons. What energy was available for state assessments in 2000 has been directed to campus-level assessments in 2008, such as the Voluntary System of Accountability. This represents a step backward, not forward.

**Adult Skill Levels.** In assessing adult skills in the states, there has also been a large step backward. In 1992, the National Assessment of Adult Literacy (NAAL) provided a sufficient survey base to estimate the mastery of higher-level skills among the adult populations of most states. That assessment was re-administered in 2003. In 1992, 13 states participated in an oversample; in 2003, only six states did so. And almost five years later, the data have not been released for secondary analysis. National results indicate lower literacy levels for adults in 2003, but data are unavailable for all but a limited number of states. If states are to improve workforce preparedness, it is crucial that policymakers have access to information about the skill levels of state residents.

## Cost Effectiveness

Over the past decade, there has been little progress in assessing state performance in higher education relative to the resources committed to the endeavor. An approach to calculating cost effectiveness was developed by the National Center for Higher Education Management Systems (NCHEMS). However, until learning outcomes are available by state, calculating the cost effectiveness of higher education will continue to rely on proxy measures that leave much to be desired.

## Conclusion

State leaders and the public need access to objective information to assess and improve higher education. No single entity is at fault for the absence of information about one of the most critical problems facing the nation today; there is plenty of blame to go around. In some areas the states — in others the nation — must provide leadership in developing the data resources for state-by-state analysis. It is time for every state — and the nation — to commit to getting the information needed to advance the educational attainment of the citizenry, and to halt the worrisome slide of the United States vis-à-vis other developed nations in this area.

## Stuck on Student Learning

By Peter T. Ewell

In 2000, the first edition of *Measuring Up* gave every state an “Incomplete” in Learning to highlight the fact that the United States lacks consistent measures of student learning in higher education. Over the past decade, the National Center for Public Policy and Higher Education has been consistent in reporting progress on the development of measures of student learning. *Measuring Up 2004* reported learning results for five states that participated in a national demonstration project. *Measuring Up 2006* recognized an additional six states that participated fully in the National Assessment of Adult Literacy (NAAL). These efforts in the states signified modest progress compared with a decade ago.

Other activities also brought attention to the importance of assessing student learning at the college level. The Collegiate Learning Assessment (CLA) and the National Survey of Student Engagement (NSSE) were both launched since we began our effort. In addition, the National Commission on the Future of Higher Education, convened by U.S. Secretary of Education Margaret Spellings, helped accreditors and institutions of higher education become more interested in assessing learning.

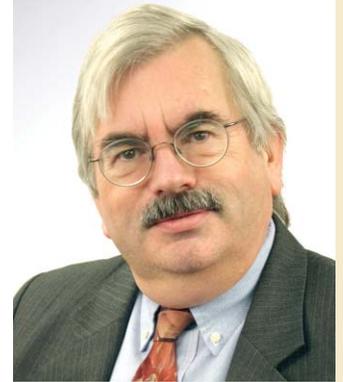
Despite this limited progress, however, an important dimension of assessing learning has been lost: the need for states and the nation to understand more about the “educational capital” of their population. The educational capital of a state is the level of collective knowledge and skills possessed by state residents. Assessing educational capital can be accomplished through state participation in national surveys of adult literacy, assessments of the abilities of college graduates, as well as other measures.

In its deliberations, the Spellings Commission recommended that more states take leadership in measuring educational capital through the approach pioneered by the National Center’s five-state demonstration project. The Commission also recommended increasing state participation in the National Assessment of Adult Literacy, as well as administering it more frequently. The nation and the states need these

measures in order to guide investment in higher education and align public policy with the needs of state residents.

As a nation, however, we appear to be regressing in this area. Only six states signed up for the oversample of the National Assessment of Adult Literacy in 2003, down from 12 in 1992. A repeat administration of this assessment is nowhere in sight. Almost five years after the assessment was administered, the National Center for Education Statistics has yet to produce 50-state estimates of citizen performance on prose literacy. Meanwhile, the Organisation for Economic Co-operation and Development (OECD) is moving forward with an international feasibility study on collegiate learning without having a commitment from the United States to participate.

Attention to these issues at the state level is also uneven. A few states continue to assess students using established examinations for which national benchmarks are available. Among them is South Dakota, which requires all students attending public universities, as a condition of graduation, to meet a specified standard on the ACT’s Collegiate Assessment of Academic Proficiency (CAAP). Kentucky will replicate a variant of the Learning Model developed by the National Center’s five-state demonstration project. Public universities in West Virginia will administer the Collegiate Learning Assessment on a statewide basis next year. And Oregon is



experimenting with portfolio measures in collaboration with the Association of American Colleges and Universities (AACU).

On the other hand, Arkansas abandoned its longstanding program of statewide testing centered on the Collegiate Assessment of Academic Proficiency last year. A recent survey by the State Higher Education Executive Officers (SHEEO) found that the engagement of state agencies in assessment at the college level is at an all-time low. Further, where states are showing interest in assessing college learning, their focus is at the campus level, to demonstrate institutional accountability. They are not measuring learning through a statewide approach, which can inform and improve state policy by identifying gaps in what college-educated residents know and can do.

A growing number of institutions are holding themselves accountable through such initiatives as the Voluntary System of Accountability (VSA) developed by the National Association of State Universities and Land Grant Colleges (NASULGC) and the American Association of State Colleges and Universities (AASCU). However admirable these efforts may be, they provide little real information for state policy. They are being undertaken largely for political reasons — to blunt attempts by the U.S. Department of Education to impose new reporting requirements about

student learning through accreditation — rather than as part of a broader effort to systematically improve instruction.

In short, events in the wake of the Spellings Commission served to politicize public debate about information on student learning at precisely the point at which such information should be collectively owned and generated. Nowhere has this condition been more apparent than in the development of longitudinal databases. At a time when more than two-thirds of students earning bachelor's degrees have attended several institutions, we as a nation lack the capacity to track student progress because of political opposition that masquerades as a concern about privacy. As 42 states have demonstrated, higher education agencies using today's information technology are perfectly capable of creating powerful student unit databases that do not compromise security.

With America's competitive edge in producing college graduates eroding steadily, states need benchmarked information about student learning more than ever. In the past decade, some states have developed the technical capacity to generate such information and the policy wisdom to use it effectively. But across the nation, we are no further along in producing such capacity in 2008 than we were in 2000 when *Measuring Up* first awarded every state an "Incomplete" in Learning.

## Facing the Nation:

### The Role of College Leaders in Higher Education Policy

By David W. Breneman

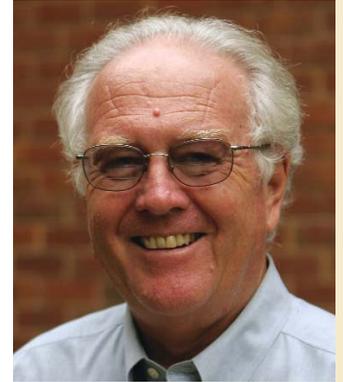
**M**easuring Up 2008, the fifth edition of the National Center's biennial reports on state performance in higher education, arrives at a time of great uncertainty and concern about the nation's economy, as the financial credit crisis has spawned bank failings not seen since the Great Depression. As the country lurches toward recession, most state and local budgets are in serious deficit, families continue to lose homes to foreclosure, jobs are being lost by the thousands, and a massive \$700 billion federal rescue plan has yet to demonstrate its success. The luxury we may have had in prior years to ignore the warning signs of current problems has now expired. We have no choice but to focus intently on solving these economic problems, casting aside the behaviors that helped bring us to this critical moment.

That higher education is central to future economic progress is beyond dispute, but a decade of *Measuring Up* reports paints a worrisome picture about how well this vital sector is performing: participation in higher education remains flat at best, affordability has declined sharply, and graduation rates continue to be a disgrace. Whatever lead we enjoyed over other countries in the last half of the 20th Century has been lost, as both our participation and completion rates have declined relative to other advanced nations. Far too much effort and too many resources have been devoted to enhancing institutional prestige, at the cost of balanced development of a high-performing system of colleges and universities able to serve the diverse educational needs of the next generation. We have increasingly relied on market forces to shape higher education, and the result has been a vastly widening resource gap between a small number of exceedingly wealthy institutions and a much larger number of poor ones. In a sense, the *Measuring Up* reports can be read as assessing the average performance of our colleges as a whole.

In earlier reports, Robert Atwell, Jane Wellman, and I have remarked on the absence of college and university leaders from the national policy debates about higher education. One result has been an unfortunate, if understandable, ten-

dency for state and national political leaders to dominate the discussion. Let me be clear in what I am saying; college and university leaders have certainly worked hard on issues of institutional self-interest, as they must, but few have provided strong voices on policy matters that transcend the local campus. To default to those outside higher education on such substantive issues as academic preparation for college-level work, access for the poor and disadvantaged, success in retention and graduation, and the serious and growing problem of affordability is to limit the nation's ability to make headway in improving the performance of our system as a system. One result, as external parties have criticized and advocated for changes, has been a growing defensiveness on the part of higher education leaders rather than an active engagement with legislators and policy analysts in seeking solutions. We are all the poorer for this failed conversation, and as noted earlier, such failure is a luxury the nation can no longer afford.

One concrete example from the National Center's experience may clarify this point. The *Measuring Up* series has been criticized by numerous college leaders for reporting failing grades for virtually all states in making higher education affordable for students and their families. In private conversations, university leaders have told



me that these failing grades have made it more difficult for their institutions to achieve tuition increases. Another response has been to attack the methodology used in *Measuring Up* to assess the affordability of higher education. In short, many university administrators, rather than addressing the state and national challenges that *Measuring Up* emphasizes, perceive the reports themselves as the problem.

None of us associated with *Measuring Up* would argue that we have the perfect instrument for measuring the complex issue of affordability in higher education. However, we all agree that keeping college affordable is a serious and growing problem, potentially much worse for the next generation of aspiring college students. We also agree that there are limits to the share of educational cost that can be shifted to students

and families. Furthermore, if state and national leaders fail to improve upon this situation, the economic prospects for the United States will be grim. Yet so far, we are failing as a nation to address this issue squarely and honestly.

The National Center is committed to developing a forum in which college and university leaders can meet with political leaders and knowledgeable policy professionals to advance a conversation about the enduring challenges of preparation, participation, affordability, completion, and accountability in higher education. The problems are now so serious and the stakes so high that the most experienced educators and political leaders must work together for policies that will enable higher education to continue to serve the millions of Americans whose well-being depends upon it.

## What's New in *Measuring Up 2008*?

### Measuring Change Over Time

As in previous editions, the Change Over Time arrows in *Measuring Up 2008* compare each state's current performance with its own previous performance in the 1990s. This year, however, a state's Change Over Time is determined by its improvement or decline in performance on a key indicator in each performance category. The key indicators were selected because they are broad gauges for understanding state success in the performance areas. The key indicators are:

**Preparation:** Percentage of 18- to 24-year-olds with a high school credential (1990 to 2006)

**Participation:** Percentage of 18- to 24-year-olds enrolled in college (1991 to 2007)

**Affordability:** Percentage of income (average of all income groups) needed to pay for college expenses at public four-year institutions (1999-2007)

**Completion:** All degree completions per 100 students (1992-2007)

**Benefits:** Percentage of 25- to 64-year-olds with a bachelor's degree or higher (1990 to 2006)

States receive either an "up" or a "down" arrow in each performance area. An "up" arrow indicates that the state has increased or remained stable on the key indicator in the category; a "down" arrow indicates that the state has declined in the key indicator in the category. The National Center does not establish benchmarks for improvement; however, the Change Over Time performance of the top states is depicted graphically on the second page of each state's summary report card. Many states, but not all, have improved on these key indicators. Affordability is different from the other categories in that lower percentages indicate higher performance.

### Improvements in Data

A number of new data sources are used for *Measuring Up 2008* because the new data provide states with a more comprehensive portrayal of their performance.

This year, the National Center replaced the data derived from the Census Bureau's Current Population Survey (CPS) with the American Community Survey (ACS), which is also administered by the Census Bureau. The ACS was expanded to a sample size of three million households in 2005 and will eventually replace the long survey form of the decennial census. It has much larger sample sizes than the CPS, making it a valuable resource for state data. As a result of this change, comparing results from previous years is no longer possible for all of the indicators that were based on the CPS. The indicators affected include: the percentage of 18- to 24-year-olds with a high school credential; the percentage of 18- to 24-year-olds enrolled in higher education; the percentage of 25- to 49-year-olds enrolled in higher education; certificates and degrees awarded per 1,000 state residents (age 18 to 49) without a college degree; and the percentage of the population with either an associate's or a bachelor's degree. The national advisory board for *Measuring Up* and the National Center have concluded that, compared with the CPS data, the new data provide states with a more comprehensive portrayal of their performance. (For more information, please see the *Technical Guide for Measuring Up 2008* at [www.highereducation.org](http://www.highereducation.org)).

In addition, *Measuring Up 2008* includes two new indicators, one in Completion and one in Benefits. In the Completion category, the new indicator measures the number of certificates and degrees awarded in relation to the number of state residents (ages 18 to 49) without a college degree. In the Benefits category, the new indicator identifies the percentage of adults who have earned an associate's degree, which parallels an existing indicator identifying the percentage of adults with a bachelor's degree.

## Questions and Answers about *Measuring Up 2008*

### **Who is being graded in this report card, and why?**

*Measuring Up 2008* grades states, not students or individual colleges or universities, on their performance in higher education. The states are responsible for preparing students for higher education by means of sound K-12 school systems, and they provide most of the public financial support — approximately \$77 billion in 2008 — for colleges and universities. Through their oversight of public institutions of higher education, state leaders affect the types and number of education programs available in the state. State leaders also determine the limits of financial support and often influence tuition and fees for public colleges and universities. They also establish how much state-based financial aid is available to students and their families, which affects students attending both private and public colleges and universities. In addition, state economic development policies influence the income advantage that residents receive from having some college experience or a college degree.

### **Why is a state-by-state report card needed for higher education?**

*Measuring Up* provides the general public and policymakers with objective information they need to assess and improve higher education. With the publication of the first edition of *Measuring Up* in 2000, states could evaluate and compare performance in higher education within a national context for the first time. The report card series was developed as a tool for fostering improvement in policy and performance.

### **What factors are considered when grading states?**

The report card grades states in six overall performance categories:

**Preparation:** How adequately does the state prepare students for education and training beyond high school?

**Participation:** Do state residents have sufficient opportunities to enroll in education and training beyond high school?

**Affordability:** How affordable is higher education for students and their families?

**Completion:** Do students make progress toward and complete their certificates or degrees in a timely manner?

**Benefits:** What benefits does the state receive from having a highly educated population?

**Learning:** What is known about student learning as a result of education and training beyond high school?

### **How are states graded?**

States receive letter grades in each performance category. Each category consists of several indicators, or quantitative measures — a total of 36 indicators in the five graded categories. Grades are calculated based on each state's performance on these indicators, relative to the best-performing states. Grades in *Measuring Up 2008* reflect state performance for 2006 or 2007, the most recent information available.

For the sixth category, Learning, states receive an "Incomplete" because there is not sufficient information about student learning for meaningful state-by-state comparisons.

### **What sources of information are used to determine the grades?**

All data used to grade states in *Measuring Up 2008* were collected from reliable national sources, including the U.S. Census Bureau and the U.S. Department of Education. All data are the most recent public information available for state comparisons. Please see the *Technical Guide for Measuring Up 2008* for more information regarding data sources.

### **Does the report card grade on a curve?**

No. Grades are calculated by comparing each state to the best-performing states for each indicator.

### **What grading scale is used?**

As shown in "How We Grade States," letter grades are based on the familiar 100-point scale: An "A" represents a score of 90 or above, and an "F" represents a score below 60.

### **How do we measure Change Over Time?**

Change Over Time indicators compare each state's current performance with its own previous performance in the 1990s. For each category, the state's change is determined by its improvement or decline in performance on a key indicator in that category. This information is displayed in two ways. First, states receive either an "up" or a "down" arrow in each performance area. An "up" arrow indicates that the state has increased or remained stable on the key indicator in the category, a "down" arrow indicates

that the state has declined in the key indicator in the category. Second, information about Change Over Time is presented graphically in greater detail on the second page of each state's summary report card.

**Does the report card use data that are unique to a particular state?**

*Measuring Up 2008* only uses data that are comparable across states. As a result, some states may find that their own internal data present a fuller picture of the state's strengths and weaknesses in higher education. The National Center encourages states to add their own data to the report card's categories to create a more detailed picture of state performance.

**What happens if data are missing for a state?**

When information is not available on a particular indicator, we assume for the purposes of grading that the state is doing no better or worse on that particular indicator than it is on the other indicators in that performance category. However, the report card uses the most recent data available. In the event that a state has data that were available for the 2006 edition of *Measuring Up* but not for the 2008 edition, the data from *Measuring Up 2006* are used again in this edition, since they are the most recent data available.

**How does the report card account for the migration of people across state lines?**

Migration affects two of the performance categories: Participation and Benefits. One of the indicators in the Participation category accounts for the migration of young people, but the indicator in the Benefits category does not, due to limitations in national data collection. In the Participation category, please see the net migration of students reported in the "Other Key Facts" section of the state report cards. In the Benefits category, states receive credit for having an educated population since they reap the economic and societal rewards regardless of where their residents were educated. With the exception of the Benefits category, all other graded performance categories recognize states for developing rather than importing talent.

**How frequently are the report cards published?**

The report cards are published every two years. Previous report cards were published in 2000, 2002, 2004, and 2006.

**What information is provided but not graded?**

The state report cards highlight important gaps in college opportunities for various income and

ethnic groups, identify improvements and setbacks in each state's performance over time, and compare state performance in higher education with other countries. Each state report card also presents important contextual information, such as demographic trends, student migration data, and state funding levels for higher education.

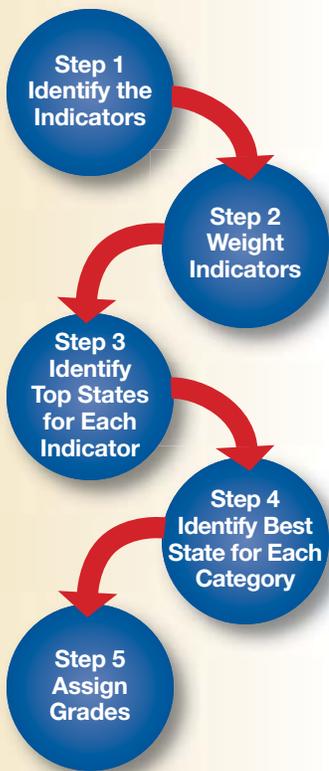
**Why does *Measuring Up 2008* include international indicators?**

As in 2006, this year's edition of *Measuring Up* provides information on key international indicators of educational performance. In the global economy, it is critical for each nation to establish and maintain a competitive edge through the ongoing, high-quality education of its population. *Measuring Up 2008* offers international comparisons that reveal how well the United States and each of the 50 states are preparing residents with the knowledge and skills necessary to compete in a global economy. As with other data in the report card, each international measure is based on the most current data available. In this case, the data are from the Organisation for Economic Co-operation and Development (OECD). International comparisons are used to gauge the states' and the nation's standing relative to OECD countries on the participation and educational success of their populations. Please see the *Technical Guide for Measuring Up 2008* for more information regarding data sources.

**How can I find out more about the report card or my state's performance?**

Explore the National Center's Web site at [www.highereducation.org](http://www.highereducation.org) to:

- Download state report cards and the national report card.
- Compare any state with the best-performing states in each performance category.
- Compare states' grades and indicator results in each performance category.
- Compare states' other key factors (such as demographic indicators and higher education appropriations).
- Identify gaps in state performance for ethnic and income groups.
- Link directly to the sources that gathered the data.
- Obtain technical information and sources for indicators, weights, and calculations.
- Find out more about the National Center for Public Policy and Higher Education.



A	= 93 & Up
A-	= 90–92
B+	= 87–89
B	= 83–86
B-	= 80–82
C+	= 77–79
C	= 73–76
C-	= 70–72
D+	= 67–69
D	= 63–66
D-	= 60–62
F	= Under 60

## How We Grade States

State grades (A, B, C, D, or F) in the five performance categories are based on each state’s performance relative to other states.

### Step 1. Identify the indicators

Indicators, or measures, are selected for each performance category: preparation, participation, affordability, completion, and benefits. All indicators used in *Measuring Up*:

- are important in assessing performance in the category,
- are collected regularly by reliable, public sources that follow accepted practices for data collection,
- are comparable across the 50 states, and
- measure performance results.

### Step 2. Weight indicators

Each indicator is assigned a weight based on its importance to the performance category. For each category, the sum of all weights is 100%.

### Step 3. Identify top states for each indicator

State results, or raw scores, on each indicator are converted to an “index” scale of 0 to 100, using the performance of the top five states as the benchmark. This establishes a high, but achievable standard of performance. Beginning with *Measuring Up 2004*, the performance of the top five states in the early 1990s sets the benchmark for the current performance in the affordability category. All other categories continue to use the top five states in the current year.

### Step 4. Identify best state for each category

State scores for each category are calculated from the state’s results on the indicators and the indicators’ weights. In each category, the sum of all the index scores on the indicators is converted to a scale of 0 to 100, based on the performance of the top state in the category.

### Step 5. Assign grades

Grades are assigned based on the category index scores, using a grading scale common in many high school and college classes.

## How We Measure Change Over Time

As in previous editions, the Change Over Time arrows in *Measuring Up 2008* compare each state’s current performance with its own previous performance in the 1990s. This year, however, a state’s Change Over Time is determined by its improvement or decline in performance on a key indicator in each performance category. The key indicators were selected because they are broad gauges for understanding state success in the performance areas. The key indicators are:

**Preparation:** Percentage of 18- to 24-year-olds with a high school credential (1990 to 2006)

**Participation:** Percentage of 18- to 24-year-olds enrolled in college (1991 to 2007)

**Affordability:** Percentage of income (average of all income groups) needed to pay for college expenses at public four-year institutions (1999-2007)

**Completion:** All degree completions per 100 students (1992-2007)

**Benefits:** Percentage of 25- to 64-year-olds with a bachelor’s degree or higher (1990 to 2006)

States receive either an “up” or a “down” arrow in each performance area. An “up” arrow indicates that the state has increased or remained stable on the key indicator in the category, a “down” arrow indicates that the state has declined in the key indicator in the category. In addition, information about Change Over Time is presented graphically in greater detail on the second page of each state’s summary report card. The National Center does not establish benchmarks for improvement; however, the Change Over Time performance of the top states is depicted graphically on the second page of each state’s summary report card. Many states, but not all, have improved on these key indicators. Affordability is different from the other categories in that lower percentages indicate higher performance.

### What do the arrows mean?



The state has increased or remained stable on the key indicator in the category



The state has declined on the key indicator in the category

## Acknowledgements

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The National Center wishes to thank members of the national advisory committee for their essays in this report. David Breneman, chair of the advisory committee challenges higher education leaders to engage in public debate about the performance and future of American higher education; Peter Ewell provides an update on the Learning category; and, Dennis Jones provides a summary of the nation’s ability to inform a policy discussion through the systematic collection of information. In addition, Alan Wagner provides an analysis for the international indicators on which we relied for the comparative aspects of *Measuring Up 2008*.

The state higher education executive officers and commissions in each state reviewed the data used for grading in *Measuring Up 2008*.

Joni Finney, vice president for the National Center and professor of practice at the University of Pennsylvania was the principal author of state reports and was responsible for leadership and direction of *Measuring Up 2008*. Her report co-authors include: Patrick Kelly, William Doyle, Stacey Zis, Darcie Harvey, Heather Jack, Kathryn Ankrum, Daphne Borromeo and Peter Ewell. Patrick Kelly, senior associate with the National Center for Higher Education Management Systems (NCHEMS) was lead analyst and project manager at NCHEMS. William Doyle, assistant professor of higher education at Vanderbilt University, was a consultant for the National Center for *Measuring Up 2008*.

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## Measuring Up 2008 Resources

To view *Measuring Up 2008* and its resources visit [www.highereducation.org](http://www.highereducation.org)

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### National Picture

- 2008 Snapshot: Performance overview on national maps
- Improvements and Declines: The nation's performance since the early 1990s
- Download the national report in PDF format

### State Reports

- State Report Cards: A comprehensive picture of higher education in each state
- Download each state's report card in PDF format

### Compare States

- Graded Performance: Compare state results by performance category
- State Facts: Compare non-graded state information
- Index Scores (sort/compare/map): Sort states by their rank within each category and create a national map based on individual indicator scores

### Commentary

- *Foreword*, by Governor James. B. Hunt Jr., Chairman of the National Center's Board of Directors
- *The 2008 National Report Card: Modest Improvements, Persistent Disparities, Eroding Global Competitiveness*, by Patrick M. Callan, President, The National Center
- *The Information Gap: Much Talk, Little Progress*, by Dennis P. Jones, President of the National Center for Higher Education Management Systems

- *Stuck on Student Learning*, by Peter T. Ewell, Vice President of the National Center for Higher Education Management Systems

- *Facing the Nation: The Role of College Leaders in Higher Education Policy*, by David W. Breneman, University Professor and Director, University of Virginia

### News Room

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To view *Measuring Up 2008* individual state report cards for each of the 50 states, visit [www.highereducation.org](http://www.highereducation.org).

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## Top 10 State Policy Issues for Higher Education in 2009

by  
AASCU State Relations  
and Policy Analysis Research Team

### Introduction

Presented here are the top 10 issues most likely to affect public higher education across the 50 states in 2009, in the view of the state policy analysis and research staff at AASCU. While numerous topics shape state higher education policy, each affecting the issues of affordability and quality, our focus is on the overarching issue of college access. This synopsis is informed by a scan of state policy activities of the past year, an analysis of trends, and consideration of events that will likely shape the policy landscape. Some issues are perennial in nature, while others reflect attention to near-term circumstances (i.e., current economic turmoil) as well as recent federal and state policy actions. The influence of any given issue will, of course, vary across individual states.

### #1—States' Fiscal Crises

The economic storm clouds that were gathering on the horizon early in 2008 have opened up over the past year, unleashing a torrent of negative economic data resulting in declining revenue in most states. The nation as a whole has been in a recession since December 2007, but for many states, the downturn began well before then. States are in the process

of closing \$30 billion in current year (fiscal 2009) budget shortfalls and face nearly an additional \$200 billion in budget gaps over the next 18 to 24 months, according to the National Governors Association (NGA). States as small as Rhode Island and as large as California are being battered by large revenue shortfalls. The Wall Street meltdown, declining real estate values, decreasing consumer spending, and increasing unemployment are among the factors hastening already existing state structural deficits. The NGA predicts that states will reduce spending in the current fiscal year budget cycle for the first time in a quarter century. It is from this stark reality that most state higher education policy action in 2009 will follow.

The end result has been—and may well continue to be—reduced state appropriations for public postsecondary education as state lawmakers stitch together budgets for the 2010 fiscal year, which begins on July 1 for all but four states. This comes at a time when public higher education institutions and systems are still trying to make up ground in state appropriations that had been lost during the economic downturn earlier this decade. While perhaps no state agency will be spared from

pared-back state spending plans in the year ahead, past history suggests that higher education could well receive a disproportionate share in the fiscal bloodletting. The cascading effect of the states' financial crises will impact many crucial state policies and programs, including state student grant programs, tuition prices and student enrollment.

## **#2–Tuition Prices and Tuition Policy**

In the wake of reduced state funding for higher education (or in a few cases, modest increases), increases in tuition prices at public colleges and universities are sure to follow. Institutions of higher education are going to great lengths to cut costs, but such efforts will likely not negate the need for colleges to hike tuition rates—sometimes dramatically—to offset reduced state support. Fall 2009 increases may, in many instances, be considerably higher than the national average increase of 6.4 percent witnessed at public four-year institutions in fall 2008, especially for those colleges facing the double blow of reduced state support paired with increases in student enrollment. In reaction to mid- (fiscal) year state budget cuts, and in anticipation of further erosion in state funding in fiscal year 2010, some institutions have taken the rare action of increasing tuition mid-year.

Significant increases in tuition prices—especially those taking place at public colleges and universities—will likely stoke debate over tuition policy, who controls it, and to what extent it should be regulated. Despite tuition increases largely provoked by insufficient, if not declining, state appropriations for higher education, many state lawmakers and other governing bodies with tuition setting authority may tussle over the parameters of these increases. Calls will be made to legislatively restrict increases, and efforts will be made to incentivize, or punish, institutions and systems to keep increases in check. Conversely, scenarios may arise in which appeals are made to loosen restrictions over tuition increases in order to meet demands for rising enrollments and to maintain the quality of undergraduate instruction. Florida serves as a case in point, with Governor Charlie Crist

recently bowing to longstanding calls for that state's public postsecondary institutions to raise what are some of the lowest tuition rates in the nation to considerably higher levels to meet enrollment and quality demands. Likewise, New York Governor David Patterson recently proposed allowing the SUNY and CUNY systems to raise tuition for just the second time in 13 years to offset a proposed \$348 million reduction in state funding for the two systems.

