

*ITASCAproject*

# Higher Education Task Force Partnerships for Prosperity

Presentation to the  
Minnesota State Colleges and Universities  
Board of Trustees

June 19, 2012

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# Topics for discussion

- **Task force overview**

- Economic significance of higher education
- Emerging findings and strategies for higher education in Minnesota

# Itasca project higher education task force objective

## **Objective**

- Identify strategies that should be implemented for higher education in Minnesota to drive long-term, sustainable economic growth and prosperity

## **Deliverables**

- Clearly defined and agreed-upon aspiration(s) that will allow the team to build strategies to meet them
- High level assessment of performance against aspirations, including strengths, weaknesses, and opportunities
- 2-4 prioritized strategies to accomplish goals
- An implementation roadmap with sufficient granularity and momentum to be carried forward in the next 3-18 months

# Higher Education Task Force Members and Advisory Group info

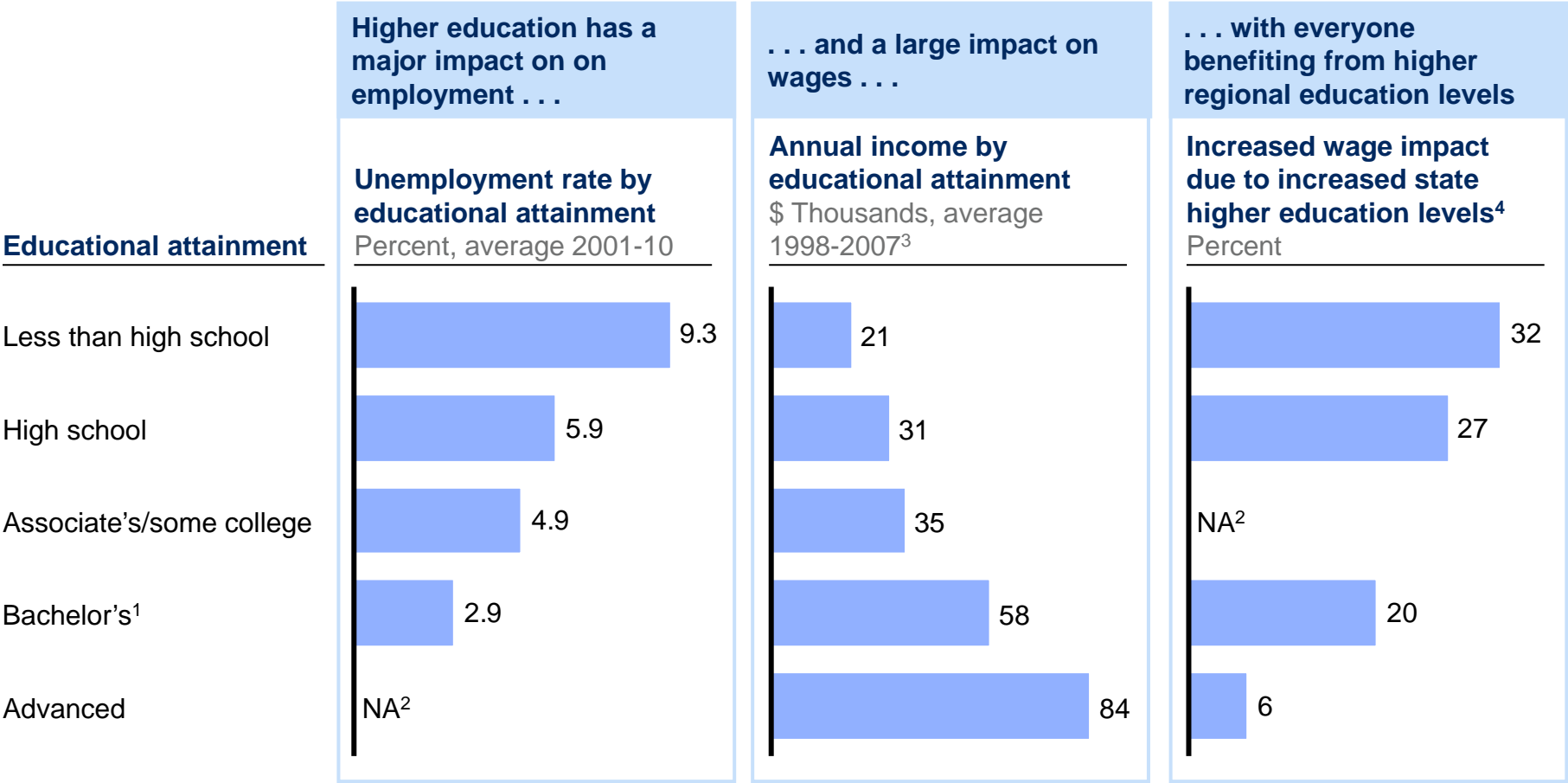
Name	Position, Company
Jim Campbell	Retired, Chairman & CEO, Wells Fargo
Richard Davis	Chairman, President & CEO, U.S. Bancorp
Kathy Gaalswyk	President, The Initiative Foundation
Eric W. Kaler	President, University of Minnesota
Jay Lund	President & CEO, Andersen Corporation
Kim Nelson	SVP, External Relations; President, General Mills Foundation
Greg Page	Chairman & CEO, Cargill
Ken Paulus	President & CEO, Allina Hospitals and Clinics
Brian Rosenberg	President, Macalester College
Steven Rosenstone	Chancellor, Minnesota State Colleges and Universities (MnSCU)
Andrew Slavitt	CEO, OptumInsight
Judy Werthauser	Vice President Human Resources, Target Corporation

**Advisory Group includes ~40 business and community leaders representing broad stakeholder groups; provides counsel to and acts as ambassadors for the project**

# Topics for discussion

- Task force overview
- **Economic significance of higher education**
- Emerging findings and strategies for higher education in Minnesota

# Higher education has a large impact on employment and wages, with significant spillover benefits for the regional community



1 For unemployment, Bachelor's figures (2.9%) represent both Bachelor's and Advanced degrees. For all other categories, figures are only Bachelor's

2 Data not available

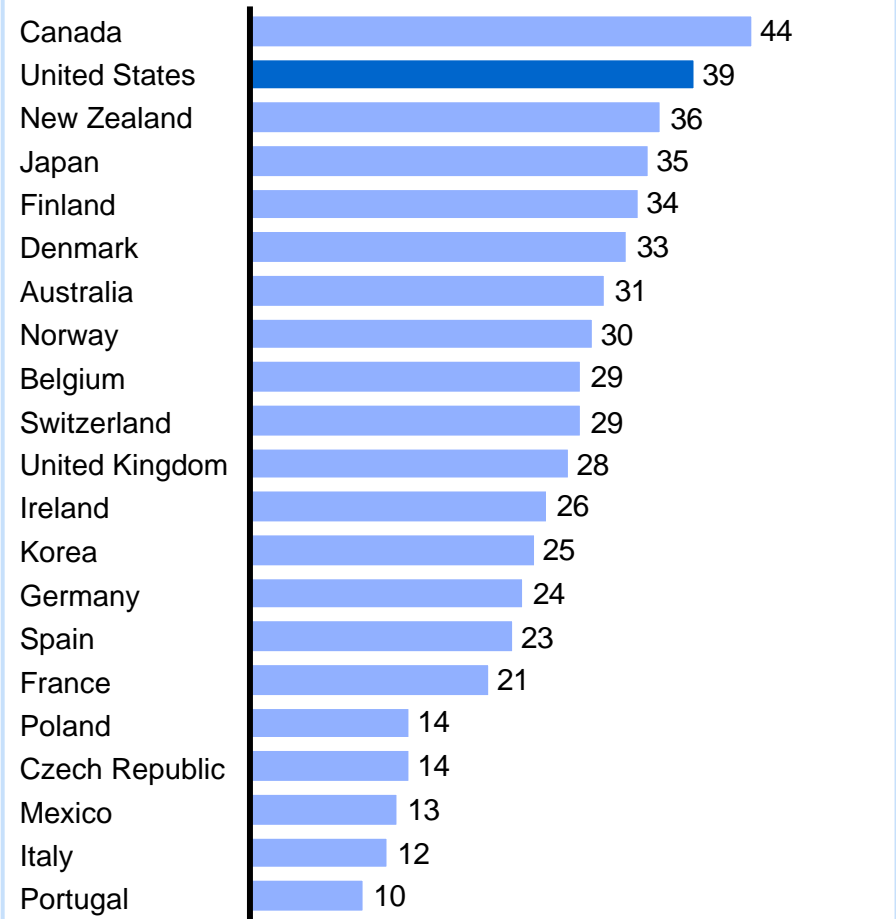
3 Average given using constant dollars

4 Increased wage impact reflects percent average wage difference by education attainment in states with 38% of population college graduates versus states with 23% of population with college graduates

