

Legislative Planning Committee

∞ Rep. Scott Munsterman, Chair



∞ Sen. Mike Vehle, Vice Chair



The South Dakota

Public University System



South Dakota Board of Regents

Dr. Michael Rush, Executive Director and CEO

Public University System

System Impact

System Overview

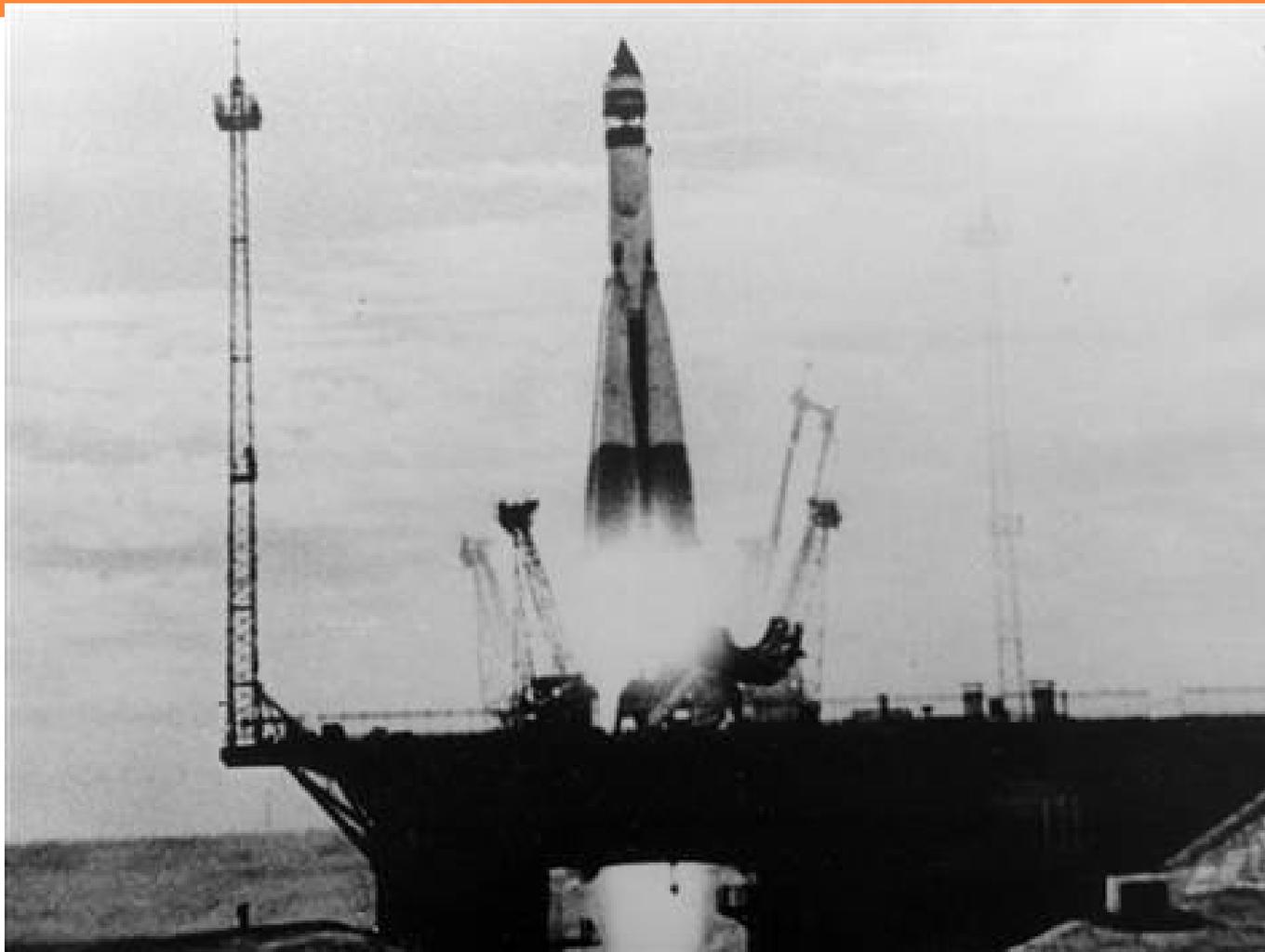
System Accountability



Higher Education: South Dakota's Competitive Edge



October 4, 1957



Baikonur, Russia
(Kazakhstan)

October 4, 1957



Premier Khrushchev pronounced “the United States now sleeps under a Soviet moon.”

American Reaction



American Reaction

"All the News That's Fit to Print"

The New York Times.

LATE CITY EDITION
A. S. Weather Bureau Report: Fair to sunny. Cloudy and cool today and tonight. Mostly fair tomorrow. Temperature: 50-55. Tomorrow: 52-57.—P.E.

VOL. CVII No. 36114 NEW YORK, SATURDAY, OCTOBER 5, 1957. FIVE CENTS

SOVIET FIRES EARTH SATELLITE INTO SPACE; IT IS CIRCLING THE GLOBE AT 18,000 M. P. H.; SPHERE TRACKED IN 4 CROSSINGS OVER U. S.

LIFE

THE RISE OF THE PLOTTERS
CANDID LOOK AT MISSEASIN FLORIDA



LYNDON JOHNSON BEYOND
IN AN ADMINISTRATION

2NeatBooks.com JANUARY 20, 1958 25 CENTS

American Reaction



American Reaction



—Dallas News Staff Photo.

SIGNALS FROM THE SATELLITE

American Response

National Defense Education Act (1958)

Provided \$877 million over four years for education that could support national security goals—especially training scientists



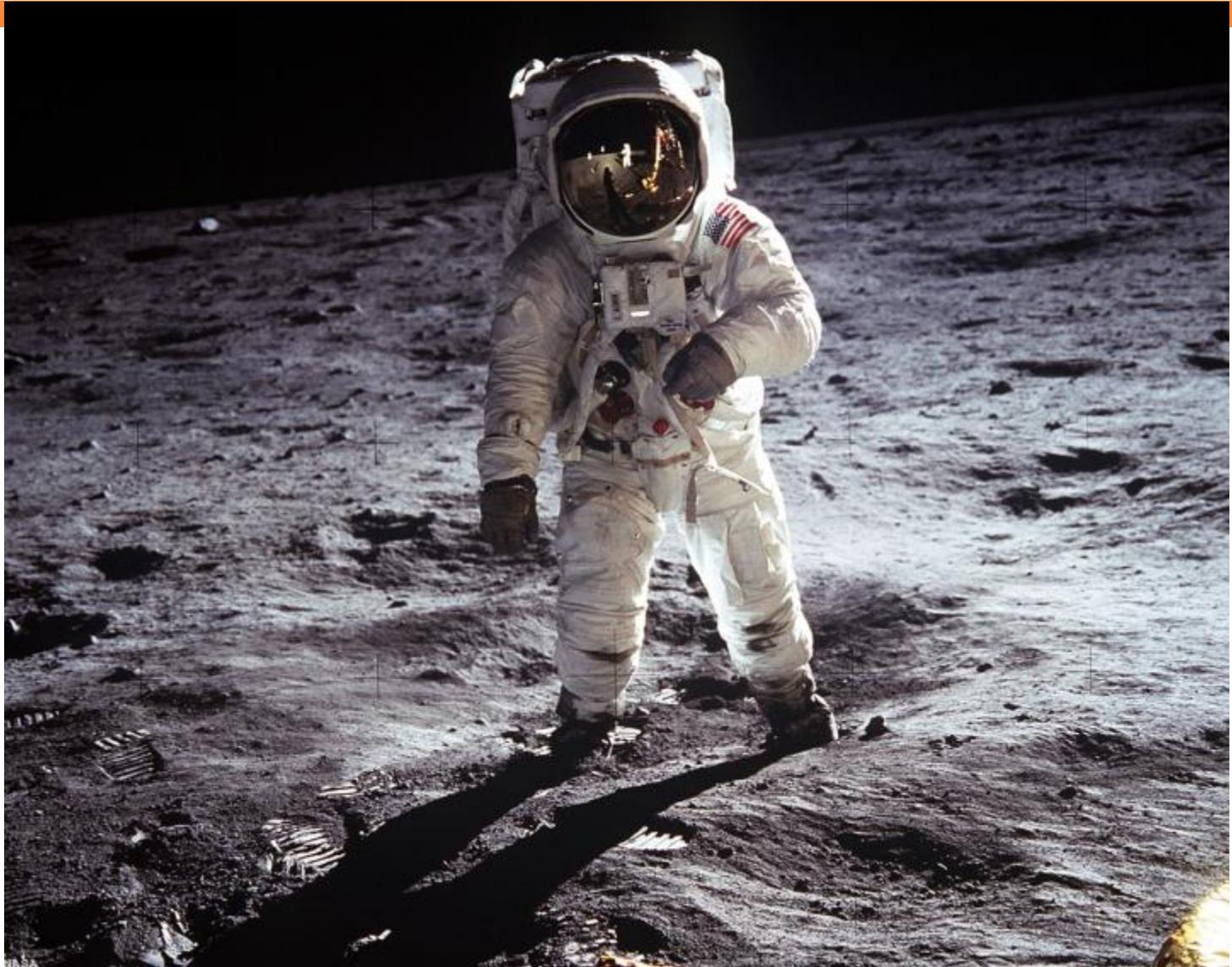
Educational Impact

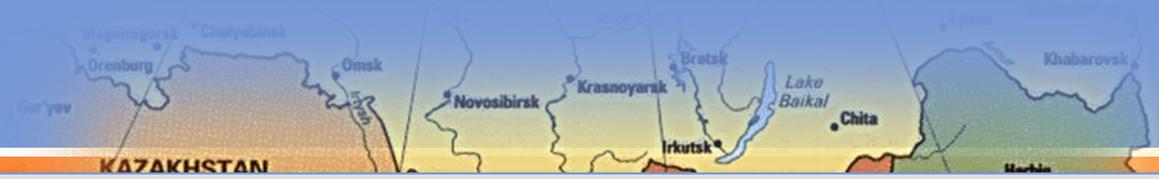
Federal education legislation to improve U.S. education

- Science
- Math
- Foreign Languages
- Graduate fellowships
- Vocational-technical training
- College loans



The result?



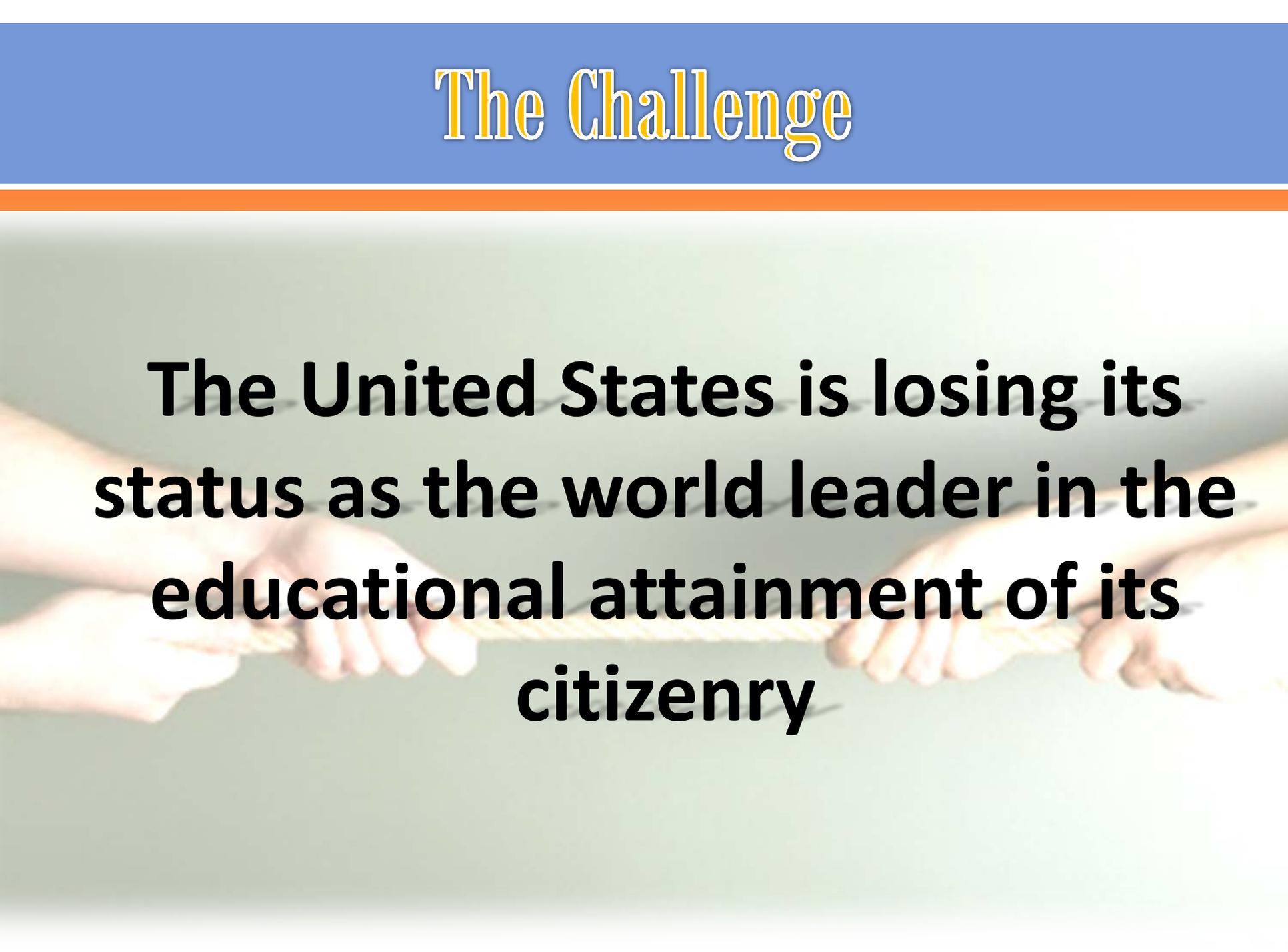


Modern Day Sputnik



The Challenge

The United States is losing its status as the world leader in the educational attainment of its citizenry

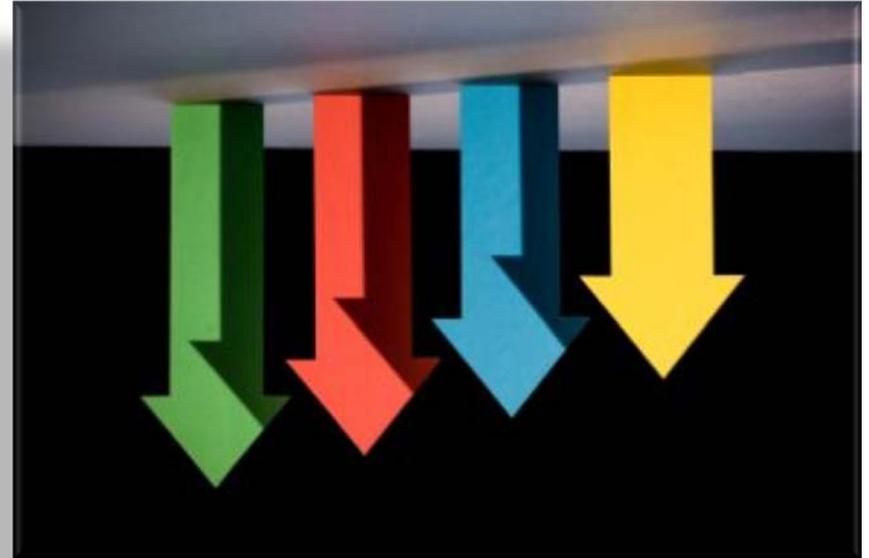
A background image showing several pairs of hands holding a thick, yellow rope, symbolizing teamwork or a challenge. The hands are positioned horizontally across the middle of the frame, with the rope running through them. The background is a soft, out-of-focus green and white gradient.

The Challenge

First



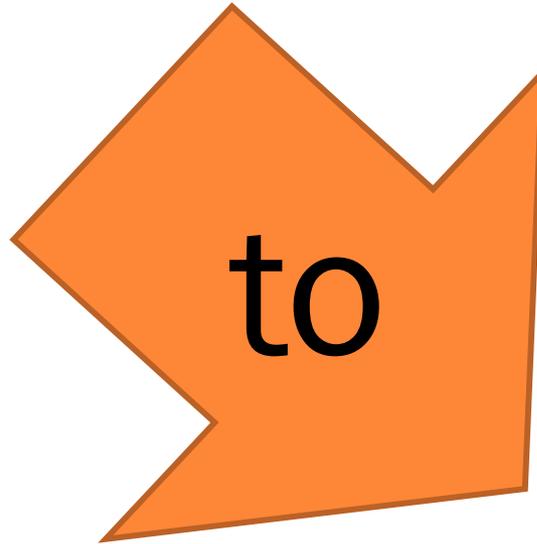
to



Last

What Happened?