## **#3–State Student Grant Aid Programs**

State grant aid to college students can be based on merit, financial need, or both. Over time, states have shifted from awarding predominantly need-based financial aid to a mix of merit- and need-based aid programs. In 2006-07, according to the College Board's Trends in Student Aid, the amount of state grant aid not based on financial need was 28 percent, up from 17 percent nine years earlier. Facing large budget deficits, state-funded student grant programs may well be a target for overhaul, such as implementing tighter restrictions on eligibility, as was the recent case in New Jersey for that state's popular STARS and STARS II scholarship programs. Ensuring fiscal integrity of these programs and striking a balance between financial need-based and merit-based qualifications will be a focus of state policy action in 2009. The federal government's Pell Grant program, the bellwether of all financial aid programs, has seen a huge increase in the number of applications in light of the economic downturn. Likewise, the pressure will be on at the state level to maintain, if not bolster, need-based aid.

## **#4–Enrollment Capacity**

Although the bubble in the Baby Boom echo has popped—with the largest high school graduating class having taken place in 2008—any leveling off of enrollments at many of the nation's colleges and universities may be postponed due to burgeoning demand that is often witnessed during a recessionary period. Traditional-aged undergraduates may find themselves not only competing for seats in classrooms at their state universities and community colleges, but also with

unemployed and under-employed adults who are returning to campus to upgrade their skill sets. As with tuition policy, the struggle over balancing enrollment levels with both fiscal and physical (instructional and laboratory) capacity may be contested at various levels of governing authority within states.

States in the West and Southwest, such as Arizona, California, Nevada, Texas and Utah, exemplify the enrollment capacity dilemma. Enrollment pressures will likely vary according to the relative affordability of each sector of postsecondary education, with the squeeze particularly burdensome at public two-year institutions. The California State University System recently announced the unprecedented move to reduce enrollment by 10,000 students across its 23-campus system for the fall 2009 term in order to address midyear budget cuts—and more cuts that are likely on the way—that stem from plummeting state revenues. At the state’s 109-institution community college system, suggestions have been made that upwards of a quarter million students may be turned away, not through formal enrollment policy, but rather as a result of sheer capacity limits. The availability of seats in classrooms, as well as course sections, will be at a premium; developing policies that balance enrollment demand and workforce needs with the requisite infrastructure and funding will be high on the higher education agenda in many states.

## **#5—Implementation of Higher Education Opportunity Act**

Increased transparency and accountability were key themes of the long-awaited reauthorization of the Higher Education Opportunity Act (HEOA) in 2008. A significant number of reporting requirements for colleges, textbook publishers, lenders, the U.S. Department of Education and other higher education-related entities aim to better inform consumers, making students and families a clear winner in the HEOA.

The sweeping legislation also intends to foster greater accountability on states’ part in financing their share of public postsecondary education

by imposing a Maintenance of Effort (MOE) requirement. Under this provision, states must now appropriate operating funds for their public colleges and universities, and for financial aid programs provided to private institutions in the state, at an amount equal to or greater than the average during the prior five years. There are limited waiver provisions for “exceptional or uncontrollable circumstances,” and many state leaders are insisting that the current recession is reason enough for a temporary release from the spending requirement. The National Governors Association has requested the U.S. Department of Education to waive this requirement for the next budget cycle due to the current recessionary impact on states. The Department has yet to weigh in on states’ obligations for the next budget-setting cycle. The penalty for noncompliance is the Department of Education’s withholding of College Access Challenge Grants, a state-matching grant program aimed at boosting access to underrepresented populations. While these grants were first funded in FY 2008 and average only about \$1,158,000 per state, the intent of the provision is to emphasize that states must not neglect their responsibility to higher education. This MOE provision and several other rules within the reauthorized HEOA will likely play a role in higher education state policy in the months ahead.

## **#6—The Incoming Obama Administration**

Considerable potential exists for the actions of President-elect Barack Obama to impact state higher education policy decisions in 2009, both through enactment of his various campaign policy proposals and through inclusion of higher education as part of the administration’s economic recovery strategy. A refundable tax credit up to \$4,000 for students in exchange for their contribution of 100 hours of community service, streamlining the federal student grant aid application process, boosting the maximum Pell Grant award, and a matching grant program for states to raise awareness of federal and state financial aid programs are among the proposals Obama offered during his campaign. On a more immediate basis, calls have been made to

include higher education in what is anticipated to be a federal economic stimulus package in the range of \$750 to \$850 billion, either through a one-time injection in federal student aid to boost enrollment, or through capital outlay dollars that will expand instructional and research capabilities at the nation's colleges and universities.

It is hoped that state leaders will complement any policies and spending programs that are championed by the Obama administration so to maximize the potential for increasing postsecondary access and exploit the full economic energy produced through the workforce development, applied research, and regional outreach activities performed by the nation's colleges and universities. Conversely, it is critical that states do not use any positive investment in higher education made at the federal level to supplant, rather than augment, the workforce development and economic development capabilities of the nation's public postsecondary institutions.

## **#7—College Readiness**

Though less time-sensitive, the need to increase the number of high school graduates who are prepared for college will continue to be a critical issue over the next year. More than a quarter of entering college freshmen take at least one remedial course in college, and this proportion is even higher at less selective four-year institutions and at community colleges. Students who are underprepared for college have a harder time completing their educational goals, and both public and private costs of degree attainment are greater. Many underprepared students do not even enroll in college, and a sizable number simply drop out of high school. If the U.S. is to remain competitive in the global economy, more must be done to strengthen the educational pipeline in order to dramatically increase the number of two- and four-year college degrees produced each year.

State and national policymakers have implemented a variety of approaches over the past 25 years to increase the college readiness of high school students, and will continue to make progress

in the year ahead. This includes efforts to implement graduation requirements aimed at assuring that all graduates are prepared for college (as opposed to systems in which students are specifically tracked into, or out of, college-preparatory curriculums); efforts to align state K-12 standards with postsecondary and workforce expectations; and efforts to align secondary and postsecondary assessments. All of these strategies have potential for improving college readiness, particularly if developed in conjunction with broader P-16 initiatives, longitudinal data systems, and coordinated accountability reporting.

## **#8—Veterans' Education**

The upcoming August 1, 2009 implementation of the Post-9/11 Veterans Educational Assistance Act of 2008, also known as the Post-9/11 GI Bill, will be a watershed moment in the history of educational assistance for veterans and servicemembers. It provides veterans with at least 90 days' active duty service post-9/11 and remaining GI Bill eligibility with tuition and required fee payments scaled to the most expensive public college in their state of residence, a housing stipend for some veterans, and a book stipend. Eligible colleges and universities may also sign on to the Yellow Ribbon Program, which allows institutions to pay up to 50 percent of eligible veterans' tuition and fee costs not covered by the Post-9/11 GI Bill and receive matching funds from the Department of Veterans Affairs (VA) for the remaining 50 percent.

The major issue in 2009 will be how this groundbreaking program will fare in implementation. The VA will be manually processing claims using pre-existing computer systems until a specialized computer system can be built to handle the new demands of the Post-9/11 GI Bill. This manual processing of claims, combined with an unknown number of veterans utilizing the Post-9/11 GI Bill benefits (best estimates hover around the 300,000 mark in its first year), and the need to write a new set of rules governing the program's benefits all add up to a complicated implementation process being put into place under an extraordinarily tight time frame. State higher education policy may be

affected either through the bill's implementation process or through the creation or augmentation of currently existing state programs aimed at facilitating postsecondary access for veterans.

## **#9–Undocumented Students**

Higher education access and affordability for undocumented students will continue to be debated in 2009, with potential trend-setting consequences. Existing federal law pertaining to in-state tuition for undocumented students is ambiguous, and Congress has repeatedly failed to pass a measure such as the DREAM Act that would support states' rights to offer in-state tuition to these students. Between 2001 and 2006, 10 states passed measures to provide in-state tuition rates to undocumented students who meet the specified criteria (including residency in the state for a given period of time, earning a high school diploma, and signing an affidavit to agree to seek legal residency status), but since then, no additional states have followed suit. Policymakers have become increasingly wary of acting on this issue without the support of federal law.

In the past couple of years, there have been several high-profile court challenges to existing in-state tuition laws. In September 2008, a California appeals court ruled for the first time that the state's 2001 law giving undocumented students in-state tuition rates violates a 1996 federal law. The California Supreme Court has agreed to hear the case, and though not binding on other states, it will have implications elsewhere. Officials in other states (including Texas and Utah) have already asked for similar review of their state laws. Also for the first time in 2008, the right of undocumented students to enroll in public institutions in a state has been called into question. In South Carolina, undocumented students have been barred from enrolling in all public institutions (even if they pay out-of-state tuition rates), and in North Carolina and Alabama, they have been barred from community colleges.

As to the future, the new administration and the new Congress should be more favorable toward passing federal legislation that would clarify states' rights

to offer in-state tuition benefits to undocumented students. With this change, the number of states with laws favorable to undocumented students would likely increase, and such a law could stem court challenges such as the one in California. However, this would remain a contentious issue in the states, as not all states will move in a direction favorable to undocumented students and states could still act to bar these students from enrolling in public colleges. If Congress fails to enact such legislation, it is highly unlikely that educational opportunity for undocumented students will improve.

## **#10–Sustainability**

The issue of sustainability was elevated considerably in 2008, courtesy of record-high oil prices that peaked in July. The repercussions to higher education were many; some negative—such as the impact of gas prices on commuter students and the costs to universities in running their plant operations, and some were positive; such as increased actions on campuses to spur conservation and redoubled R&D efforts aimed at nurturing new alternative and renewable energy sources. With a backdrop of high energy prices, greater recognition of the causes behind global warming, and continued conflict in the Middle East, federal and state policy actions in 2009 may accelerate campus sustainability projects and fund campus-based research endeavors while generating so-called green collar jobs in the process.

## **Conclusion**

State higher education policy in 2009 will be affected on many fronts: through repercussions of the national economic recession, by the cascading effect of significant federal legislation passed in 2008 and which will be implemented this year, and through the perennial quest to improve college access and affordability. With diminishing revenue streams in the midst of increasing enrollment demands typical of recessionary periods, state policy and higher education leaders face a daunting task ahead. States will have to raise revenues and/or cut expenditures; assuming that it's more of the latter than the former, it is certain that elevating

public higher education as a state priority will be all the more challenging.

Embedded in the fiscally tumultuous year ahead is a silver lining, however. Sheer economic necessity will drive greater innovation, through new policies and actions at all levels—state, system and institutional. The need to innovate, even while under financial

duress, will lead to improvements in cost efficiency, effectiveness and productivity. The ultimate challenge in 2009 is to contend with current economic conditions, maximize the role of America's public colleges and universities as an integral part of a national recovery, and maintain access to these institutions as a state—and national—public policy priority.

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# THE 2007 STATE NEW ECONOMY INDEX



BENCHMARKING

ECONOMIC

TRANSFORMATION

IN THE STATES

Ewing Marion  
KAUFFMAN  
Foundation



## THE INDICATORS

### OVERVIEW AND METHODOLOGY

The 2007 State New Economy Index builds on the 2002 State New Economy Index, using most of the indicators contained in that report. In our continuing effort to measure the New Economy better, the 2007 Index also includes eight new indicators, many of which take advantage of newly available data. Several of these indicators assess entrepreneurial activity. The Index measures the number of entrepreneurs who start new companies, the number of patents issued to independent inventors, and the number of firms that are among the fastest growing in the nation, as measured by the Deloitte Fast 500 and the Inc. 500. To assess manufacturing competitiveness, a new indicator measures the value-added of a state's manufacturing sectors. To highlight the increased significance of the service economy, service exports have been added to the manufacturing exports

indicator, and a new indicator tracks employment in high-wage services that are traded outside a region's economy. To capture growing global trends more accurately, the Index also measures the average education level of immigrants and the number of package exports.

Like the 2002 Index, the report controls for a state's industry sector mix in variables that measure company behavior (R&D, exports, patents, manufacturing value-added). Holding the industry mix constant is important because some industries export, patent, spend more on R&D, or have higher value-added than others by their nature. For example, without controlling for industry mix, Washington state would score very high in manufacturing exports because its aviation sector (e.g. Boeing) is so large, and exports are a large share of that industry's output. To present a more accurate measure of the degree to which companies in a state, irrespective of the industry they are in, export, invest in R&D, or patent, these three indicators account for the state's industrial composition.<sup>47</sup> Similarly, manufacturing value-added is measured on a sector-by-sector basis, ensuring that a state's companies are compared to the nationwide performance of firms in the same industry.

Because the 1999, 2002 and 2007 reports use different indicators and methodologies, the total scores are not necessarily compatible. Therefore, a state's movement to a higher or lower overall rank between the years does not necessarily reflect changes in its economy. However, the 2002 overall scores have been revised to reduce methodological differences with the 2007 data.

The 26 indicators are divided into 5 categories that best capture what is new about the New Economy:

- 1) Knowledge jobs. Indicators measure employment of IT professionals outside the IT industry; jobs held by managers, professionals, and technicians; the educational attainment of the entire workforce; immigration of knowledge workers; employment in high value-added manufacturing sectors; and employment in high-wage traded services.
- 2) Globalization. Indicators measure the export orientation of manufacturing and services; foreign direct investment; and package exports.
- 3) Economic dynamism. Indicators measure the number of fast growing "gazelle" companies; the degree of job churning (which is a product of new business start-ups

and existing business failures); the number of Deloitte Technology Fast 500 and Inc. 500 firms, the value of initial public stock offerings (IPOs) by companies; the number of entrepreneurs starting new businesses; and the number of individual inventor patents issued.

- 4) **Transformation to a digital economy.** Indicators measure the percentage of population online; the number of Internet domain name registrations; technology in schools; the degree to which state and local governments use information technologies to deliver services; Internet and computer use by farmers; and residential and business access to broadband telecommunications.
- 5) **Technological innovation capacity.** Indicators measure the number of jobs in technology-producing industries; the number of scientists and engineers in the workforce; the number of patents issued; industry investment in research and development; and venture capital activity.

In all cases, the report relies on the most recently published statistics available, but the data may in some cases be several years old due to the delays in publishing federal statistics. In all cases, data are reported to control for the size of the state, using factors such as the number of workers or total worker earnings as the denominator.

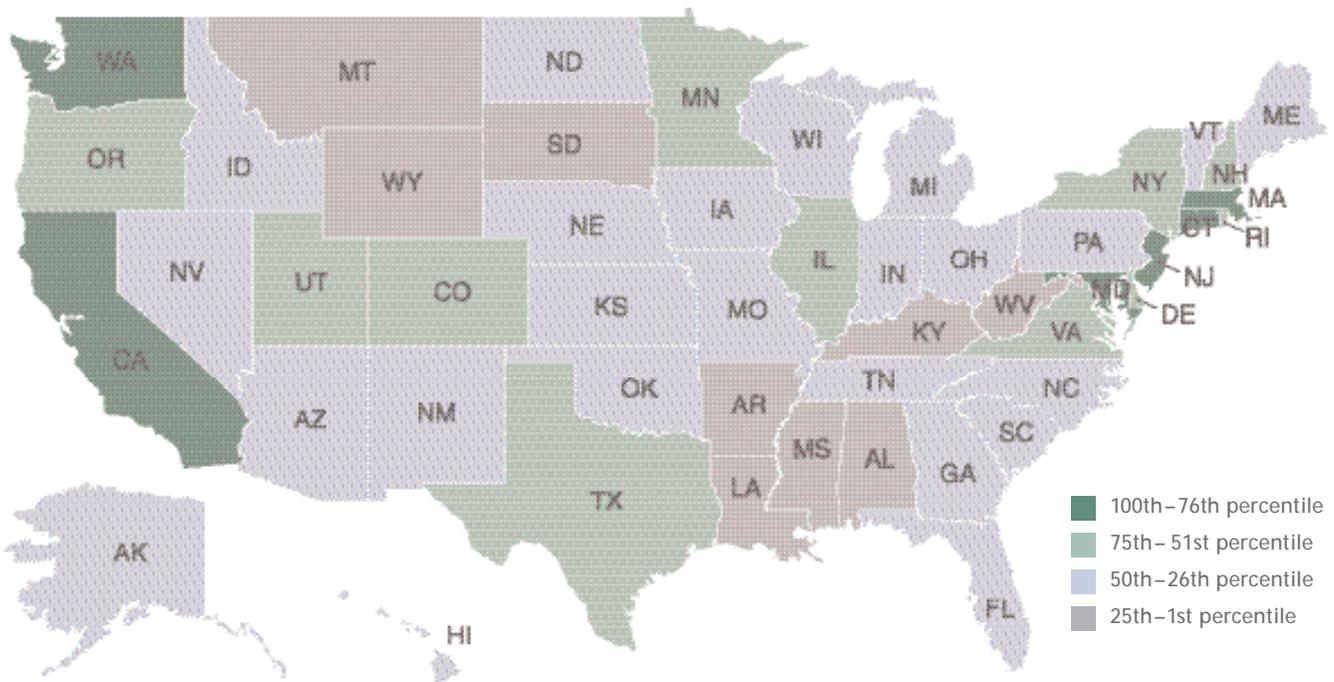
Scores in each indicator are calculated as follows: In order to measure the magnitude of the differences between the states instead of just their rank from one to fifty, raw scores are based on standard deviations from the mean. Therefore, on average for most indicators, approximately half the states initially have negative scores (below the national mean) and approximately half have positive scores. The scores are then equally adjusted (ten is added to each of the five indicator category totals) to ensure that all are positive.

In the calculation of the five indicator category totals (e.g., Globalization, Economic Dynamism, etc.) and the overall New Economy scores, the indicators are weighted both according to their relative importance and so that closely correlated indicators (for example, patents, R&D spending, and high-tech jobs) do not bias the results. (See Appendix).

The overall scores are calculated by adding the states' adjusted scores in each of the five indicator categories and then dividing that total by the sum of the highest score achieved by any state in each category. Thus, each state's final score is a percentage of the total score a state would have achieved if it had finished first in every category.

Maps were coded using the following methodology: The range between the highest and lowest scores was calculated and divided by four. That product was subtracted from the top score to calculate the range for the 100th to 76th percentile, and likewise for the other three percentile ranges. In other words, the percentiles do not necessarily divide into an equal number of states, but rather indicate which state scores fall into a particular range.

OVERALL SCORES



2007 Rank	2007 Score	State	1999 Rank	1999 Score	2002 Rank	2002 Score	Rank Change from 1999* 2002**	
1	96.1	Massachusetts	1	82.3	1	94.5	0	0
2	86.4	New Jersey	8	60.9	6	81.8	6	4
3	85.0	Maryland	11	59.2	5	83.0	8	2
4	84.6	Washington	4	69.0	4	86.1	0	0
5	82.9	California	2	74.3	2	90.1	-3	-3
6	81.8	Connecticut	5	64.9	7	78.8	-1	1
7	79.6	Delaware	9	59.9	9	76.4	2	2
8	79.5	Virginia	12	58.8	8	77.5	4	0
9	78.3	Colorado	3	72.3	3	86.2	-6	-6
10	77.4	New York	16	54.5	11	75.1	6	1
11	75.3	Minnesota	14	56.5	14	72.7	3	3
12	73.2	Utah	6	64.0	16	72.1	-6	4
13	71.1	New Hampshire	7	62.5	12	73.9	-6	-1
14	68.6	Texas	17	52.3	10	75.3	3	-4
15	68.6	Rhode Island	29	45.3	23	65.8	14	8
16	68.4	Illinois	22	48.4	19	68.5	6	3
17	66.8	Oregon	15	56.1	13	73.8	-2	-4
18	64.8	Georgia	25	46.6	18	69.3	7	0
19	64.7	Michigan	34	44.6	22	66.3	15	3
20	64.5	Vermont	18	51.9	26	63.1	-2	6
21	63.6	Pennsylvania	24	46.7	21	66.9	3	0
22	63.2	Arizona	10	59.2	15	72.2	-12	-7
23	63.2	Florida	20	50.8	17	70.3	-3	-6
24	62.8	Idaho	23	47.9	20	67.5	-1	-4
25	62.4	Alaska	13	57.7	39	55.6	-12	14

2007 Rank	2007 Score	State	1999 Rank	1999 Score	2002 Rank	2002 Score	Rank Change from 1999* 2002**	
26	60.2	North Carolina	30	45.2	24	63.9	4	-2
27	59.2	Nevada	21	49.0	31	59.2	-6	4
28	59.0	Nebraska	36	41.8	36	56.7	8	8
29	57.8	Ohio	33	44.8	27	61.7	4	-2
30	55.9	Wisconsin	32	44.9	37	56.5	2	7
31	55.8	Indiana	37	41.0	32	58.0	6	1
32	55.6	Maine	28	45.6	29	61.2	-4	-3
33	53.7	New Mexico	19	51.4	25	63.2	-14	-8
34	53.6	Kansas	27	45.8	30	59.4	-7	-4
35	53.5	Missouri	35	44.2	28	61.3	0	-7
36	53.3	Tennessee	31	45.1	34	56.9	-5	-2
37	51.9	North Dakota	45	29.0	47	47.8	8	10
38	51.8	Iowa	42	33.5	40	54.1	4	2
39	51.5	South Carolina	38	39.7	35	56.9	-1	-4
40	51.4	Oklahoma	40	38.6	33	57.0	0	-7
41	50.9	Hawaii	26	46.1	38	56.3	-15	-3
42	49.5	Montana	46	29.0	41	52.9	4	-1
43	47.9	Wyoming	41	34.5	43	52.0	-2	0
44	45.9	Louisiana	47	28.2	44	51.7	3	0
45	45.3	Kentucky	39	39.4	42	52.3	-6	-3
46	45.1	Alabama	44	32.3	45	50.2	-2	-1
47	44.7	Arkansas	49	26.2	49	43.5	2	2
48	43.8	South Dakota	43	32.3	46	49.9	-5	-2
49	36.5	Mississippi	50	22.6	50	43.0	1	1
50	35.6	West Virginia	48	26.8	48	44.2	-2	-2

\* Because of differences in methodology and indicators measured, changes in ranks between 1999 and 2007 cannot all be attributed to changes in actual economic conditions in the state.

\*\*While the 2002 and 2007 reports measure different indicators, methodological differences have been eliminated between them in order to make the two scores as closely comparable as possible. As a result, the final 2002 scores listed here do not reflect the actual scores published in that report.