# Other countries are prioritizing education, and surpassing U.S. levels of educational attainment

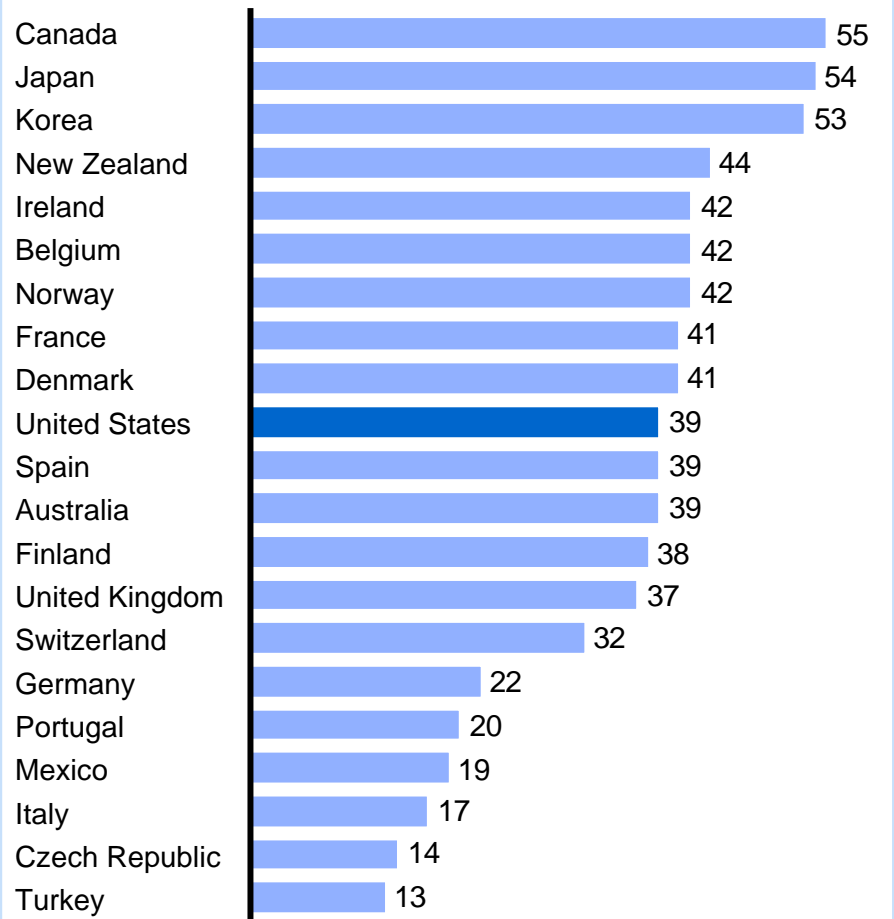
## Educational level of older Americans reflects educational progress of earlier times

Percent of adults age 35-64 holding associate's degree or higher



## Other countries are prioritizing educating their next generation and surpassing U.S. attainment levels

Percent of adults age 25-34 holding associate's degree or higher



# Topics for discussion

- Task force overview
- Economic significance of higher education
- **Emerging findings and strategies for higher education in Minnesota**



# Minnesota's higher education system has several strengths

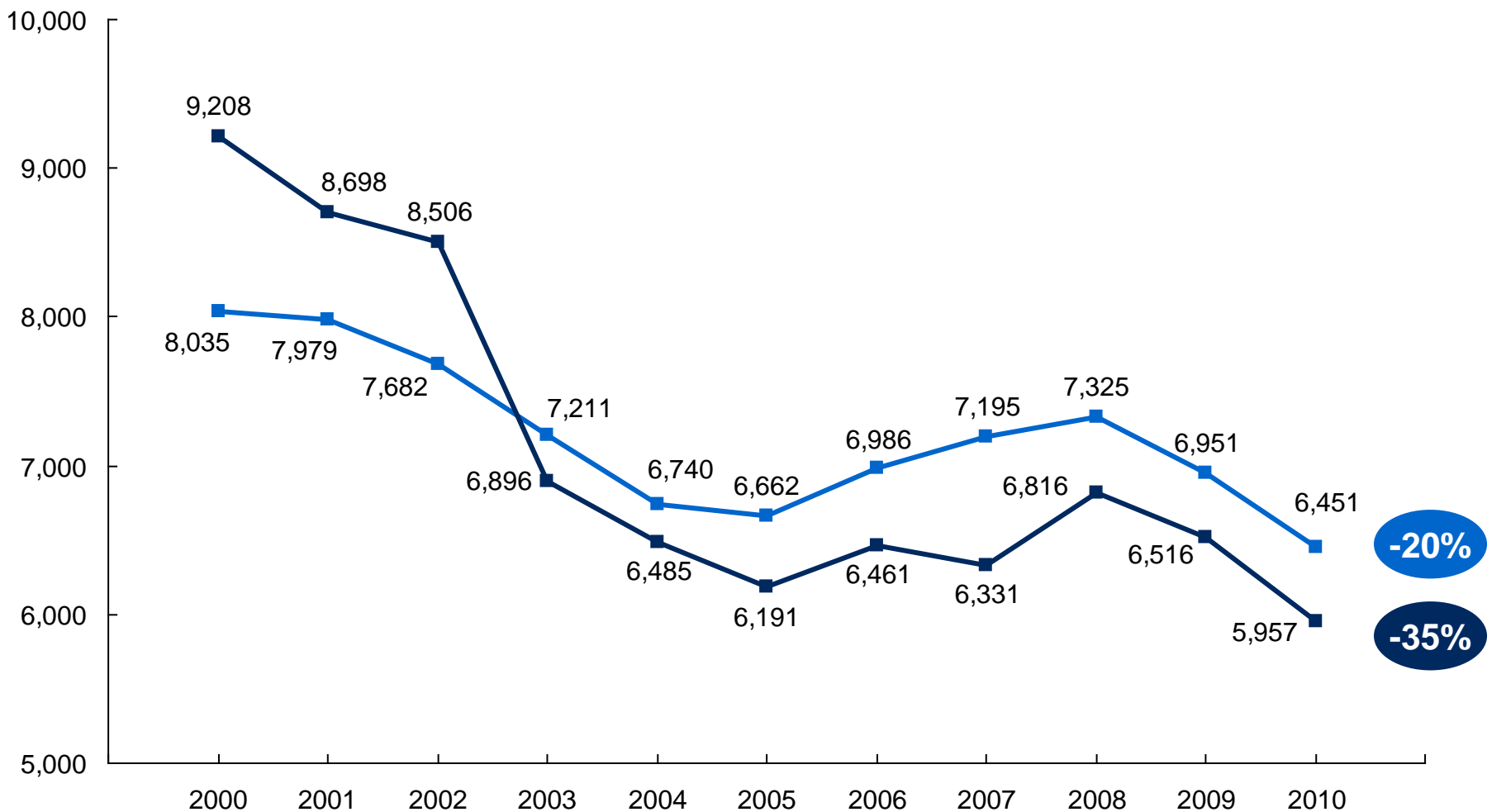
- **Comparatively high rates of post-secondary enrollment and educational attainment**
  - 8<sup>th</sup> in U.S. in percent of HS grads enrolling directly in higher education
  - Completion rates at MN private colleges 9 points above peer averages
- **Presence of world-class research institutions and graduate education**
  - U of M ranks 8th among U.S. public universities in R&D expenditures
  - Mayo Clinic is a world leader in medical research
- **Home to successful models of new thinking in higher education**
  - Major on-line universities Capella and Walden based here
  - MnSCU partners with employers to provide custom training to 125,000 workers annually
  - FastTRAC<sup>1</sup> provides rapid vocational credentialing to those without post-secondary degrees
  - U of M Academic Health Center's Corridors of Discovery enhancing interdisciplinary collaboration in addressing major health problems, such as diabetes
  - More than 200 collaborative academic programs between UMN and MnSCU
- **Strong and diverse business community**, with more Fortune 500 companies per capita than any other state

<sup>1</sup> The FastTRAC program is a credentialing collaboration among MnSCU, DEED, MN Office of Higher Education and six other regional organizations

# Funding cuts greater than the national average pressure the state's students and institutions

## State higher education appropriations per public FTE<sup>1</sup>

Constant 2010 dollars



<sup>1</sup> Educational appropriations include ARRA (American Recovery and Reinvestment Act) funds

# Minnesota can be a globally competitive center of talent and innovation if business and higher education unite around four strategic priorities

**Outputs** from state higher education will increase in value and relevance to Minnesota's economy

## Align academic offerings with workforce needs

Business communicates workforce needs to higher education, and the two work hand-in-hand to see that occupational and foundational skills students gain through programs ranging from certificates to graduate / professional degrees prepare them not only for a good job, but also for a fulfilling life and career

**Inputs** to state higher education will be used with greater efficacy and efficiency

## Form new collaborations across higher ed. to optimize system-wide intellectual assets and efficiency

Higher education strengthens Minnesota's world-class position in core industries by leveraging unique program strengths across institutions to create a sum greater than its parts, and by pursuing system-wide operational efficiencies that help moderate costs born by students and increase return on investments

## Foster an ecosystem of research and innovation

Research, innovation and graduate / professional education foster economic development, create new knowledge and enhance learning; institutions partner with business to pursue common lines of inquiry, translate research, disseminate cutting-edge knowledge, and solve real-world problems

## Graduate more students, and demonstrate their capabilities

Institutions of higher education have higher student persistence and completion rates, and provide objective measures of learning outcomes to better ensure graduates' development of capabilities and communicate these to potential employers

**Minnesota will drive long-term economic prosperity with a higher education ecosystem that brings educators and employers together to create world-class clusters of talent and innovation**