10th



16th

Trend has been arrested

College Completion – ranked 10th

High school Completion – ranked 11th



The Challenge

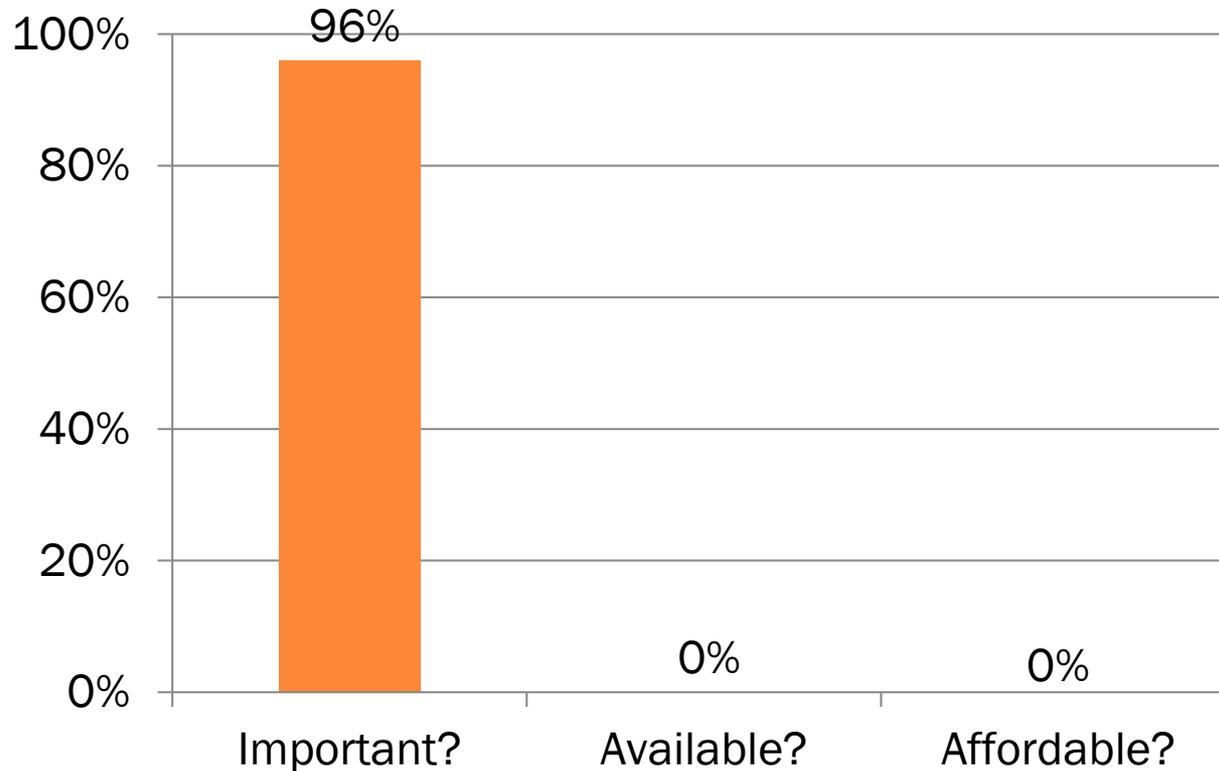
Maintaining
Momentum



Public Perception

The Affordability Disconnect

Percent of US adults agreeing that higher education is:

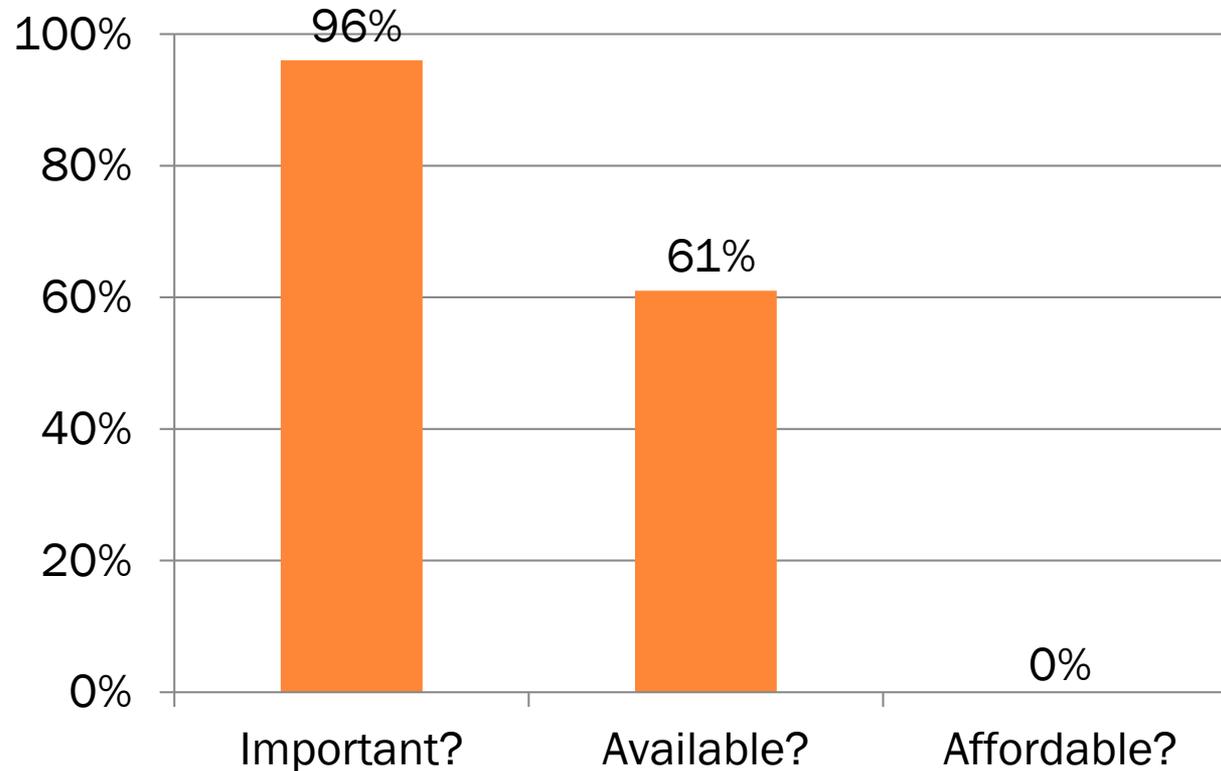


Source: Gallup-Lumina poll, December 2014

Public Perception

The Affordability Disconnect

Percent of US adults agreeing that higher education is:

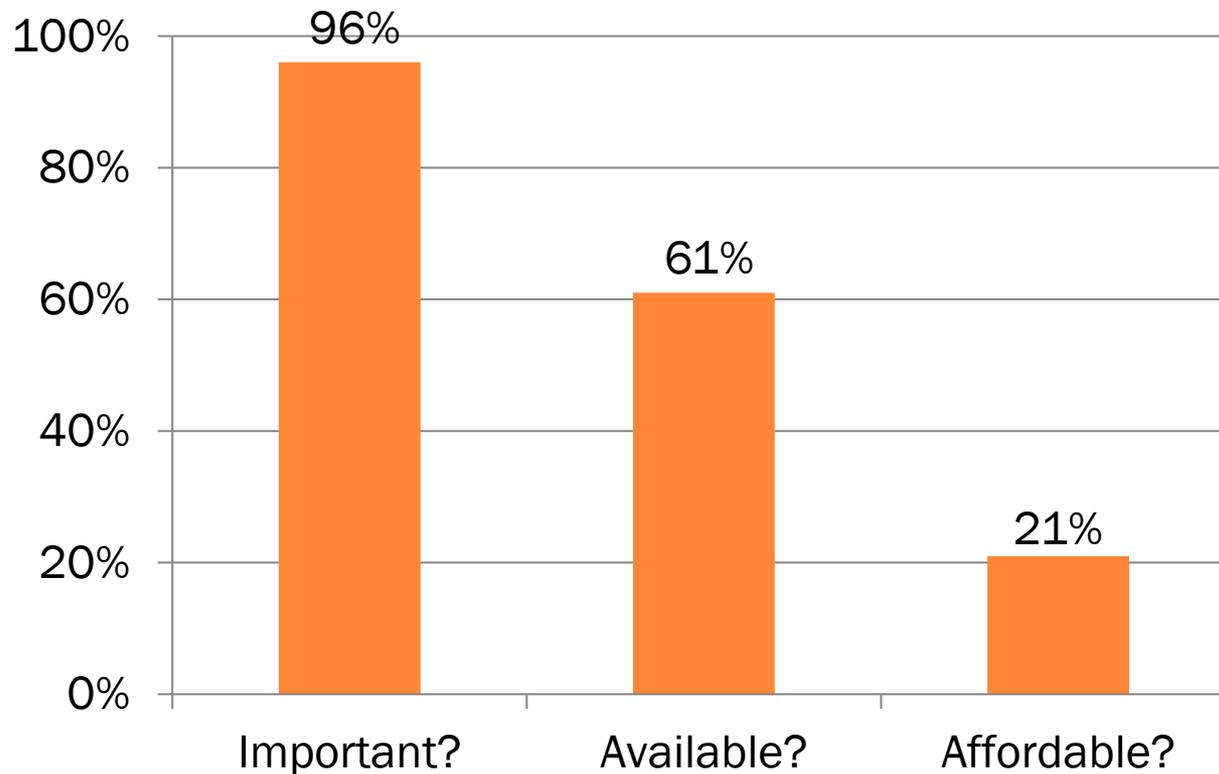


Source: Gallup-Lumina poll, December 2014

Public Perception

The Affordability Disconnect

Percent of US adults agreeing that higher education is:

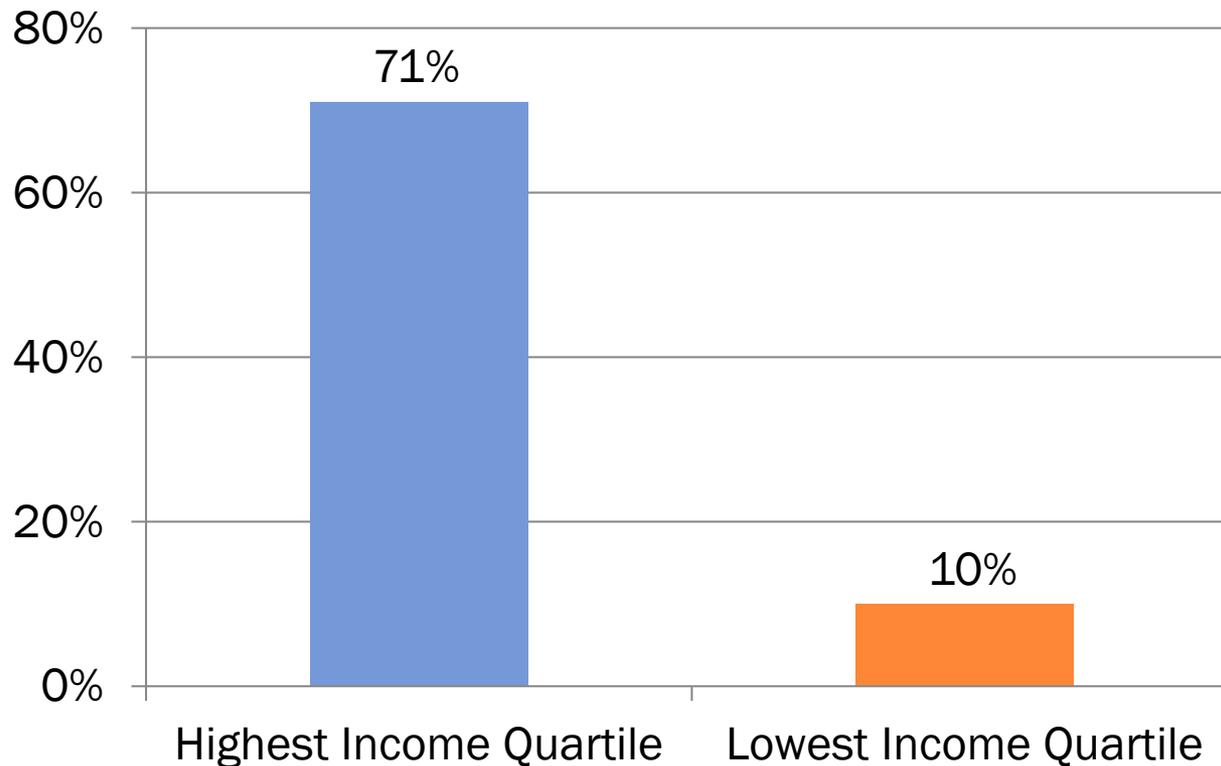


Source: Gallup-Lumina poll, December 2014

The Obstacles

Completion Rates by Income

Baccalaureate Degree Attainment by Age 24

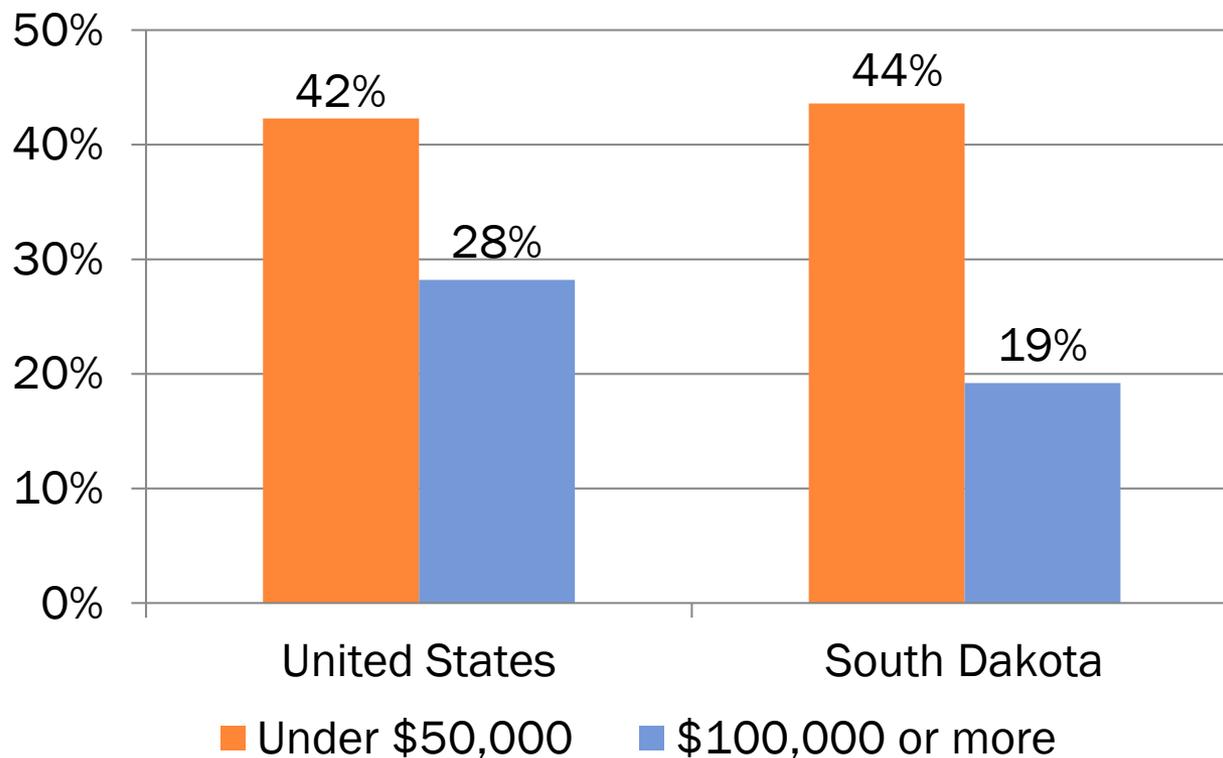


Source: Postsecondary Education Opportunity, 245 (November 2012)

The Obstacles

Ability to Pay for Higher Education

Percent of families with school-age children by annual family income:



SD Need-Based Aid

Need-Based Grant Aid Awarded by State				
State	2012-13	2011-12	2010-11	2009-10
Washington	\$1,365	\$1,144	\$887	\$919
California	\$1,043	\$1,015	\$858	\$697
WICHE	\$721	\$689	\$582	\$528
US	\$585	\$562	\$527	\$531
Nevada	\$476	\$445	\$360	\$258
Colorado	\$373	\$371	\$380	\$396
Oregon	\$325	\$269	\$122	\$511
North Dakota	\$279	\$249	\$229	\$218
Alaska	\$218	\$150	\$81	\$48
New Mexico	\$135	\$257	\$270	\$252
Montana	\$103	\$123	\$108	\$109
Arizona	\$96	\$70	\$89	\$86
Hawaii	\$69	\$81	\$73	\$77
Utah	\$20	\$18	\$25	\$32
Idaho	\$15	\$28	\$22	\$31
South Dakota	\$0	\$0	\$11	\$5
Wyoming	\$0	\$0	\$7	\$7

Source: National Association of State Student Grant and Aid Programs; NCES IPEDS *Fall Enrollment Survey* (WICHE calculations)







So What?



Higher Education as an Economic Engine

- ∞ Attracts income
- ∞ Generates income
- ∞ Attracts business
- ∞ Enhances individual wealth

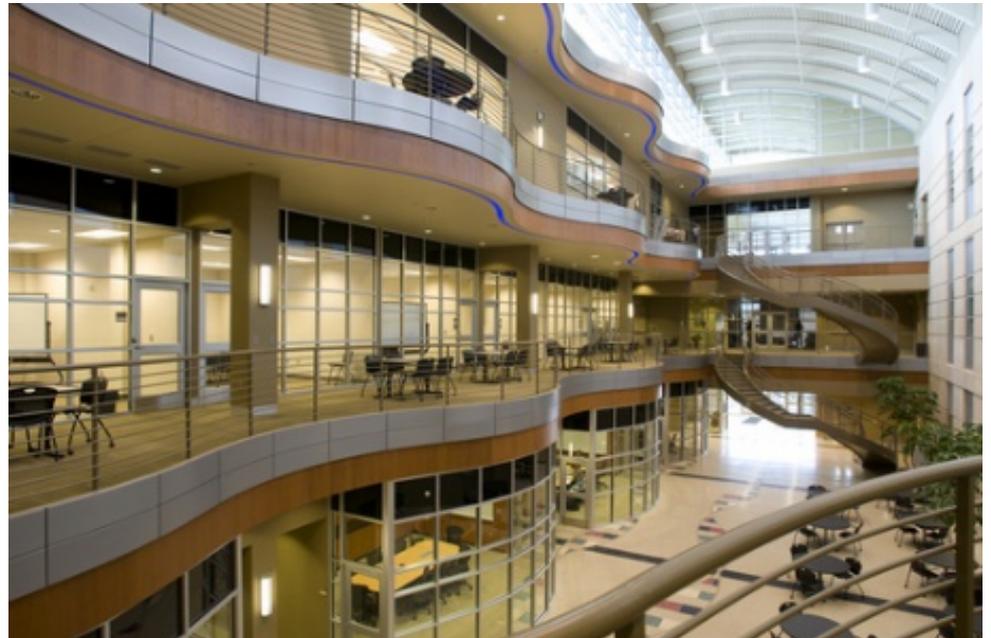


Attracts Income

FY 2014

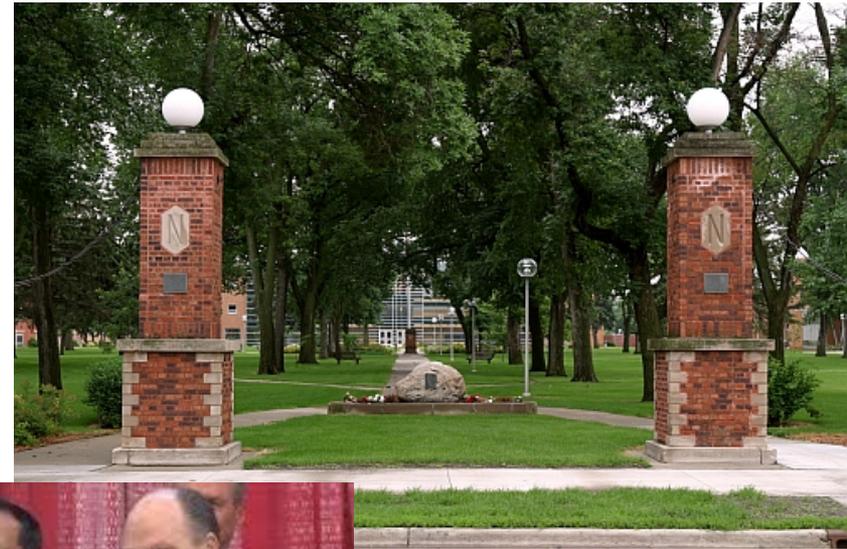
∞ \$276 million in federal money

- Compares to \$180 million from General Fund



Generates Income

- SD's public universities generate \$1.97 billion per year in long-run annual economic impact
 - BHSU - \$191 million
 - DSU - \$110 million
 - NSU - \$157 million
 - SDSMT - \$148 million
 - SDSU - \$766 million
 - USD - \$522 million

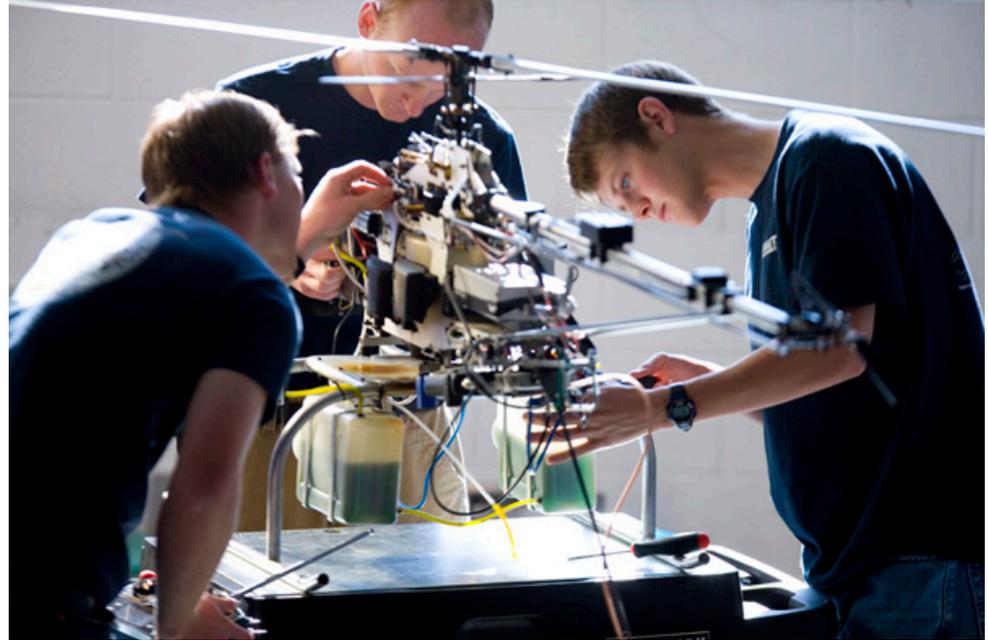


S
(2010)

Government Research Bureau

Attracts Business

- ∞ Workforce
- ∞ Family benefits
- ∞ Social and economic climate



- Business expertise
- Research partnerships



Milken Institute Study on Economic Development



A Matter of Degrees: The Effect of Educational Attainment on Regional Economic Prosperity

How does education drive economic prosperity?