## STATE NEW ECONOMY SCORES IN ALPHABETICAL ORDER

State	Overall		IT Professionals		Managerial, Professional, Technical Jobs		Workforce Education		Immigration of Knowledge Workers		Manufacturing Value-Added		High-Wage Traded Services		Export Focus of Manufacturing and Services		Foreign Direct Investment		Package Exports		"Gazelle Jobs"		Job Churning		Fastest Growing Firms	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Alabama	46	45.1	33	0.95%	37	18.8%	42	32.6	12	14.2	43	15.6%	37	11.1%	35	\$17,119	22	2.9%	39	0.06	34	5.5%	35	22.9%	32	0.013%
Alaska	25	62.4	35	0.89%	15	21.2%	16	41.6	16	14.0	16	29.5%	42	9.7%	4	\$32,277	25	2.6%	50	0.01	11	8.9%	9	28.0%	34	0.012%
Arizona	22	63.2	23	1.22%	30	19.8%	23	38.9	49	12.3	13	35.7%	20	13.5%	10	\$28,618	38	2.0%	33	0.10	27	6.5%	15	26.7%	11	0.031%
Arkansas	47	44.7	47	0.65%	46	17.6%	49	28.7	37	13.1	8	40.2%	30	12.3%	49	\$10,679	37	2.1%	40	0.06	5	11.3%	32	23.3%	43	0.003%
California	5	82.9	16	1.29%	17	21.0%	12	43.0	33	13.2	20	26.7%	6	17.1%	9	\$28,883	23	2.7%	19	0.14	10	9.0%	28	24.0%	9	0.034%
Colorado	9	78.3	6	1.60%	14	21.4%	2	50.0	34	13.2	11	35.9%	16	14.2%	33	\$17,489	32	2.4%	32	0.10	8	9.3%	30	23.8%	8	0.035%
Connecticut	6	81.8	5	1.83%	3	24.5%	4	49.4	2	14.8	14	33.2%	2	20.2%	26	\$19,058	4	4.8%	13	0.16	25	6.8%	46	20.5%	12	0.030%
Delaware	7	79.6	8	1.56%	10	22.3%	20	40.4	22	13.7	21	25.7%	1	24.3%	7	\$29,864	2	5.0%	10	0.18	2	13.5%	19	25.9%	14	0.023%
Florida	23	63.2	26	1.13%	40	18.6%	29	37.5	35	13.2	19	27.9%	24	13.0%	12	\$25,998	28	2.4%	25	0.12	14	8.6%	7	29.5%	23	0.017%
Georgia	18	64.8	12	1.40%	19	20.8%	24	38.9	32	13.3	29	21.7%	15	14.5%	16	\$23,742	16	3.5%	24	0.12	18	8.0%	13	26.9%	6	0.038%
Hawaii	41	50.9	40	0.79%	44	18.1%	17	41.4	4	14.6	31	21.3%	46	8.5%	20	\$22,442	9	3.9%	49	0.01	47	4.0%	20	25.6%	46	0.000%
Idaho	24	62.8	38	0.88%	27	20.1%	37	35.9	45	12.8	50	6.0%	38	11.1%	22	\$21,203	47	1.5%	42	0.05	41	4.5%	6	30.8%	20	0.018%
Illinois	16	68.4	9	1.54%	9	22.6%	14	42.3	20	13.8	40	17.0%	8	16.7%	17	\$23,336	17	3.2%	5	0.20	22	7.3%	33	23.3%	29	0.013%
Indiana	31	55.8	39	0.86%	36	19.0%	43	32.3	30	13.4	1	48.7%	41	10.0%	47	\$11,040	11	3.7%	6	0.19	32	5.9%	34	23.0%	16	0.021%
Iowa	38	51.8	27	1.09%	42	18.6%	36	35.9	9	14.3	6	42.7%	18	13.6%	41	\$14,616	40	1.9%	23	0.14	39	4.9%	49	19.0%	36	0.009%
Kansas	34	53.6	17	1.27%	26	20.1%	19	40.8	17	13.9	48	9.2%	32	12.1%	40	\$14,647	42	1.8%	31	0.11	35	5.4%	42	21.9%	39	0.007%
Kentucky	45	45.3	36	0.88%	43	18.6%	47	29.9	42	12.9	33	20.9%	40	10.6%	21	\$22,125	12	3.6%	8	0.19	44	4.2%	41	22.1%	25	0.014%
Louisiana	44	45.9	45	0.68%	29	19.8%	46	30.5	24	13.7	25	24.4%	21	13.2%	8	\$28,971	39	2.0%	48	0.03	33	5.6%	43	21.5%	42	0.004%
Maine	32	55.6	41	0.79%	21	20.4%	27	38.2	23	13.7	23	24.6%	35	11.5%	37	\$15,861	15	3.6%	38	0.06	43	4.3%	40	22.5%	38	0.007%
Maryland	3	85.0	2	2.06%	2	24.8%	3	49.5	19	13.8	10	37.1%	25	13.0%	31	\$18,054	19	3.1%	36	0.08	4	11.6%	4	31.2%	3	0.058%
Massachusetts	1	96.1	4	1.86%	1	26.8%	1	52.4	15	14.1	2	46.8%	7	16.8%	11	\$27,535	5	4.5%	4	0.21	21	7.6%	39	22.6%	2	0.075%
Michigan	19	64.7	22	1.22%	11	22.1%	28	37.6	6	14.4	22	24.8%	29	12.3%	29	\$18,544	10	3.7%	14	0.16	24	6.8%	37	22.6%	30	0.013%
Minnesota	11	75.3	7	1.57%	7	23.0%	10	44.7	28	13.5	9	39.2%	4	17.7%	27	\$18,821	30	2.4%	1	0.25	7	10.4%	31	23.5%	13	0.028%
Mississippi	49	36.5	49	0.54%	47	17.4%	48	29.8	39	13.0	49	7.3%	43	9.7%	45	\$11,540	44	1.7%	44	0.04	40	4.8%	24	24.9%	40	0.006%
Missouri	35	53.5	13	1.40%	33	19.6%	38	35.2	25	13.7	34	20.8%	11	15.3%	39	\$15,363	31	2.4%	29	0.11	31	6.1%	17	26.4%	27	0.014%
Montana	42	49.5	48	0.61%	41	18.6%	22	39.1	13	14.1	45	14.4%	49	7.8%	44	\$13,391	49	1.1%	43	0.05	49	3.8%	10	27.3%	35	0.012%
Nebraska	28	59.0	14	1.38%	34	19.4%	21	40.1	40	12.9	41	16.8%	12	15.1%	43	\$13,770	45	1.7%	27	0.12	1	16.6%	44	21.0%	31	0.013%
Nevada	27	59.2	46	0.66%	50	15.0%	45	31.8	48	12.4	7	40.7%	44	9.0%	5	\$31,758	41	1.9%	11	0.17	38	5.1%	1	38.1%	22	0.018%
New Hampshire	13	71.1	20	1.23%	13	21.9%	8	46.0	1	15.3	28	22.7%	13	15.1%	48	\$10,926	3	5.0%	15	0.16	28	6.2%	25	24.5%	18	0.020%
New Jersey	2	86.4	3	1.94%	5	23.6%	6	46.9	29	13.5	32	21.1%	5	17.3%	19	\$23,039	6	4.5%	3	0.22	6	11.3%	8	29.0%	5	0.041%
New Mexico	33	53.7	34	0.91%	18	20.8%	26	38.6	41	12.9	42	16.3%	45	9.0%	13	\$25,148	48	1.2%	47	0.03	37	5.2%	14	26.9%	45	0.002%
New York	10	77.4	11	1.47%	4	23.9%	9	45.3	10	14.2	27	23.7%	3	19.6%	6	\$30,844	14	3.6%	7	0.19	3	11.7%	18	25.9%	19	0.020%
North Carolina	26	60.2	15	1.29%	32	19.7%	33	37.1	36	13.1	36	19.3%	28	12.9%	34	\$17,482	8	4.0%	26	0.12	16	8.4%	23	25.2%	24	0.016%
North Dakota	37	51.9	43	0.72%	45	17.8%	25	38.9	18	13.9	5	43.5%	39	10.6%	24	\$20,301	46	1.7%	37	0.08	26	6.6%	45	20.7%	46	0.000%
Ohio	29	57.8	24	1.21%	20	20.7%	39	34.6	7	14.4	30	21.5%	17	13.9%	30	\$18,080	20	3.0%	9	0.18	29	6.2%	48	19.5%	17	0.020%
Oklahoma	40	51.4	29	1.03%	25	20.1%	41	33.5	43	12.9	17	29.3%	36	11.4%	38	\$15,599	43	1.8%	41	0.06	36	5.3%	38	22.6%	26	0.014%
Oregon	17	66.7	30	1.02%	24	20.1%	18	41.4	14	14.1	24	24.6%	19	13.6%	18	\$23,141	34	2.2%	18	0.15	30	6.2%	12	27.0%	28	0.013%
Pennsylvania	21	63.6	21	1.23%	12	21.9%	32	37.1	21	13.7	18	28.3%	14	14.5%	36	\$15,985	18	3.2%	17	0.15	13	8.7%	26	24.1%	15	0.023%
Rhode Island	15	68.6	25	1.17%	6	23.5%	13	42.5	3	14.6	37	18.3%	23	13.1%	50	\$8,542	7	4.3%	2	0.25	19	8.0%	29	23.9%	44	0.003%
South Carolina	39	51.5	37	0.88%	38	18.8%	40	34.5	38	13.1	26	24.1%	34	11.5%	15	\$24,665	1	5.2%	20	0.14	42	4.4%	27	24.0%	33	0.012%
South Dakota	48	43.8	42	0.78%	49	17.1%	30	37.3	50	12.0	47	11.4%	26	12.9%	46	\$11,305	50	1.0%	30	0.11	46	4.1%	50	15.3%	46	0.000%
Tennessee	36	53.3	31	0.99%	39	18.7%	44	32.2	46	12.7	39	17.8%	33	11.8%	25	\$20,040	13	3.6%	28	0.11	12	8.7%	5	30.8%	21	0.018%
Texas	14	68.6	18	1.25%	22	20.2%	34	36.3	44	12.8	35	20.4%	27	12.9%	2	\$56,256	24	2.7%	35	0.09	20	7.8%	11	27.1%	7	0.037%
Utah	12	73.2	19	1.24%	23	20.2%	15	42.1	26	13.6	15	33.1%	10	15.5%	23	\$20,803	35	2.1%	21	0.14	17	8.2%	3	36.7%	4	0.052%
Vermont	20	64.5	32	0.99%	28	19.9%	7	46.5	8	14.4	38	18.2%	50	7.5%	3	\$37,574	26	2.6%	16	0.16	48	3.8%	36	22.7%	41	0.005%
Virginia	8	79.5	1	2.36%	8	22.9%	5	47.1	11	14.2	4	45.9%	9	16.4%	32	\$17,793	21	2.9%	34	0.10	15	8.6%	21	25.5%	1	0.082%
Washington	4	84.6	10	1.48%	16	21.1%	11	44.6	5	14.6	3	46.7%	31	12.1%	1	\$59,547	33	2.3%	22	0.14	9	9.1%	2	37.2%	10	0.032%
West Virginia	50	35.6	44	0.68%	31	19.8%	50	26.1	47	12.6	46	14.0%	48	8.0%	28	\$18,817	36	2.1%	45	0.04	50	3.1%	22	25.3%	46	0.000%
Wisconsin	30	55.9	28	1.07%	35	19.4%	31	37.2	31	13.4	12	35.9%	22	13.2%	42	\$14,063	27	2.5%	12	0.17	23	7.3%	47	20.4%	37	0.008%
Wyoming	43	47.9	50	0.52%	48	17.3%	35	35.9	27	13.5	44	15.1%	47	8.2%	14	\$24,698	29	2.4%	46	0.04	45	4.1%	16	26.7%	46	0.000%
U.S. Average		62.1		1.30%		21.0%		39.7		13.5		26.9%		14.5%		\$25,374		3.0%		0.14		8.0%		25.4%		0.026%

State	IPOs		Entrepreneurial Activity		Inventor Patents		Online Population		Internet Domain Names		Technology in Schools		E-Gov't		Online Agriculture		Broadband Telecommunications		High-Tech Jobs		Scientists and Engineers		Patents		Industry Investment in R&D		Venture Capital	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
AL	21	4.62	44	0.22%	46	0.046	44	53.2%	36	1.81	43	4.06	47	3.63	48	3.82	34	3.78	29	3.1%	39	0.28%	45	0.24	34	1.36%	41	0.02%
AK	44	3.28	6	0.38%	22	0.078	1	71.6%	17	2.78	10	5.95	45	3.85	25	5.04	6	6.00	36	2.2%	28	0.32%	37	0.29	50	0.36%	47	0.00%
AZ	40	3.73	35	0.25%	14	0.095	17	63.6%	2	5.04	37	4.36	17	5.41	42	4.29	12	5.08	16	3.9%	30	0.31%	12	0.84	25	2.14%	20	0.16%
AR	39	3.75	7	0.38%	47	0.036	49	49.9%	46	1.34	23	5.23	30	4.87	41	4.33	47	3.17	41	2.1%	49	0.22%	50	0.12	44	0.77%	39	0.02%
CA	3	6.04	9	0.36%	1	0.143	34	56.8%	4	4.01	48	3.48	21	5.23	19	5.41	2	6.51	7	5.1%	12	0.50%	4	1.29	5	4.38%	2	1.27%
CO	2	6.24	2	0.44%	12	0.104	9	65.1%	11	3.07	44	4.05	38	4.46	10	6.13	21	4.51	3	5.8%	10	0.54%	2	1.33	16	2.81%	4	0.50%
CT	15	5.10	25	0.27%	6	0.112	7	66.9%	23	2.55	29	5.00	36	4.60	1	7.18	14	5.06	14	4.1%	6	0.56%	14	0.81	7	4.09%	11	0.23%
DE	28	4.27	50	0.13%	13	0.099	27	59.1%	13	2.92	38	4.36	31	4.81	31	4.87	35	3.72	15	3.9%	4	0.69%	5	1.22	1	7.13%	28	0.06%
FL	24	4.58	32	0.26%	10	0.106	33	57.7%	6	3.80	17	5.46	25	5.10	15	5.72	4	6.07	27	3.2%	48	0.22%	23	0.53	39	1.27%	25	0.10%
GA	31	4.16	12	0.35%	44	0.051	37	56.3%	16	2.83	25	5.19	33	4.67	49	3.72	1	6.93	22	3.5%	36	0.29%	25	0.50	35	1.32%	22	0.13%
HI	34	3.96	31	0.26%	43	0.051	38	56.1%	5	3.88	39	4.29	42	4.22	25	5.04	26	4.26	46	1.9%	16	0.43%	44	0.26	45	0.75%	32	0.05%
ID	12	5.21	5	0.41%	11	0.104	22	62.2%	39	1.73	21	5.30	39	4.44	7	6.57	43	3.36	11	4.4%	23	0.37%	1	2.99	12	3.20%	38	0.02%
IL	10	5.27	20	0.30%	26	0.073	31	58.4%	20	2.70	30	4.96	12	5.61	16	5.69	10	5.21	26	3.4%	26	0.35%	24	0.51	15	3.01%	24	0.12%
IN	23	4.59	28	0.27%	42	0.055	29	58.8%	33	1.89	19	5.40	3	6.35	29	4.95	32	4.00	30	3.0%	37	0.29%	48	0.21	24	2.24%	29	0.06%
IA	38	3.81	26	0.27%	38	0.057	19	63.5%	42	1.56	13	5.64	43	4.20	13	5.75	39	3.55	34	2.3%	38	0.28%	34	0.35	29	1.74%	42	0.01%
KS	42	3.67	33	0.26%	34	0.065	16	63.8%	38	1.75	4	6.35	23	5.17	30	4.91	24	4.42	24	3.4%	40	0.28%	32	0.40	26	2.14%	47	0.00%
KY	29	4.25	42	0.23%	48	0.033	36	56.6%	40	1.61	31	4.90	11	5.63	50	3.36	40	3.53	44	2.0%	46	0.25%	43	0.26	43	0.85%	36	0.03%
LA	26	4.45	30	0.26%	33	0.066	48	50.0%	21	2.63	41	4.23	40	4.38	45	4.00	17	4.74	48	1.7%	44	0.26%	40	0.28	49	0.48%	46	0.00%
ME	16	5.01	14	0.34%	41	0.055	13	64.5%	41	1.60	2	7.29	32	4.75	1	7.18	45	3.26	35	2.3%	27	0.33%	31	0.40	41	1.09%	45	0.01%
MD	11	5.23	19	0.30%	20	0.081	10	65.1%	14	2.88	46	3.98	22	5.17	31	4.87	9	5.64	5	5.3%	1	0.98%	11	0.88	9	3.49%	6	0.46%
MA	5	5.79	43	0.22%	8	0.109	21	62.5%	15	2.87	33	4.76	18	5.41	1	7.18	7	5.80	1	6.5%	3	0.83%	6	1.00	6	4.11%	1	1.36%
MI	30	4.21	40	0.24%	16	0.087	28	58.9%	29	2.23	32	4.89	1	6.78	21	5.34	31	4.12	20	3.7%	25	0.35%	15	0.74	4	4.76%	34	0.05%
MN	17	4.97	24	0.28%	5	0.112	4	69.0%	24	2.42	35	4.67	9	5.68	22	5.27	27	4.25	12	4.2%	22	0.37%	13	0.82	8	3.91%	19	0.18%
MS	36	3.88	11	0.35%	49	0.032	50	42.6%	49	0.96	40	4.29	35	4.60	46	3.98	42	3.36	49	1.5%	45	0.25%	49	0.15	14	3.03%	43	0.01%
MO	27	4.42	45	0.21%	37	0.058	24	60.5%	34	1.87	11	5.70	29	4.94	44	4.07	37	3.65	31	2.9%	32	0.30%	33	0.36	30	1.67%	26	0.09%
MT	20	4.66	4	0.41%	24	0.076	25	60.0%	45	1.48	8	5.97	24	5.15	9	6.29	49	3.03	47	1.8%	18	0.41%	21	0.57	47	0.67%	23	0.12%
NE	35	3.94	34	0.25%	27	0.070	11	64.8%	43	1.50	7	6.04	13	5.52	18	5.57	23	4.45	28	3.1%	43	0.26%	38	0.29	36	1.29%	40	0.02%
NV	1	7.20	46	0.20%	4	0.118	40	55.6%	1	7.15	49	3.21	34	4.64	42	4.29	5	6.03	38	2.2%	50	0.16%	20	0.63	40	1.11%	21	0.14%
NH	44	3.28	37	0.25%	3	0.119	2	70.4%	19	2.71	45	3.98	46	3.85	1	7.18	20	4.55	6	5.2%	19	0.41%	36	0.31	11	3.33%	7	0.38%
NJ	14	5.16	21	0.29%	9	0.107	20	62.6%	18	2.73	22	5.27	14	5.51	34	4.82	3	6.31	4	5.3%	9	0.54%	8	0.95	3	5.16%	8	0.37%
NM	44	3.28	8	0.37%	30	0.067	46	51.8%	32	1.90	18	5.41	49	3.41	39	4.47	36	3.69	8	4.5%	2	0.94%	18	0.72	37	1.29%	16	0.19%
NY	9	5.53	22	0.29%	19	0.084	35	56.8%	10	3.19	36	4.52	8	5.74	23	5.16	8	5.79	23	3.5%	15	0.46%	7	0.96	27	2.05%	13	0.20%
NC	25	4.58	36	0.25%	36	0.060	42	55.1%	25	2.37	34	4.75	26	5.03	28	4.99	18	4.67	25	3.4%	17	0.42%	27	0.46	17	2.79%	9	0.28%
ND	44	3.28	29	0.26%	21	0.080	12	64.5%	44	1.48	6	6.08	20	5.29	12	5.83	41	3.37	37	2.2%	35	0.29%	39	0.28	22	2.28%	47	0.00%
OH	32	4.10	23	0.29%	28	0.068	30	58.6%	28	2.25	12	5.67	5	6.07	37	4.68	33	3.93	32	2.6%	24	0.36%	29	0.44	19	2.58%	35	0.04%
OK	4	6.04	3	0.43%	39	0.057	41	55.3%	31	1.97	26	5.05	44	4.05	36	4.71	29	4.16	42	2.1%	41	0.27%	30	0.42	38	1.28%	30	0.06%
OR	37	3.86	15	0.34%	7	0.110	23	62.2%	12	2.97	47	3.70	19	5.36	8	6.31	16	4.80	13	4.1%	13	0.48%	9	0.94	10	3.39%	18	0.19%
PA	18	4.82	48	0.18%	25	0.073	26	59.7%	30	2.18	20	5.36	16	5.49	38	4.62	22	4.45	21	3.7%	14	0.46%	22	0.54	13	3.10%	14	0.20%
RI	44	3.28	38	0.24%	31	0.067	32	57.8%	27	2.28	42	4.18	37	4.52	1	7.18	15	5.05	18	3.8%	5	0.57%	16	0.72	2	5.48%	12	0.20%
SC	33	3.96	39	0.24%	40	0.056	45	52.4%	35	1.82	24	5.21	28	4.95	40	4.38	30	4.13	40	2.1%	42	0.26%	42	0.27	32	1.44%	44	0.01%
SD	7	5.66	27	0.27%	29	0.068	14	64.1%	50	0.91	1	7.43	15	5.50	17	5.65	44	3.35	43	2.0%	47	0.23%	41	0.28	46	0.71%	47	0.00%
TN	19	4.73	41	0.23%	45	0.047	39	55.8%	22	2.61	28	5.03	7	5.78	47	3.84	25	4.30	39	2.1%	31	0.30%	47	0.23	33	1.43%	31	0.05%
TX	6	5.67	13	0.35%	32	0.066	43	54.6%	9	3.31	14	5.60	4	6.15	35	4.79	19	4.63	19	3.7%	29	0.31%	17	0.72	21	2.45%	10	0.25%
UT	13	5.17	17	0.31%	2	0.123	3	69.6%	3	4.04	50	2.68	2	6.35	24	5.11	28	4.19	10	4.4%	20	0.40%	19	0.71	28	1.97%	5	0.47%
VT	44	3.28	1	0.46%	17	0.087	8	65.9%	26	2.36	16	5.46	41	4.33	1	7.18	48	3.11	17	3.8%	7	0.56%	10	0.89	23	2.27%	15	0.20%
VA	8	5.62	47	0.20%	35	0.063	18	63.6%	7	3.76	9	5.96	6	5.85	33	4.84	13	5.07	2	5.8%	8	0.55%	26	0.49	18	2.65%	17	0.19%
WA	22	4.59	16	0.32%	18	0.086	6	68.0%	8	3.49	27	5.03	10	5.65	11	5.96	11	5.09	9	4.5%	11	0.52%	3	1.32	31	1.62%	3	0.61%
WV	44	3.28	49	0.17%	50	0.031	47	51.5%	47	1.30	5	6.09	48	3.57	27	5.00	50	2.94	45	1.9%	34	0.29%	46	0.24	42	0.96%	37	0.03%
WI	41	3.72	18	0.30%	23	0.078	15	64.1%	37	1.81	15	5.54	27	4.96	20	5.37	38	3.65	33	2.6%	33	0.29%	35	0.34	20	2.58%	33	0.05%
WY	44	3.28	10	0.36%	15	0.093	5	68.4%	48	1.05	3	6.79	50	3.29	14	5.75	46	3.21	50	1.4%	21	0.39%	28	0.45	48	0.53%	27	0.07%
		5.00		0.30%		0.085		58.7%		2.94		5.00		5.00		5.00		5.00		3.7%		0.41%		0.75		3.17%		0.35%

January 10, 2009

## Guest column: Regents resolve to put Iowa's needs first

*DAVID W. MILES is president of the Iowa Board of Regents. Contact: miles.david.w@gmail.com.*

On behalf of the Iowa Board of Regents, I offer our thanks to all Iowans for the privilege of representing them in the governance of the University of Iowa, Iowa State University, the University of Northern Iowa, the Iowa School for the Deaf and the Iowa Braille and Sight Saving School.

Each of Iowa's public universities and special schools is committed to making Iowa the best-educated state in the nation, through excellence in teaching, cutting-edge research and direct service to Iowans, including economic development.

The success of Iowa's public universities and special schools would not be possible without the support of the governor, Legislature, congressional delegation and, most important, the Iowans we serve. As we enter a new year filled with much economic uncertainty for Iowans, we offer two resolutions:

First, our commitment to provide world-class teaching, research and service to Iowans will not waver.

Second, in these challenging economic times, the Board of Regents and each of our institutions will place the needs of Iowa first and foremost. During the remaining six months of fiscal 2009, we will adjust to \$17.5 million in budget reductions announced in December and continue to address the roughly \$250 million in flood damages on the U of I campus.

As the Legislature considers the state's budget this session, we will work together to protect and enhance these vital educational institutions, while at the same time keeping tuition costs below the median for our peers, improving productivity on our campuses and continuing to provide affordable access.

Our first priority is educating Iowans. In fall 2008, Iowa's public universities enrolled a record 70,000 students, nearly 70 percent of whom are Iowans. Our academic quality is world-class. At the U of I, graduate programs in the arts, humanities and health sciences rank in the top 10 nationally, led by the world-renowned Iowa Writers' Workshop. Many graduate programs at ISU, including those in statistics, engineering and chemistry, rank among the top 25 nationally, and several programs of the College of Design rank among the nation's best. UNI has been ranked second among Midwest public comprehensive universities by U.S. News and World Report for 12 consecutive years. UNI enrolls the most math- and science-education majors in Iowa, and is the home of the Board of Regents Mathematics and Science Education Institute.

Our research efforts are directed to developing new knowledge that demonstrably improves the quality of life for Iowans. In 2008, the U of I announced a \$25 million gift from the Fraternal Order of the Eagles that will fund diabetes research in an effort to develop a cure. This is one of many research initiatives planned for the new U of I Institute for Biomedical Discovery, which will provide cross-disciplinary research in the biomedical and life sciences to develop new treatments and cures and to bolster Iowa's economy through new jobs and business partnerships.

Also in 2008, ISU was named a National Research Center for biochemicals by the National Science Foundation. This designation will bring \$18 million in external research funding to Iowa, solidifying ISU's position as a world-class center of research in the bioeconomy and providing a competitive advantage for Iowa in this important emerging industry.

The natural disasters of 2008 presented a special opportunity for our institutions to serve Iowans. At the U of I and its Hospitals and Clinics, countless individuals fought valiantly to protect the state's investment in campus facilities, to continue vital services without interruption and to quickly resume educational and research activities.

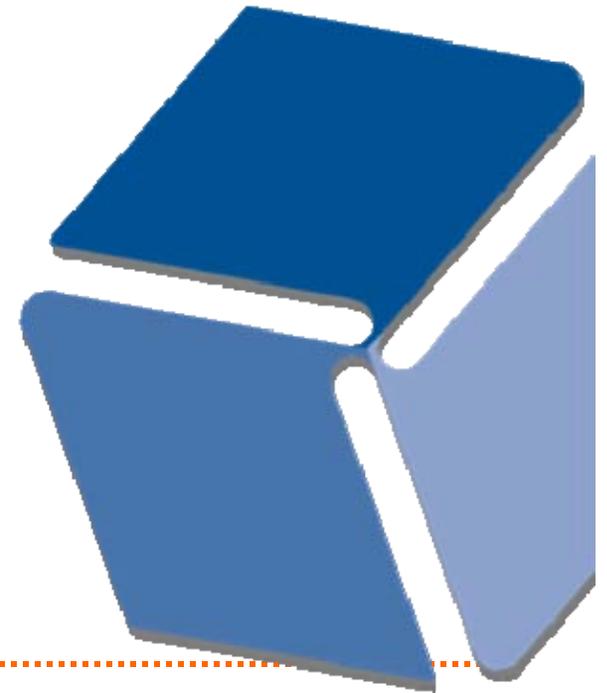
UNI provided essential disaster-recovery services to Parkersburg following the May tornado, as well as assistance to the Waterloo/Cedar Falls area through flood-protection services and shelter.

The Iowa Braille and Sight Saving School provided refuge for many Vinton residents impacted by high flood waters. And the disaster-recovery services of ISU Extension and the UNI Regional Business Center provided immediate assistance to numerous communities statewide, including thousands of rural small businesses.

Iowa's public universities and special schools are significant engines of economic development. Nearly 53,000 employees and more than 211,000 university alumni, including many of Iowa's top professionals, contribute to the state's work force of taxpayers and industry leaders. And, due to the excellence of our programs, our universities consistently attract significant external funding, which totaled a record \$697 million in fiscal 2008, and record private giving from alumni and friends, which totaled nearly \$310 million in the same period. As a result, for every \$1 in state funding, the universities generated \$1.58 in external gifts, grants and nonresident tuition.

The Board of Regents will not forget the many extraordinary challenges of 2008 and the accomplishments of our faculty, staff and students. We look forward to another year of great accomplishments by Iowa's public universities and special schools as they continue to transform the lives of students and contribute to the health and vitality of our state.

# Connecting Higher Education with the Future of Iowa



February 2, 2009  
Des Moines, Iowa



**NCHEMS**

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



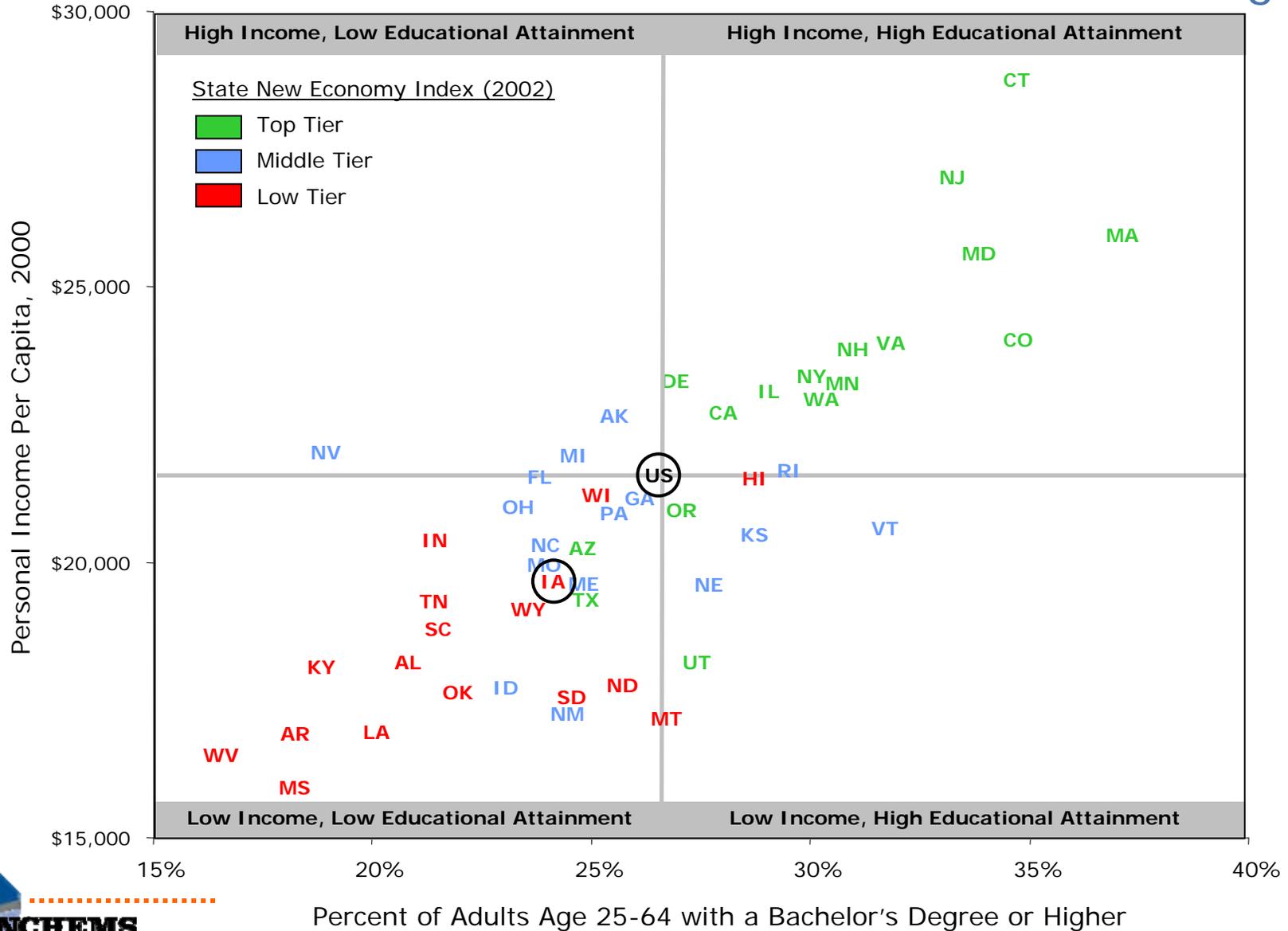
# WHY HIGHER EDUCATION IS SO IMPORTANT



**NCHEMS**

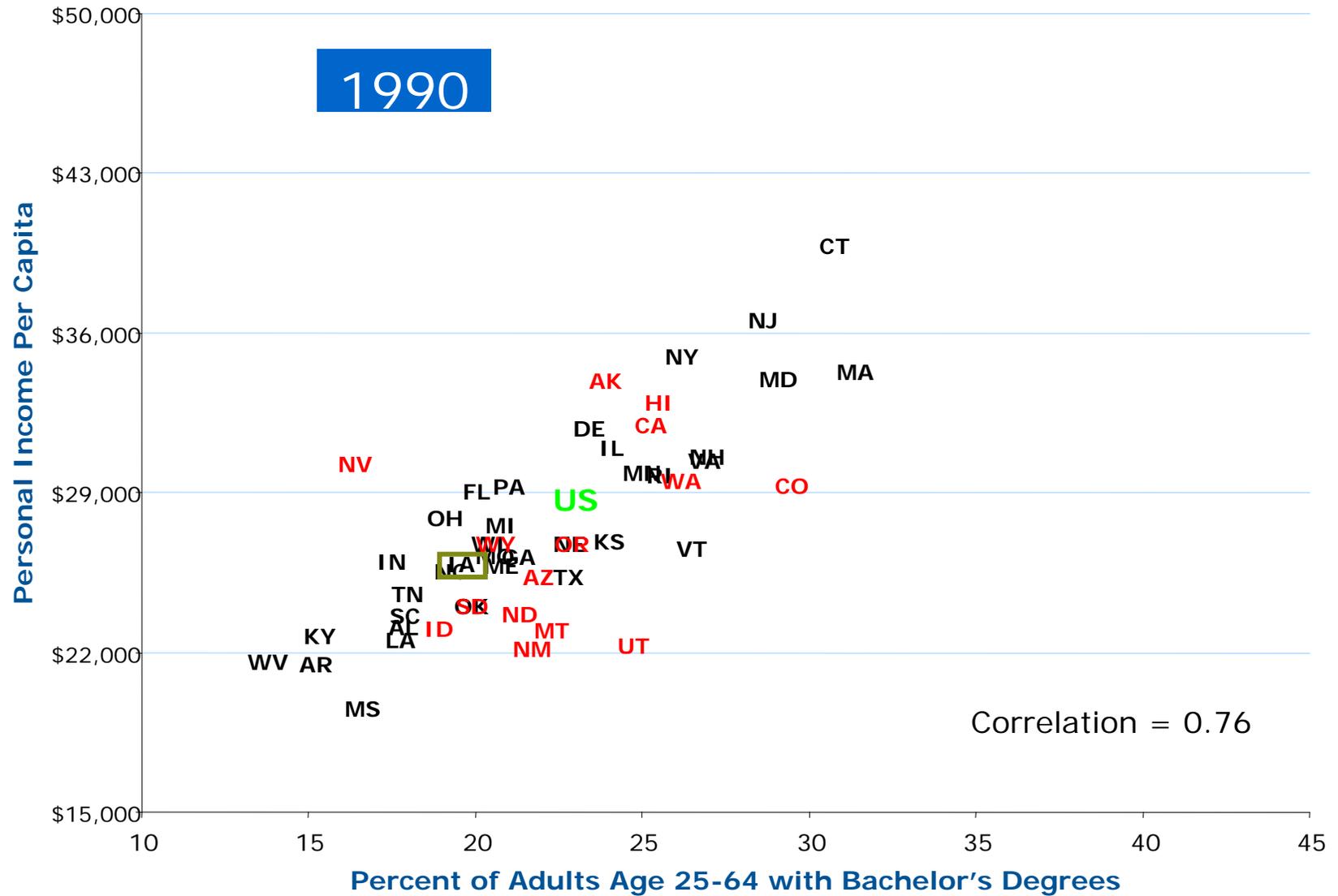
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# Relationship Between Educational Attainment, Personal Income, and Economic Strength