# Strategy 1: Workforce Alignment

## Align academic offerings with workforce needs

Business communicates workforce needs to higher education, and the two work hand-in-hand to see that occupational and foundational skills students gain through programs ranging from certificates to graduate / professional degrees prepare them not only for a good job, but also for a fulfilling life and career





## Vision: align academic offerings with workforce needs

Minnesota's **highly evolved market for skills** draws students and employers from around the world

- A state-wide **collaboration of higher education and businesses produces a deep understanding** of occupational skills needed by sector and foundational skills needed
- With good information, **institutions design programs to meet market needs**
- **Students understand skill needs and career options**, becoming more empowered over their futures
- **A dramatic increase in internships** available from small and large companies statewide provides deepened engagement between students, employers, and higher education
- Upon completing a program of higher learning (ranging from certificates to graduate and professional degrees), **students have mastered a suite of highly relevant skills**, making them highly sought after by employers, and well positioned for advancement and growth for the rest of their lives

## Strategy 2: Research and Innovation



### Foster an ecosystem of research and innovation

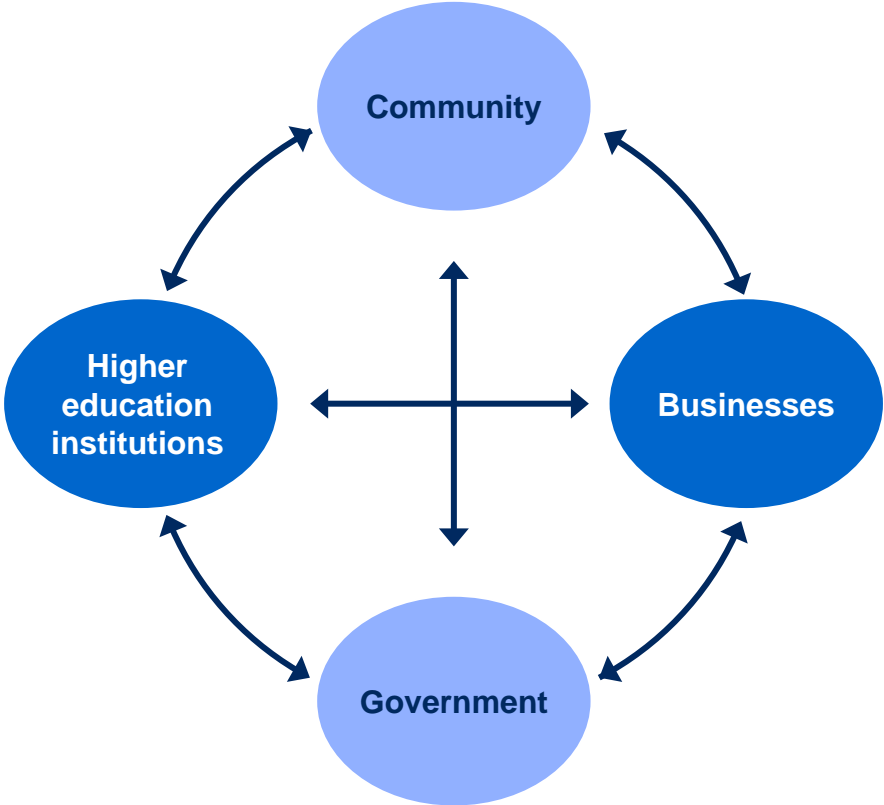
Research, innovation and graduate / professional education foster economic development, create new knowledge and enhance learning; institutions partner with business to pursue common lines of inquiry, translate research, disseminate cutting-edge knowledge, and solve real-world problems

# Minnesota's innovation ecosystem includes many players, especially higher education and core industries

## Elements of Minnesota's innovation ecosystem

Minnesota's higher education institutions produce many forms of intellectual capital that nourish the innovation ecosystem including

- Undergraduate students
- Graduate and professional students
- Consortia and centers
- Professors / consulting
- Sponsored research
- Intellectual property and publications



Minnesota's businesses form a key part of the innovation ecosystem, especially core industries including

- Business services (including corporate headquarters)
- Financial services and insurance
- Food and agribusiness
- Healthcare, life sciences and biotechnology
- Innovation and technology
- Manufacturing
- Mining and natural resources



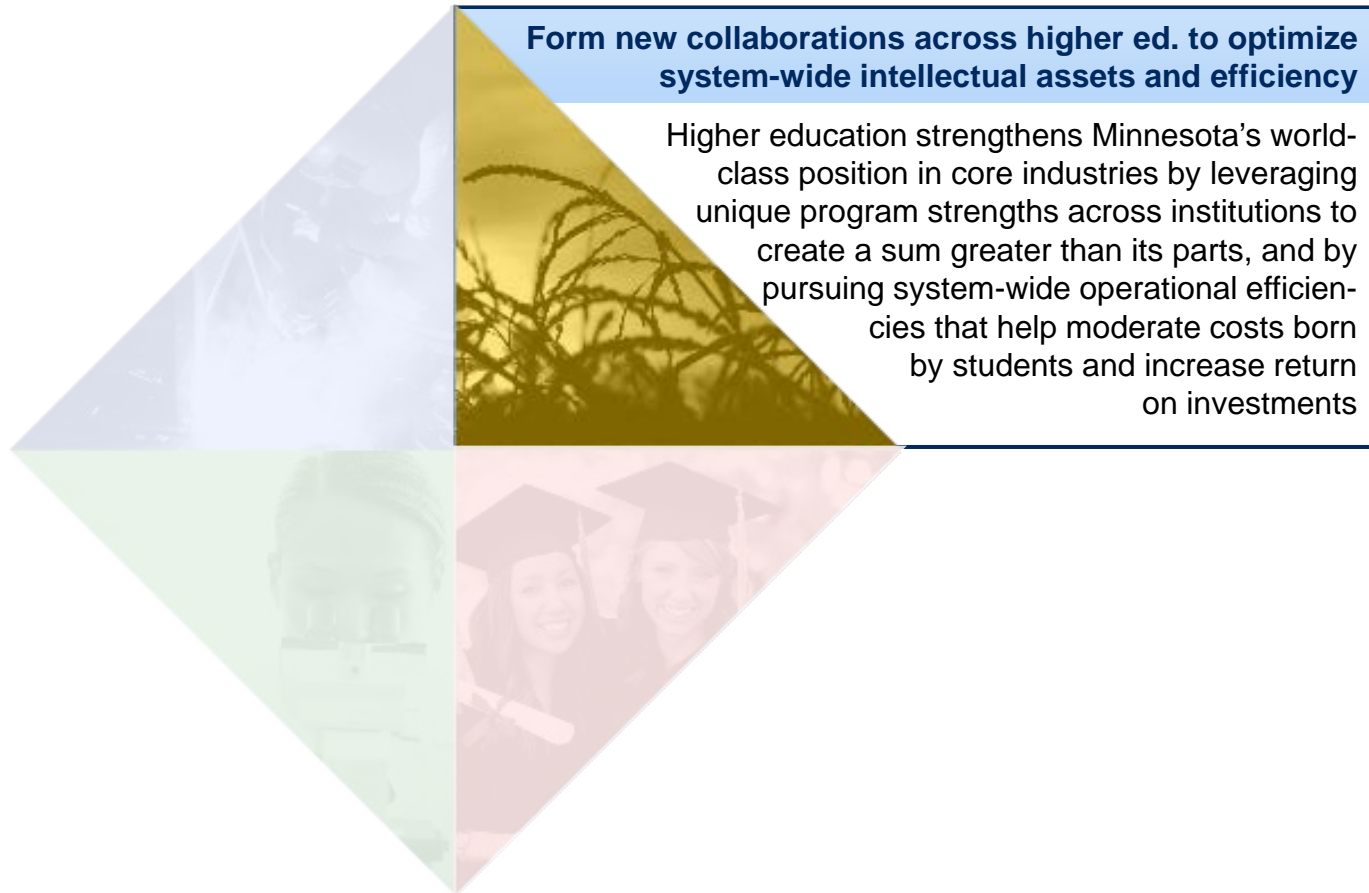
## Vision: foster an ecosystem of research and innovation

**Minnesota is a hot spot for research and innovation, attracting technical and entrepreneurial talent from around the world**

- **Advanced statewide culture of innovation**
  - **Establish multi-institution research partnerships** that align with the state's core economic competencies
  - **Build relationships between academics and practitioners**, making it easier for companies to sponsor academic research and for academics to commercialize innovations
  - **Facilitate process for faculty and students** to work on real-world problems
  - **Surface innovations** from non-traditional sources
- **Strengthened pipeline of future innovation leaders**
  - Create more opportunities for **undergraduates to participate in research**
  - Launch a joint campaign to **attract and retain talented students and researchers** in Minnesota



## Strategy 3: New Collaborations Across Higher Education



# Minnesota has a deep and broad system of higher education; more collaboration among institutions can enhance strengths and efficiency



**University of Minnesota**

- Five campuses: Twin Cities, Morris, Crookston, Duluth and Rochester
- **67,932 students** currently enrolled
- Grants ~14,000 degrees per year, 64% of them undergraduate, and
  - 90% all STEM doctorate degrees
  - 85% of all medical doctor degrees
  - 100% of all dentistry, pharmacy and veterinary medicine degrees
- **Annual budget ~\$4.2 bn**