EDUCATION OF THE U.S. WORKFORCE



HIGH SCHOOL DIPLOMA

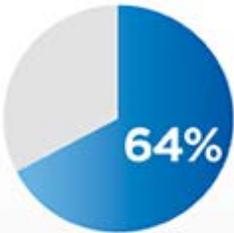
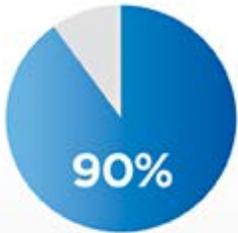


SOME COLLEGE



AT LEAST A BACHELOR'S DEGREE

2010



1990

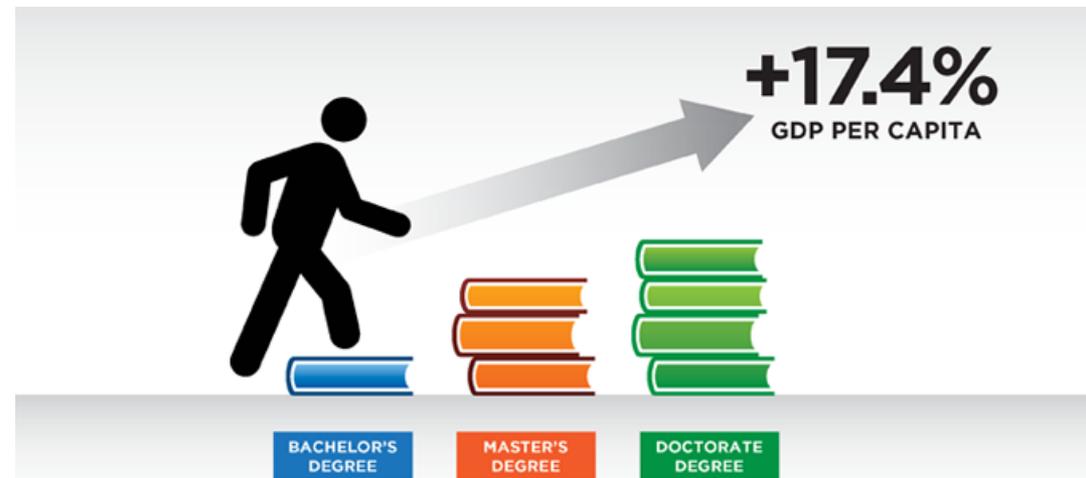


Milken Institute Study

A Matter of Degrees: The effect of educational attainment on regional economic prosperity

Key Findings:

- Education increases regional prosperity
- Better educated, bigger benefits.



Add one year of college to the region's workforce, and GDP per capita jumps 17.4%

Enhances Individual Income

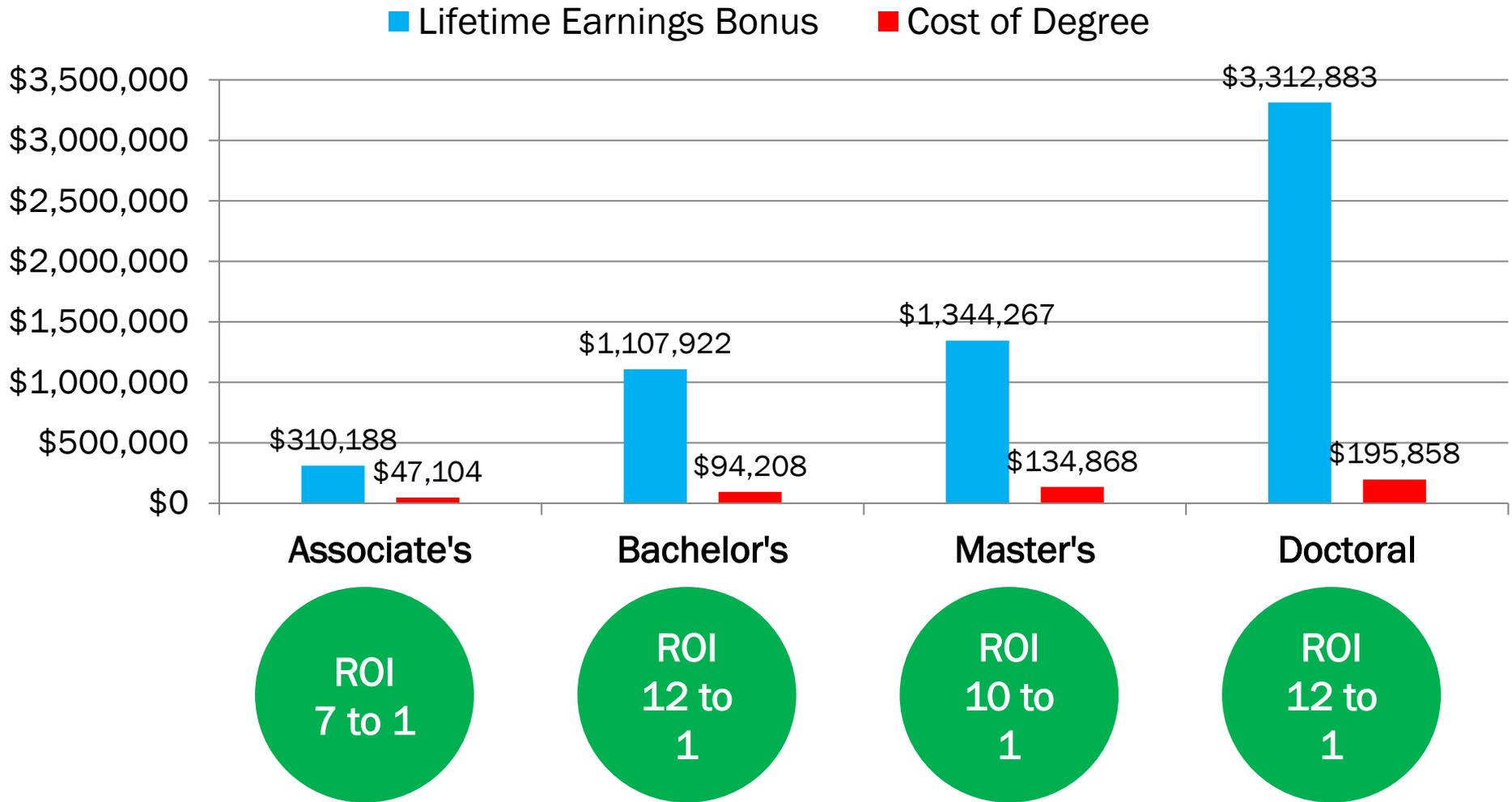
- ∞ Some College – 18.6% higher
- ∞ Associate degree – 32.5% higher
- ∞ BS degree – 73.9% higher