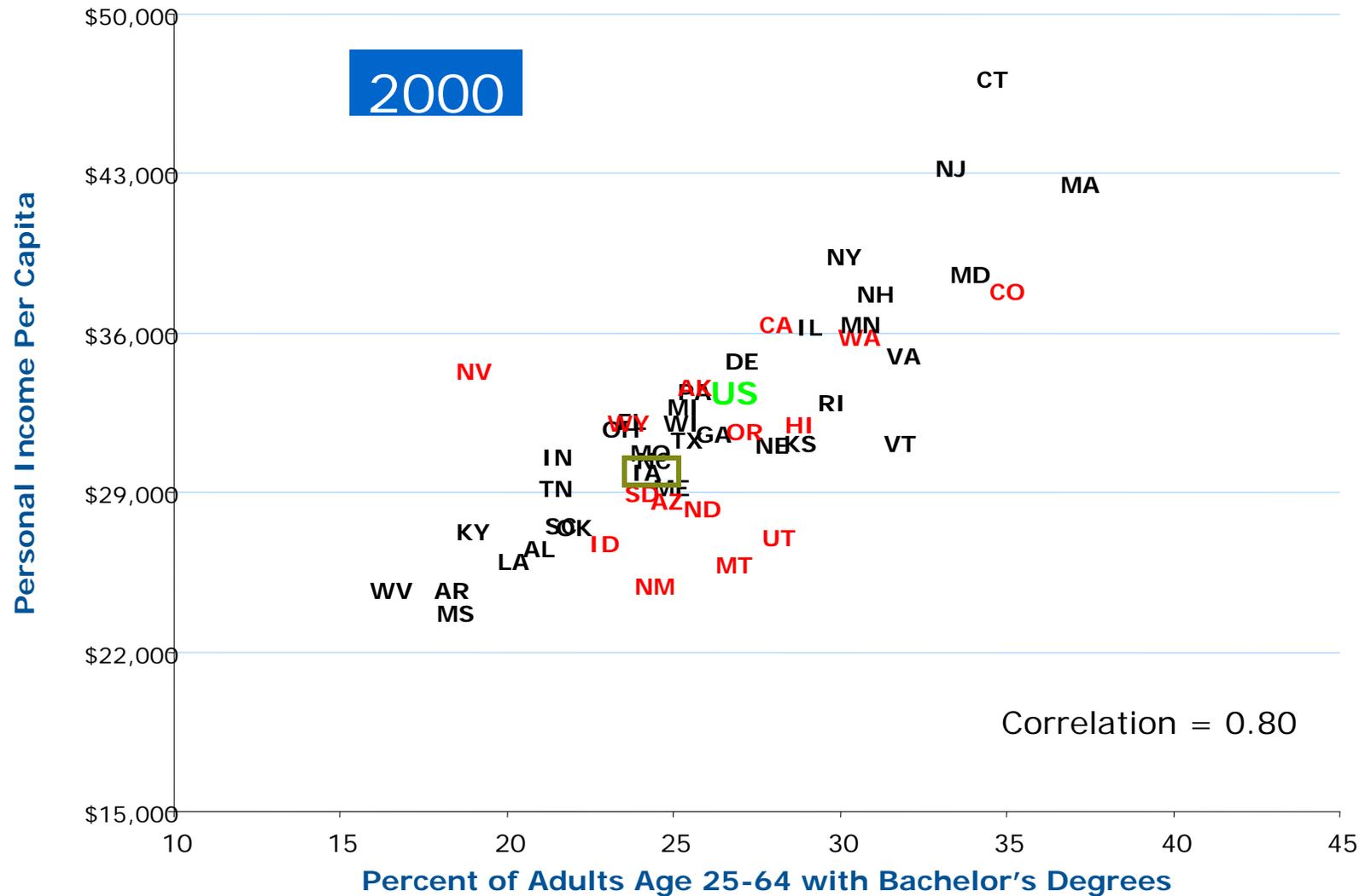




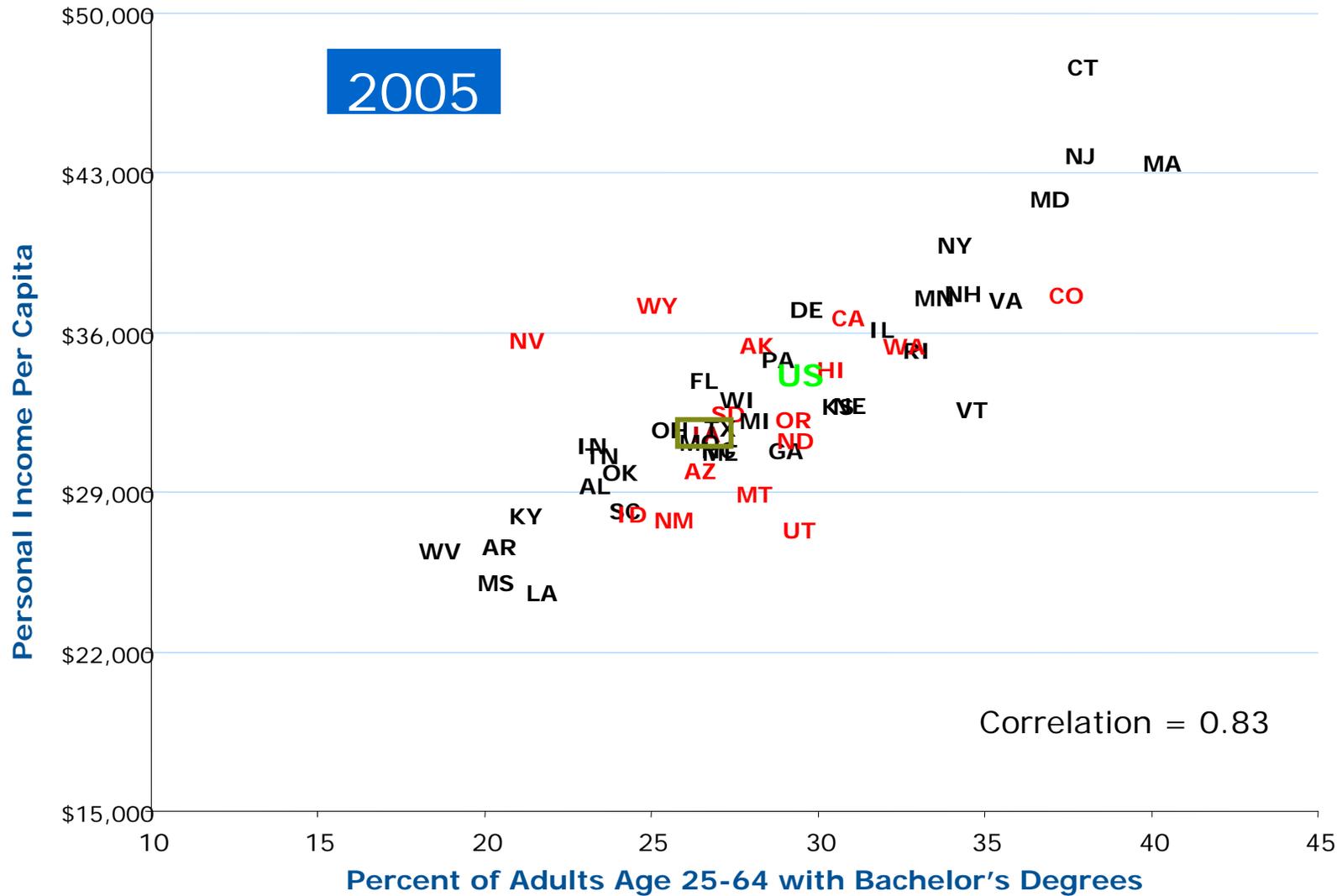
# Educational Attainment and Income



# Educational Attainment and Income



# Educational Attainment and Income



Source: U.S. Census Bureau, Decennial Census' and American Community Survey



**NCEMS**

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# Increasing Levels of Education Attainment Lead to Improved Societal Outcomes

- Increased levels of workforce participation
- Decreased rates of incarceration
- Improved health outcomes
- Reduced participation in Medicaid and other social service programs
- Greater participation in artistic, cultural, and civic pursuits
- Higher levels of volunteerism and social engagement





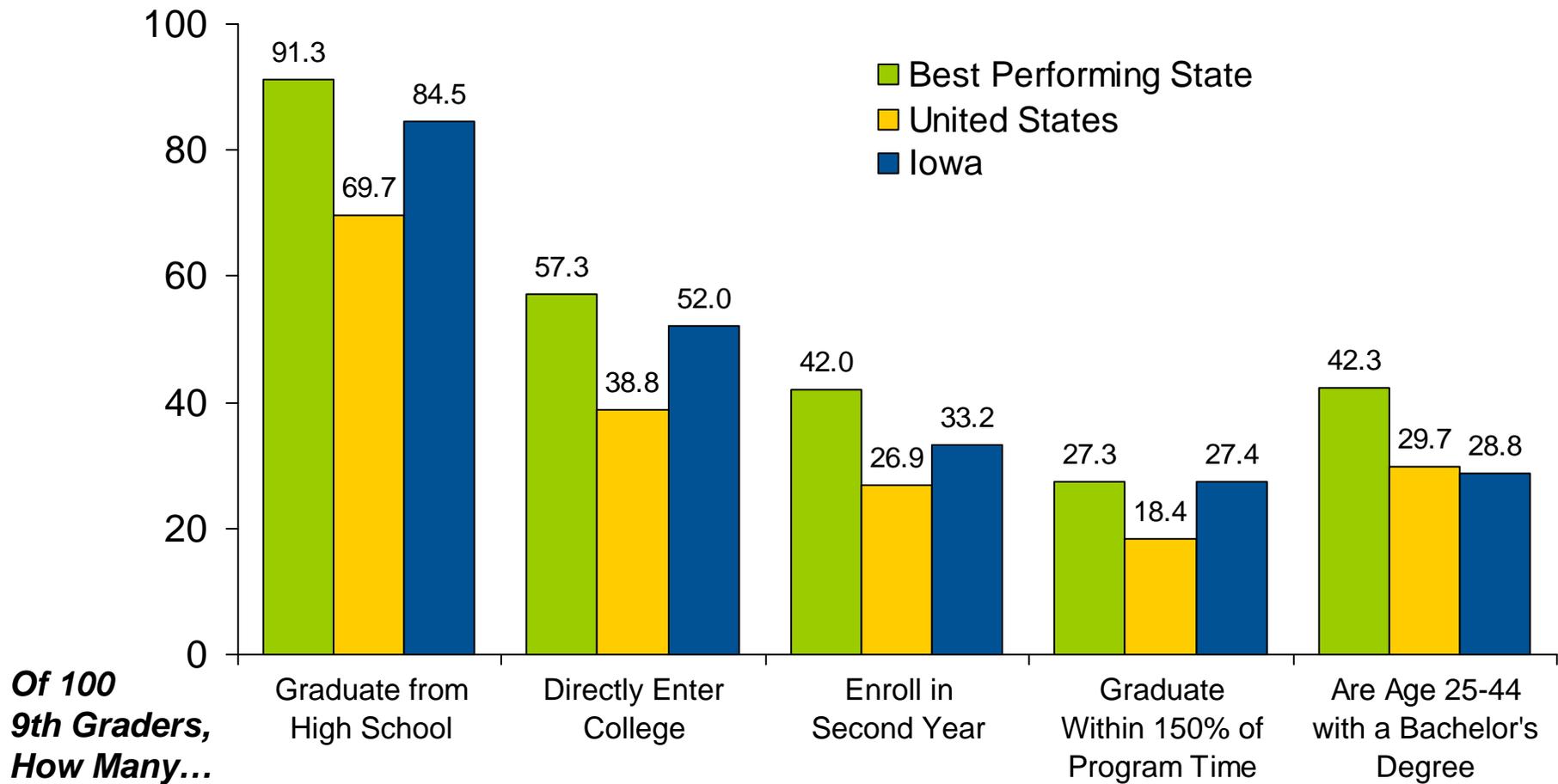
# EDUCATION AN IOWA SUCCESS STORY



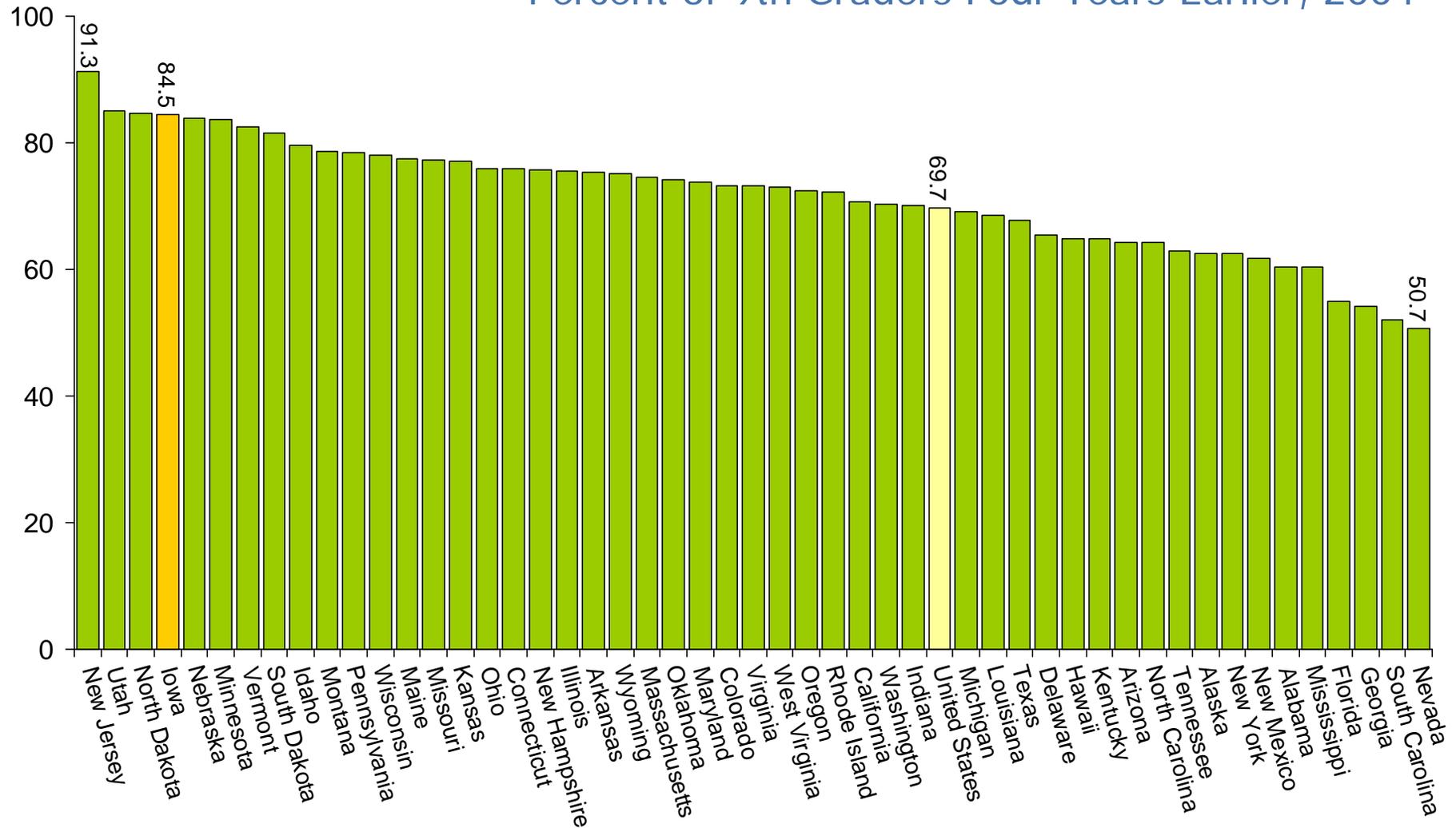
**NCHEMS**

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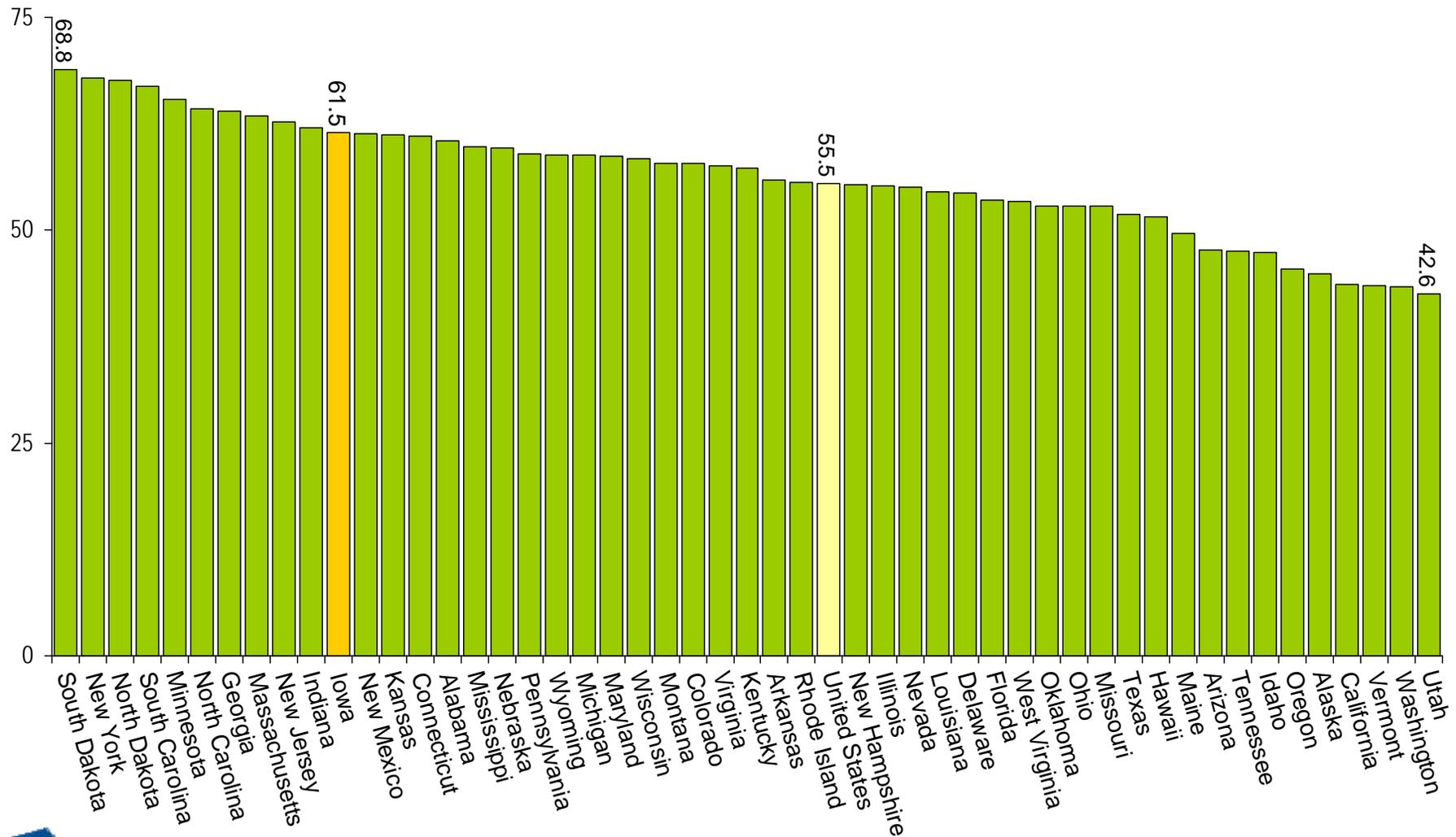
# Student Pipeline, 2004



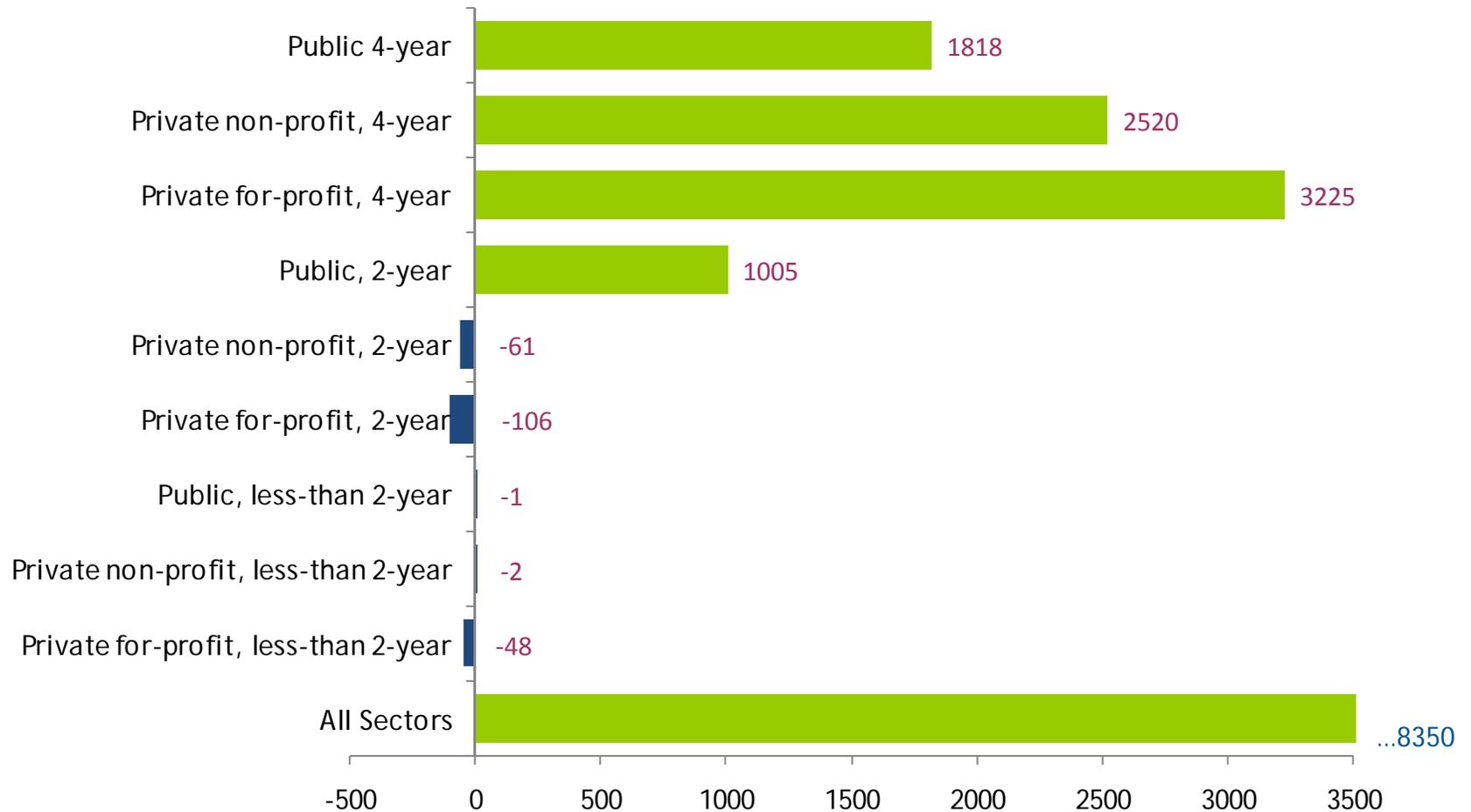
## High School Graduation Rates - Public High School Graduates as a Percent of 9th Graders Four Years Earlier, 2004



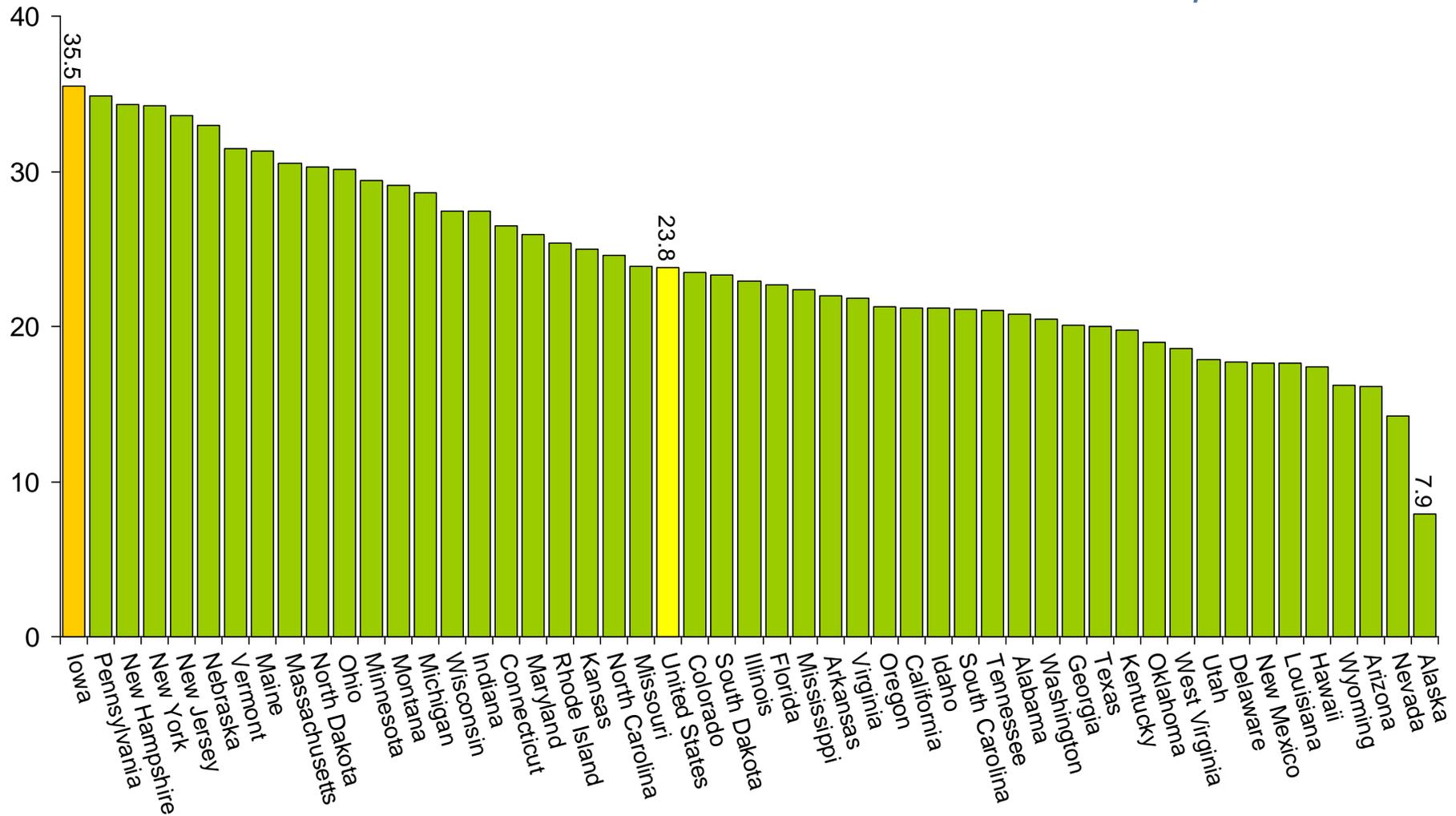
## College-Going Rates—First-Time Freshmen Directly Out of High School as a Percent of Recent High School Graduates, 2004