**MN State Colleges & Universities (MnSCU)**

- 31 institutions on 54 campuses
  - 24 Community and technical colleges
  - 7 State universities
- **420,000 students** (both credit and non-credit)
- Grants over ~38,000 degrees and other awards per year, 32% certificates, 37% AAs, 26% BAs, and 5% advanced degrees
- **Annual budget ~\$2.0 bn**



**Private colleges**

- 17 private, non-profit, 4-year, liberal arts schools in MPCC
  - 67,651 students enrolled
  - Grants nearly 14,000 degrees per year, 67% are undergrad
  - **Annual spend ~\$1.3 bn**



**Private for-profit schools**

- 152 schools; 24 solely on-line
- Biggest are Walden, Capella, and Rasmussen which between them offer range of degrees (i.e., AA to Ph.D) in online and traditional environments
- Other offerings range from healthcare assistants to yoga instruction
- 88 only offer less than 2-year degrees
- Annual spend unknown; most are not publicly traded

**Total spend:** over \$7 bn per year

**Total students:** 467,714

**Total institutions:** 205



## Vision: form new collaborations across HE system

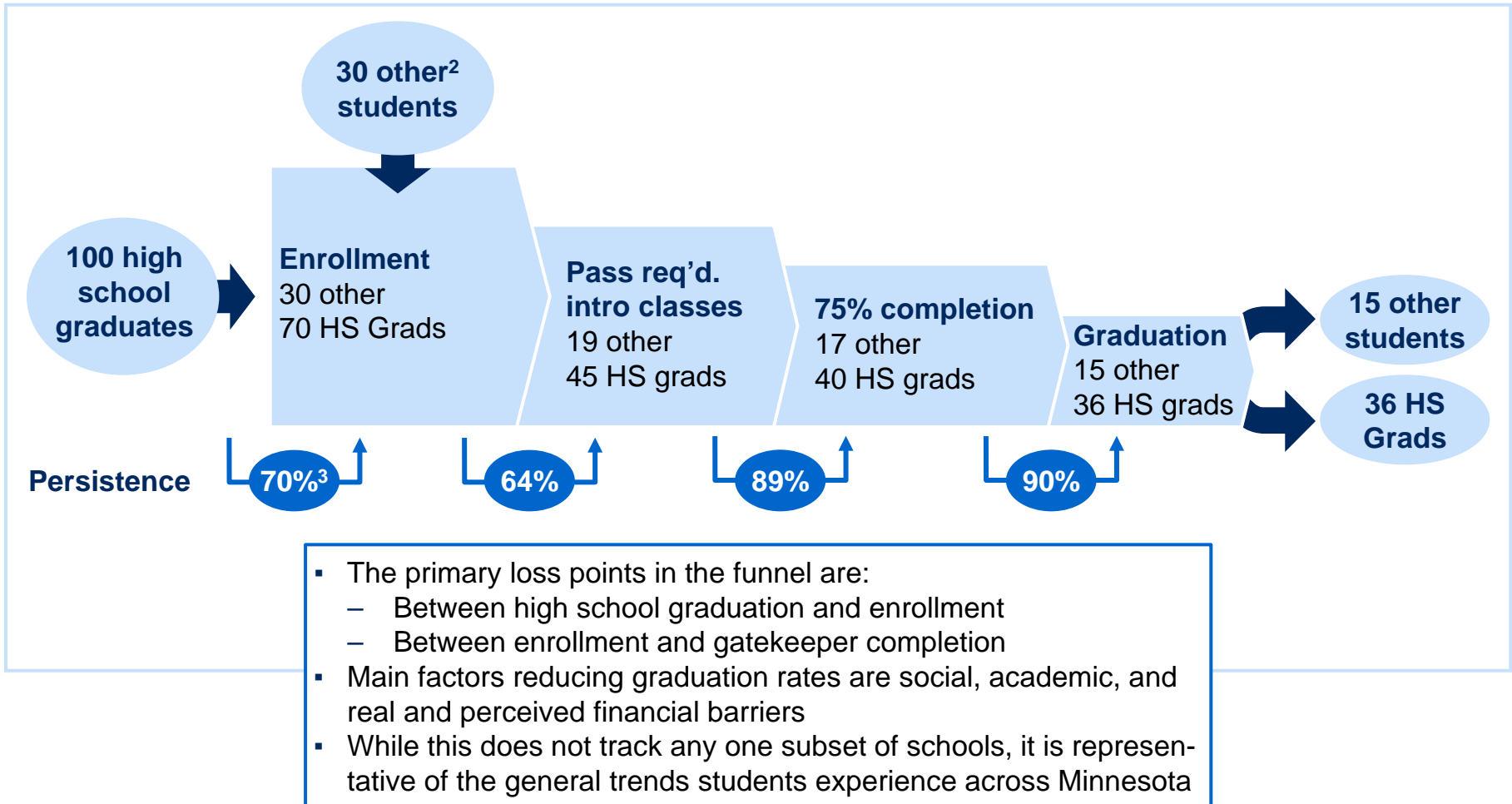
### New collaborations across higher education create major advancements in the use of system-wide intellectual assets and efficiency

- **Leveraging the unique strengths across the system in intentional program partnerships or more open cross-enrollment agreements** creates additional benefits for students, teachers and employers across the state
  - A promising example: nanotechnology partnership of UMN and MnSCU
- Within a system of 200 institutions and \$7 billion of annual spend, there are likely **significant opportunities to further adopt best practices from other institutions or leverage their shared services**, and to further use the system-wide scale for efficiencies in purchasing and elsewhere that would not be available to institutions on their own

## Strategy 4: Graduation and Credentialing



# Only 36% of recent Minnesota high school graduates complete a post-secondary degree in timely fashion<sup>1</sup>



<sup>1</sup> Within 150% time (e.g. completing four-year programs within six years, and two-year programs within three years)

<sup>2</sup> 70% of new undergraduates are recent high school graduates, "other" students are any student who is not a recent high school graduate

<sup>3</sup> Graduated in the spring and enrolled the following fall

Note: Based on a weighted average graduation rate in Minnesota of 51% calculated from IPEDS



## Vision: graduate more students, show their capabilities

**Minnesota makes the most out of its students and higher education investment, ensuring that most students who start a program of higher learning are able to complete it**

- **Students clearly understand the benefits and costs of higher education** and are able to make fitting choices about enrolling (or not) and selecting programs of study
- **Students graduate high school with the skills needed** to engage in an appropriate form of higher education
- **Best practices in student support are leveraged across the state higher education system**, rapidly identifying and addressing student needs
- Student support resources are brought to bear especially for those students most in need of help, **significantly addressing achievement gaps** based on socio-economic or ethnic background
- **Major strides in affordability and flexibility provide** students of different backgrounds and life circumstances (including adult learners) feasible pathways to completing a high quality post-secondary education

# Closing

## Task force next steps

- Complete and publish whitepaper summarizing findings
- Launch steering committee and working teams to support strategies
- Seek support for Employer-Educator Compact, asking signers to commit to working together in new ways
- Generate interest, support, volunteers through communications strategy

- The Task Force's four recommended strategies together form a long-term vision for the state
- The aspirations are high and cannot be achieved by any single institution or group on their own
- Success will require the coordinated effort of many people from our state's higher education, business, policy and civic communities