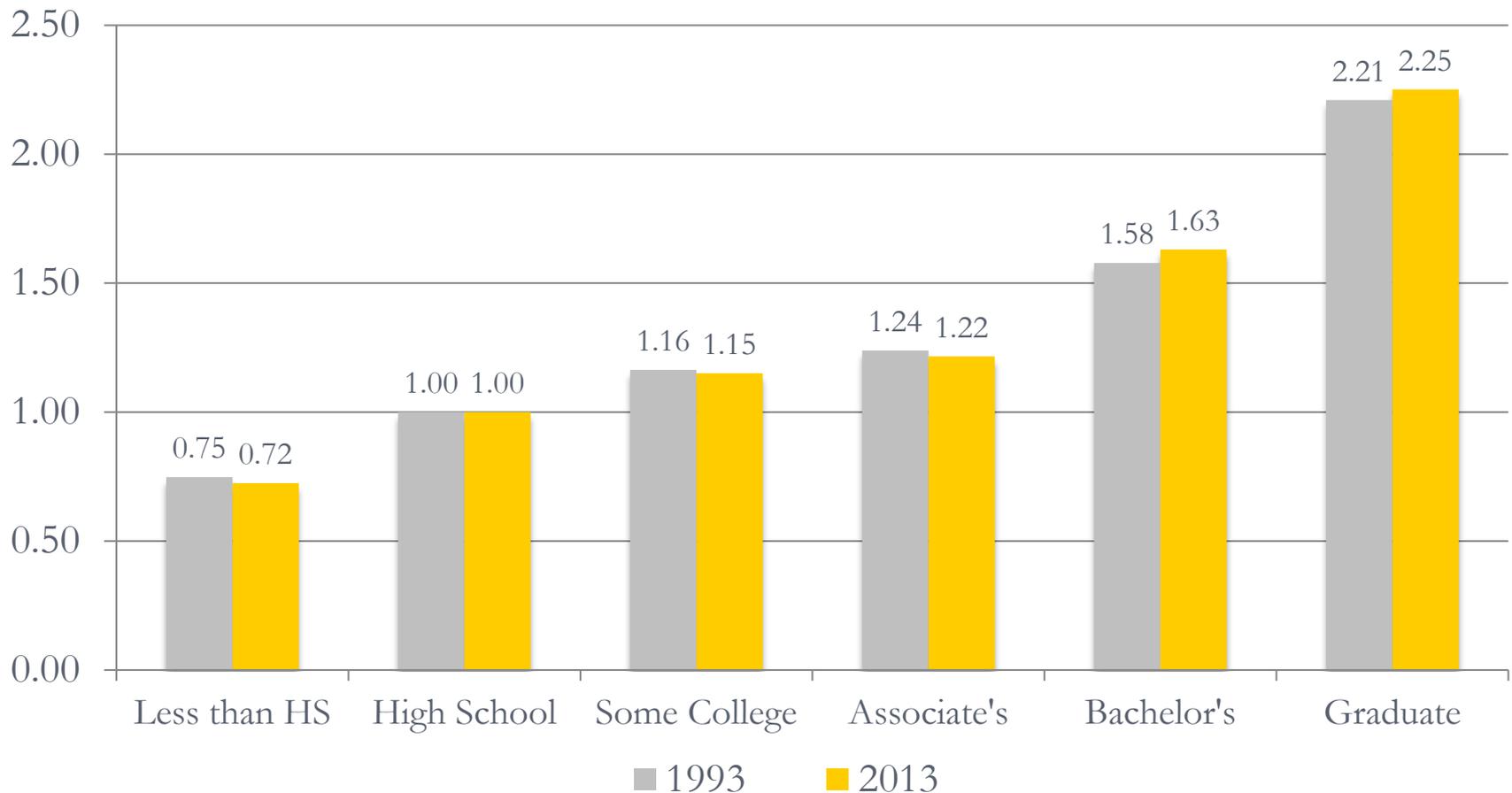
Education and Training Pay

A College Education's Return on Investment (ROI) in SD Region

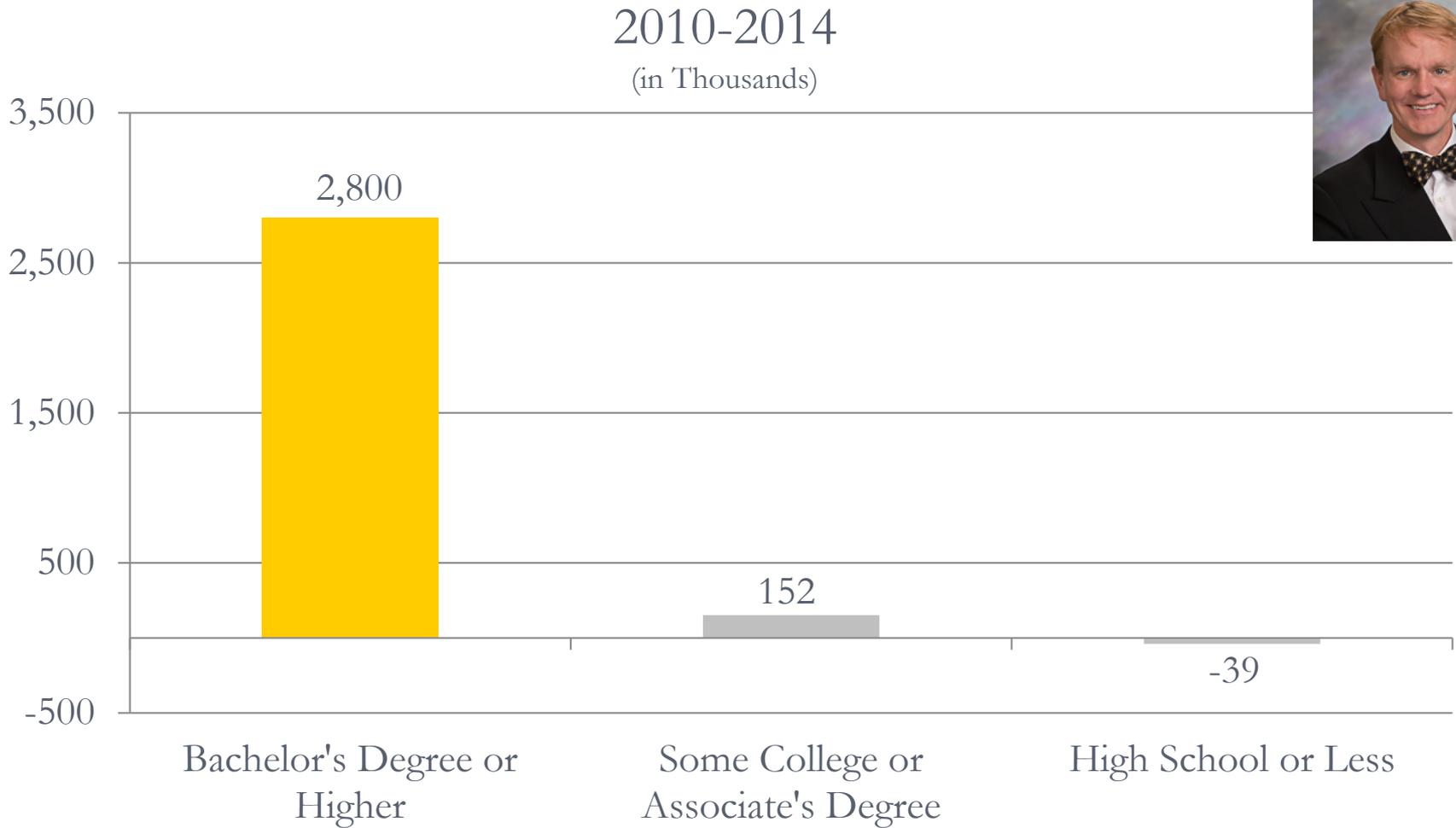


Wage Premiums by Degree Level

1993-2013

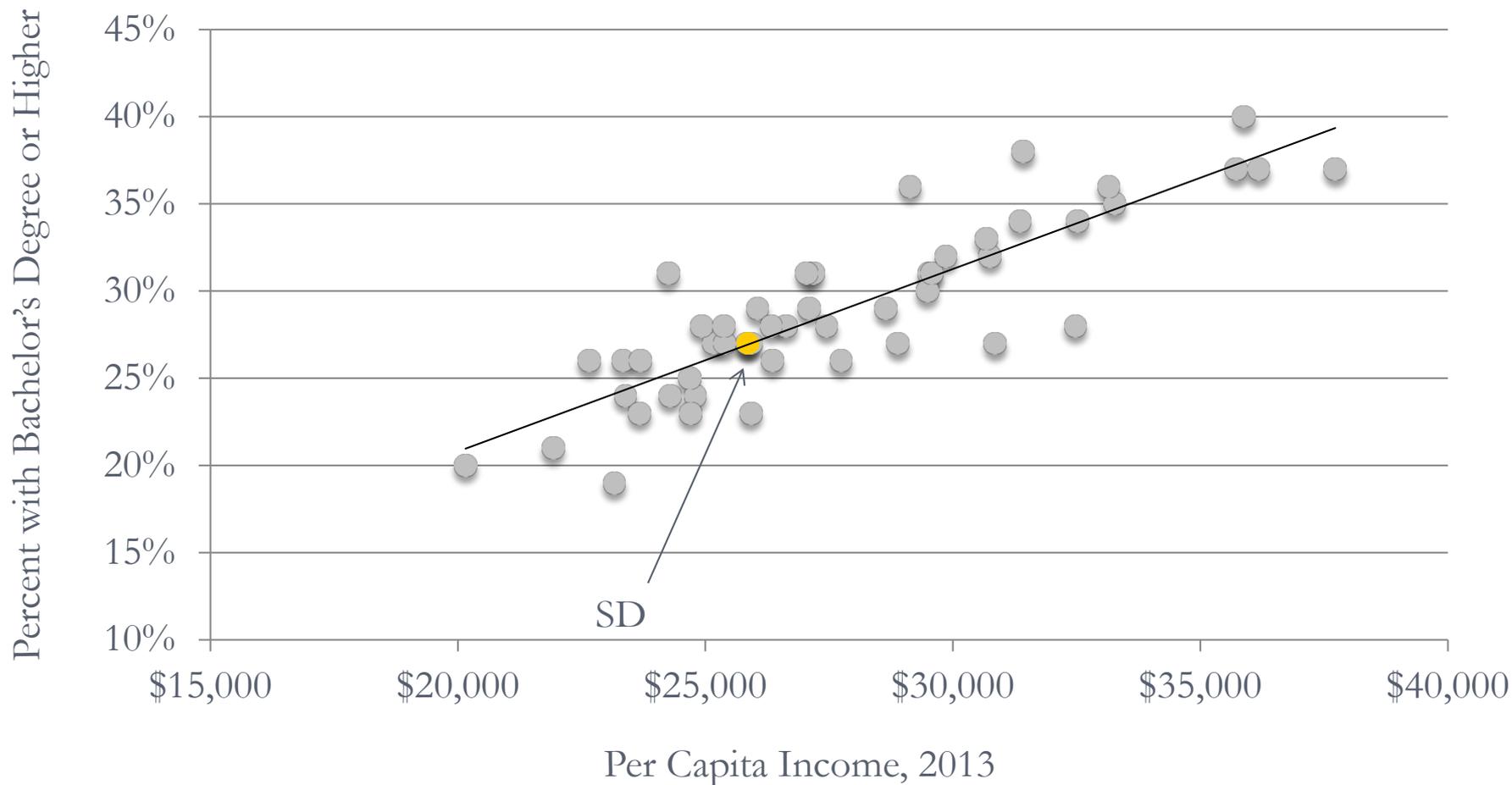


High Paying Jobs by Degree Level

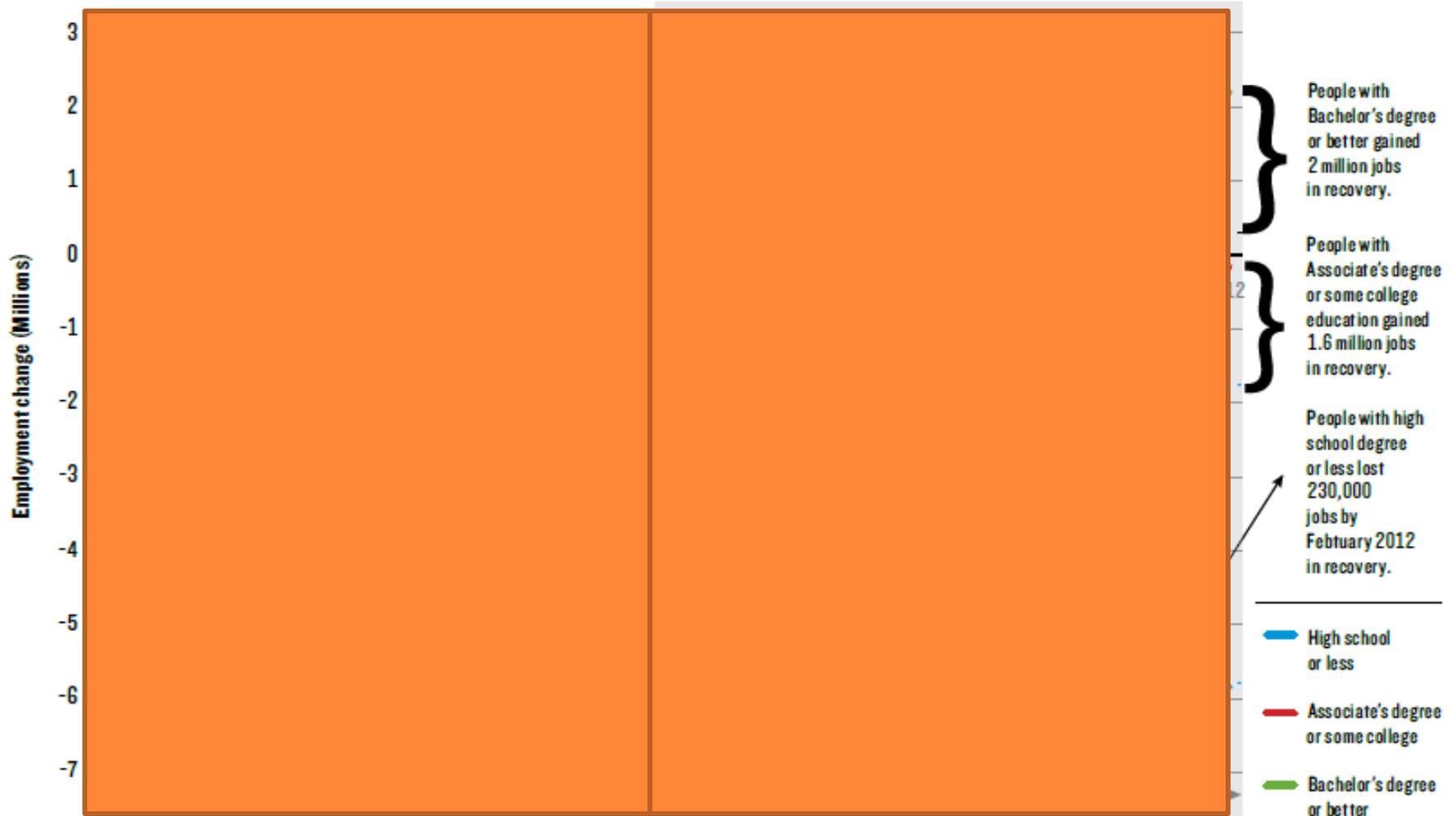


Impact of Education on Income

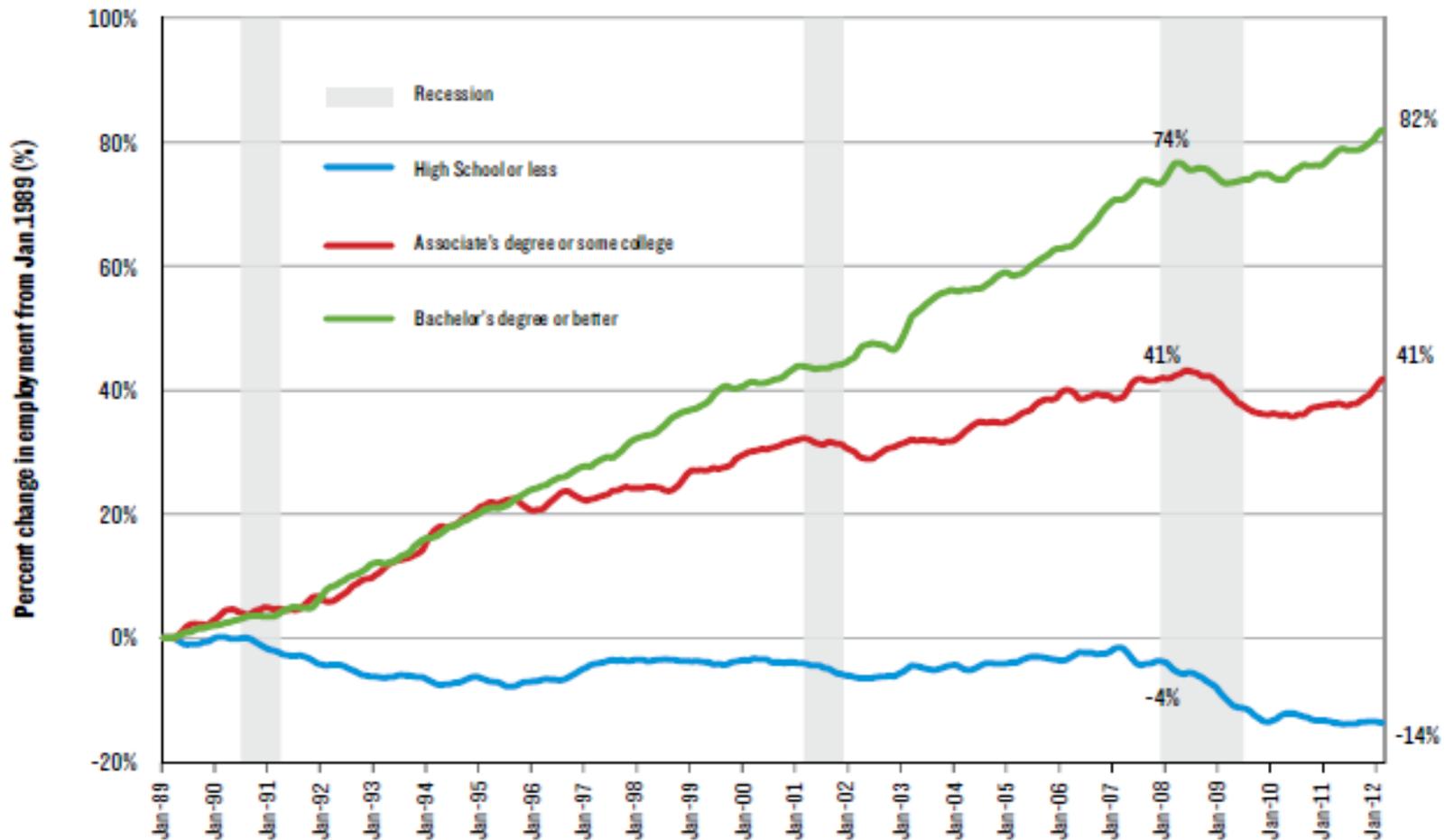
States by Income and Education, 2013



The Education dimension of the recent recession



Post recession 2007: The growth has been in college level jobs



Source: Total employment of workers aged 18 and older is a CEW estimate from the Current Population Survey. The monthly employment numbers are seasonally adjusted using the U.S. Census Bureau X-12 procedure and are smoothed using four-month moving averages. The areas shaded in grey indicate periods of recessions as reported by the National Bureau of Economic Research.

¹⁰ Authors' estimate using Current Population Survey (CPS) data.

Strengthening South Dakota

Economic, Social, and Human Capital

Higher state revenue

Less welfare

Better Health and Retirement

Less Crime

More charitable giving

Increased voter participation and civic
engagement



How are we doing?



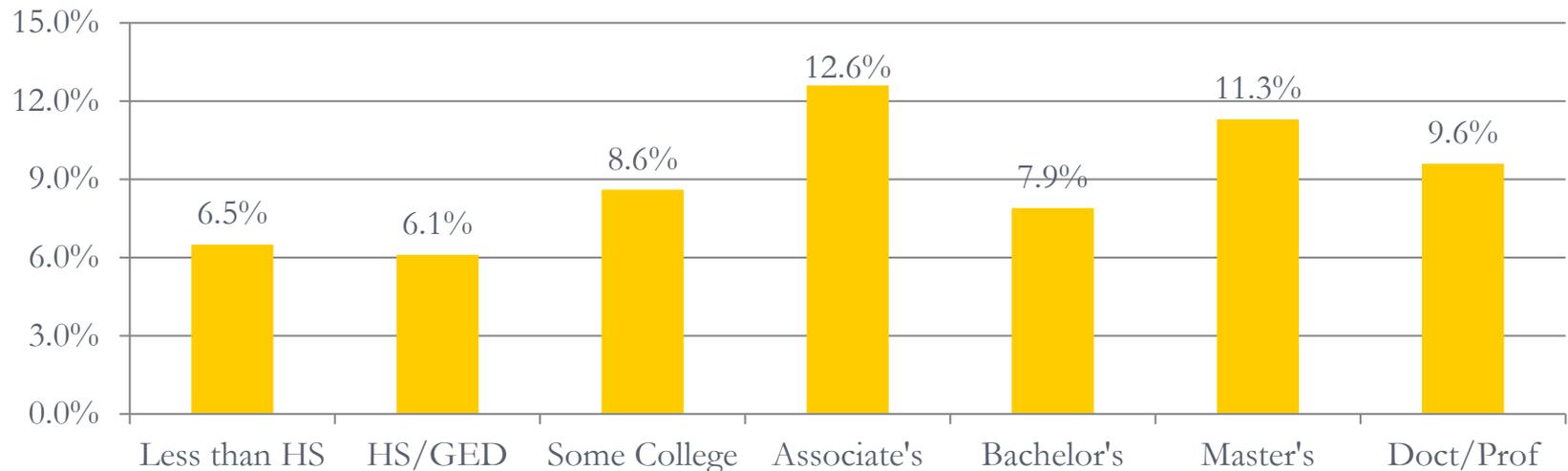
Georgetown Public Policy Institute

- ∞ “Recovery: Job Growth and Education Requirements Through 2020”
- ∞ In South Dakota, 65 percent of jobs by 2020 will require postsecondary education



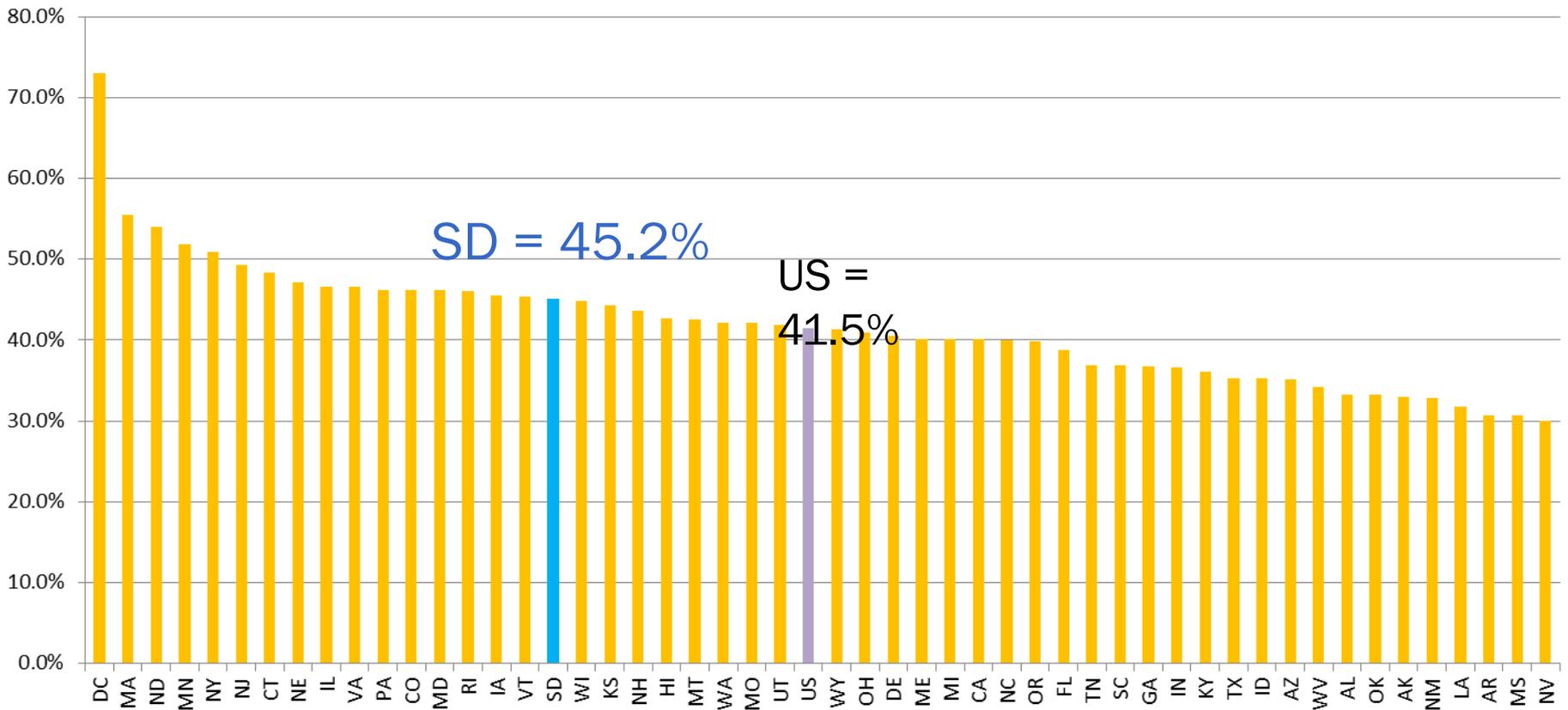
South Dakota Degrees Needed

SD Employment Projections by Typical Education, 2012-2022



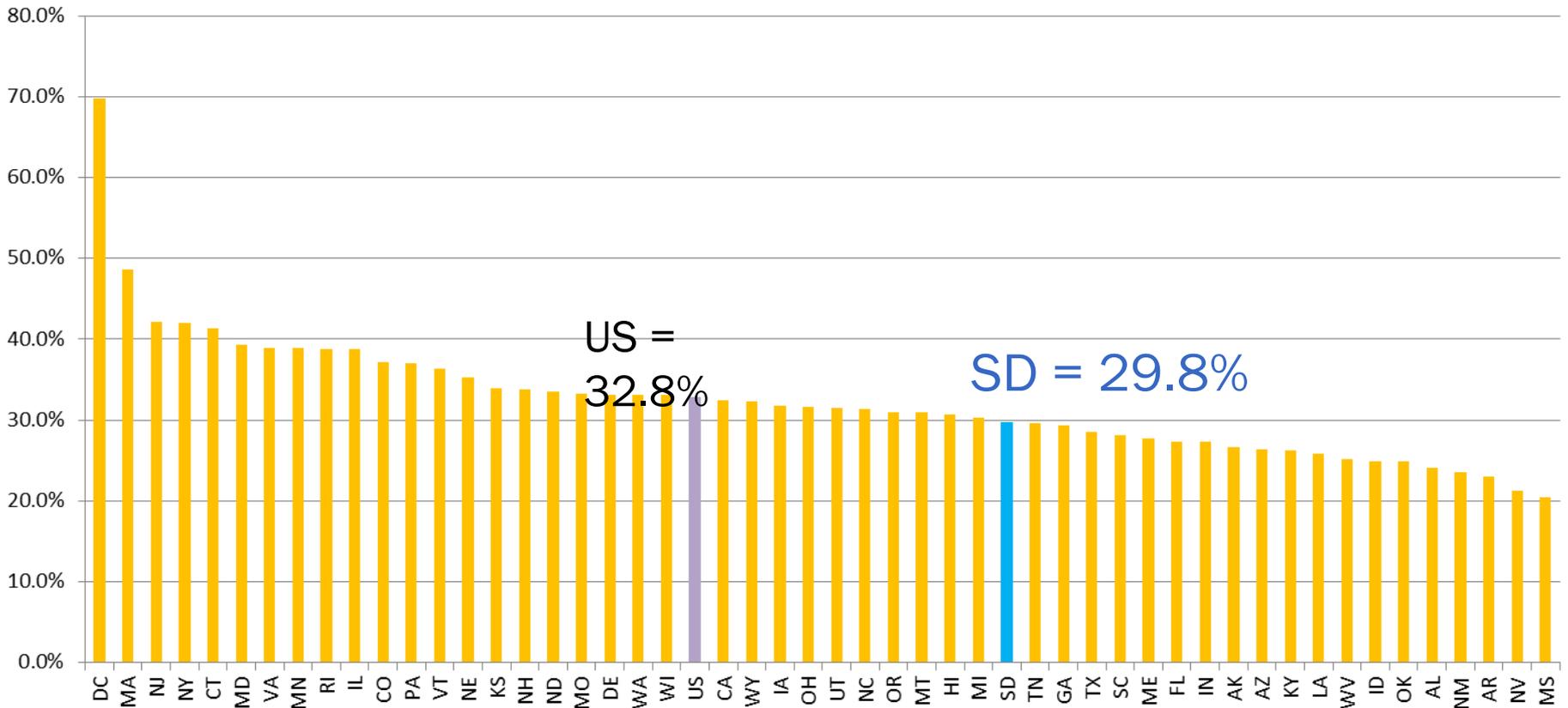
Current Attainment in SD

Percent of 25-34 year-olds with associate's degree or higher



Current Attainment in SD

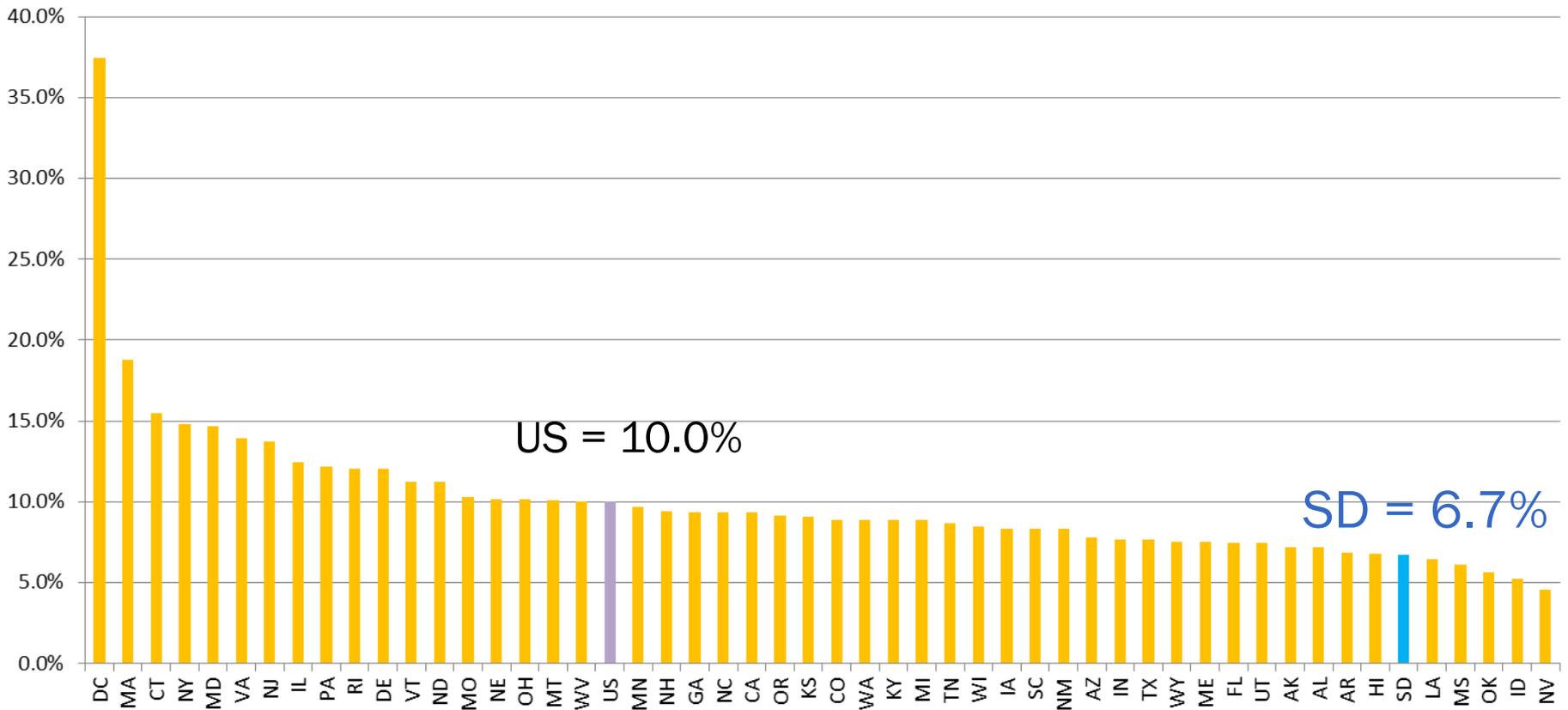
Percent of 25-34 year-olds with bachelor's degree or higher