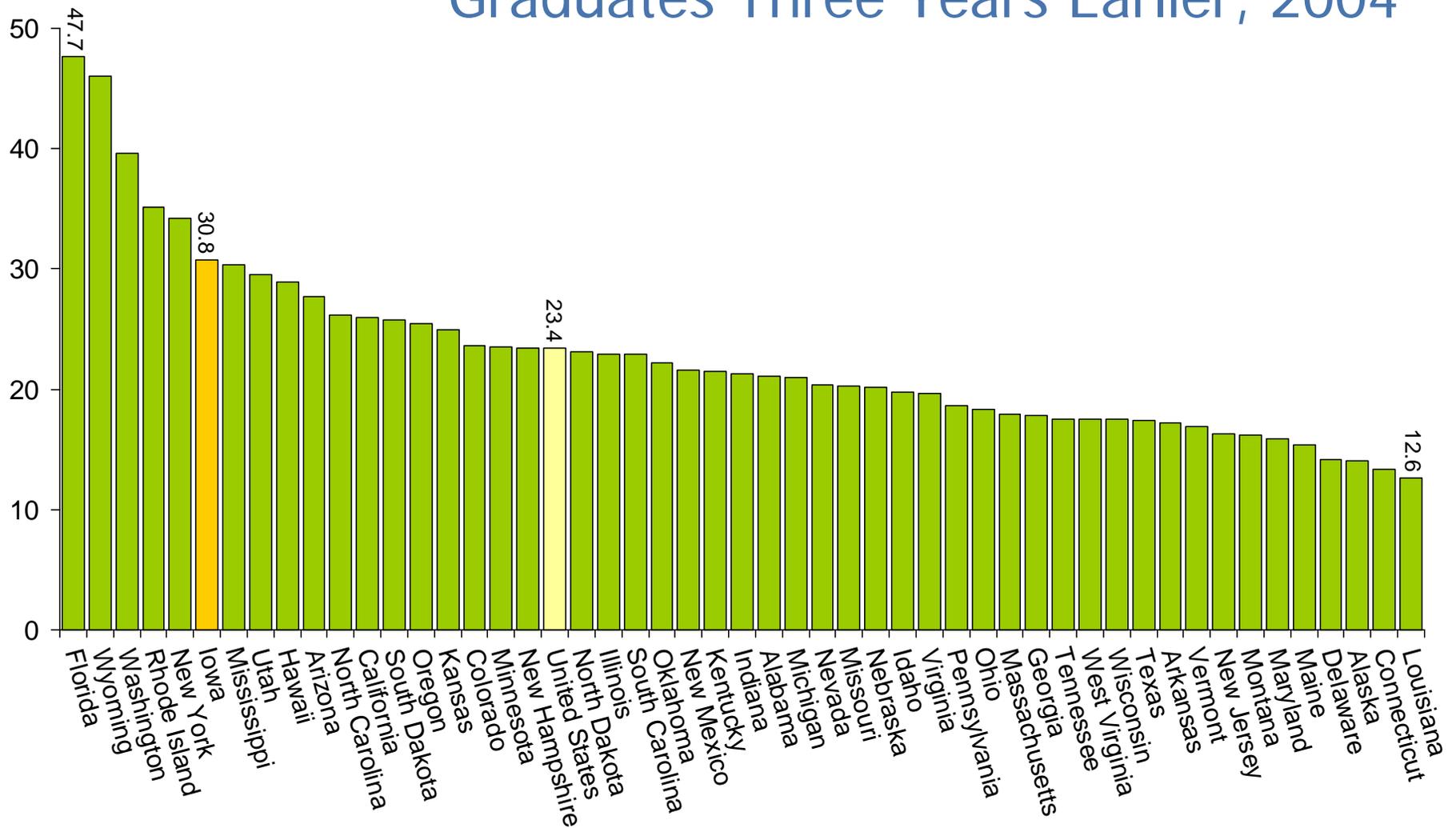
# Iowa Net Migration of First-time College Students by Sector (Fall 2006)



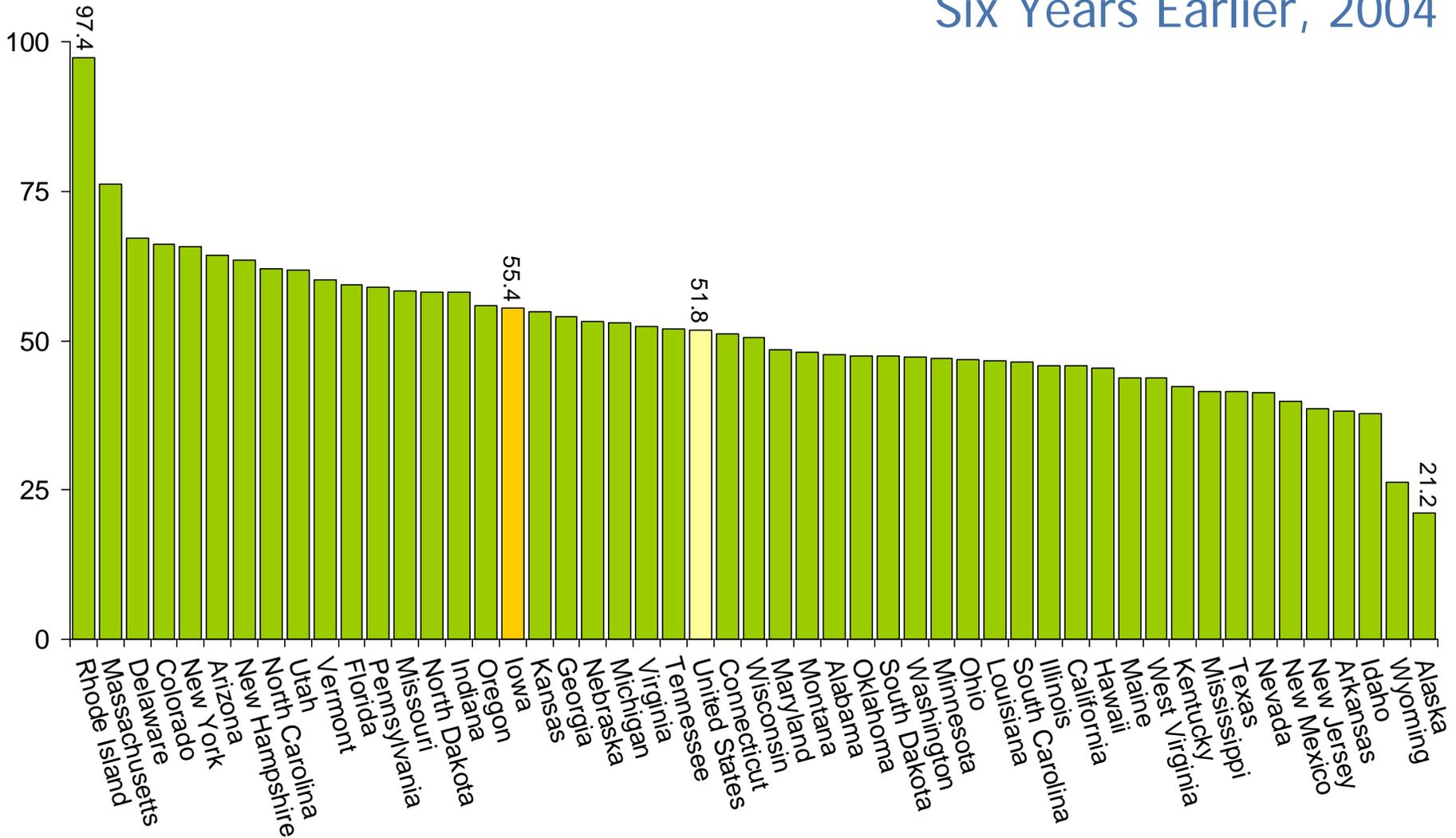
# College Participation Rates by State for Students from Low-Income Families, 2006



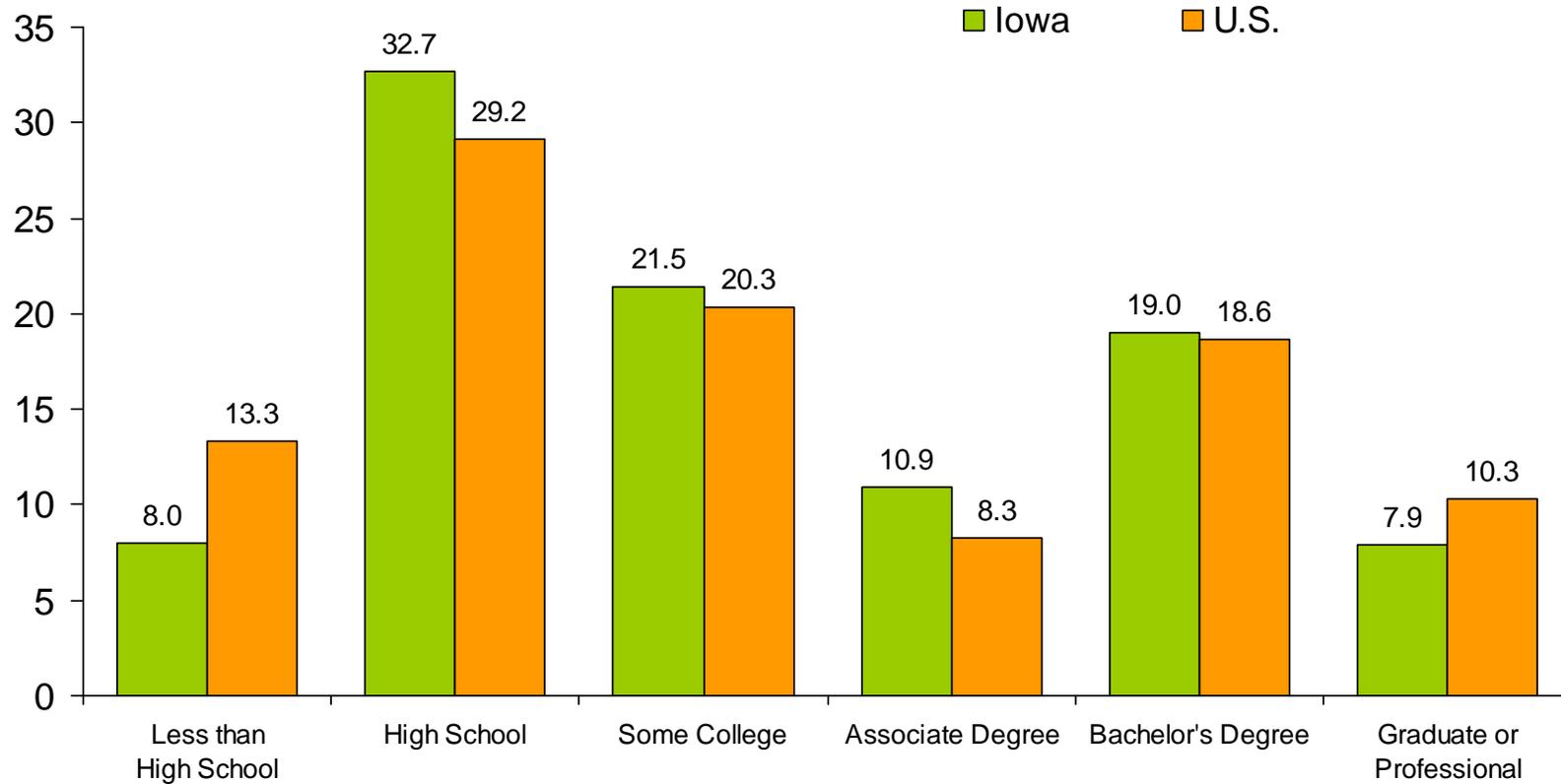
# Associate Degrees Awarded per 100 High School Graduates Three Years Earlier, 2004



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

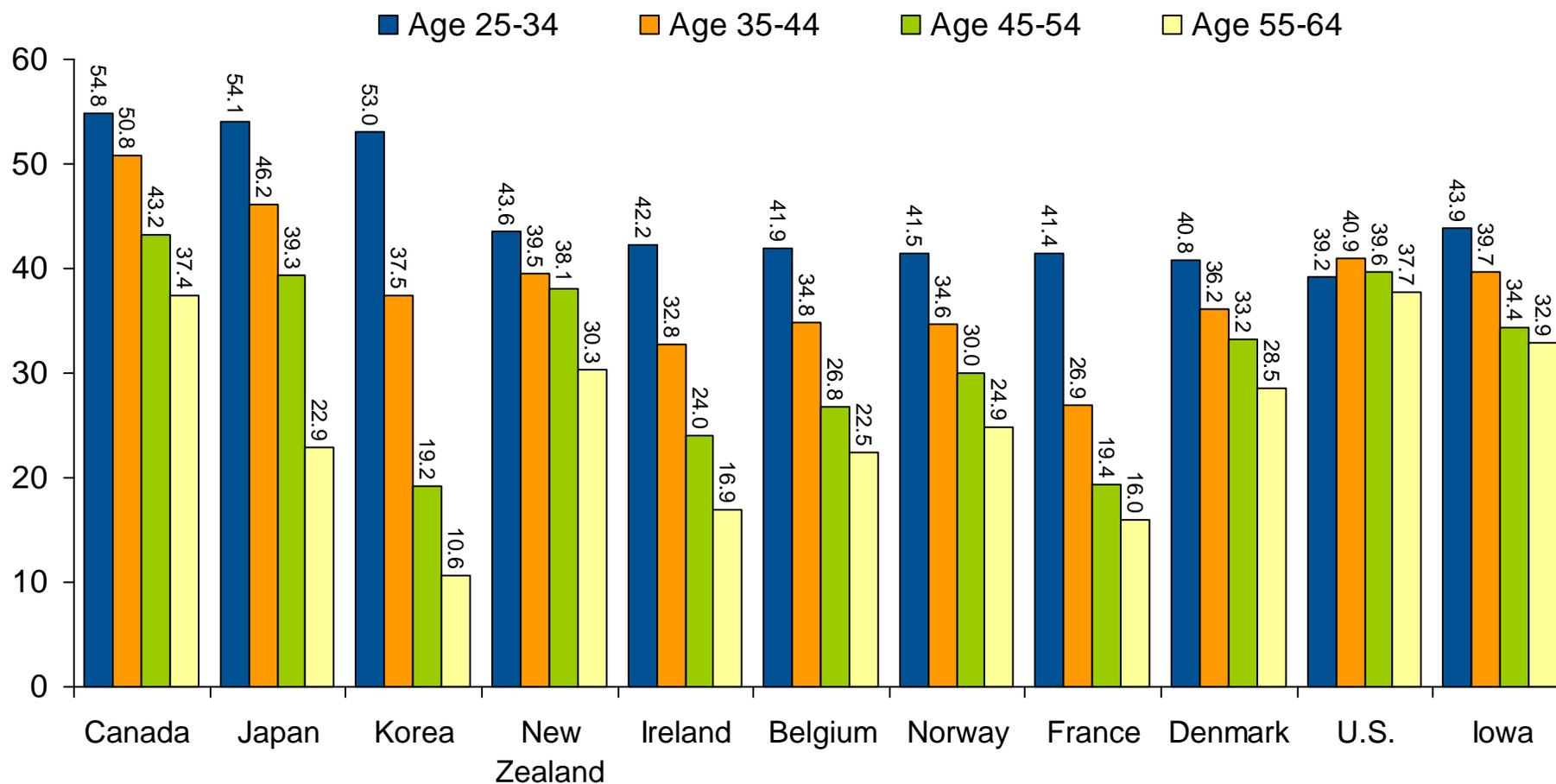


# Educational Attainment of Population Age 25-64, 2006

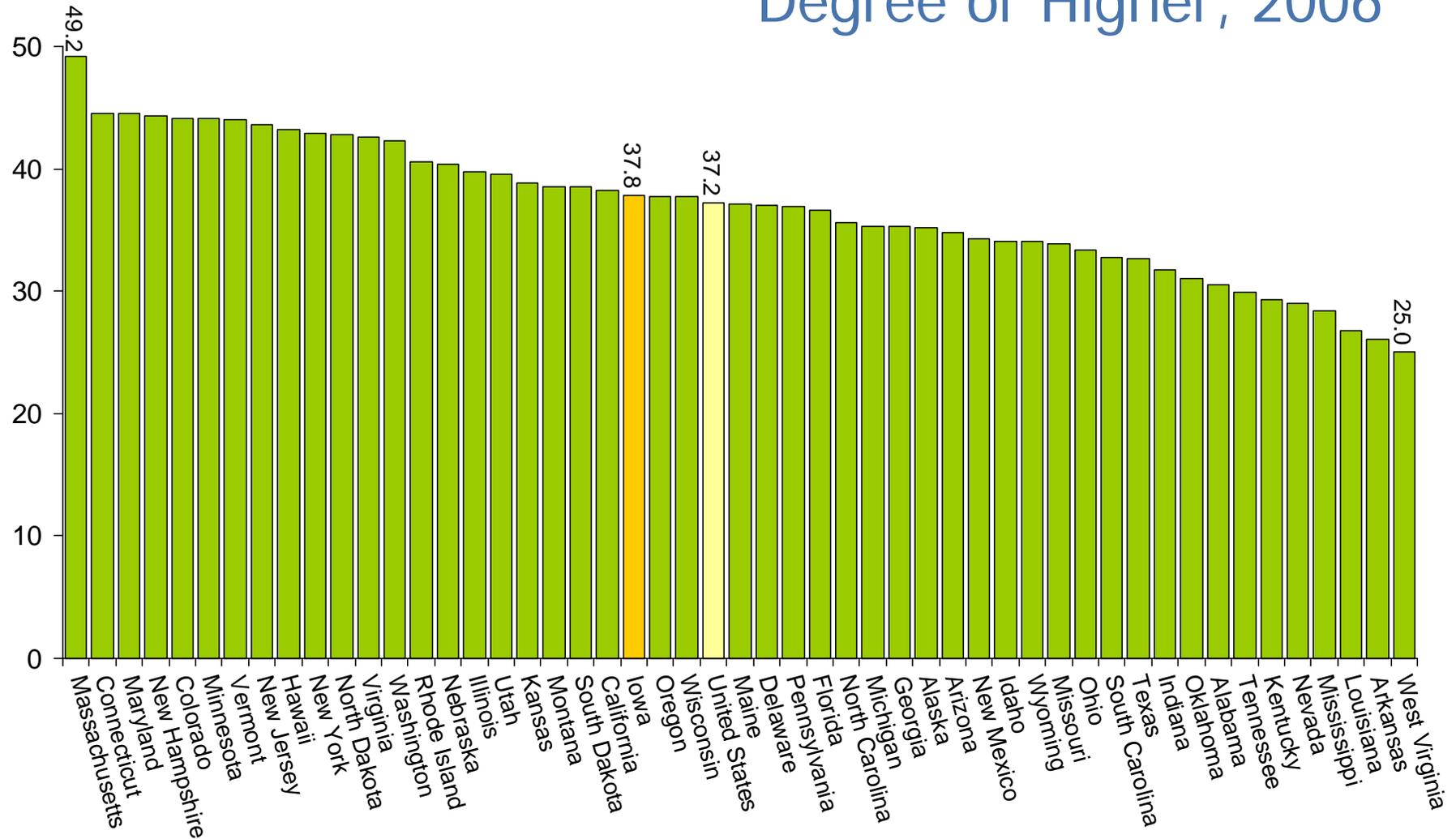


Source: U.S. Census Bureau, 2006 ACS Public Use Microdata Samples (PUMS)

## Percent of Adults with an Associate Degree or Higher by Age Group - Iowa, U.S. & Leading OECD Countries



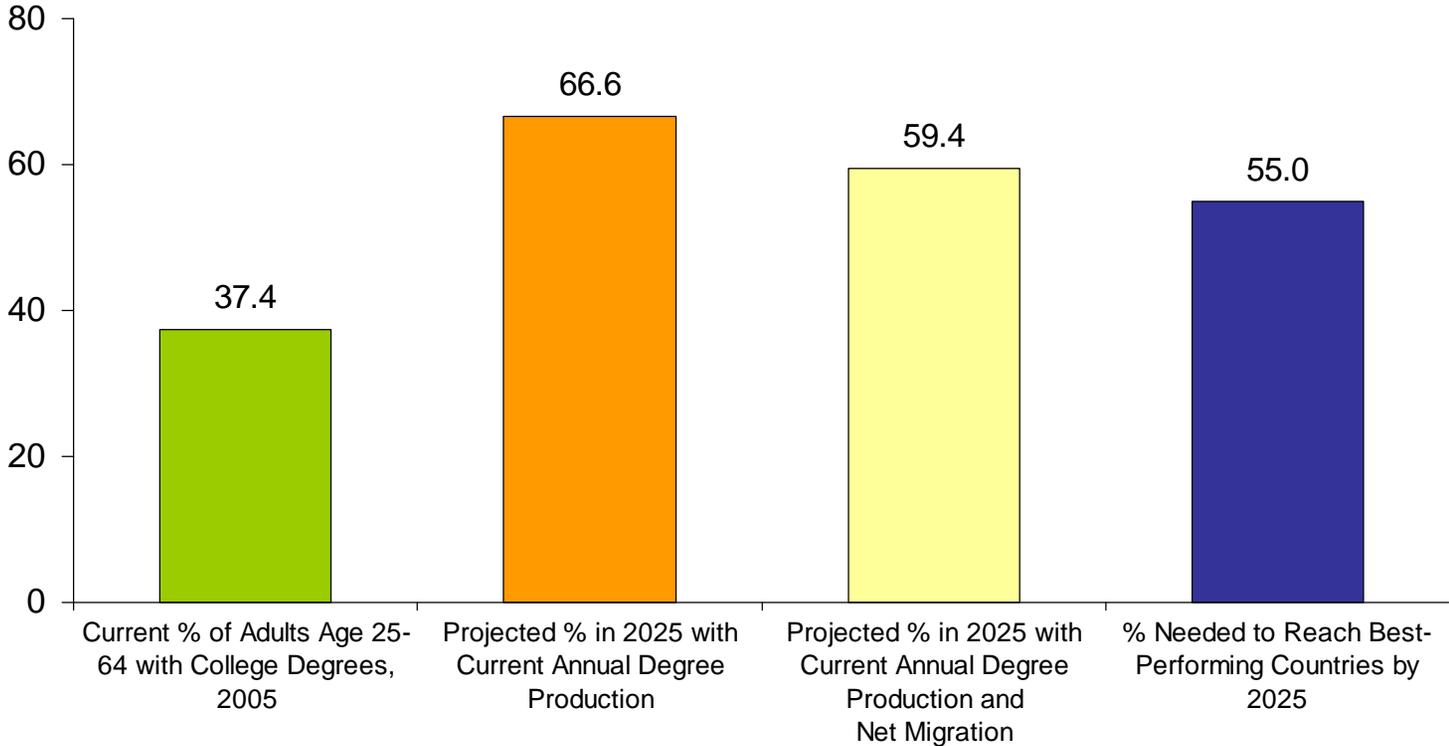
# Percent of Population Age 25-64 with an Associate Degree or Higher, 2006





# Educational Attainment in Iowa (%)

Current, in 2025 with Current Degree Production, and Best-Performing Countries in 2025





# THE CHALLENGES FACING IOWA



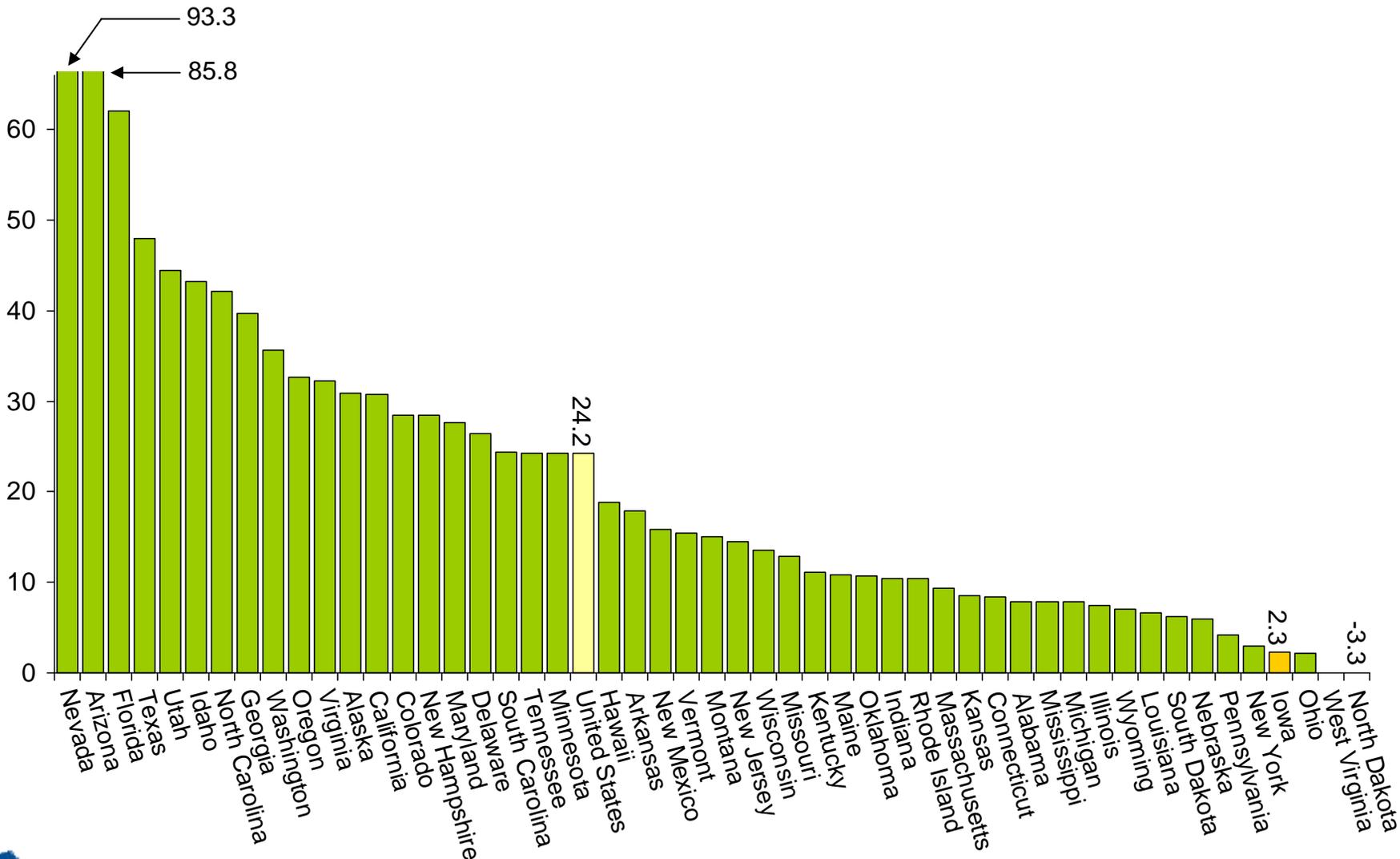
**NCHEMS**

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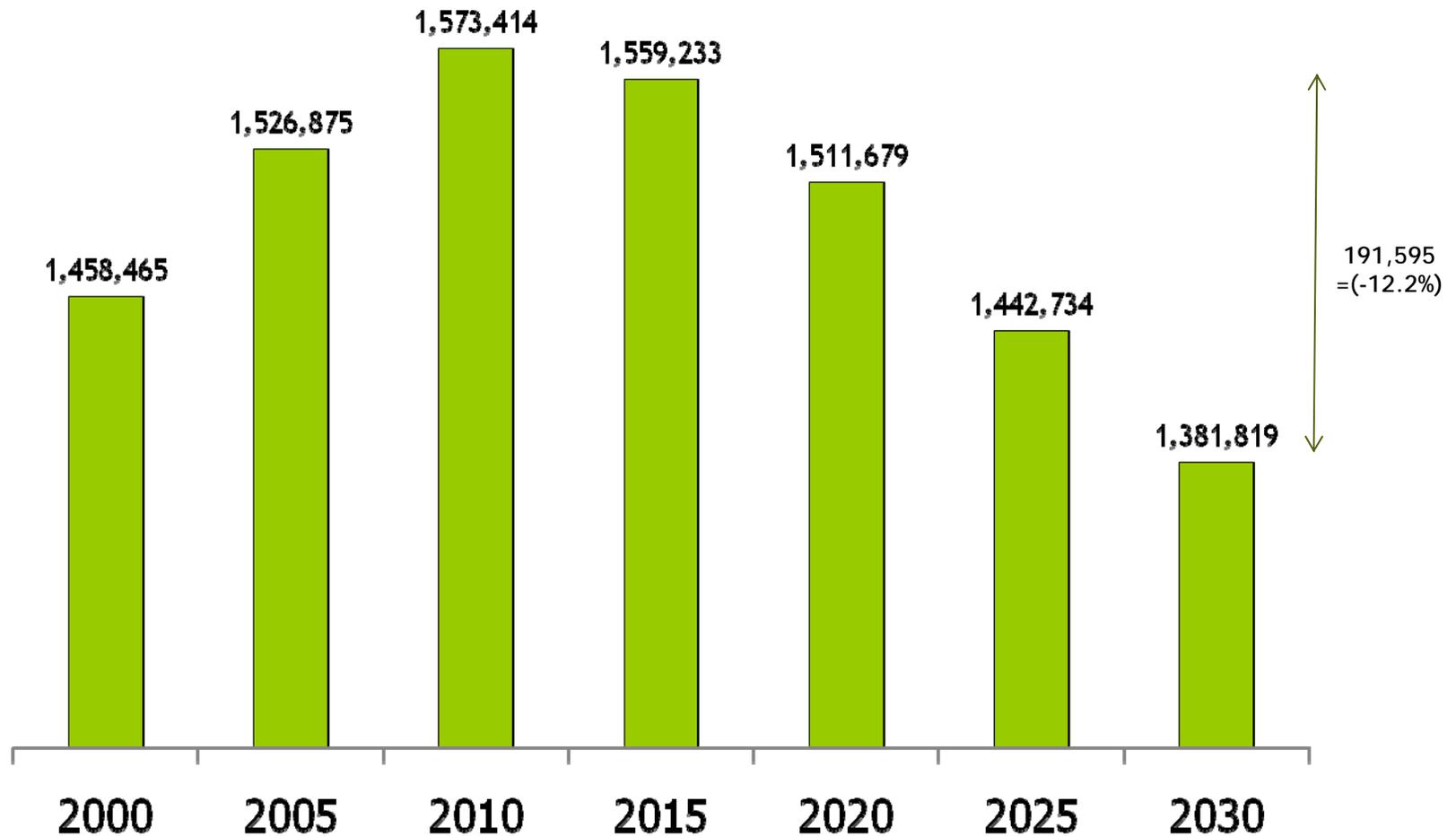