# Appendix

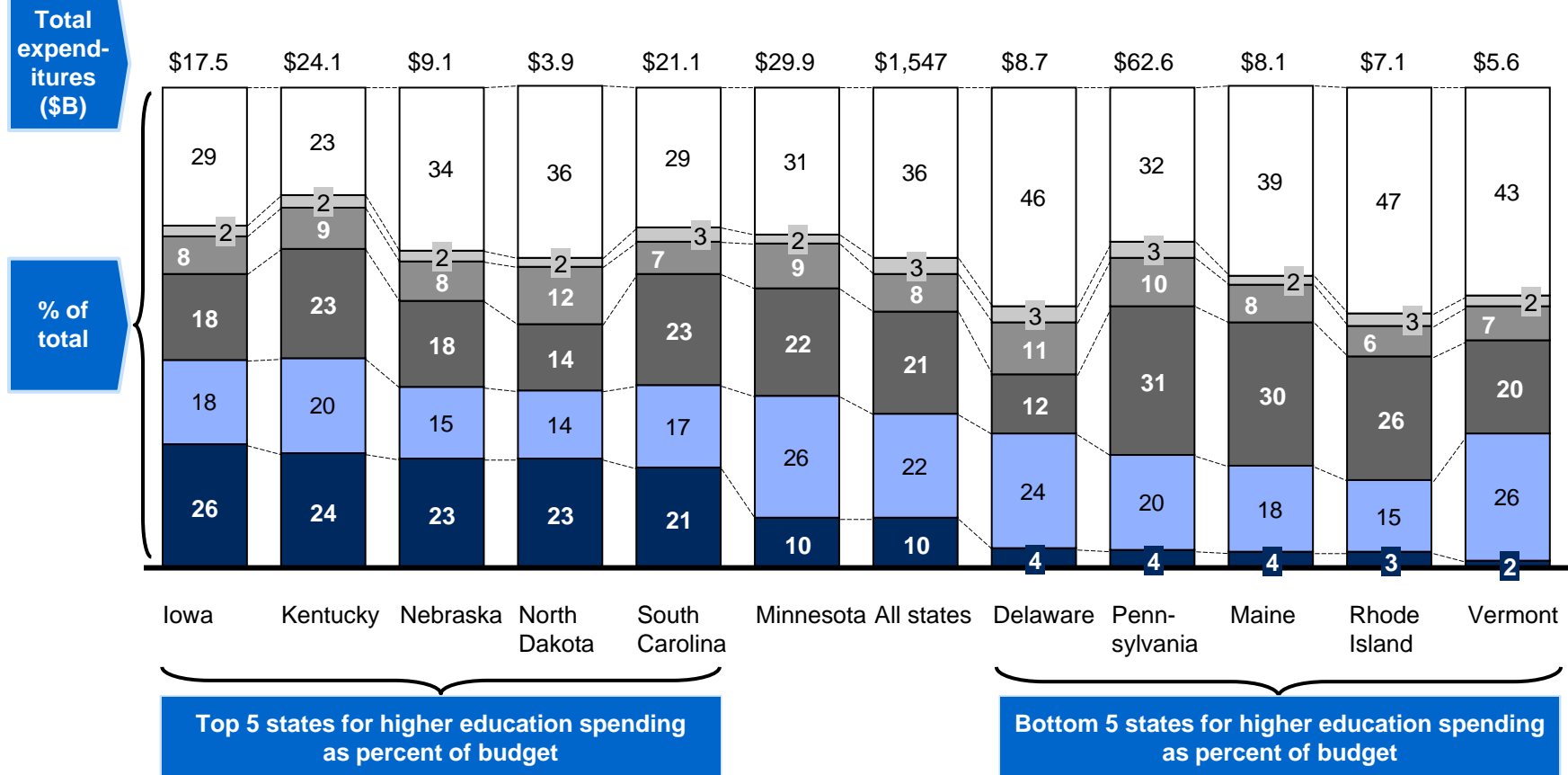


# Compared to other states, Minnesota spends an average percent of the annual state budget on higher education

## State expenditures by function (2009)

Percent of total expenditures

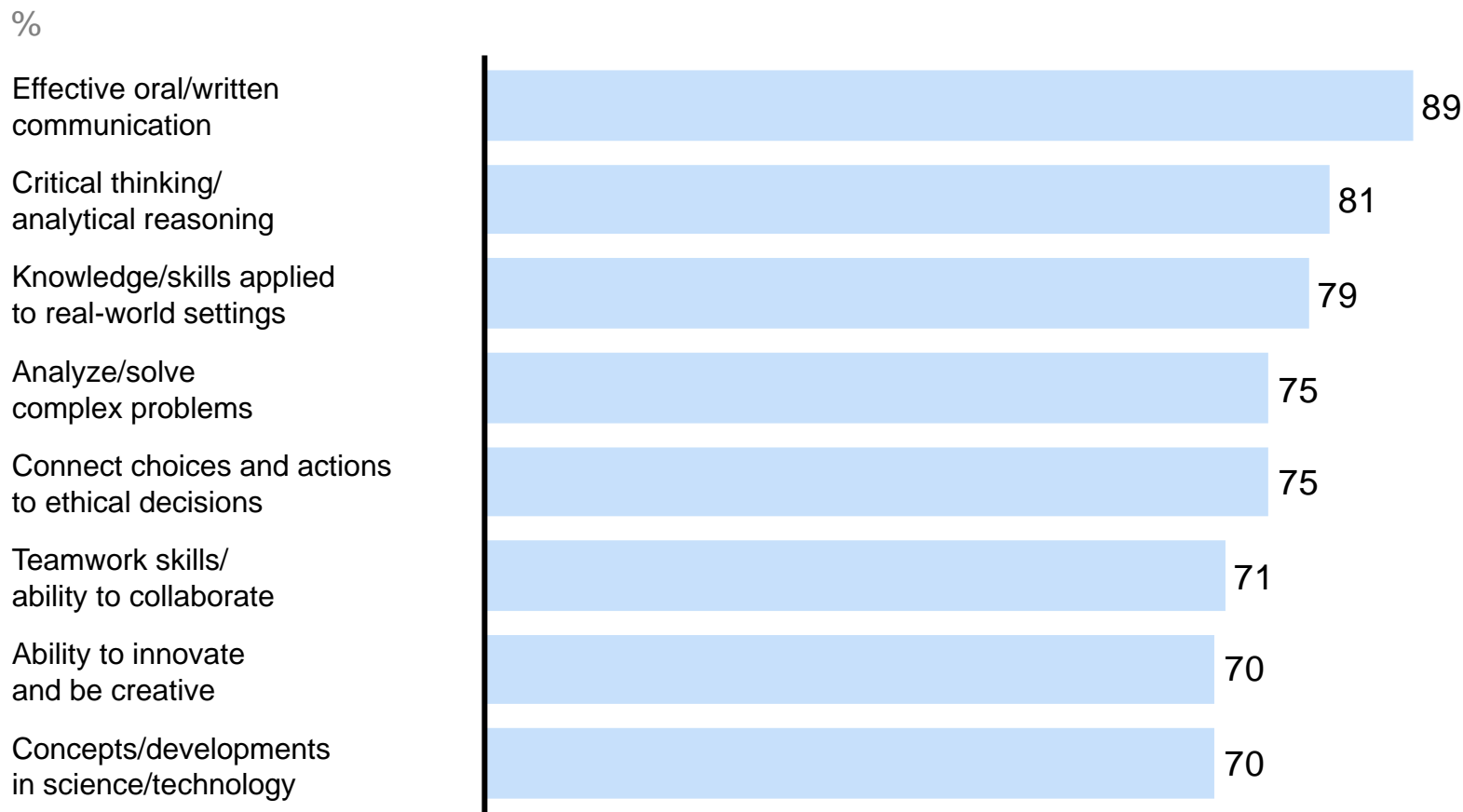
- All other
- Transportation
- K-12
- Corrections
- Medicaid
- Higher Education



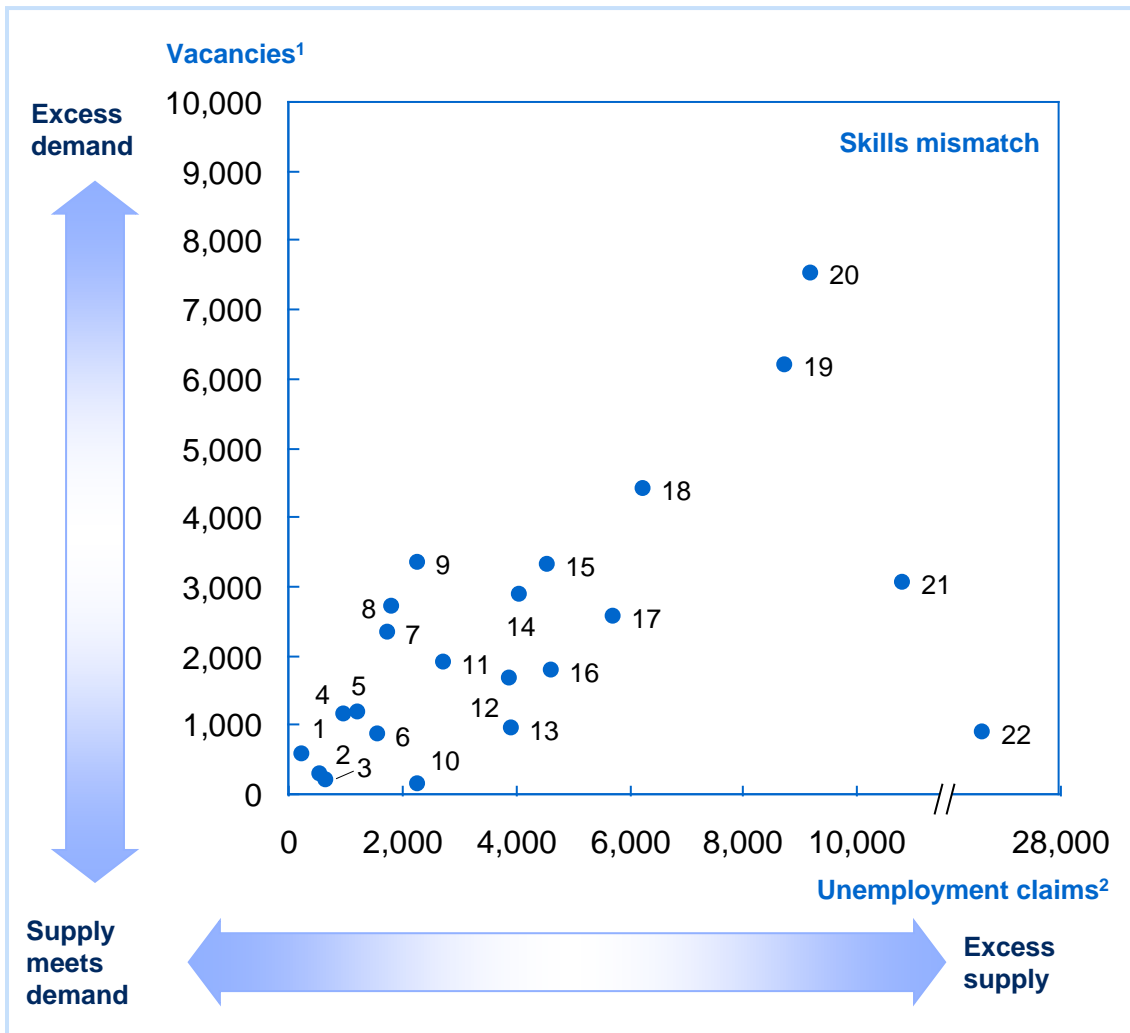
SOURCE: National Association of State Budget Officers, State Budget Report Fiscal Year 2009, table 5: "State Spending by Function as a Percent of Total State Expenditures, Fiscal 2009"