Source: US Census Bureau, American Community Survey, 2013 PUMS

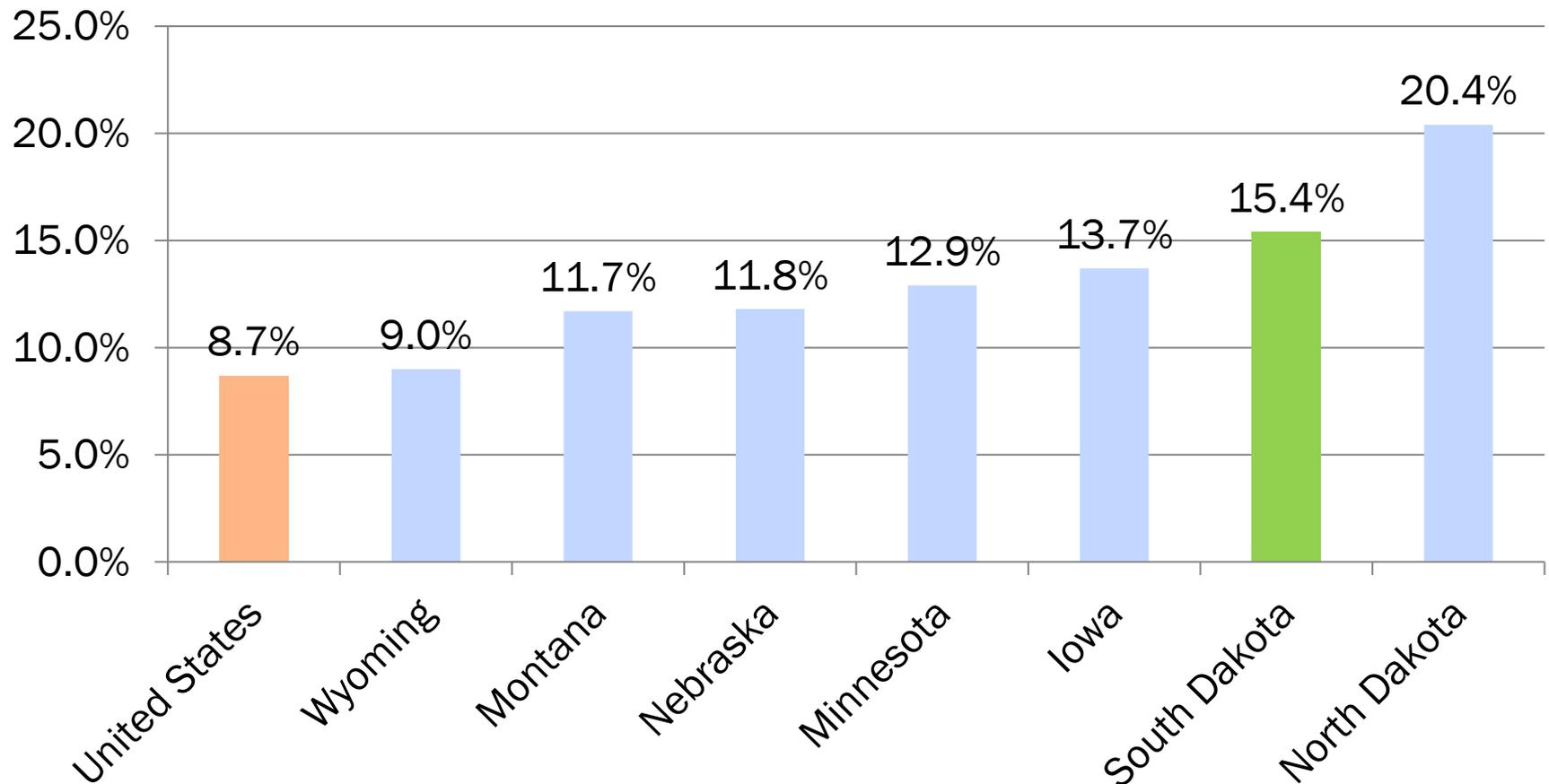
Current Attainment in SD

Percent of 25-34 year-olds with master's degree or higher



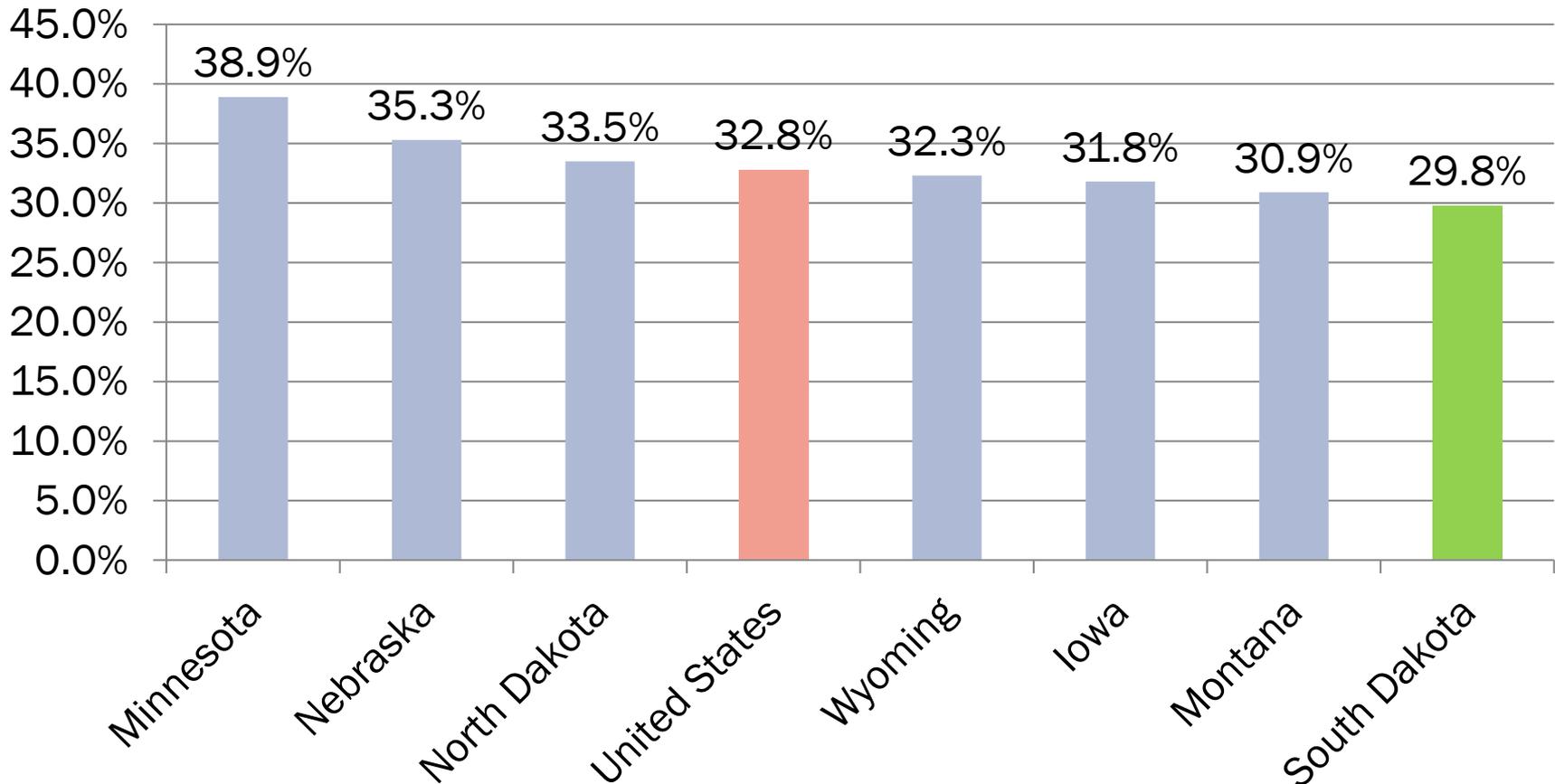
Current Attainment in SD

Percent of 25-34 year-olds with associate's degree



Current Attainment in SD

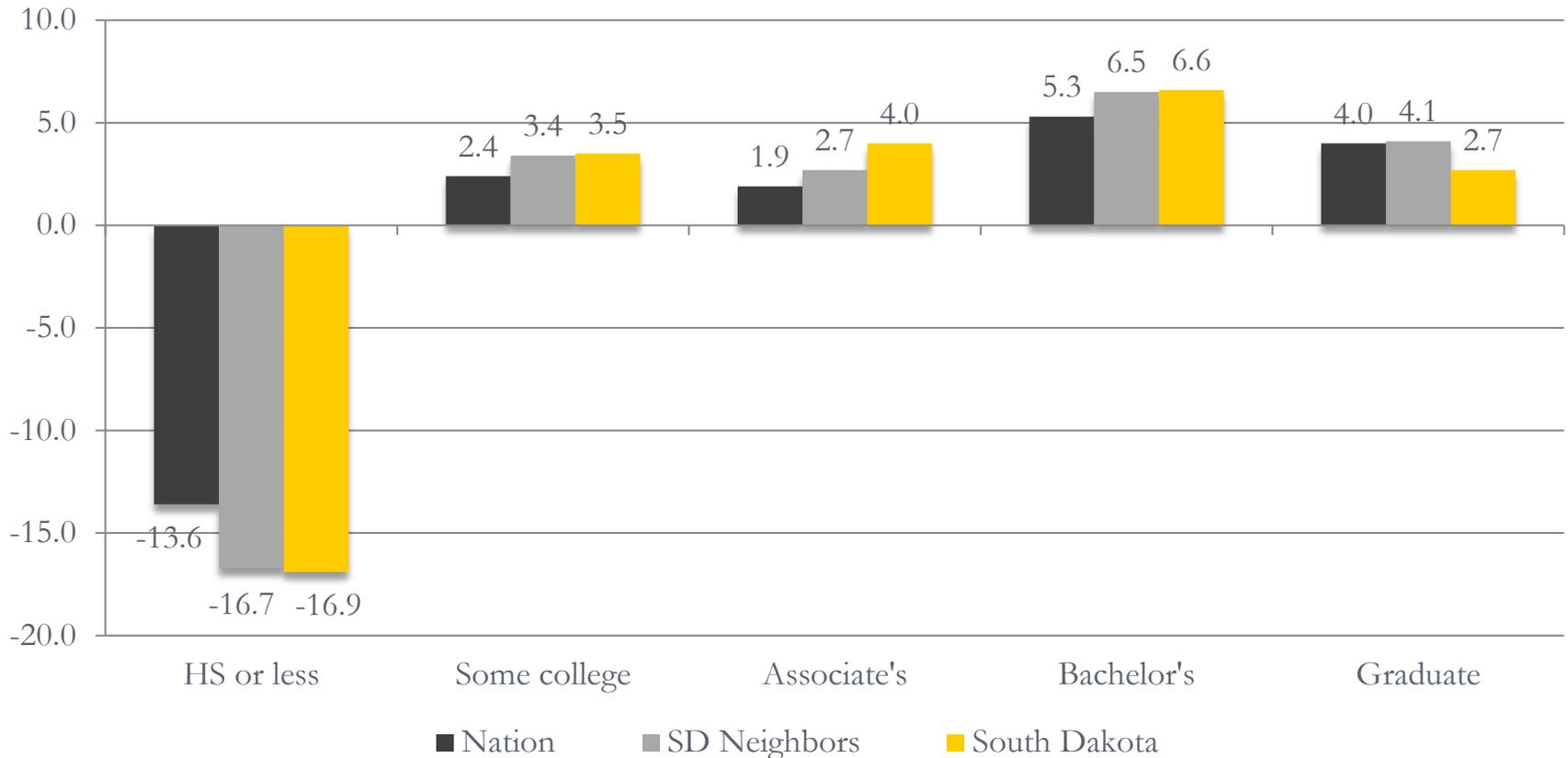
Percent of SD (25-34) with a bachelor's degree or higher



Change in Educational Attainment by Geography

1990-2013

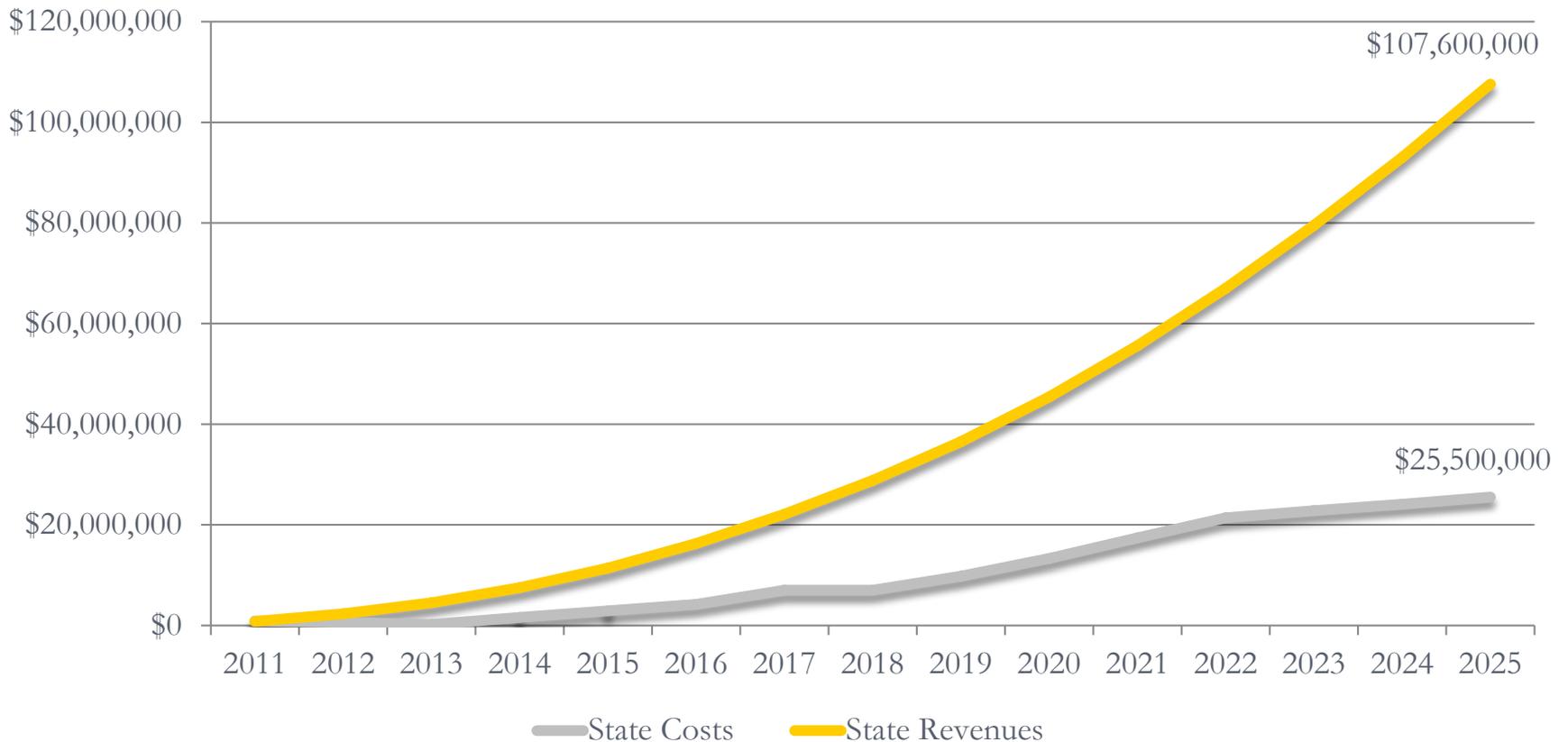
(Percentages)