# 1. Sustaining a Highly Skilled Workforce

# Population Projections—Percent Change, 2000-25

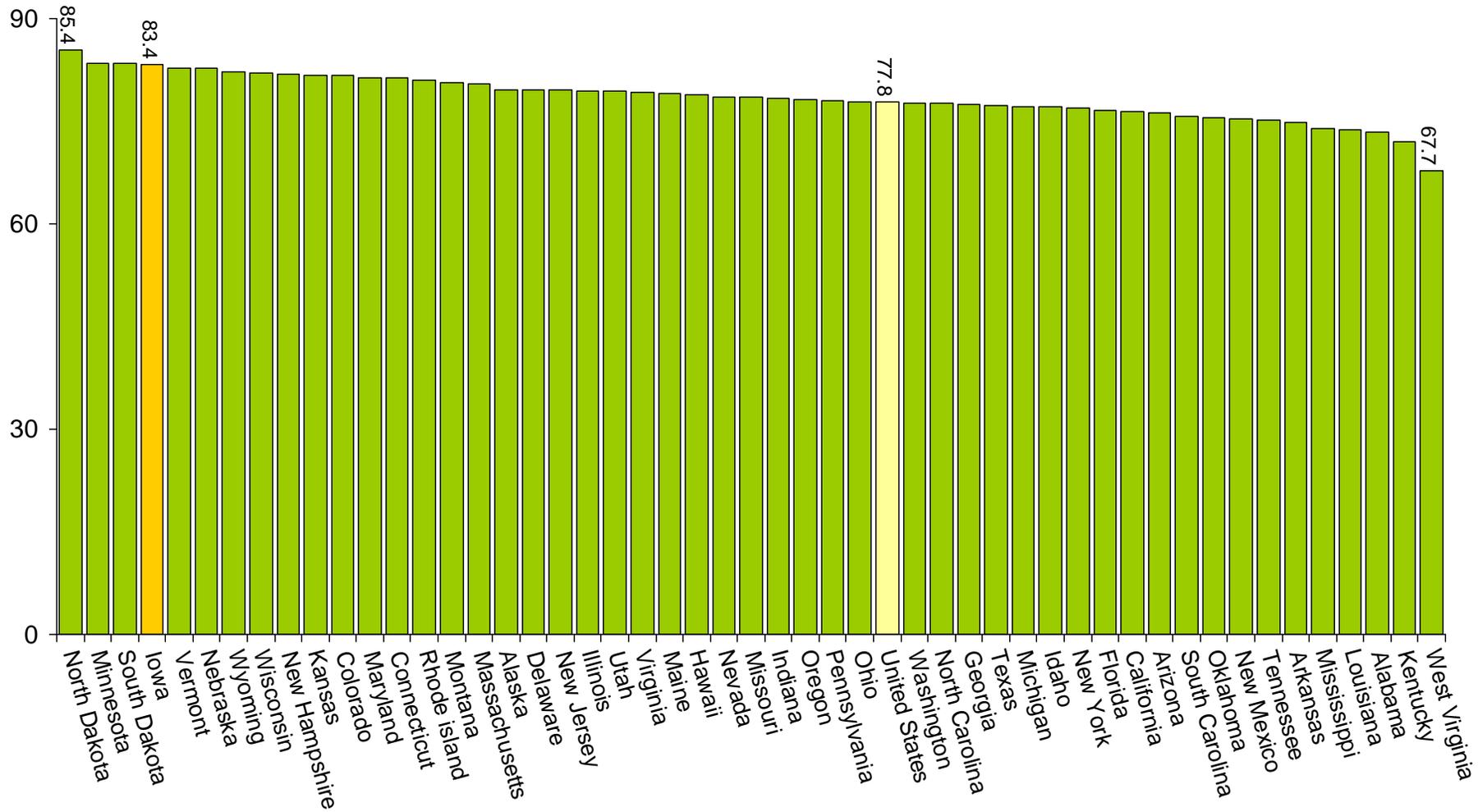


# Iowa Population Projections, Ages 25-64, 2000-2030

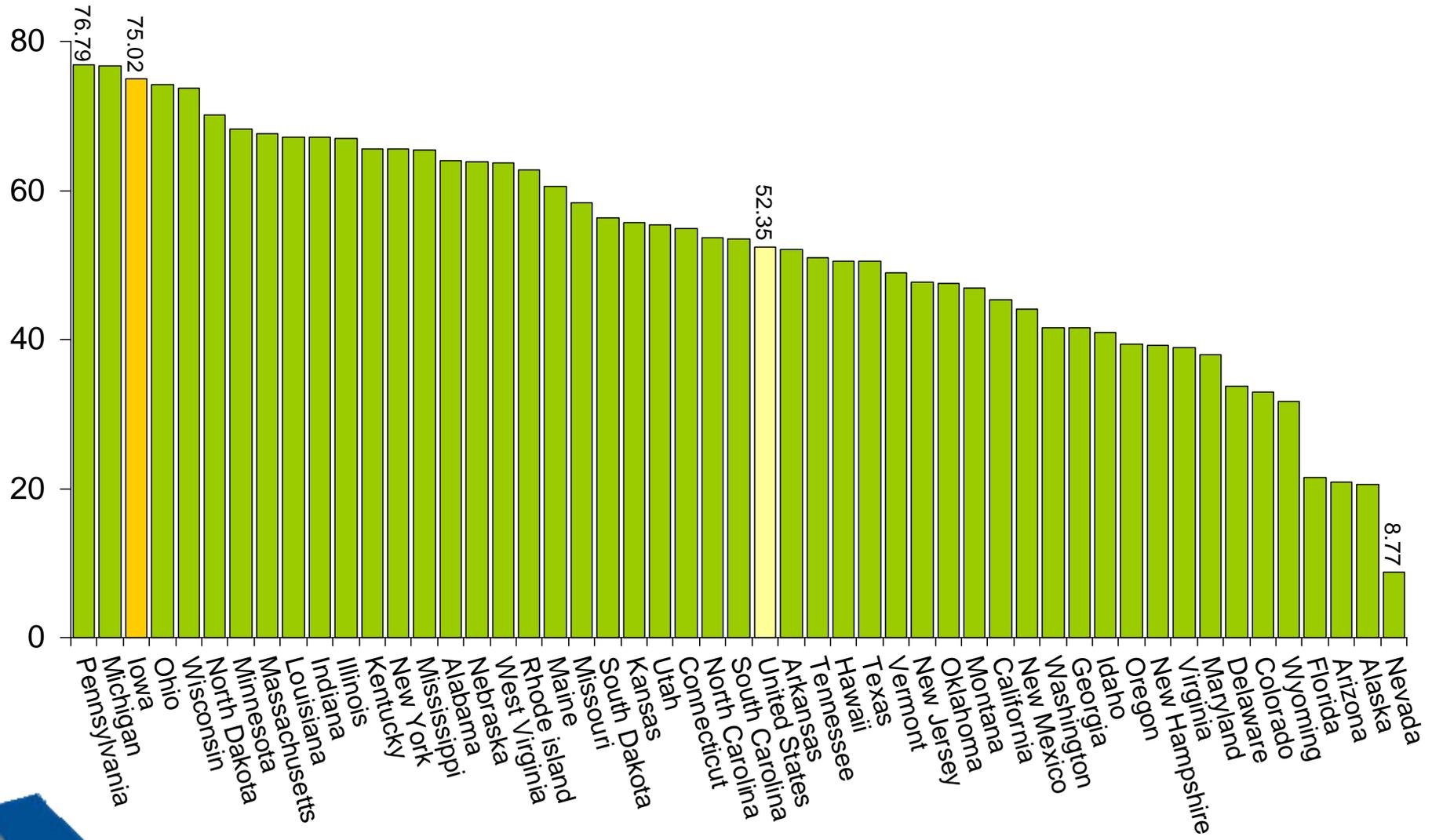


Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005.  
Internet Release Date: April 21, 2005

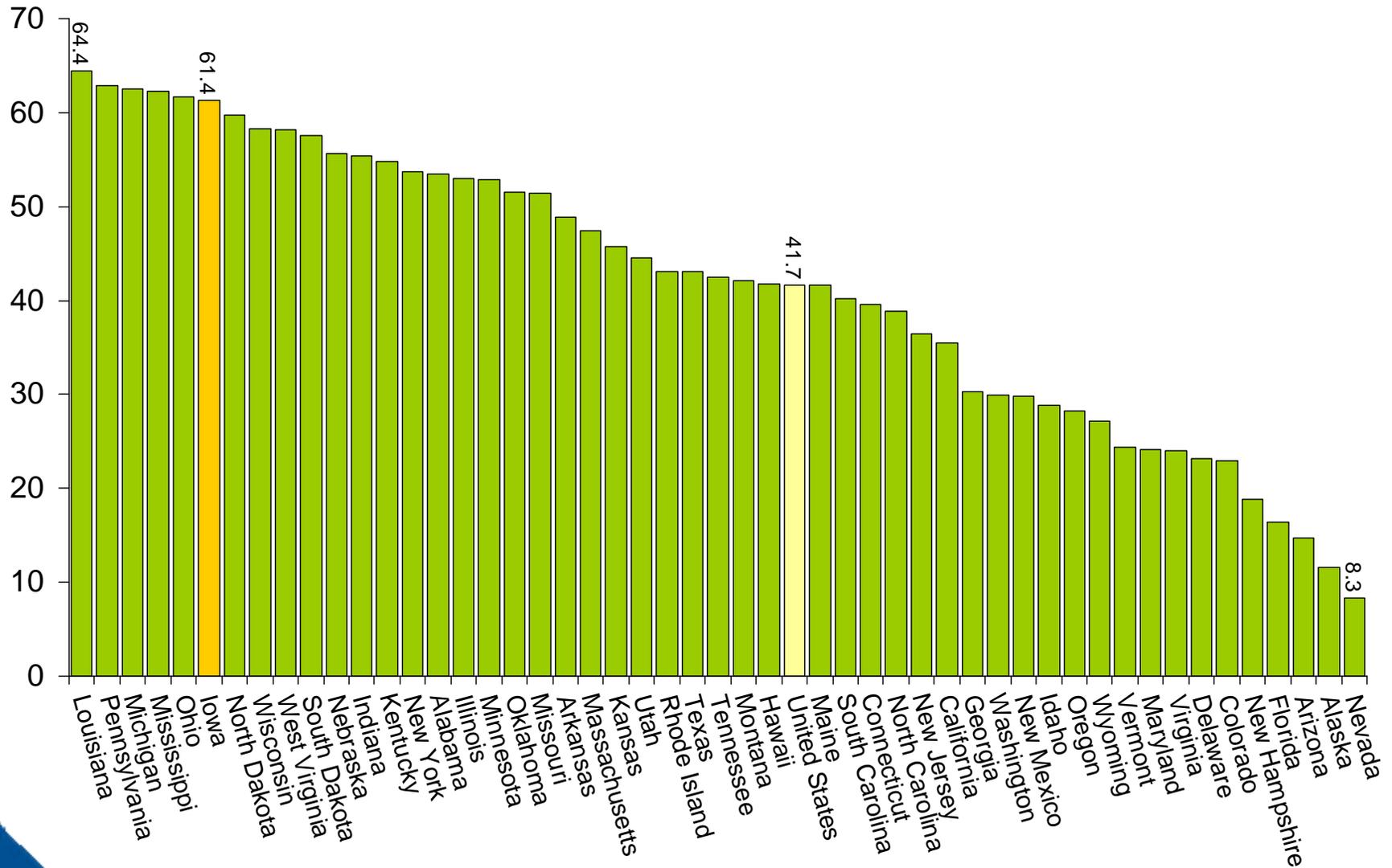
# Percent of Civilian Population Age 25-64 Participating in the Workforce, 2005



# Percent of Residents Age 25-64 with an Associate Degree Born In-State, 2005



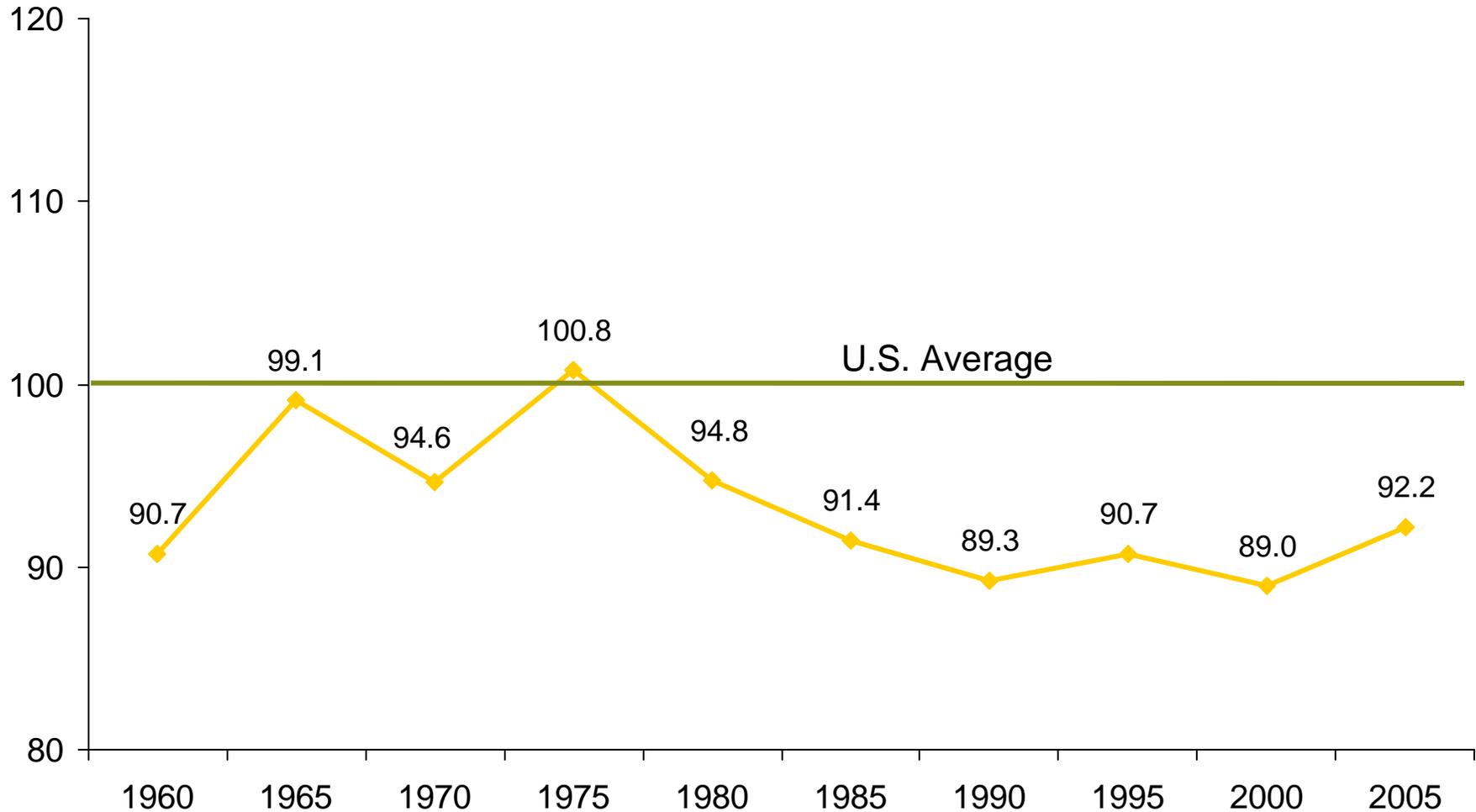
# Percent of Residents Age 25-64 with a Bachelor's Degree or Higher Born In-State, 2005



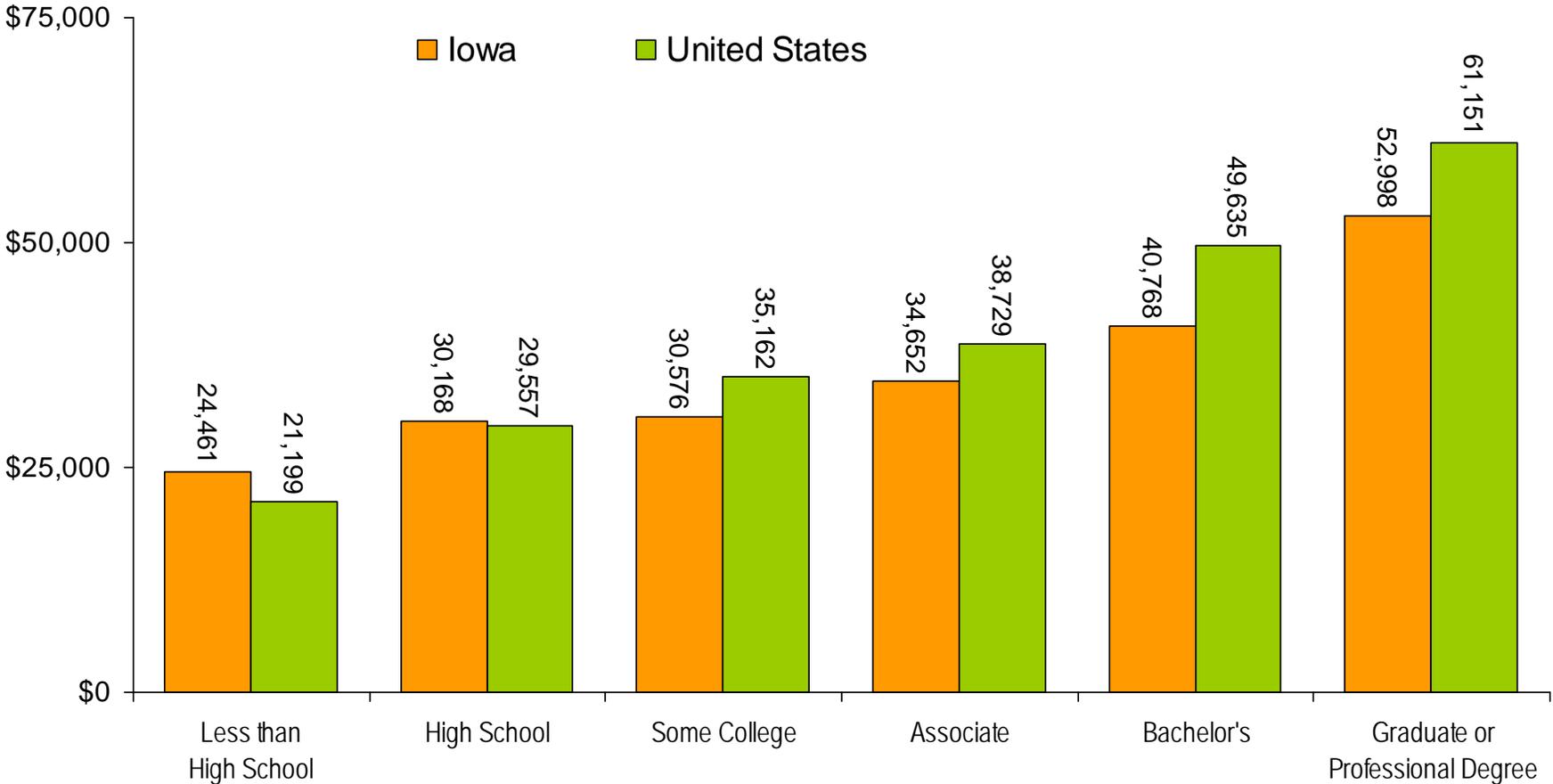


## 2. Expanding and Diversifying the Economy

# Per Capita Personal Income as a Percent of U.S. Average - Iowa, 1960-2005

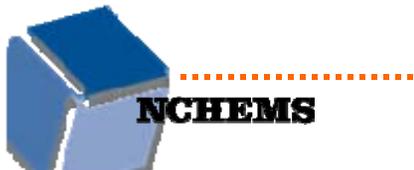
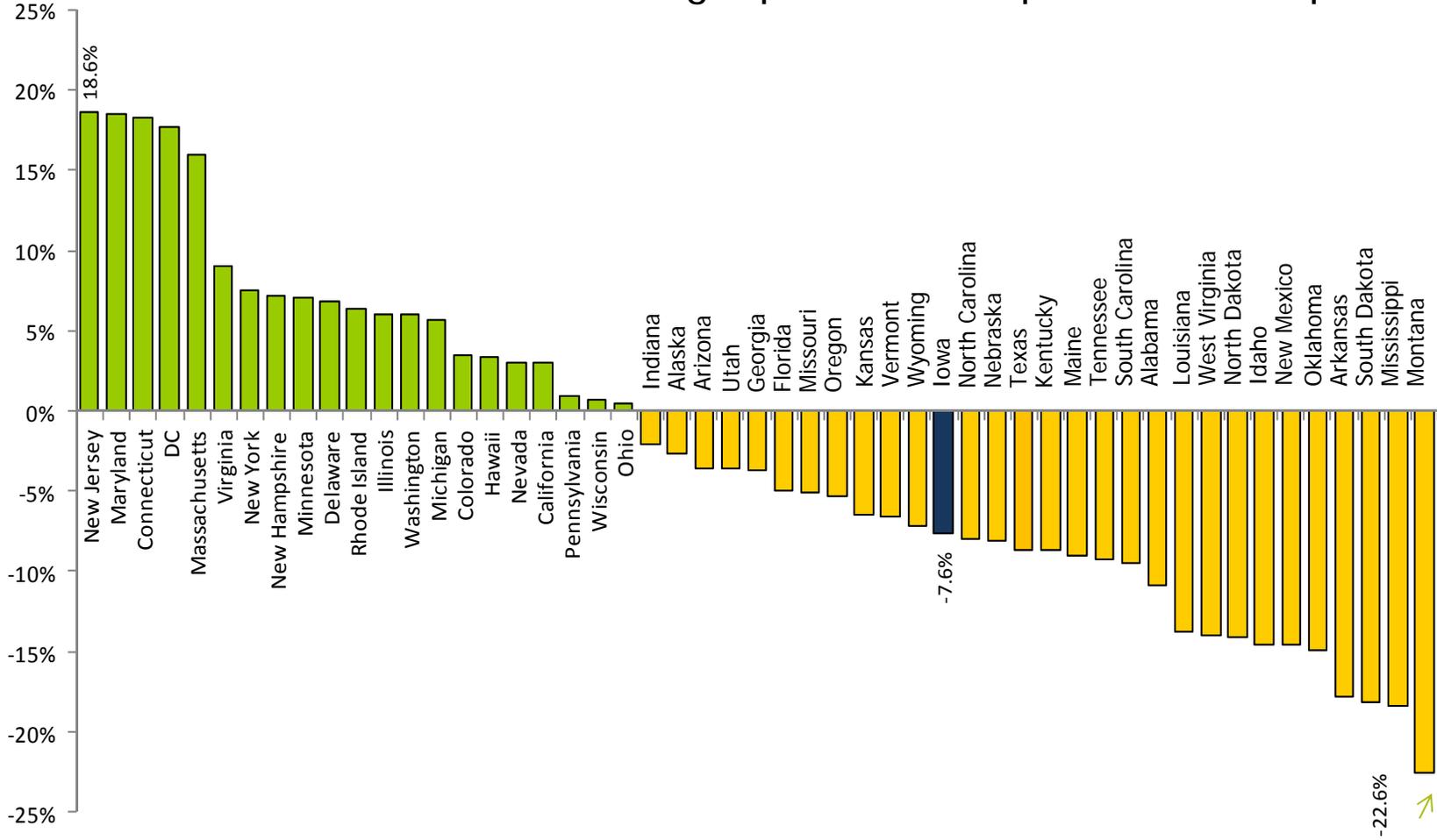


# Median Earnings of Population Age 25-64 by Level of Education, 2005



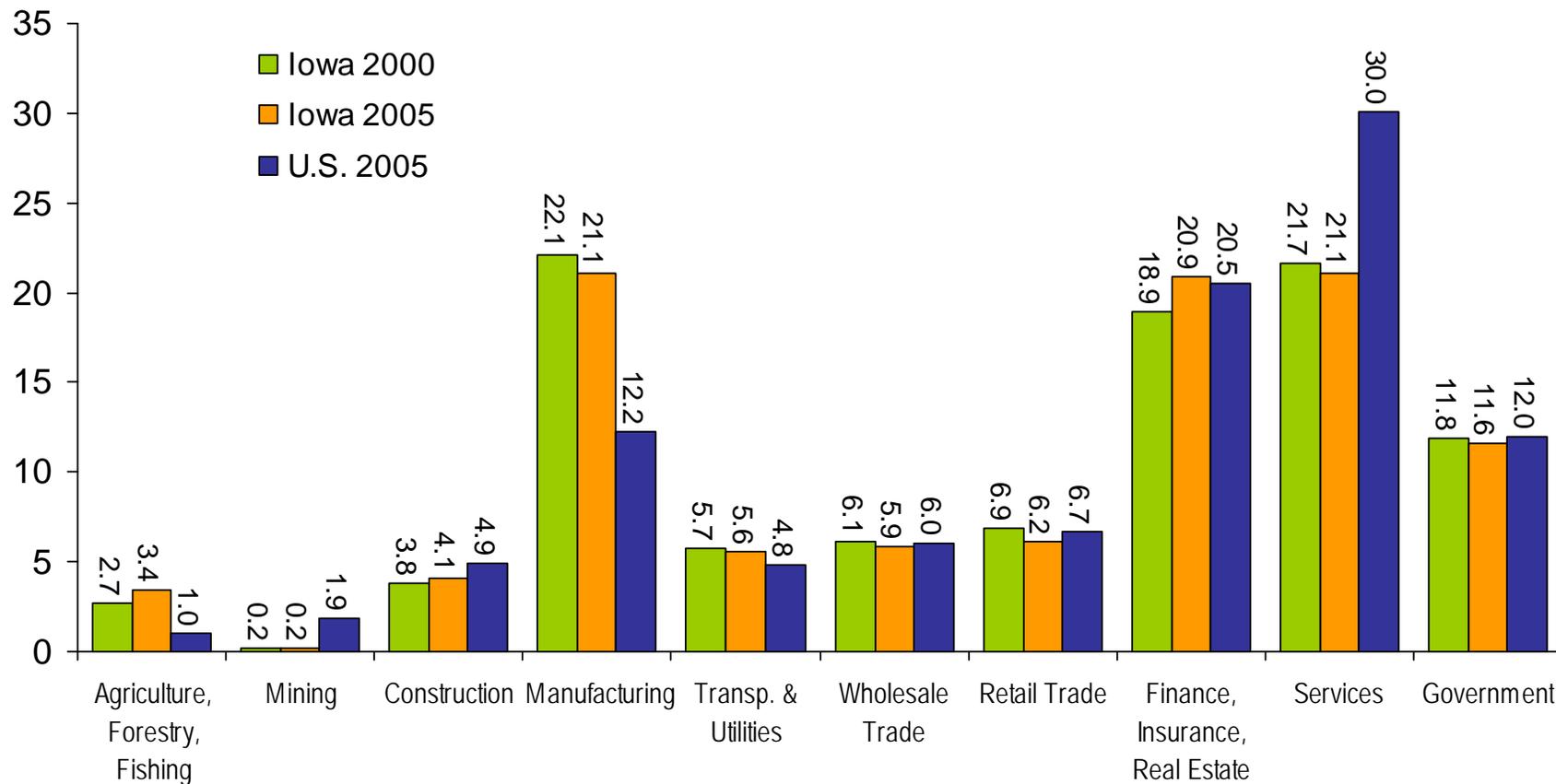
# Percentage of Full-Time Employees with Earnings in the U.S. Quartiles (2006)