## ... in particular stressed important 'foundational' skills, such as communications and critical thinking

**%age of employers saying two- and four-year colleges should place more emphasis on helping students to develop skills, qualities, capabilities, and knowledge**



# Minnesota job vacancies and unemployment claims by occupation



**Occupational Group (in order of least unemployment)**

- 1 - Life, Physical, and Social Science Occupations
- 2 - Protective Service Occupations
- 3 - Legal Occupations
- 4 - Community and Social Service Occupations
- 5 - Architecture and Engineering Occupations
- 6 - Arts, Design, Entertainment, Sports, and Media Occ
- 7 - Computer and Mathematical Occupations
- 8 - Personal Care and Service Occupations
- 9 - Healthcare Practitioners and Technical Occupations
- 10 - Farming, Fishing, and Forestry Occupations
- 11 - Education, Training, and Library Occupations
- 12 - Installation, Maintenance, and Repair Occupations
- 13 - Building and Grounds Cleaning and Maintenance Occu
- 14 - Business and Financial Operations Occupations
- 15 - Healthcare Support Occupations
- 16 - Management Occupations
- 17 - Transportation and Material Moving Occupations
- 18 - Food Preparation and Serving Related Occupations
- 19 - Office and Administrative Support Occupations
- 20 - Sales and Related Occupations
- 21 - Production Occupations
- 22 - Construction and Extraction Occupations

1 Vacancies by occupational group (Standard Occupational Classification) as of fourth quarter 2011

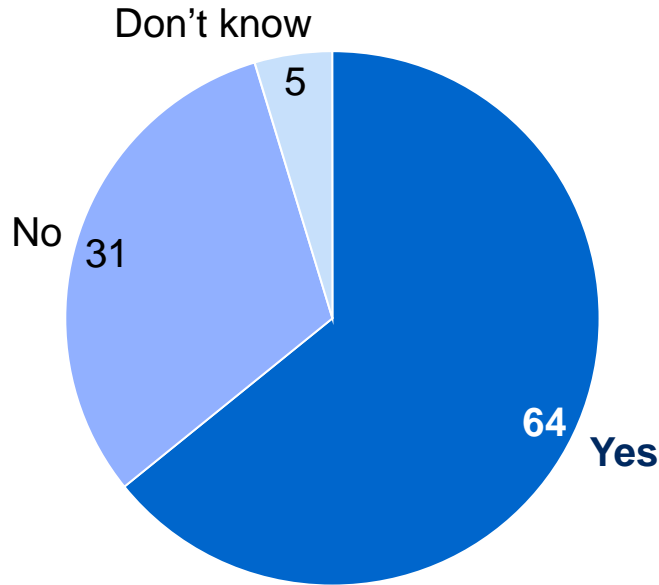
2 Unemployment claims by occupational group (Standard Occupational Classification) as of December 2011

SOURCE: Minnesota Department of Employment and Economic Development

# Most employers report it is difficult to find qualified applicants for some positions and are dissatisfied with preparedness...

Are there positions in your company for which you usually find it difficult to find qualified applicants?

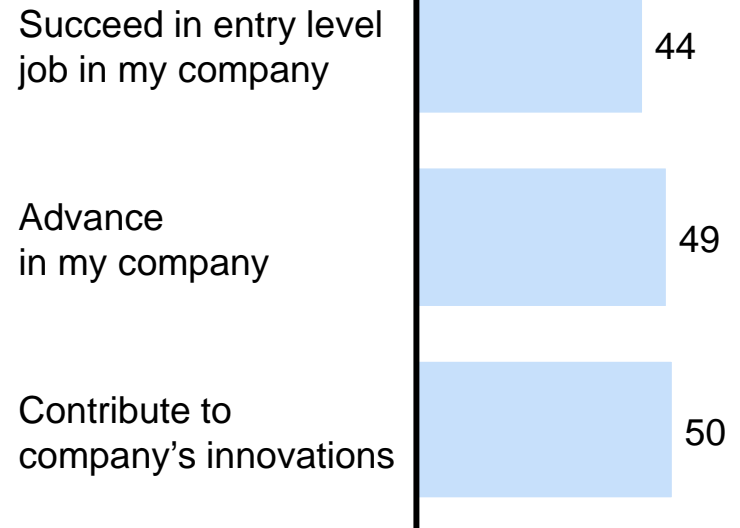
% of employers



How prepared are recent graduates for success in your company?

% of employers

Not well prepared to

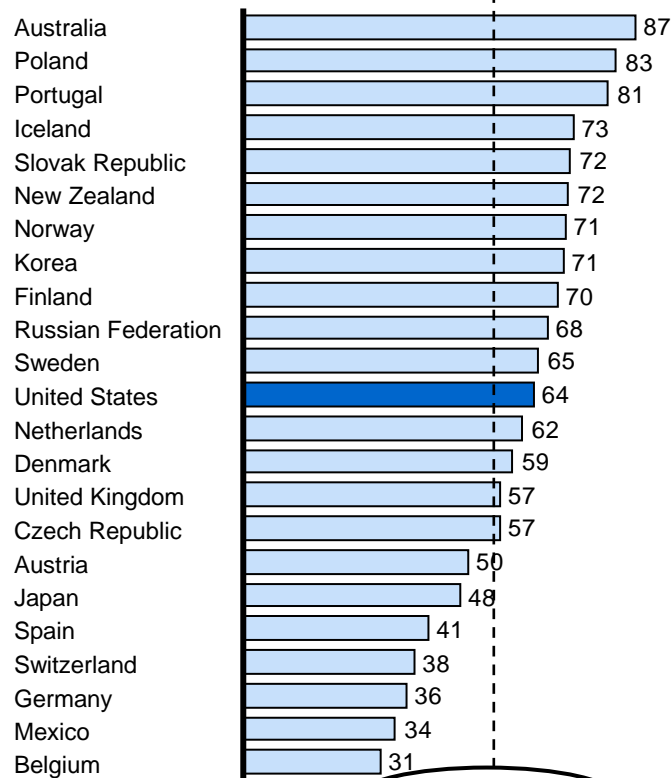


Note: Numbers may not add due to rounding

# The US educational system sends an above average percentage of its high school graduates into postsecondary education, but those students are less likely to complete their program

## The United States sends a high percentage of students to postsecondary education...

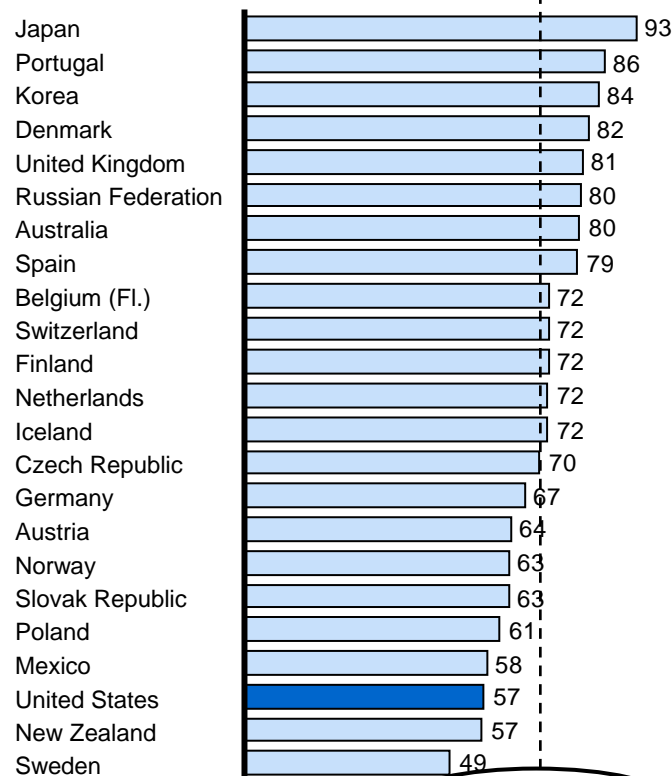
% of students entering post-secondary education (2008)<sup>1</sup>



OECD Ave = 56

## ... but many students in the US fail to complete their postsecondary program

% of enrollees completing a postsecondary program (2008)