Projected Revenues from Meeting 65% Goal

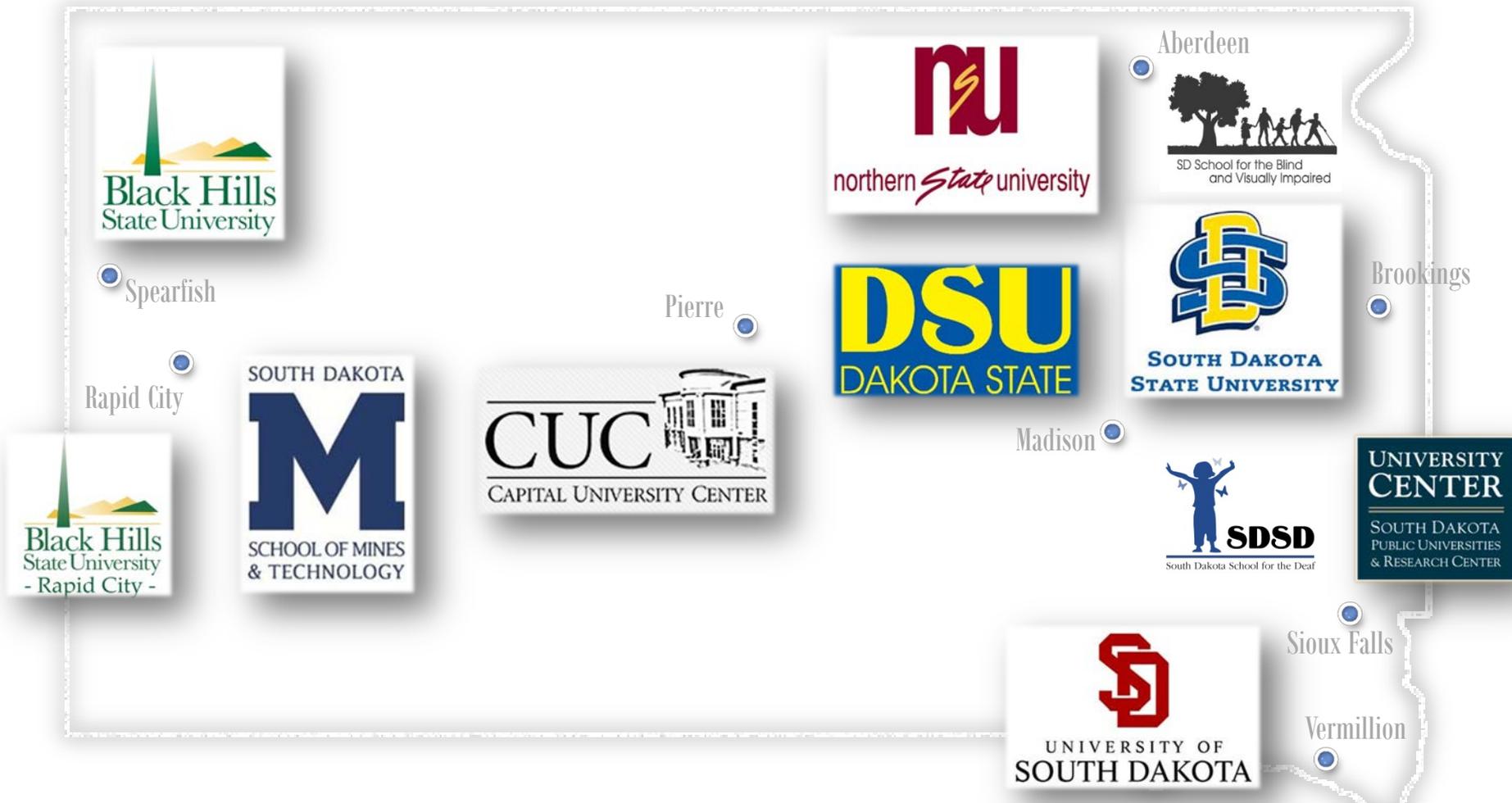
(NCHEMS/CLASP)



University System Overview

Paul Turman, Chief Academic Affairs Officer

Institutions and Schools



University System Overview

Mission and Priorities

∞ The Board of Regents' Mission

○ Creating a higher education system that is:

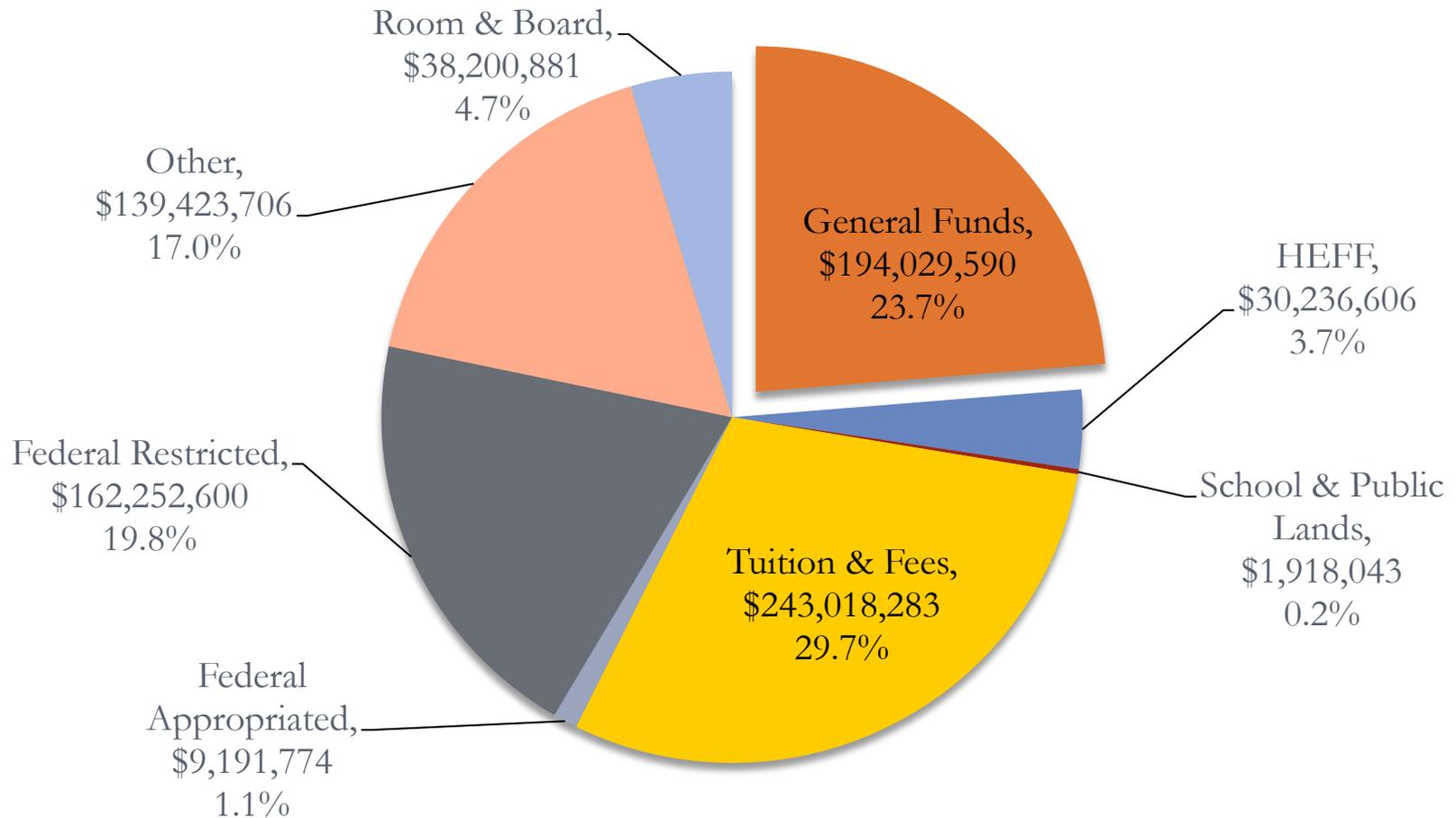
- Excellent
- Efficient
- Accessible
- Affordable



University System Overview

Organization and Structure

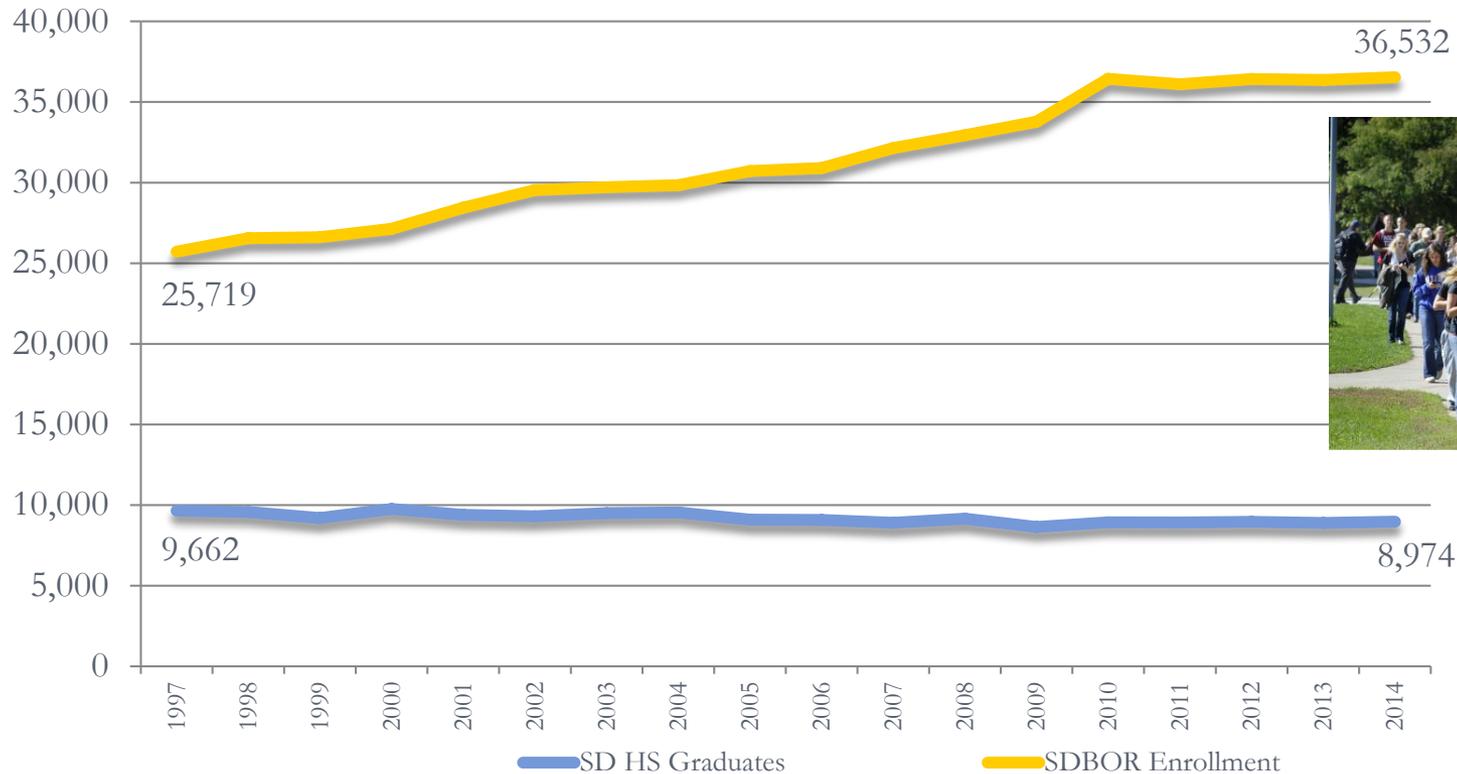
Funds by Fund Source



University System Overview

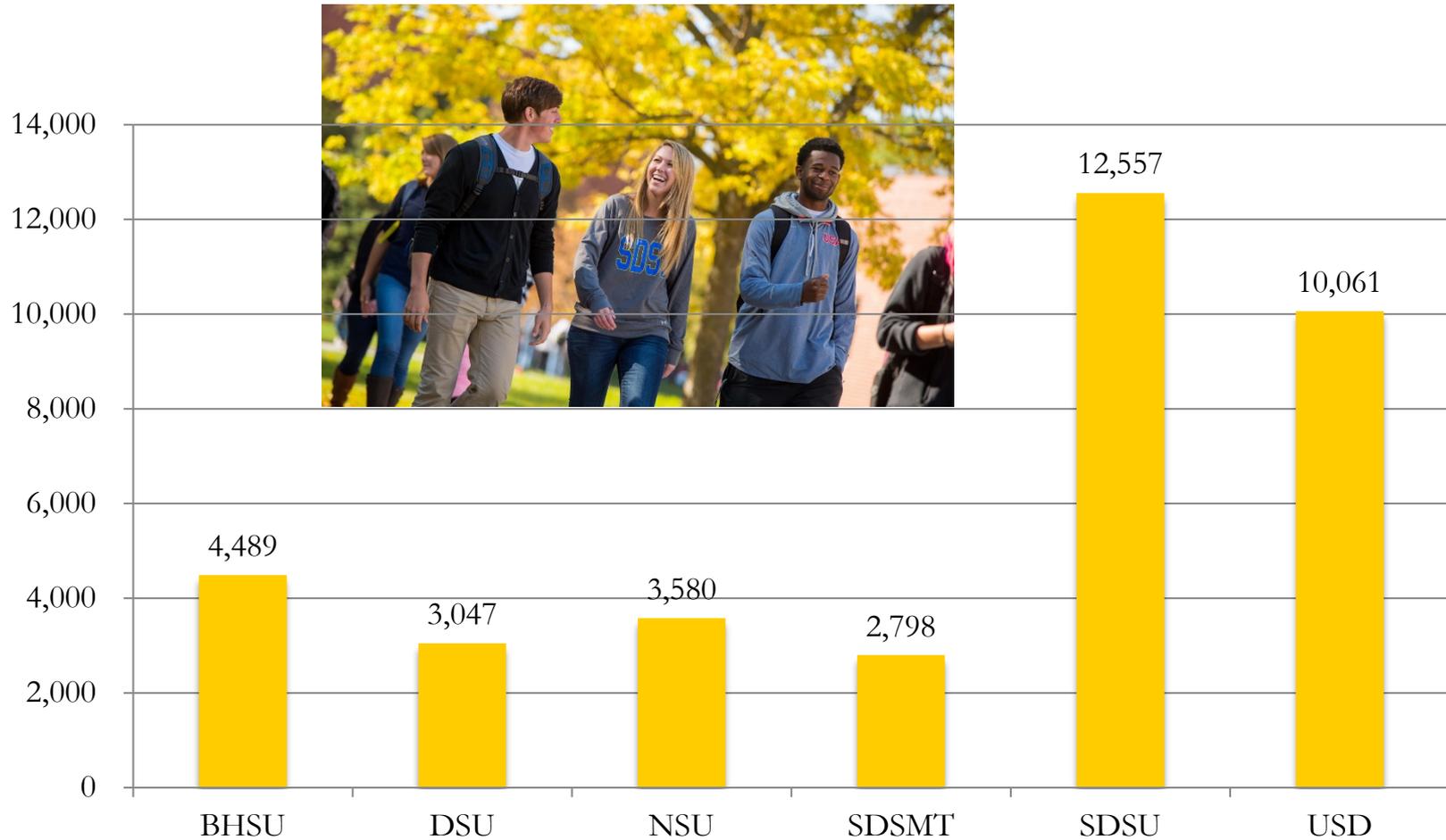
Increasing Accessibility — Enrollment Growth

Fall Enrollment Trend



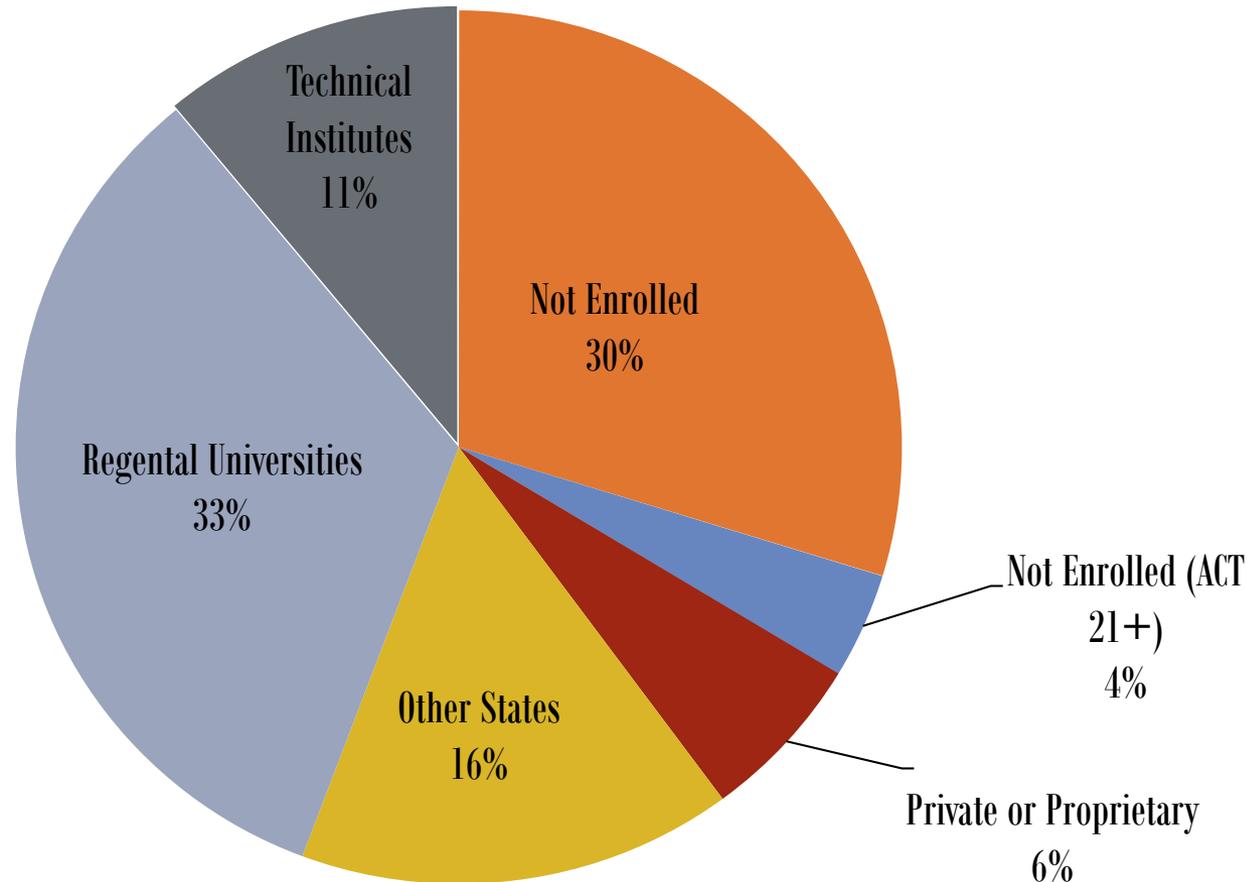
University System Overview

Institutional Enrollments – FY14



University System Overview

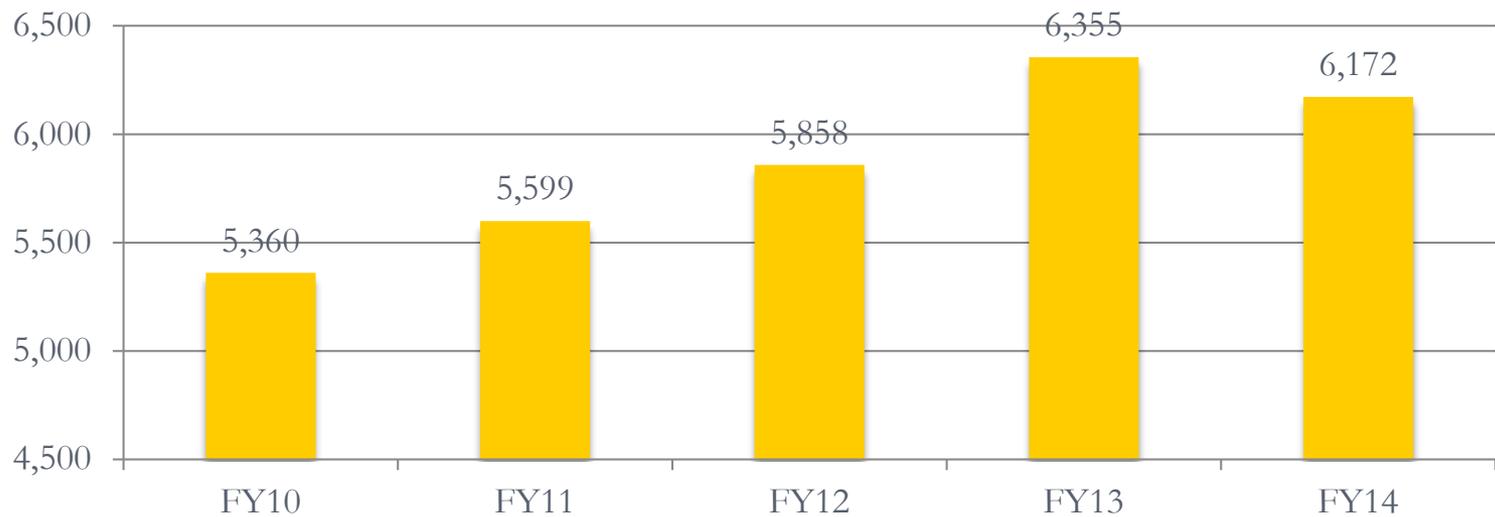
Postsecondary Placement of SD High School Graduates