Percent in high quartile minus percent in low quartile

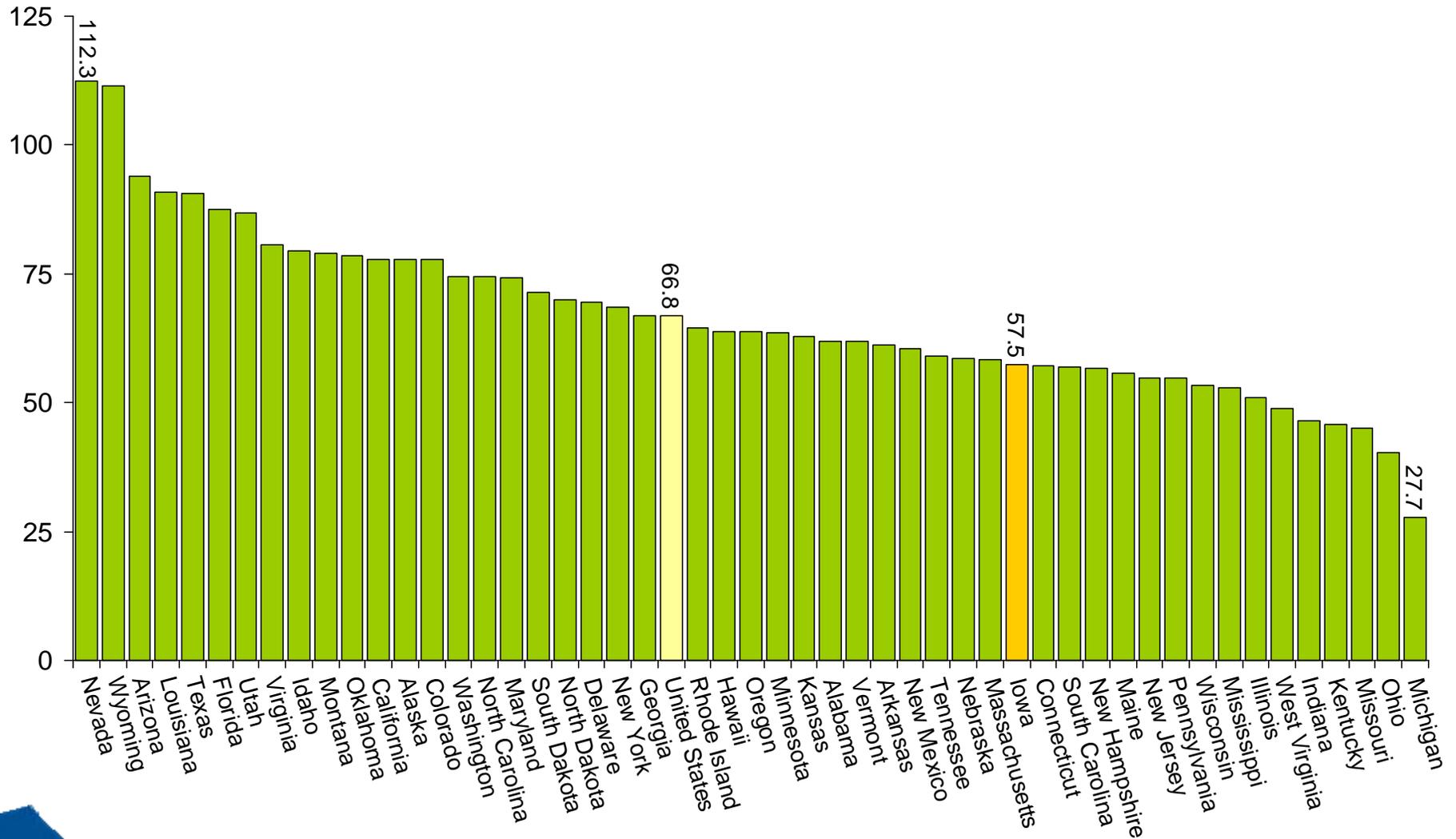


Source: 2006 American Community Survey (Public Use Microdata Samples)

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

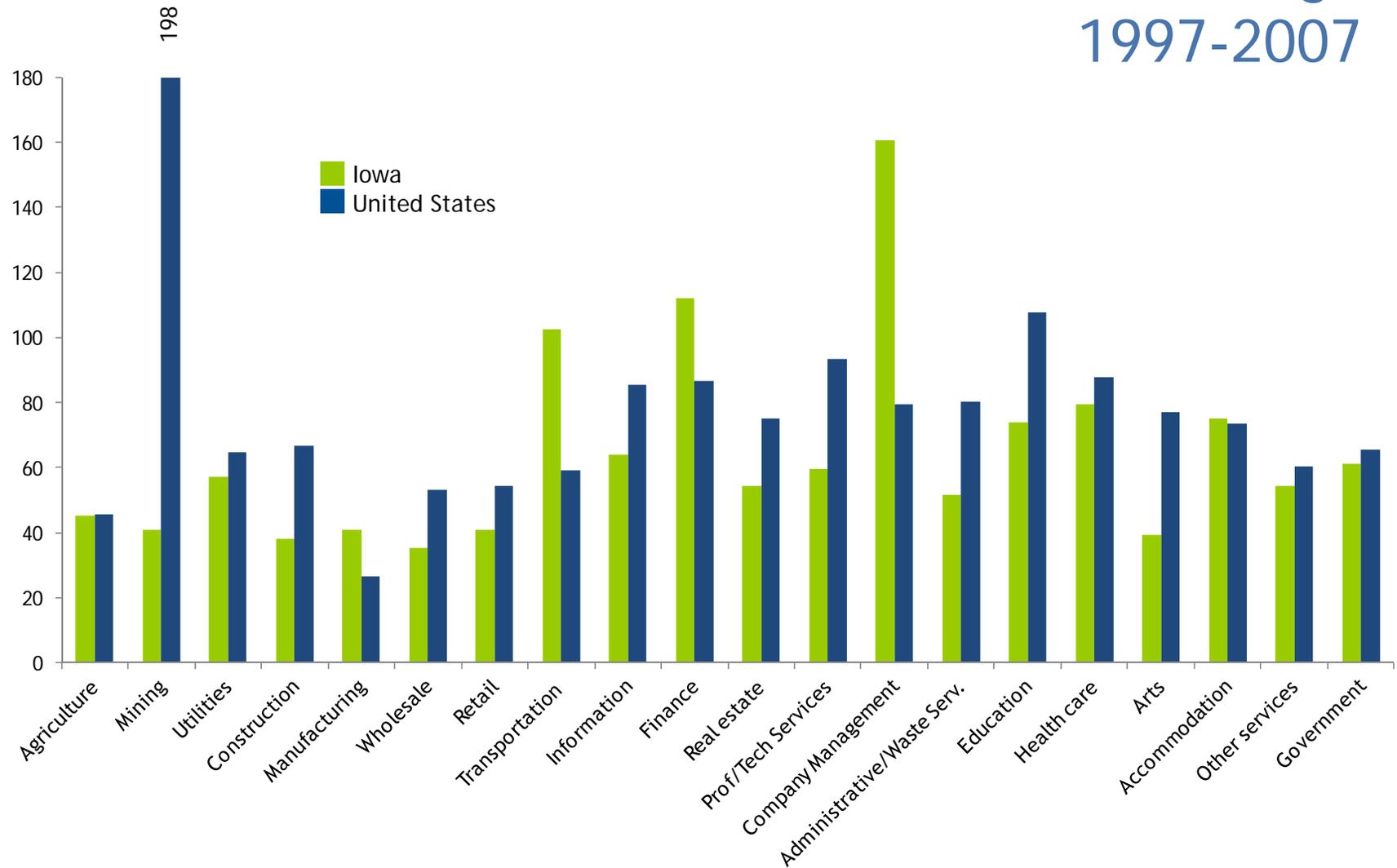


# Percent Change in Gross State Product, 1997-2007



Source: Bureau of Economic Analysis, U.S. Department of Commerce

# Gross Domestic Product – Percent Change 1997-2007



# Development Report Card for the States, 2006 - Iowa

Overall	
<b>Performance</b>	<b>B</b>
Employment	D
Earnings & Job Quality	A
Equity	A
Quality of Life	A
Resource Efficiency	C
<b>Business Vitality</b>	<b>D</b>
Competitiveness/Existing Businesses	C
Entrepreneurial Energy	F
<b>Development Capacity</b>	<b>C</b>
Human Resources	C
Financial Resources	F
Infrastructure Resources	D
Amenity Resources & Natural Capital	A
Innovation Assets	C

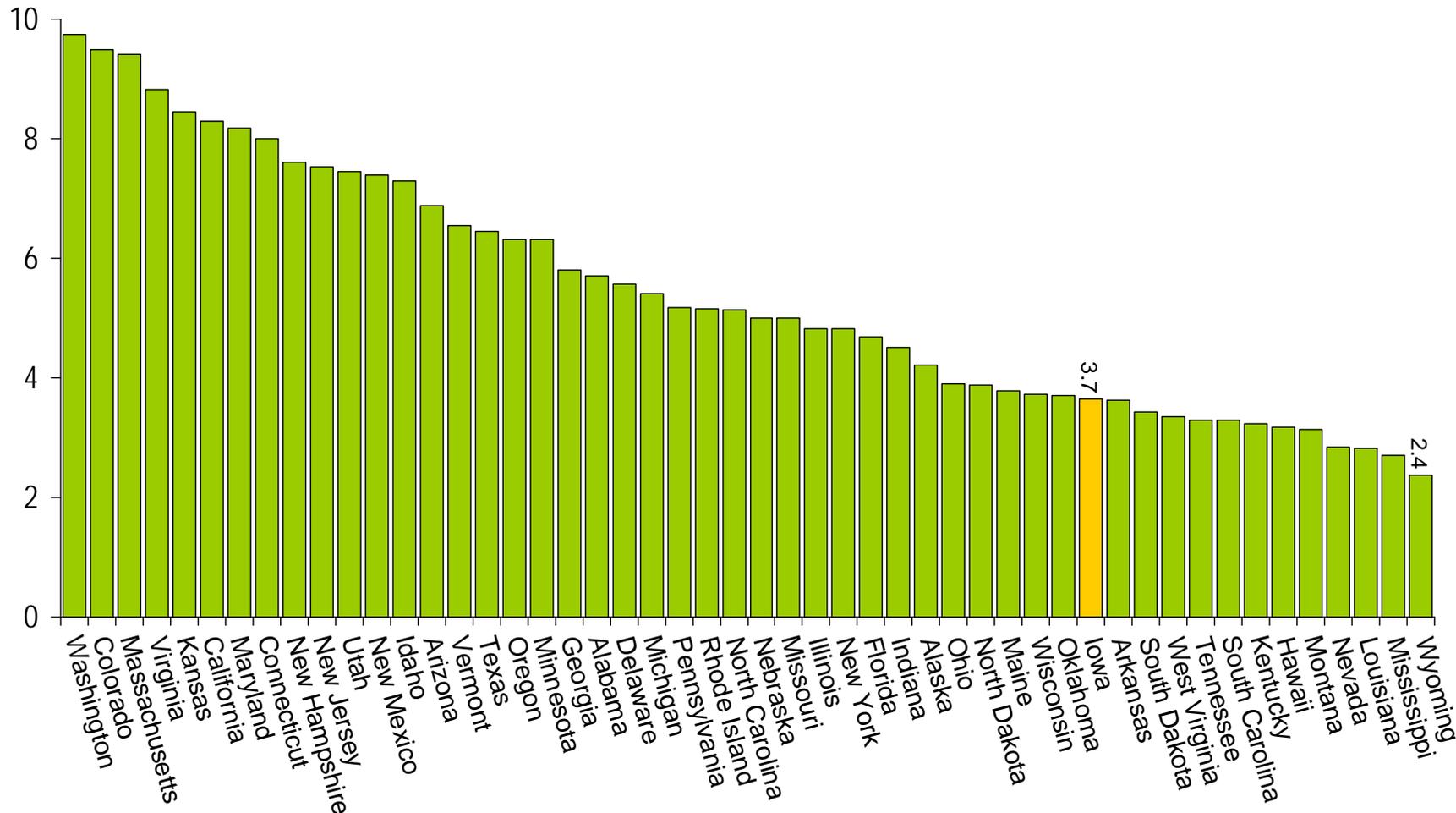
## Iowa Strengths (Top 10 Rankings)

Rank	Measure
1	Air Pollution
2	Income Distribution
4	Involuntary Part-Time Employment
5	High School Completion
5	Affordable Urban Housing
5	Business Closings
6	Rate of Recycled Waste
8	Voting Rate
9	Employer-Provided Health Insurance
9	Income Distribution Change
9	Working Poor
10	Royalties & Licenses
10	Academic R&D

## Iowa Weaknesses (Bottom 10 Rankings)

Rank	Measure
41	SBIC Financing
43	Change in Unemployment Rate
43	Change in Uninsured Low-income Children
44	Manufacturing Investment
45	Change in Poverty Rate
45	Venture Capital Investments
47	SBIR Grants
48	Change in Homeownership Rate
49	Employment Growth: Long Term
50	New Companies

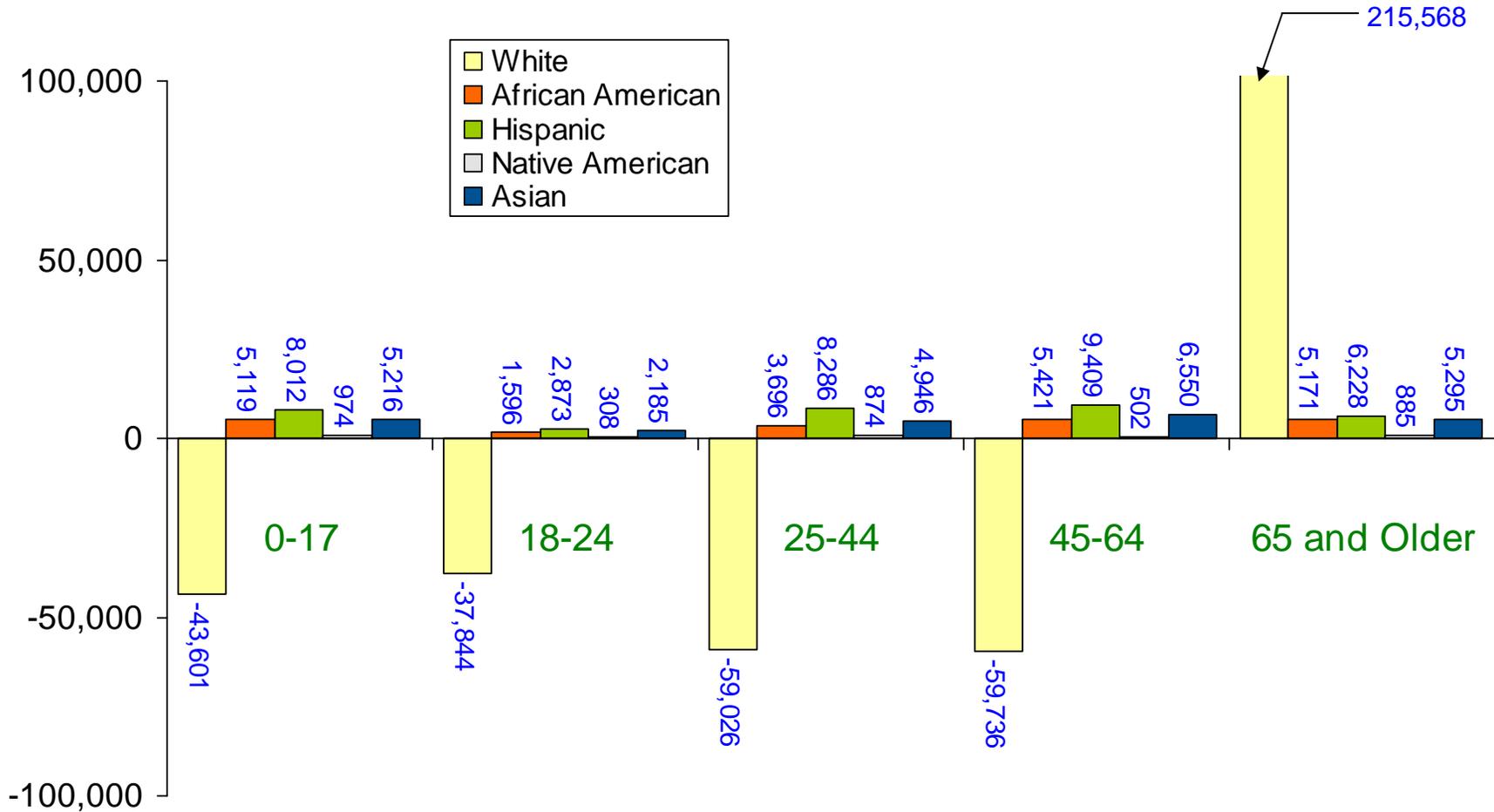
# Employment in High-Technology Establishments as Share of Total Employment by State, 2004



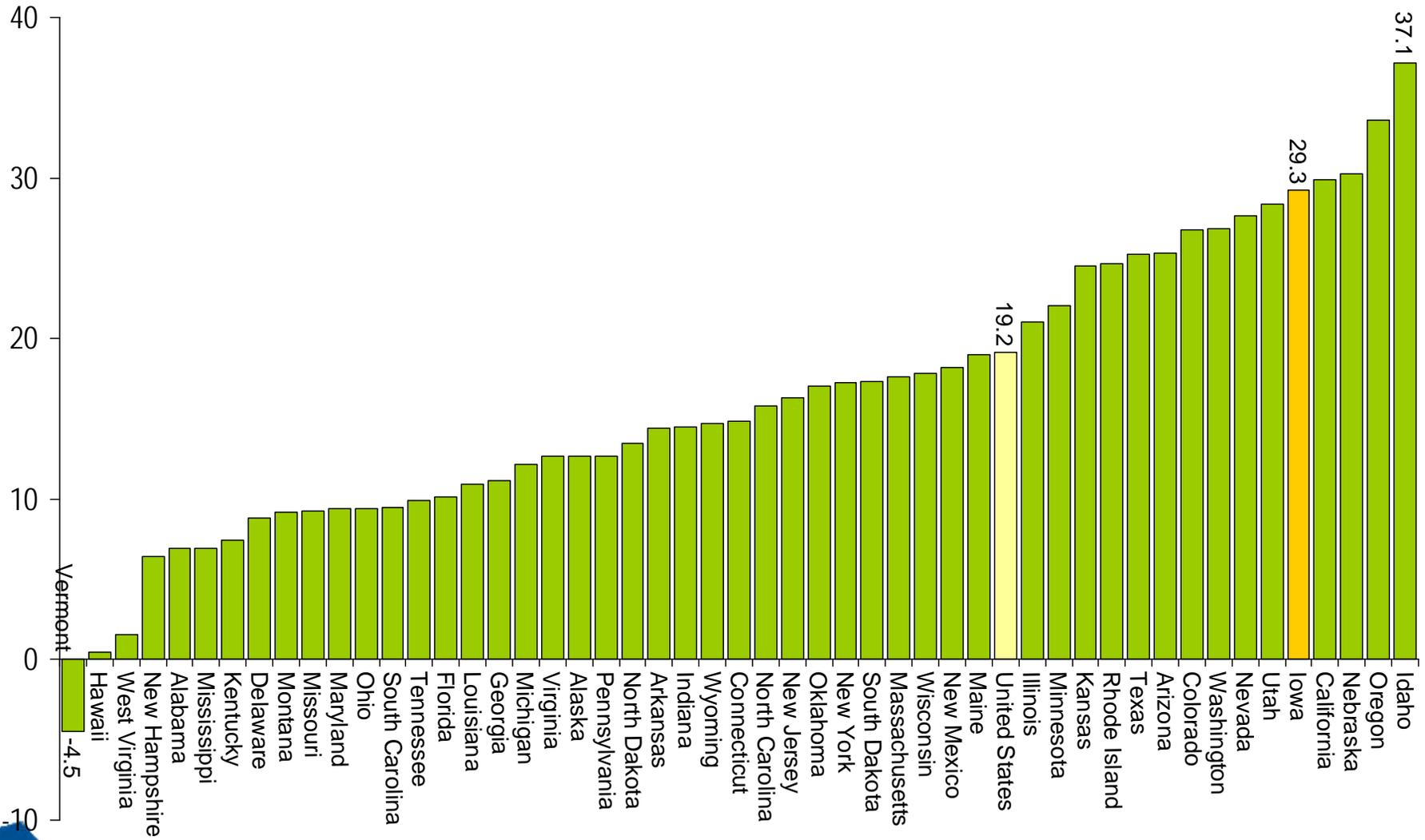


### 3. Reducing the Education Attainment Gap

# Projected Change in Iowa Population by Age & Race/Ethnicity, 2005-25 (in Thousands)

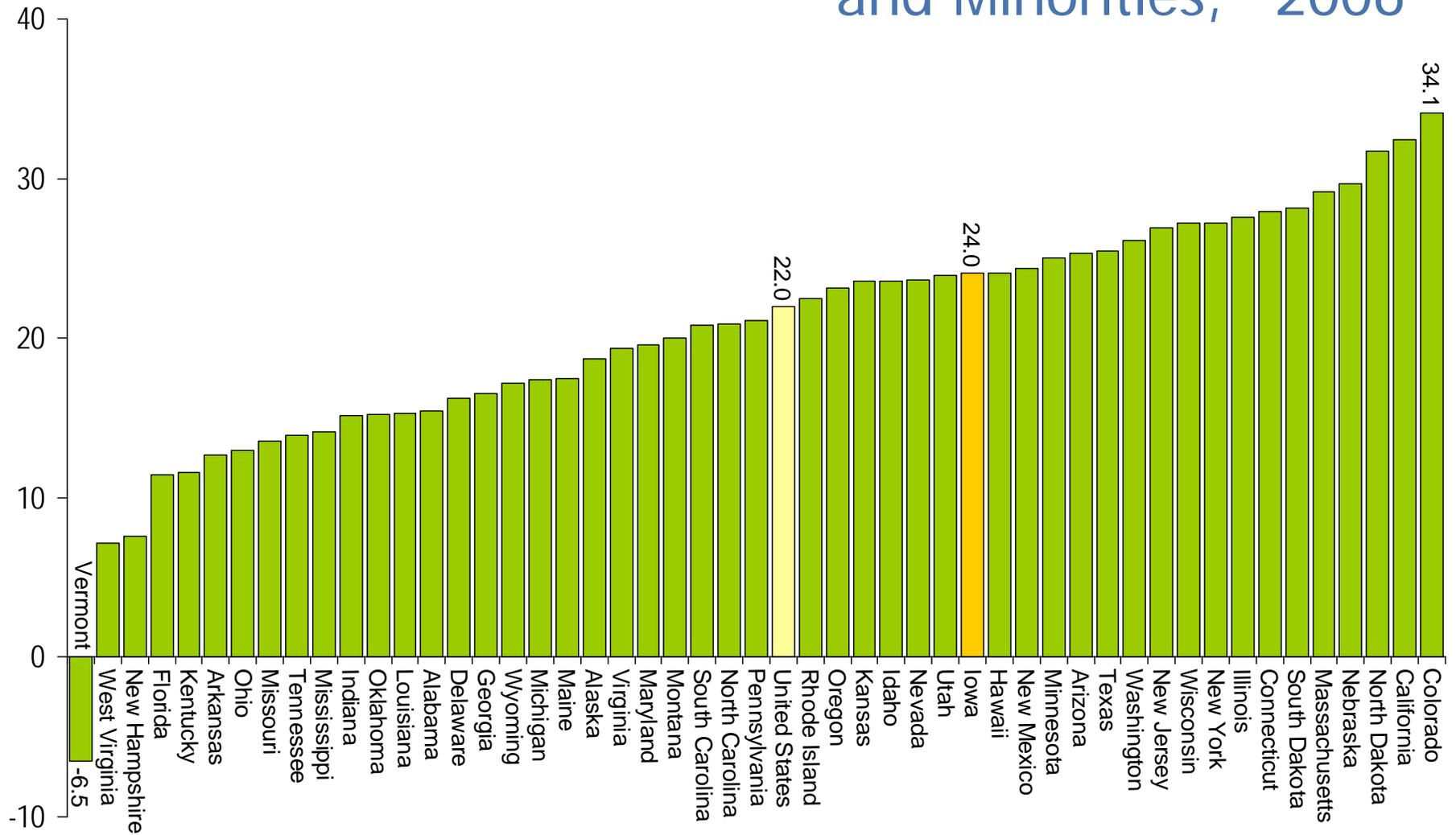


# Difference in High School Attainment Between Whites and Minorities,\* 2006



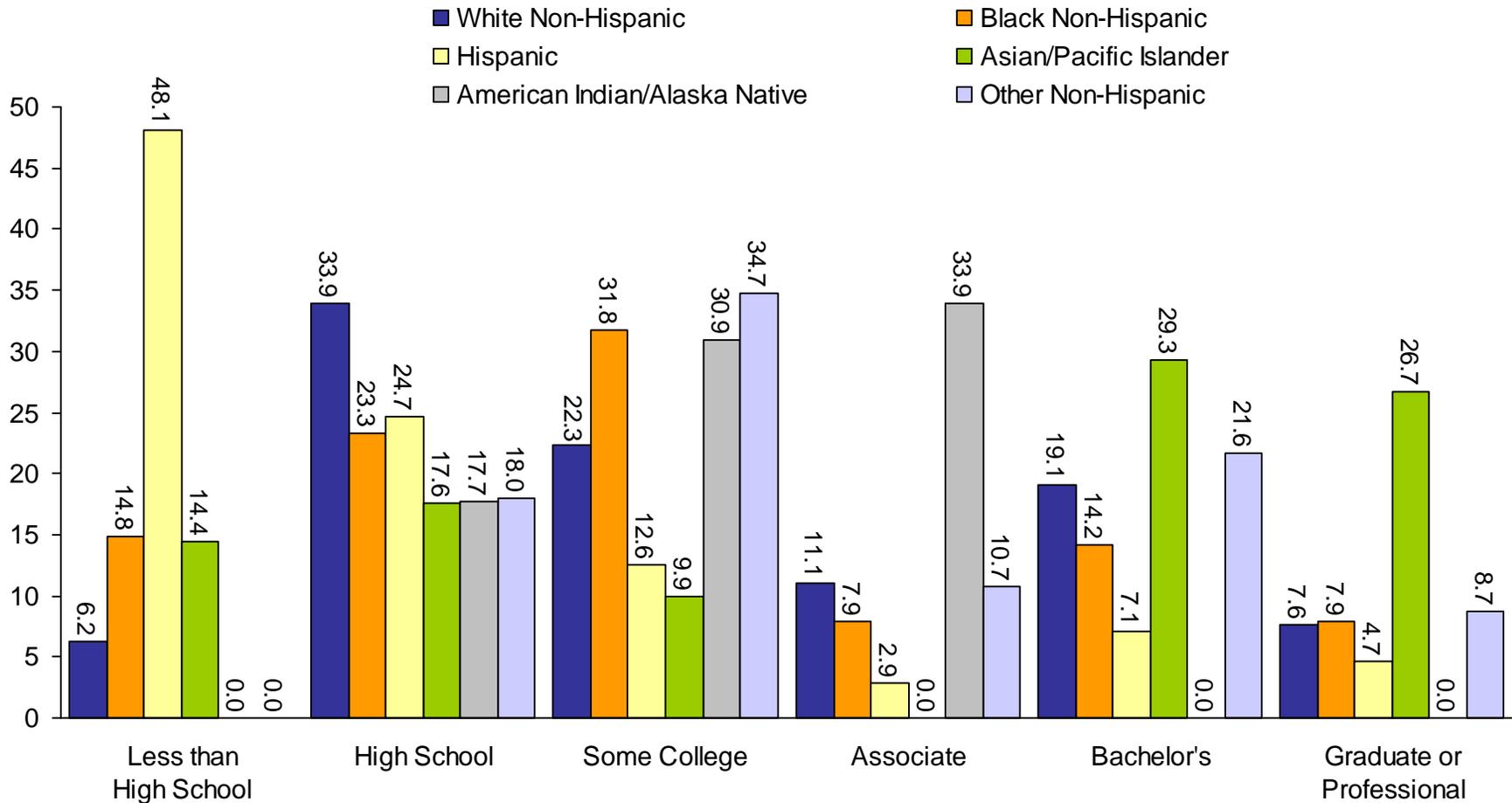
\* Minorities include African-American, Hispanic, and Native American  
 Source: U.S. Census Bureau, 2006 ACS PUMS