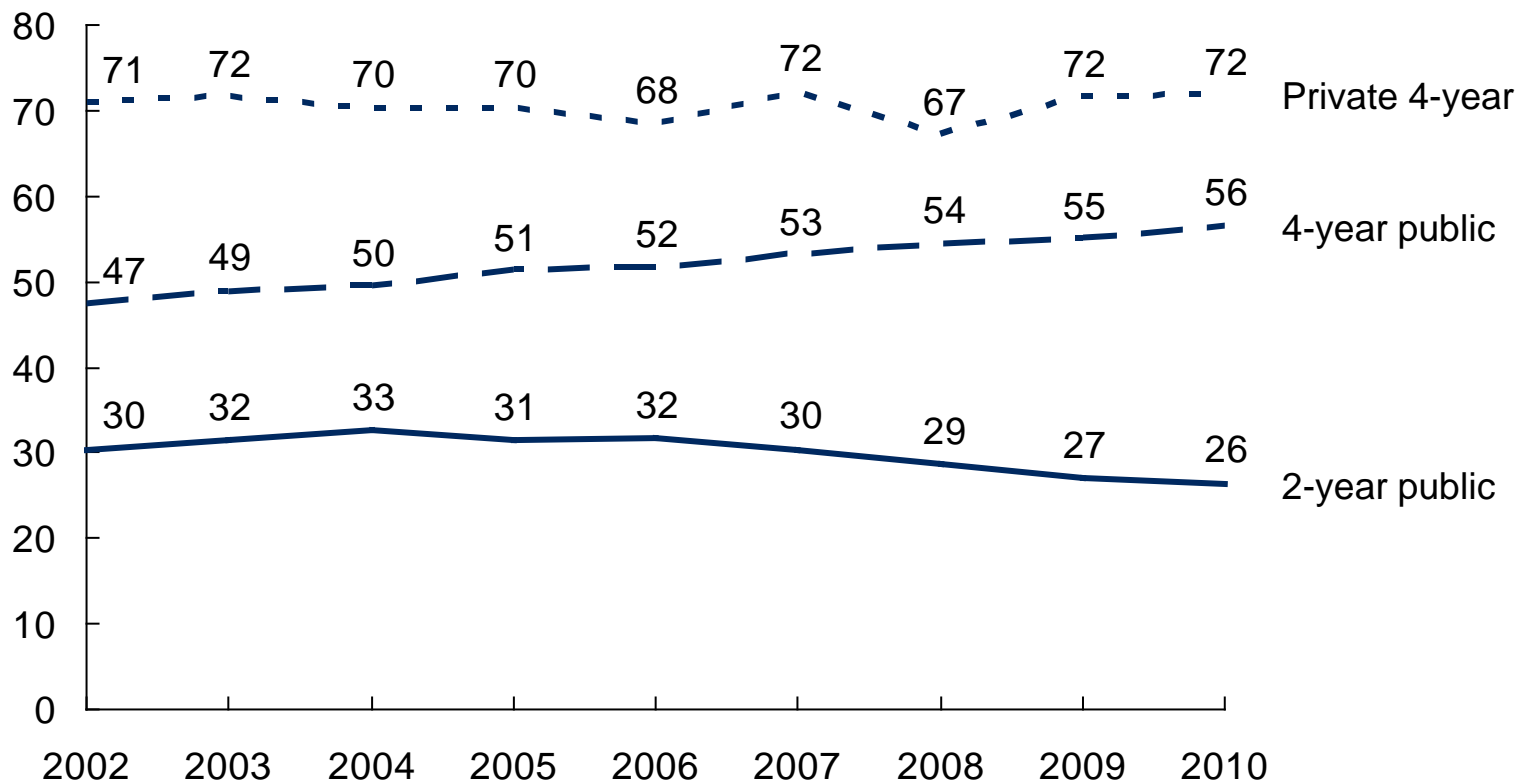
OECD Ave = 70

<sup>1</sup> Tertiary type A programs

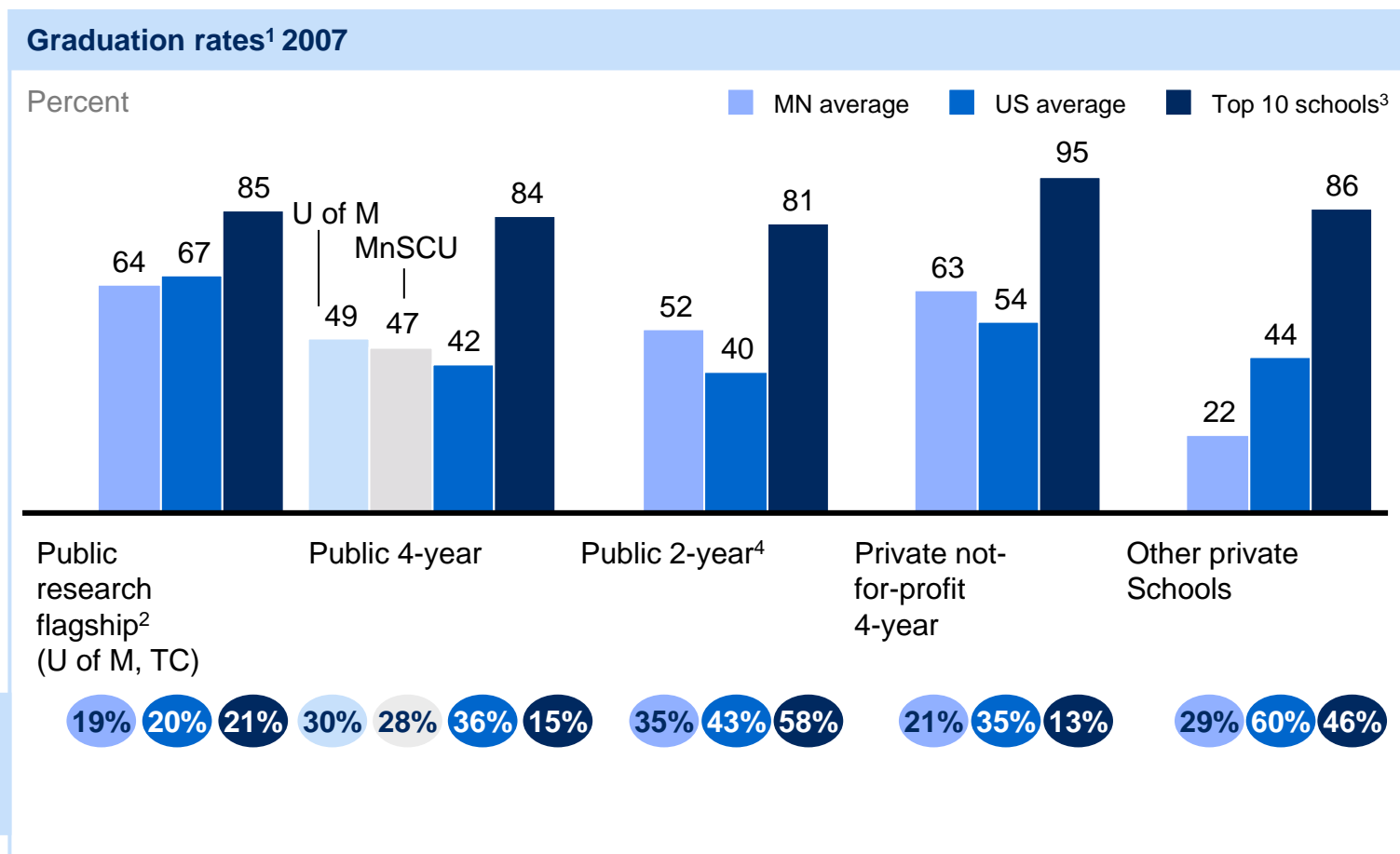
# Since completion data has been tracked in the US, graduation rates have increased at 4-year schools and decreased at 2-year schools

Graduation Rates at Minnesota Colleges in 150% of time

Percent



# Minnesota performs near the US average in its graduation rates in most categories



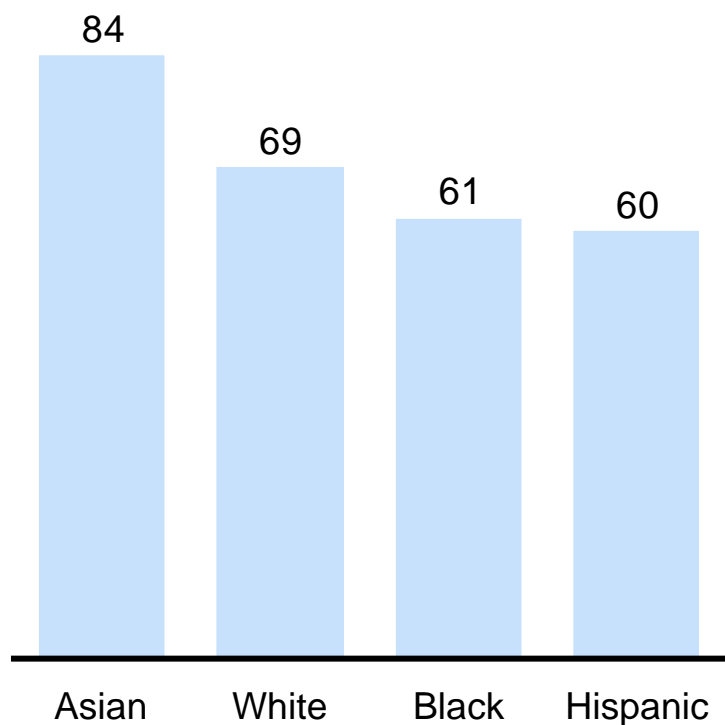
**% total students receiving federal aid**