University System Overview

System Completion Agenda – Graduate Production Growth

Degrees Awarded – Trend



University System Overview

Efficiencies and Excellence — Enrollments vs. Graduate Production

Graduate and Enrollment Growth at SD Public Institutions: Ten-Year Trend

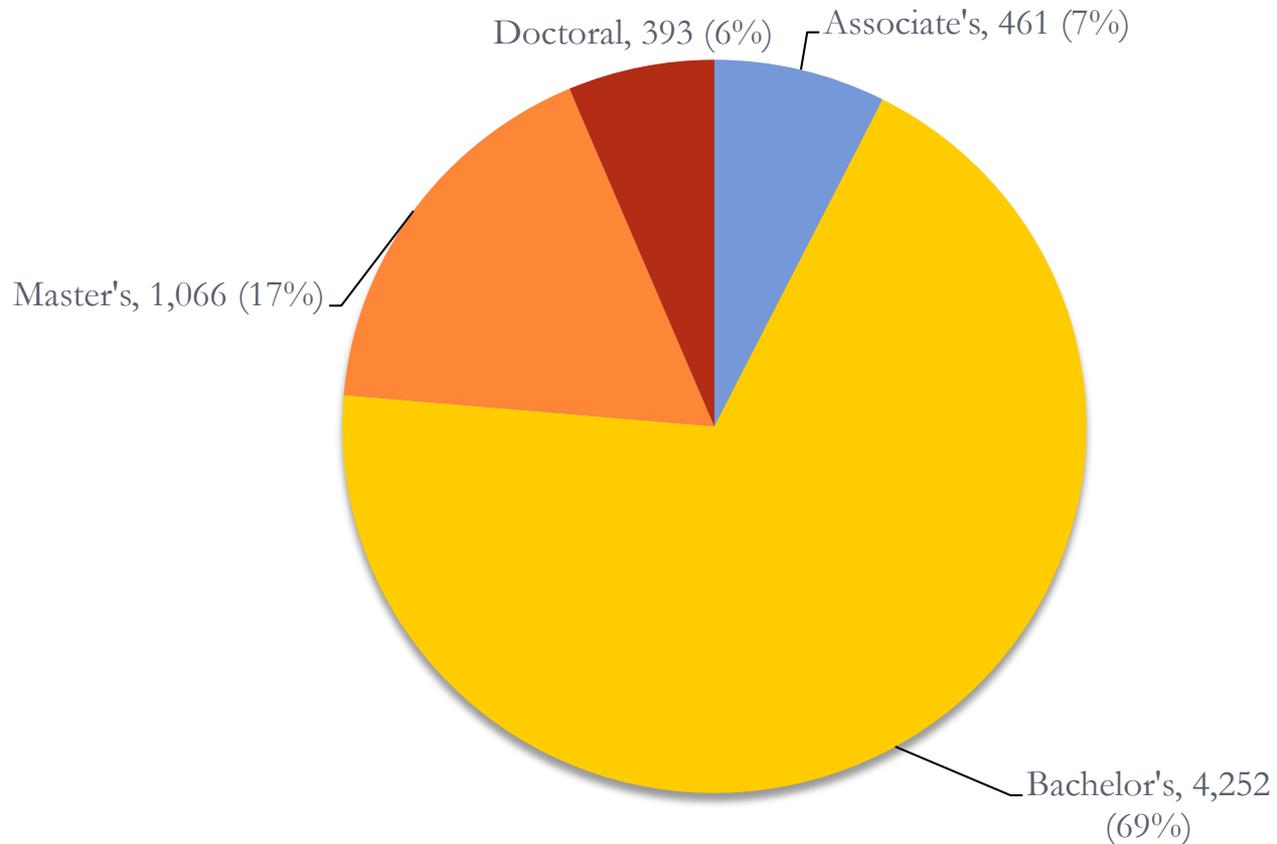
	<i>FY05</i>	<i>FY06</i>	<i>FY07</i>	<i>FY08</i>	<i>FY08</i>	<i>FY10</i>	<i>FY11</i>	<i>FY12</i>	<i>FY13</i>	<i>FY14</i>	<i>Growth</i>
<i>Fall FTE Enrollments</i>	23,534	24,089	24,144	24,512	24,926	25,468	26,625	26,720	26,468	26,782	14%
<i>Grads - Associate</i>	387	398	452	401	423	419	432	413	485	461	19%
<i>Grads - Bachelor</i>	3,237	3,330	3,463	3,606	3,798	3,656	3,831	3,994	4,317	4,252	31%
<i>Grads - Graduate</i>	1,261	1,192	1,168	1,269	1,236	1,285	1,336	1,451	1,553	1,459	16%
Total	4,885	4,920	5,083	5,276	5,457	5,360	5,599	5,858	6,355	6,172	26%
Graduate Growth	-	35	198	391	572	475	714	973	1,470	1,287	679*

* Indicates that, since the base year of FY2005, the Regental system has produced an average of 679 more graduates per year than it did in the base year

University System Overview

Aligning Graduate Production With Workforce Needs

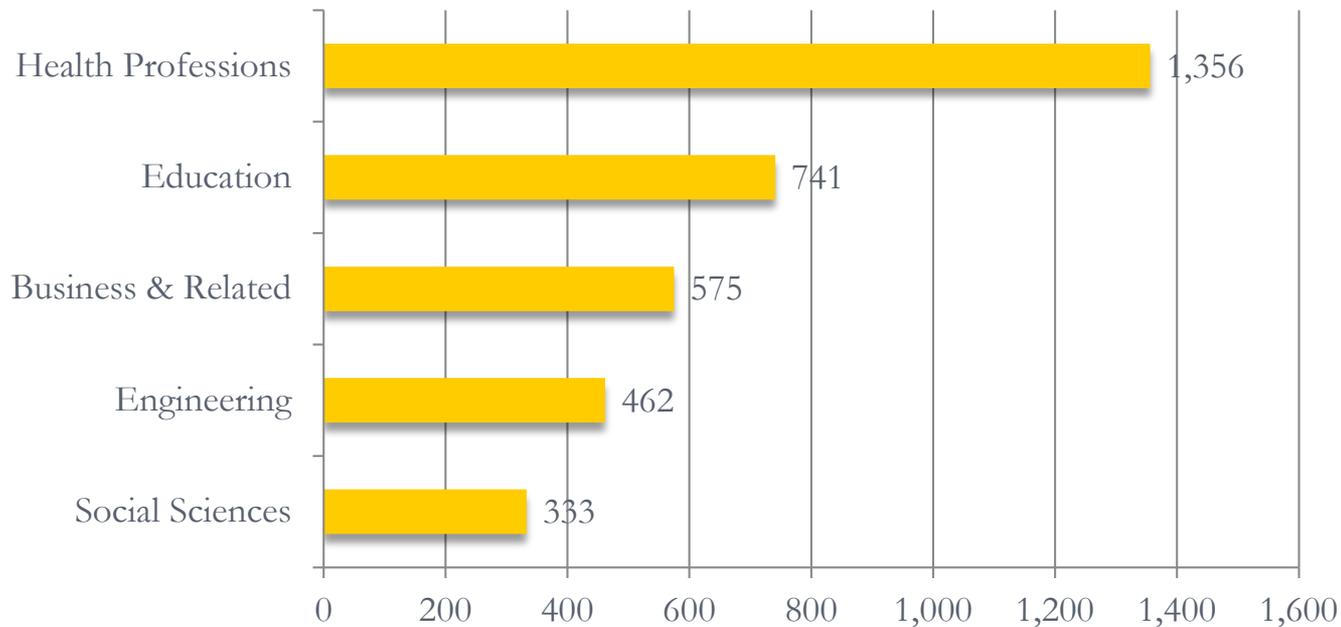
∞ Degrees by Level, FY2014



University System Overview

Graduation Production & Workforce Shortages

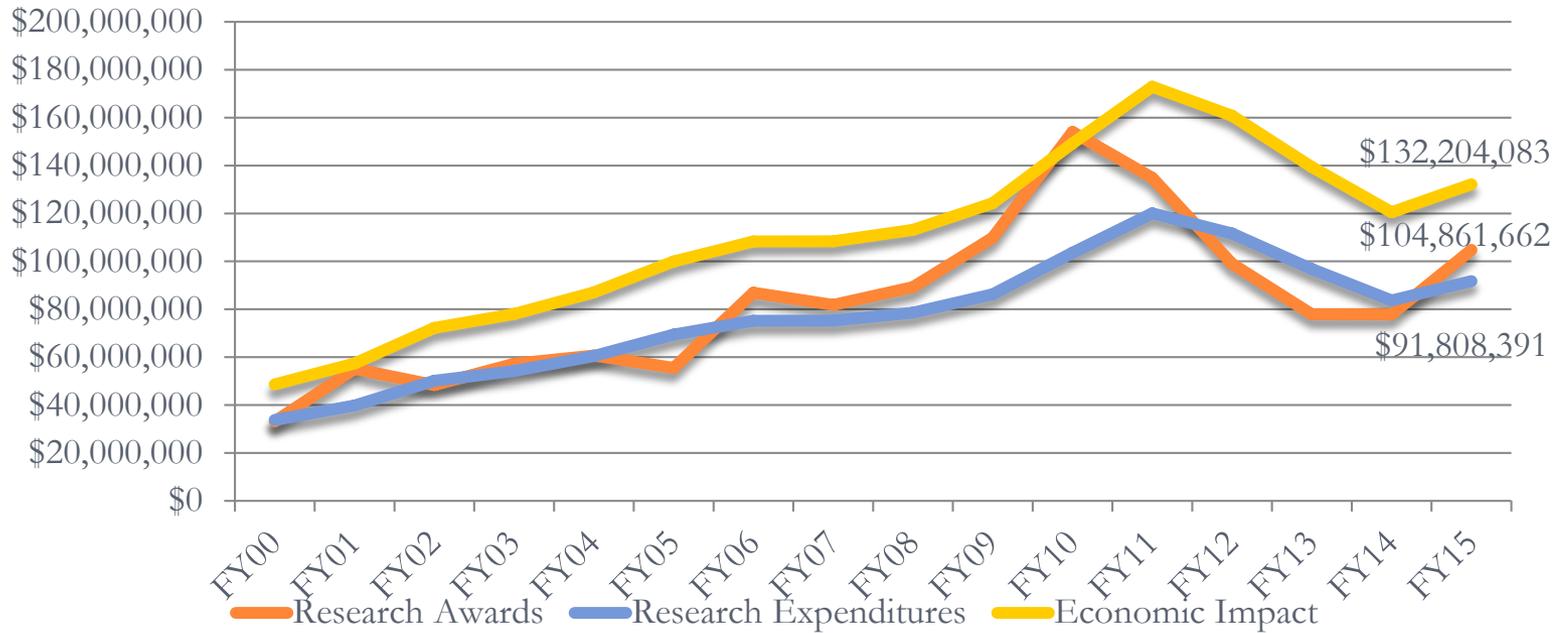
🌀 Largest Majors by Graduates, FY14



University System Overview

System Research Awards & Expenditures

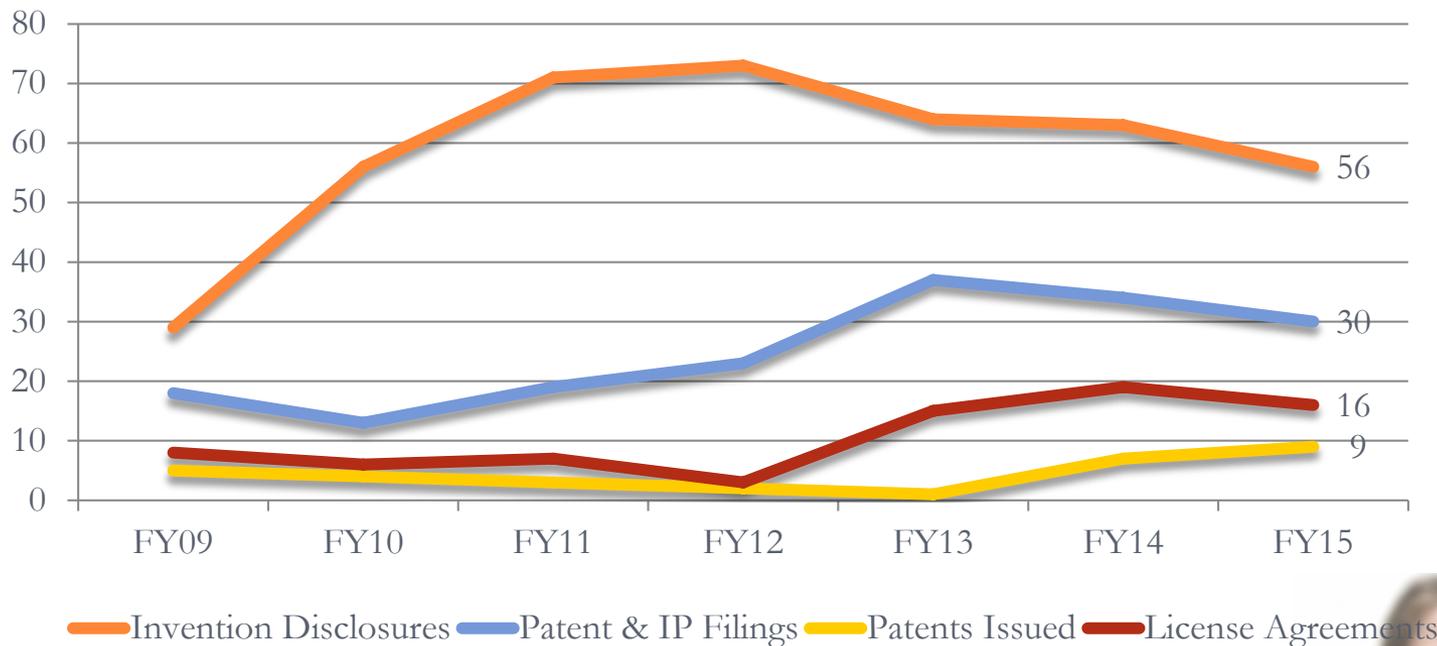
Research Activity, FY00-FY15



University System Overview

The Impact of Basic Research on State Economic Development

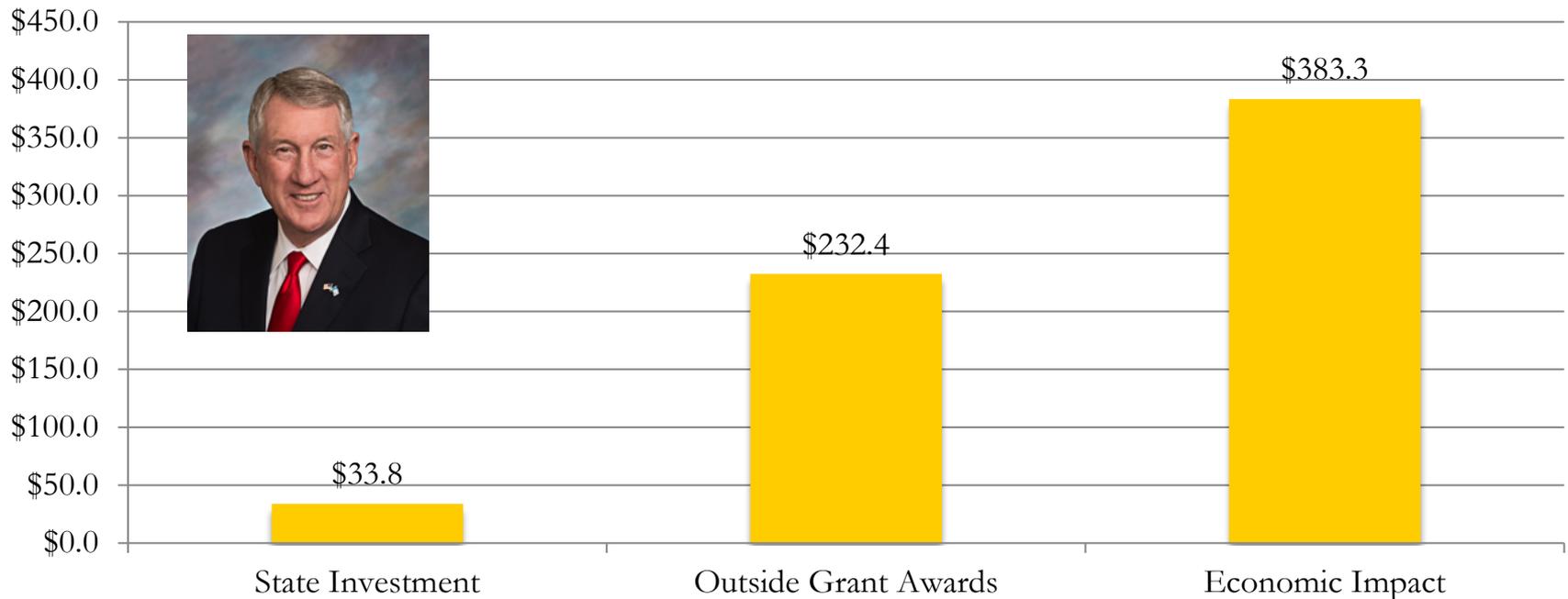
Technology Transfer and Commercialization, FY09-FY15



University System Overview

Basic Research Activity

Governor Research Centers, FY06-FY14 Investment and Return
(in Millions)



Biorefinery World, LLC
Redefining refineries



CalxAqua, LLC
Healthy Water for Society

University System Overview

Produce Graduates for Target Industry Sectors

- Value-Added Agriculture & Agribusiness
- Energy & Environment
- Materials & Advanced Manufacturing
- Human Health and Nutrition
- Information Technology/Cyber Security/Information Assurance