# Difference in College Attainment Between Whites and Minorities,\* 2006

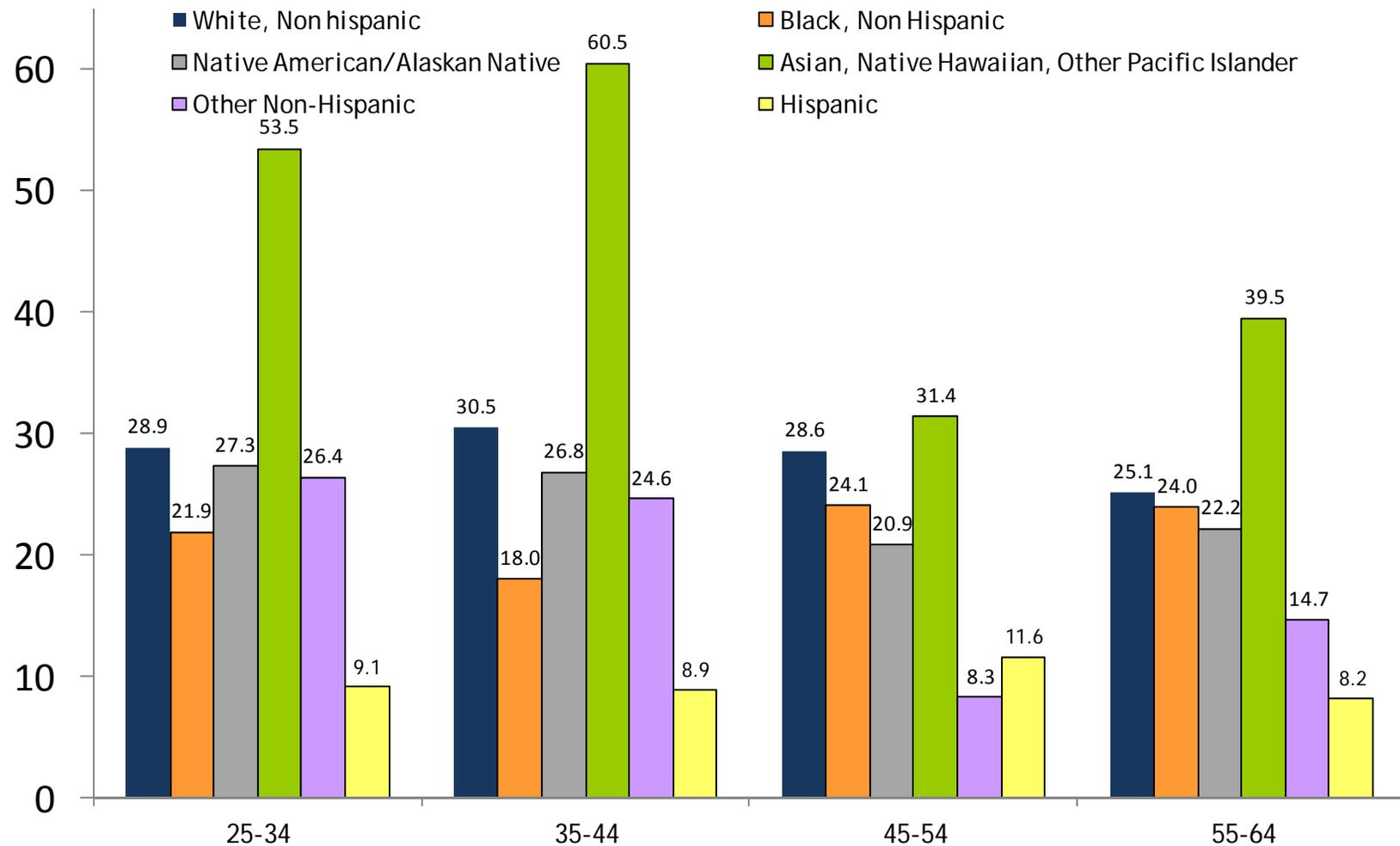


\* Minorities include African-American, Hispanic, and Native American  
 Source: U.S. Census Bureau, 2006 ACS (PUMS)

# Percent Educational Attainment of Population Age 25-64 By Race/Ethnicity - Iowa, 2005



# Percentage of Iowans with at Least an Associates Degree, by Race/Ethnicity, 2006



Source: U.S. Census Bureau, 2006 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File.



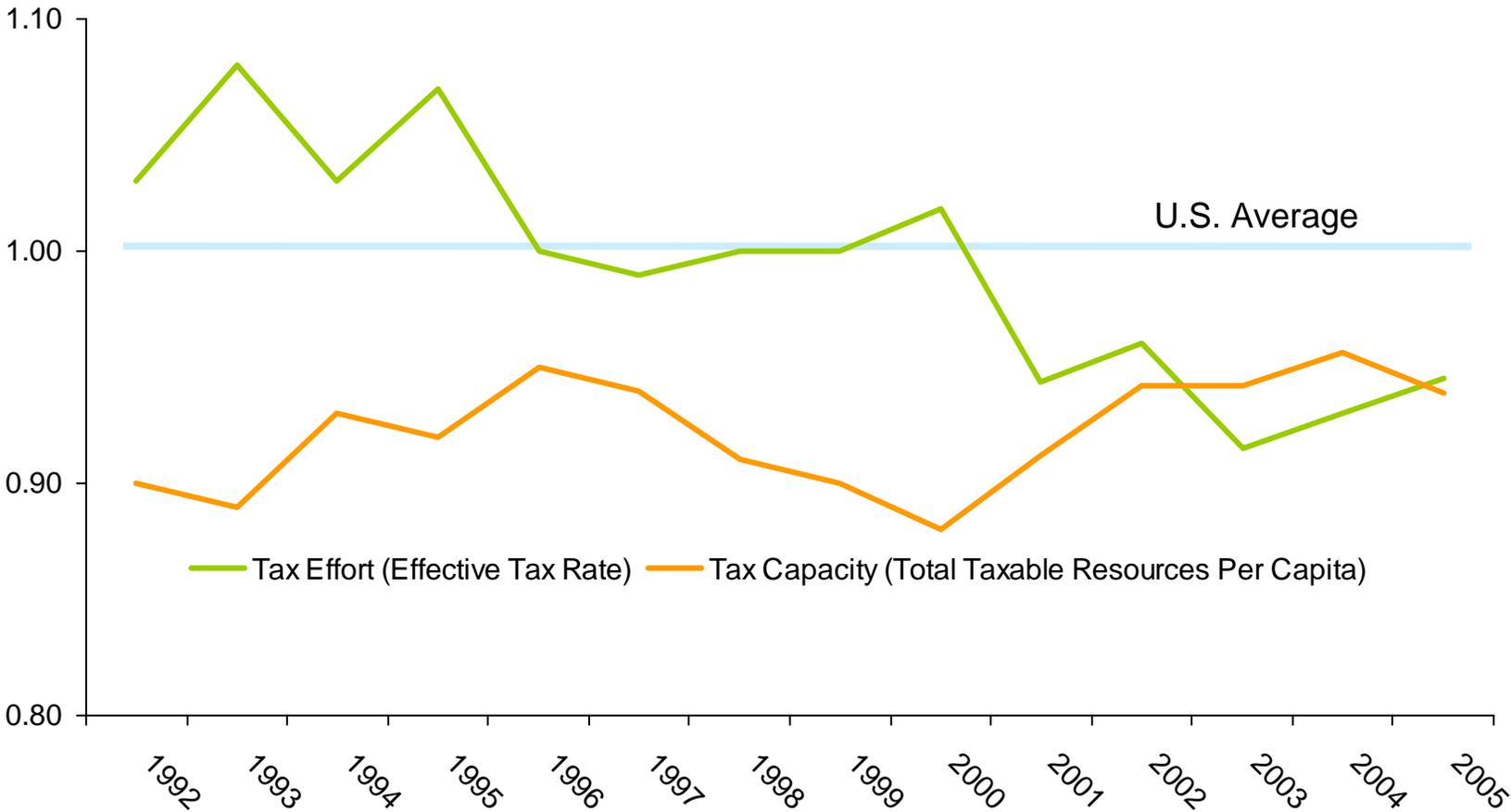
## 4. Keeping Higher Education Affordable in Difficult Economic Times



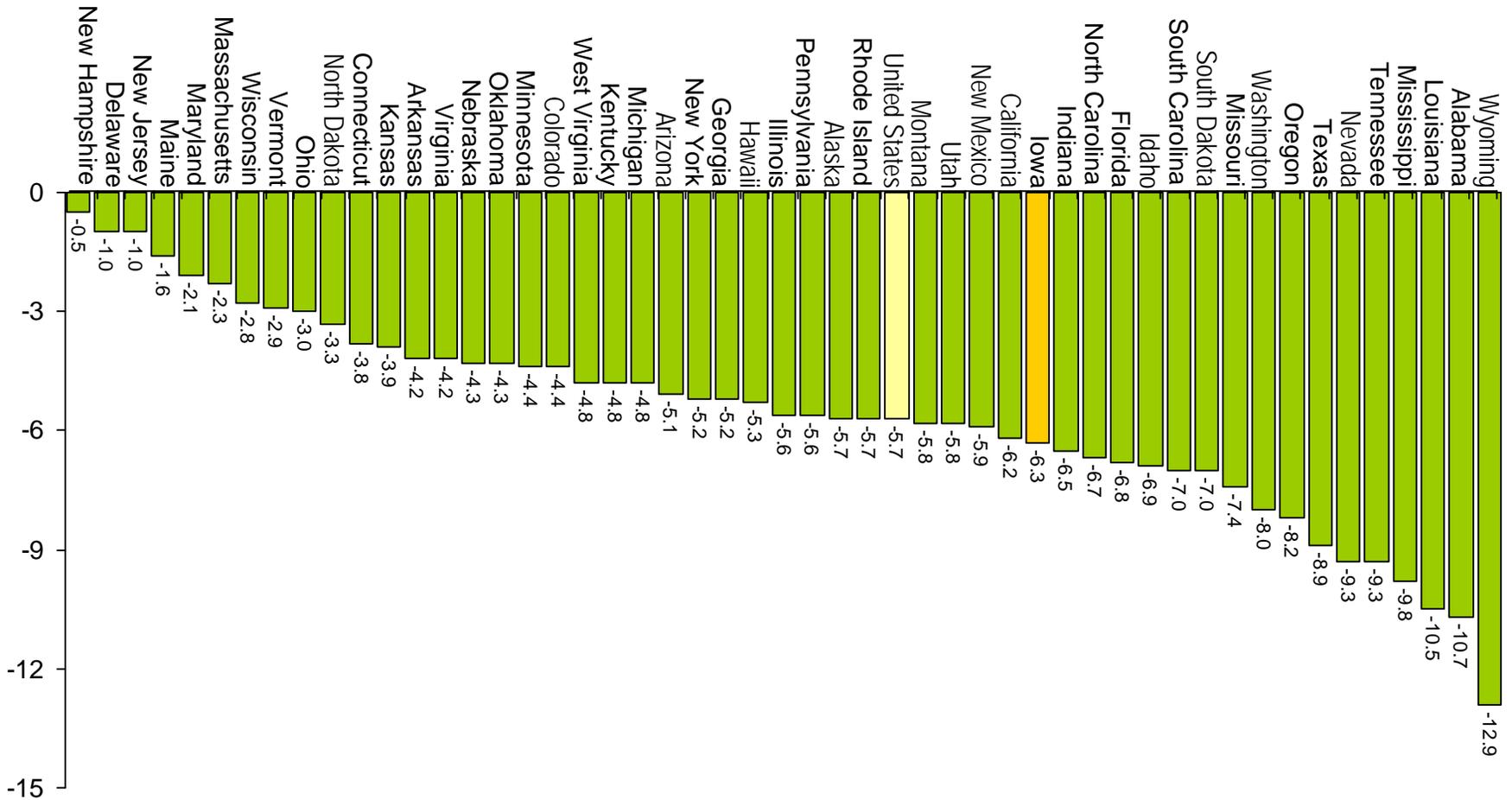
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# State Tax Capacity & Effort Iowa Indexed to U.S. Average

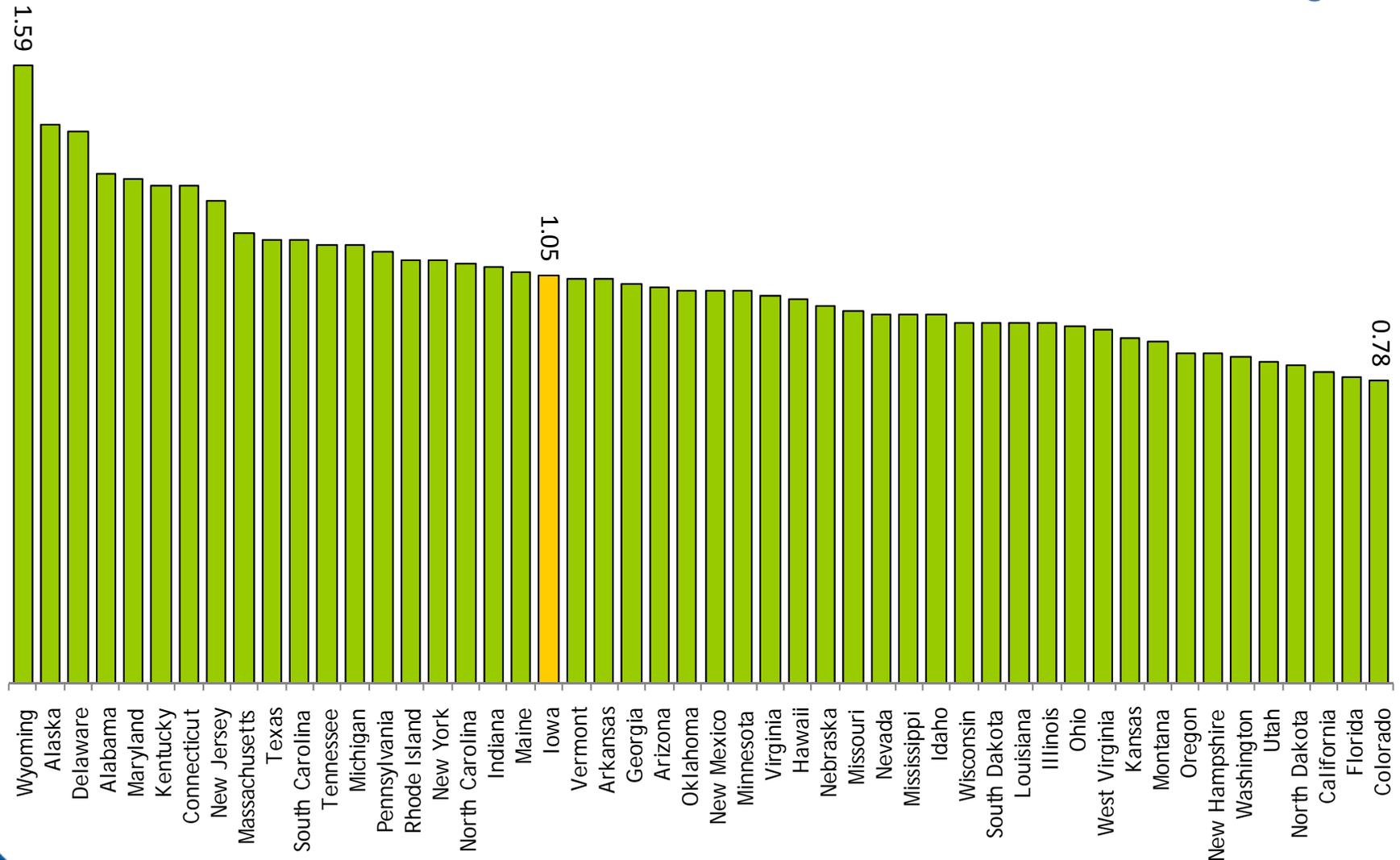


# Projected State and Local Budget Surplus (Gap) as a Percent of Revenues, 2013

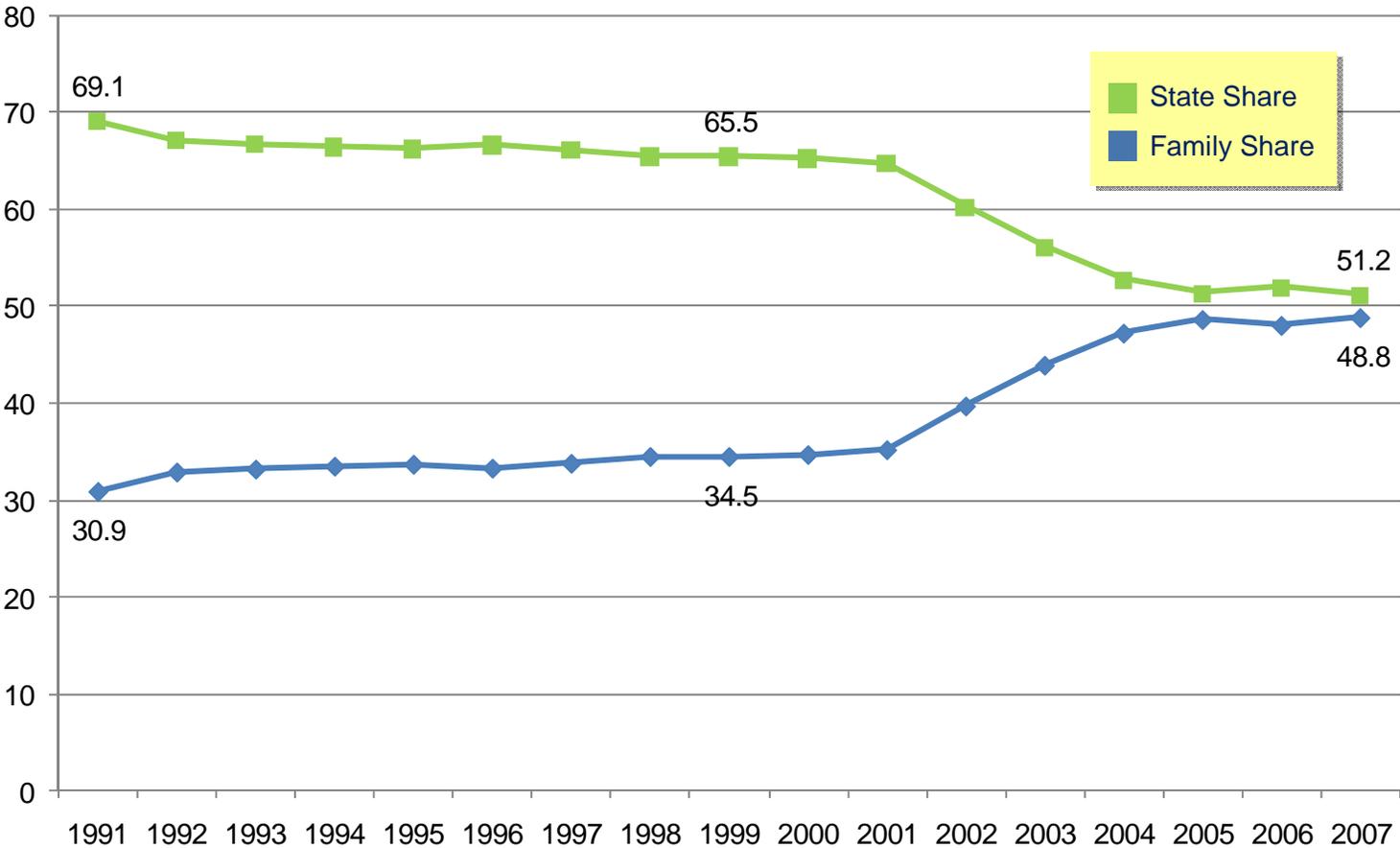


# Total Public Higher Education Revenue per FTE

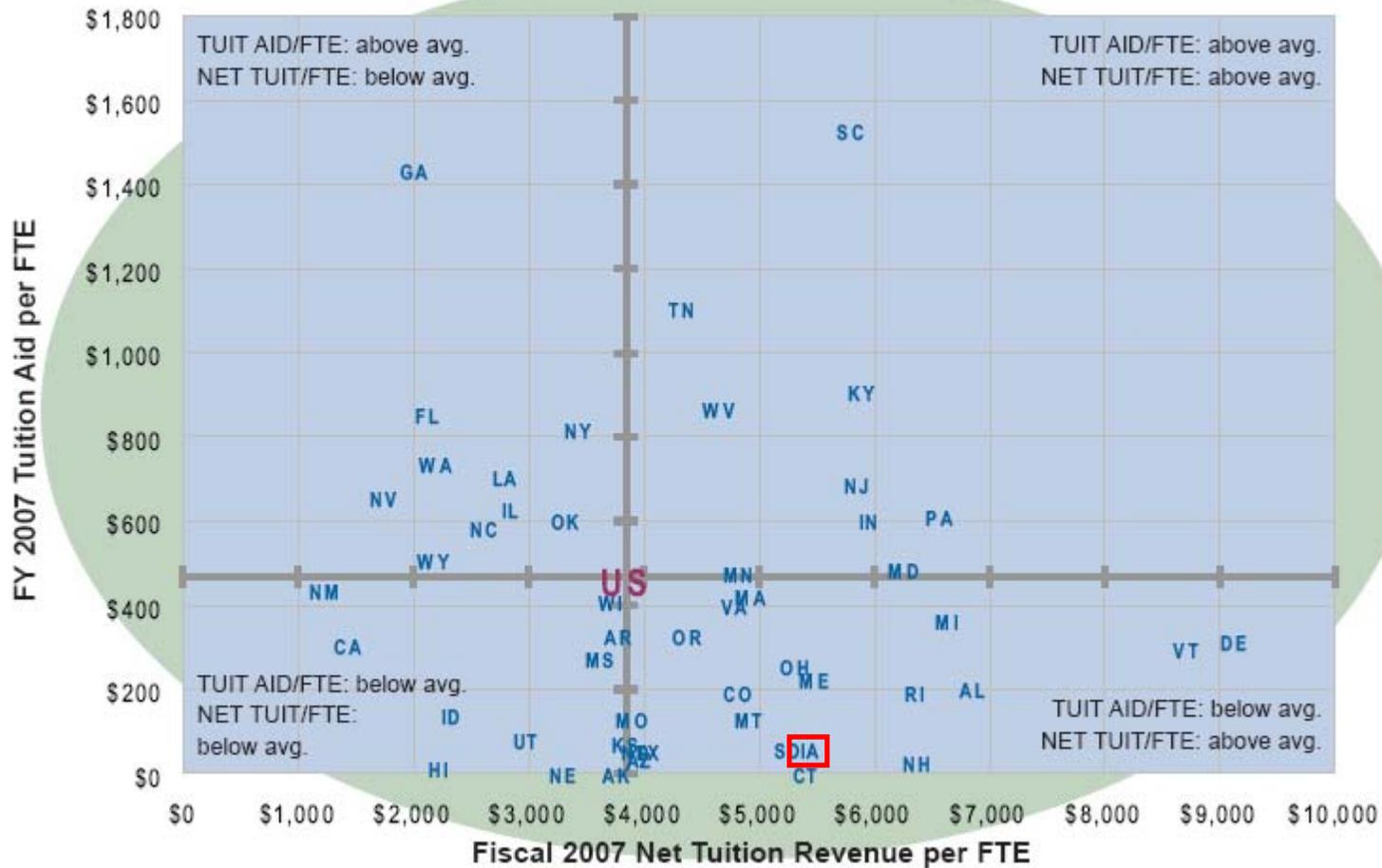
## Indexed to US Average



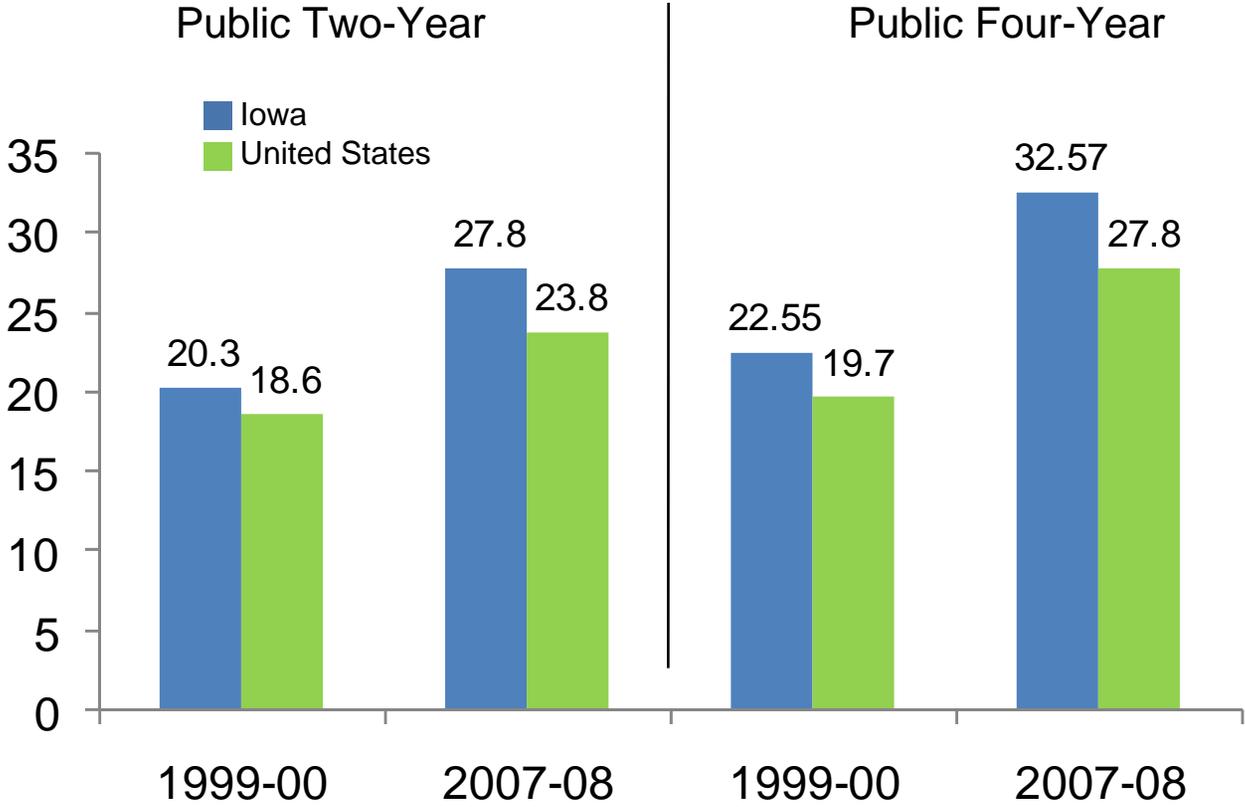
# State & Family Share of Funding for Public Higher Education, 1991 – 2007, Iowa



# Net Tuition Revenue per FTE and State-Funded Tuition Aid per FTE, FY2007 (Public Institutions only)



# Percentage of Income Needed to Pay for College at Public Two- & Four-Year Institutions, 2000-2008



# Share of Income that the Poorest Families Need to Pay for Tuition at the Lowest Priced Colleges