2020 Vision:

The South Dakota Science and Innovation Strategy

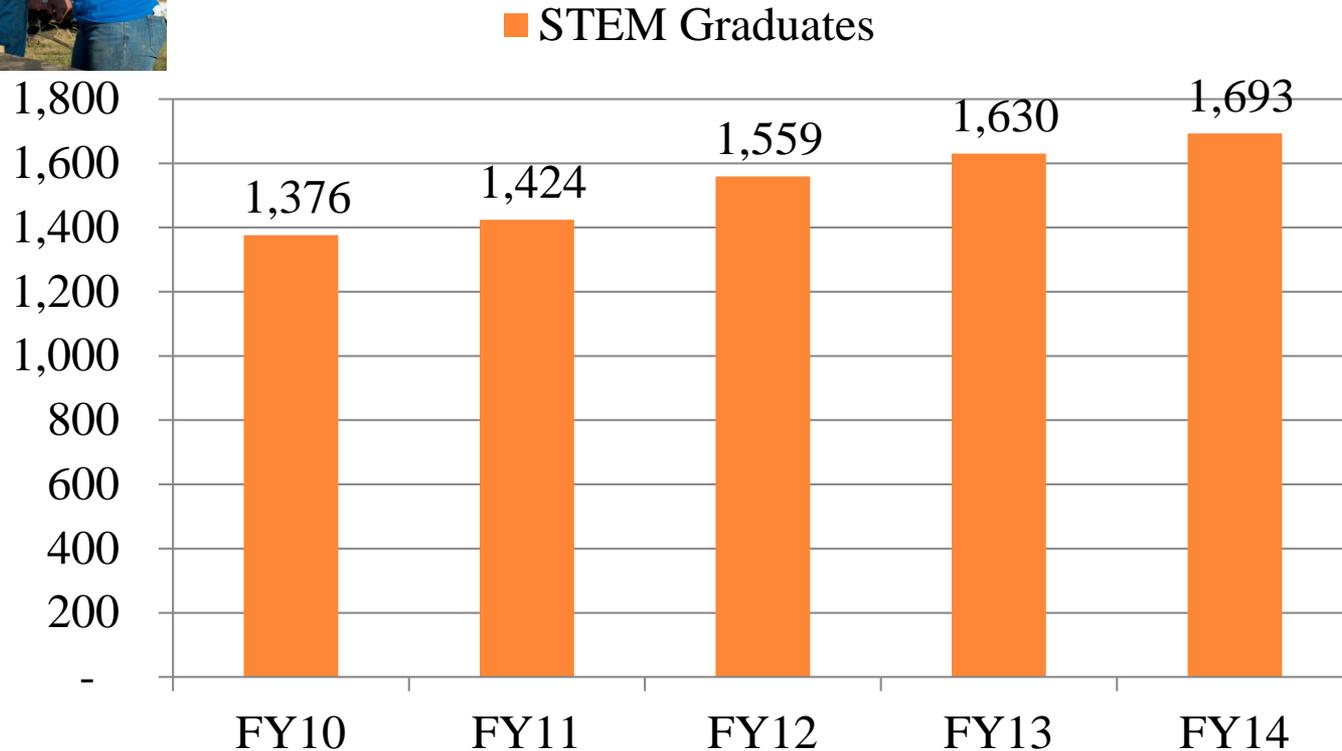


SD EPSCoR
REACH Committee
April 2013



University System Overview

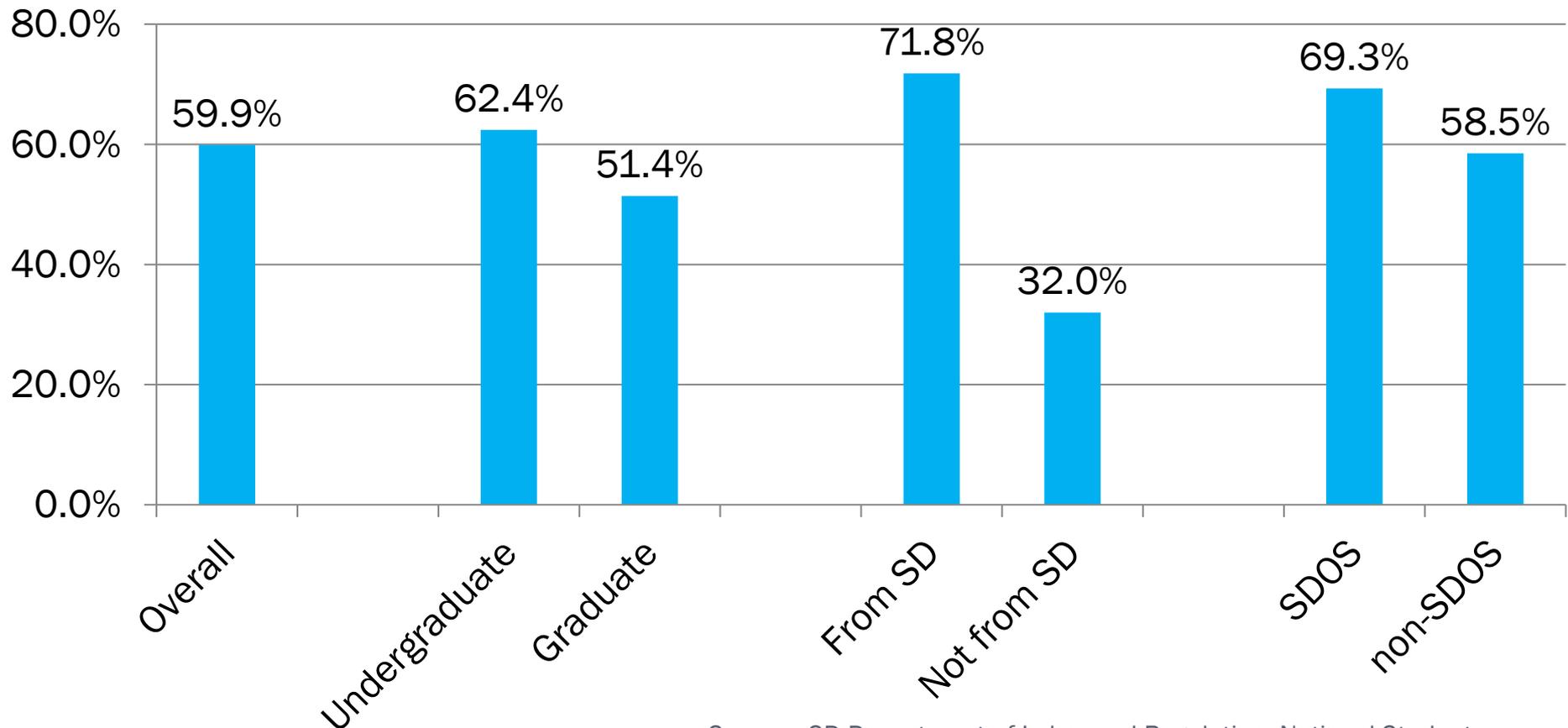
Graduate Production to Foster New Innovations



Placement of SDBOR Graduates

One Year After Graduation

In-State Placements by Student Characteristic FY2008-FY2012 Graduates Combined



Source: SD Department of Labor and Regulation, National Student Clearinghouse

Measuring Our Progress

Daniel Palmer — Director of Institutional Research



Measuring Our Progress

Report Types

∞ How do we measure and report our progress?

- SDBOR *Fact Book*

- www.sdbor.edu/mediapubs/factbook/index.htm

- Research Reports

- www.sdbor.edu/theboard/agenda/index.htm

- Accountability Reporting

- www.sdbor.edu/mediapubs/accreports/index.htm

- SDBOR Strategic Plan

- www.sdbor.edu/theboard/StrategicPlan

- SDBOR Interactive Dashboards

- www.sdbor.edu/dashboards

Measuring Our Progress

Research Reports



*** Special Data Analysis ***

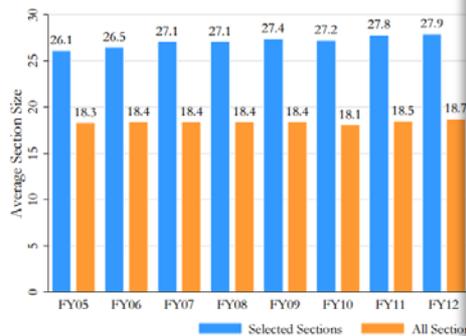
SDOS Persistence Analysis

Average Section Size

Average section size fell marginally in the university system in FY2015. For all institutions and course levels, the average section size among selected sections compared with a mean value of 27.4 last year. Average section size for undergraduate sections (28.7), followed by dual-listed sections (23.9) and Across all section types (selected and non-selected combined), an average of 27.9 in Regental course sections offered in FY2015.

Figure 2

Average Class Size by Section Type and Year



Large Sections

Large sections (those with an enrollment of 100 or more) are used for a Regental system. For example, introductory courses (e.g., Introduction to History I) offer students an overview of a discipline. Other large section types include General Chemistry I require students to enroll in supplemental laboratory, small group interaction in a traditional classroom environment. Participatory learning (e.g., Marching Band, Orientation to Nursing) are experiential requirements programs. Nearly all large sections are associated with one of these broad

Of the 11,899 sections offered during FY2015, 131 (1.1 percent) had an enrollment of 100 or more students, down slightly from the prior year.¹ As seen in Figure 3 below, 59.5 percent ($n=78$) of these sections enrolled 100-149 students, with approximately 7.6 percent ($n=10$) enrolling 300 students or more.

Figure 3
Sections with an Enrollment of 100 or More

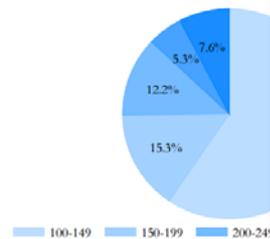


Table 3 shows historical institutional data, and indicates that the sections than any other university. In FY2015 specifically, the ten largest sections ranged from 301 to 368 students; all at SDSU.

Table 3

	Large Sections by Institution		
	FY2011	FY2012	FY2015
BHISU	5	2	1
DSU	0	0	0
NSU	3	3	4
SDSMT	5	5	6
SDSU	71	86	97
USD	34	33	32
Total	118	129	140

¹ "Large" sections are defined here as those with enrollments greater than 100 students. This figure represents the aggregation of all cross-listed sections. Unless otherwise noted, the figure represents the total number of unduplicated sections, not just selected sections.



*** Special Data Analysis ***

Educational Attainment in South Dakota

Over the next decade, national job growth will be dominated by positions requiring a postsecondary degree. According to the US Bureau of Labor Statistics, the number of positions requiring a postsecondary degree will grow by 14.0 percent in the United States between 2012 and 2022, while jobs requiring a high school diploma will grow by only 7.9 percent.¹ The nation's rapid transition toward a knowledge-based, service-based economy will continue to call for an increasingly skilled workforce, to the point that – by 2020 – 65 percent of jobs in South Dakota are expected to require some level of postsecondary education.² With these observations in mind, the following analysis offers a summary of where South Dakota currently stands with respect to educational attainment.

Data Notes

Data used in this analysis are sourced from the US Census Bureau's 2013 American Community Survey (ACS) Public Use Microdata Sample (PUMS). The ACS is a continuous survey project that samples approximately three million addresses each year, or approximately one percent of the total US population. PUMS files contain a subset of actual responses to the ACS, along with weighting coefficients that allow calculated estimates to be scaled back to the population level. The flexibility of PUMS datasets allows for custom analyses that are not available through the Census Bureau's pre-tabulated estimates.

It is important to remember, then, that data used in this analysis are based on self-reported survey responses, and thus are subject to the same sources of sampling and nonsampling error associated with any other type of survey research. Accordingly, all figures presented in this analysis should be understood as estimates, not hard counts.

In order to facilitate comparability with related research conducted by the Census Bureau, the scope of this analysis is limited to working-age adults only (defined here as all persons aged 25 years or older). For reference, South Dakota's working age population in 2013 is estimated at 554,844, out of a total state population of 844,877.

¹ United States Bureau of Labor Statistics (2013). *Occupational Employment Projections to 2022*.

² Georgetown University Public Policy Institute, Center on Education and the Workforce (2013). *Recovery: Job Growth and Education Requirements through 2020*.

³ These figures describe state-supported, selected sections only.

After more than a decade in operation, the program has provided funding support to qualifying colleges and universities. A financial support to qualifying years of postsecondary study.¹ and reveals that these students are high-achieving students – to be

Data Notes

Analyses of graduation rates typically enrollment (for bachelor's degree-seeking students) who began their study at the university system directly.

To track the persistence of these students – a student roster was substituted with enrollment data for nearly all American universities. This analysis, a student must have completed at least one year of initial enrollment (i.e., by August 1st) and have been enrolled (at least part-time).

Analysis

A total of 2,652 students from South Dakota were enrolled in Fall 2008. Prior to

- (1) *SDOS* Students receiving financial aid
- (2) *nsDOS* Students with no financial aid
- (3) *Other* Students not receiving financial aid

Of the total cohort, 34.2 percent were earning a qualifying ACT score, and 5

¹ In 2015, this amount was raised to \$6,500 for a

² This ACT scoring threshold (24) is the composite score, however, that a qualifying ACT composite score

Measuring Our Progress

SDBOR Strategic Plan

in 2014, the South Dakota Board of Regents adopted a new five-year

STRATEGIC PLAN

based on four priority areas:

- one... student success
- two... academic quality & performance
- three... research & economic development
- four... affordability and accountability

for each area, several

PERFORMANCE MEASURES

were chosen, each with a

2014 BASELINE MEASUREMENT

« and »

2020 GOAL

SO...

is SDBOR making progress toward its

2020 GOALS?

Measuring Our Progress

SDBOR Strategic Plan

PRIORITY 1 STUDENT SUCCESS

	BASELINE	NOW	GOAL
DEGREES ($\frac{\text{UNDERGRAD}}{\text{GRAD}}$)	$\frac{4,800}{1,550}$	$\frac{4,800}{1,550}$	$\frac{5,630}{1,820}$
AIAN DEGREES	132	132	220
RETENTION RATE	77.7%	77.7%	83.0%
GRAD RATES ($\frac{4\text{-YEAR}}{6\text{-YEAR}}$)	$\frac{24.2\%}{51.6\%}$	$\frac{24.2\%}{51.6\%}$	$\frac{27.0\%}{54.0\%}$
REMEDIATION RATE	26.6%	26.6%	22.0%

Measuring Our Progress

SDBOR Strategic Plan

PRIORITY 2

ACADEMIC QUALITY AND PERFORMANCE

BASELINE 93.2%

NOW 93.2%

GOAL 95.0%

PERCENT OF GRADS PASSING LICENSURE EXAMS

BASELINE 91

NOW 91

GOAL 100

NUMBER OF ACCREDITED PROGRAMS

BASELINE 7

NOW 7

GOAL 7

NUMBER OF NEW GRADUATE PROGRAMS

STUDENTS PARTICIPATING IN EXPERIENTIAL LEARNING

BASELINE 2,658

NOW 2,658

GOAL 3,250



Measuring Our Progress

SDBOR Strategic Plan

PRIORITY 3 RESEARCH AND ECONOMIC DEVELOPMENT

GRANTS AND CONTRACTS EXPENDITURES

\$97
MILLION

\$97
MILLION

\$150
MILLION

BASELINE

NOW

GOAL



LICENSE AGREEMENTS SIGNED

15

BASELINE

15

NOW

25

GOAL

STEM GRADUATES

1,630

BASELINE

1,630

NOW

1,950

GOAL

START-UP COMPANIES

8

BASELINE

8

NOW

8

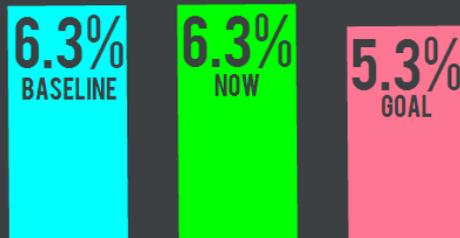
GOAL

Measuring Our Progress

SDBOR Strategic Plan

PRIORITY 4 AFFORDABILITY AND ACCOUNTABILITY

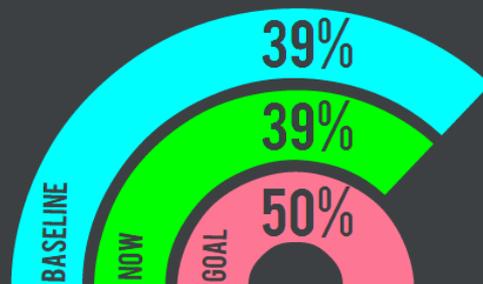
3-YEAR FEDERAL LOAN DEFAULT RATE



REGIONAL RANK FOR UNDERGRAD TUITION & FEES



PERCENT OF OPERATING BUDGET FUNDED BY STATE



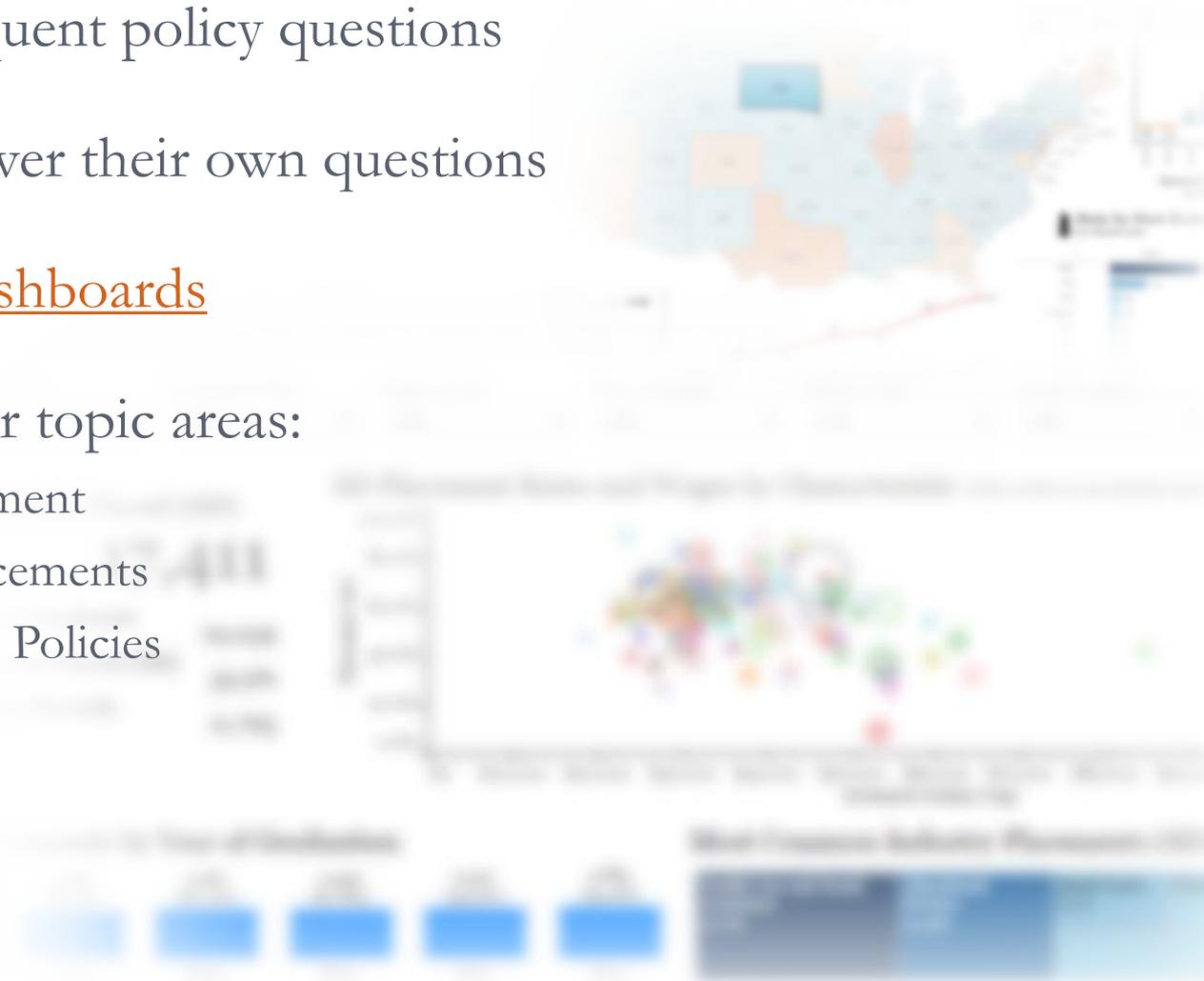
STUDENTS SERVED BY SD SPECIAL SCHOOLS



Measuring Our Progress

SDBOR Interactive Dashboards

- ∞ Responding to frequent policy questions
- ∞ Allow users to answer their own questions
- ∞ www.sdbor.edu/dashboards
- ∞ Organized into four topic areas:
 - Access and Enrollment
 - Graduates and Placements
 - SDBOR Academic Policies
 - State Labor Force



South Dakota University System





MARK'S PLACE
EST. 1988

Questions?