1 Defined as first-time, full-time enrollees who complete within 150% of planned time (e.g., 6 years for 4-year degree, 3 years for 2-year degree); weighted average graduation rate based on number of full-time student equivalent (FTSE)  
 2 Includes 63 public institutions nationwide, as identified by IPEDS  
 3 Schools included only if they have 500 or more FTSE  
 4 Includes transfer rate for Minnesota schools

# There are significant disparities in enrollment and completion by races

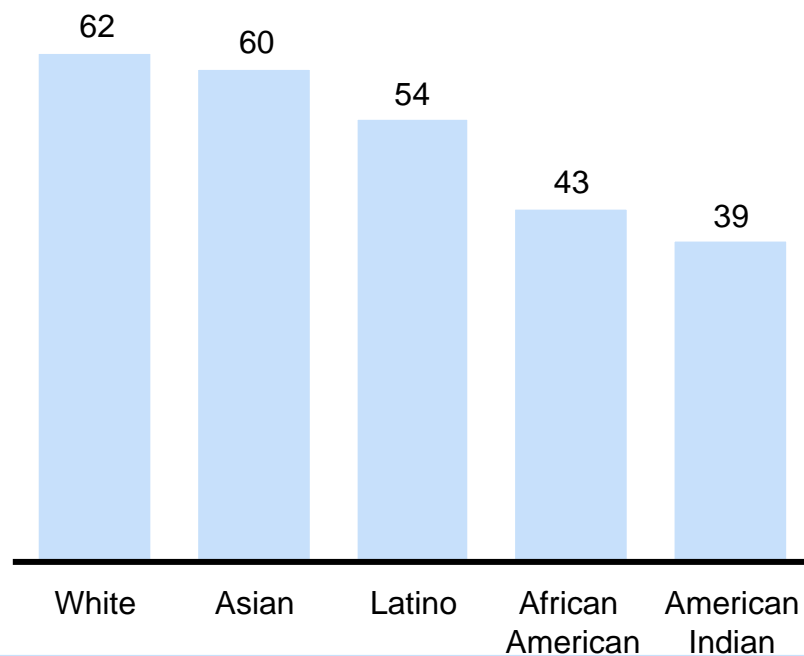
## Disparities in enrollment between races....

% high school graduates enrolling directly in higher education by race in US (2010)



## ...and disparities in completion by race

% of enrollees completing a postsecondary program, Minnesota (2010)<sup>1</sup>



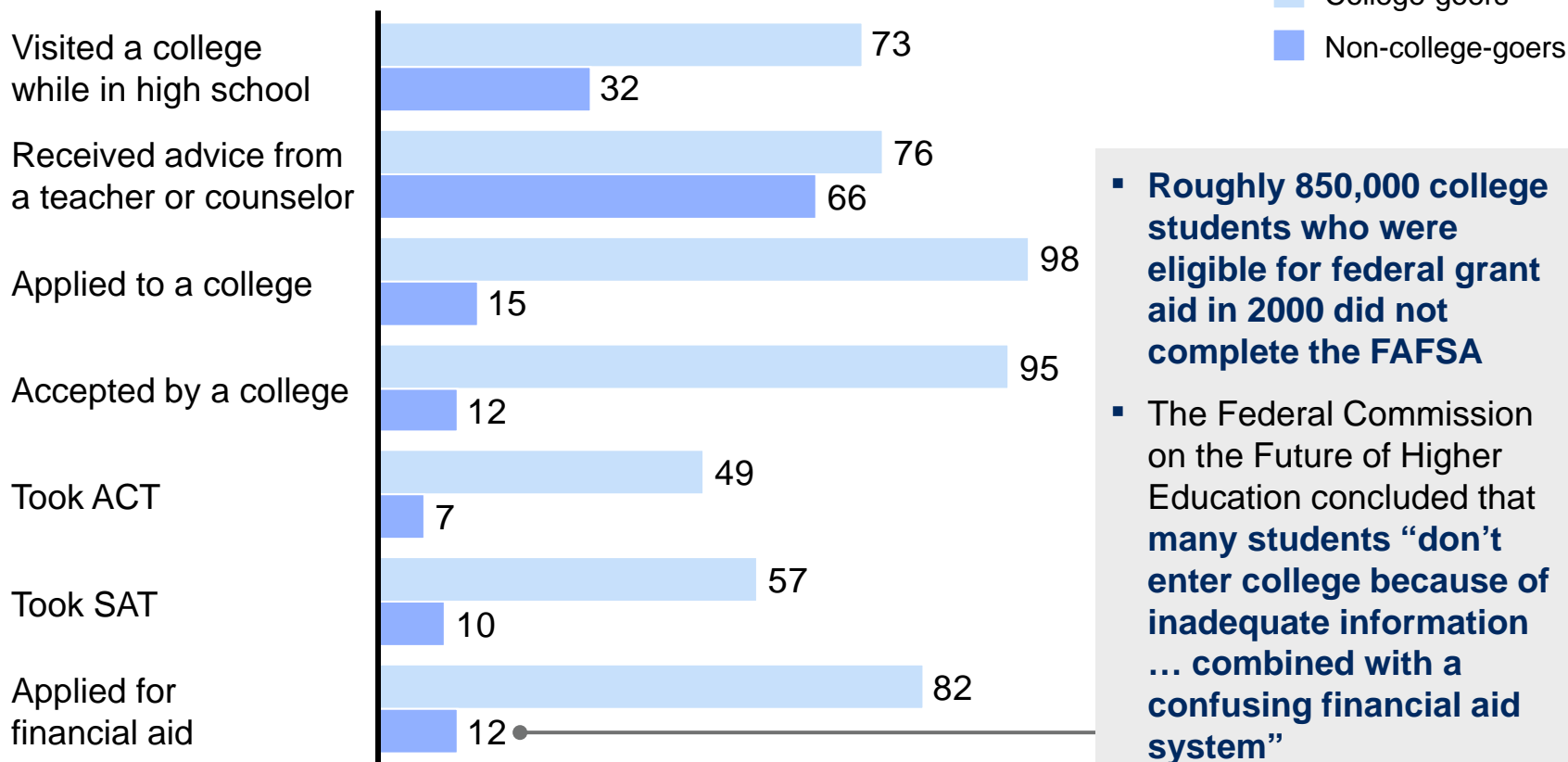
1 Tertiary type A programs



# Many college-qualified students do not take the steps required to enroll in college

## Steps taken to enroll in college (national), 2007

Percent of college-qualified students<sup>1</sup>



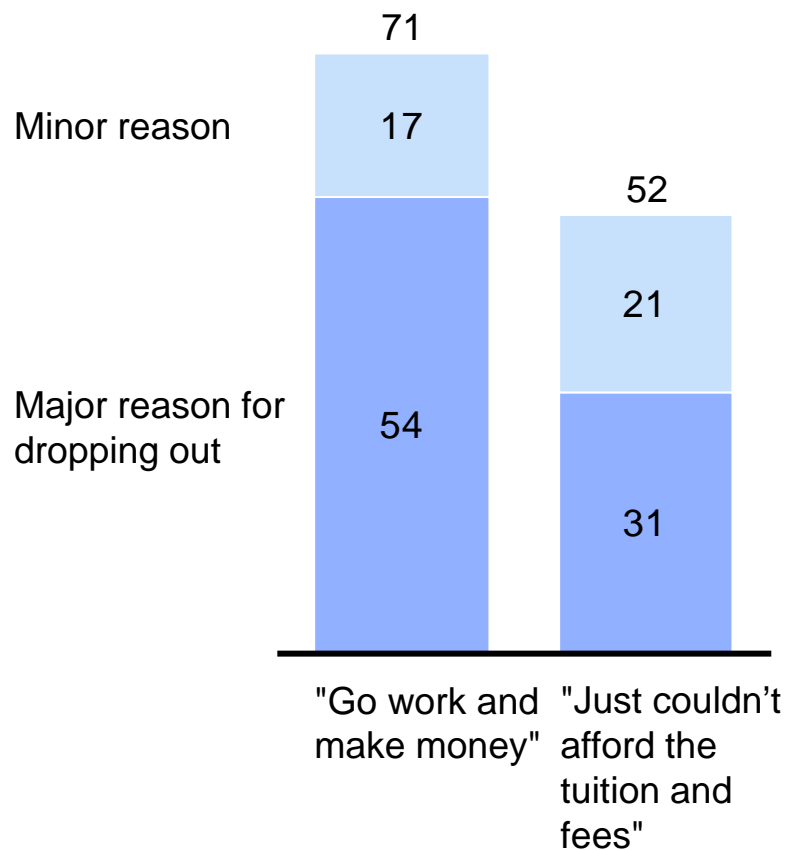
- **Roughly 850,000 college students who were eligible for federal grant aid in 2000 did not complete the FAFSA**
- The Federal Commission on the Future of Higher Education concluded that **many students “don’t enter college because of inadequate information ... combined with a confusing financial aid system”**

<sup>1</sup> College qualified students are defined as high school graduates who have a GPA of 2.5 or higher, took college preparatory classes, took algebra I or II, pre-calculus, and calculus or trigonometry

# Nationally, many students drop out due to financial concerns

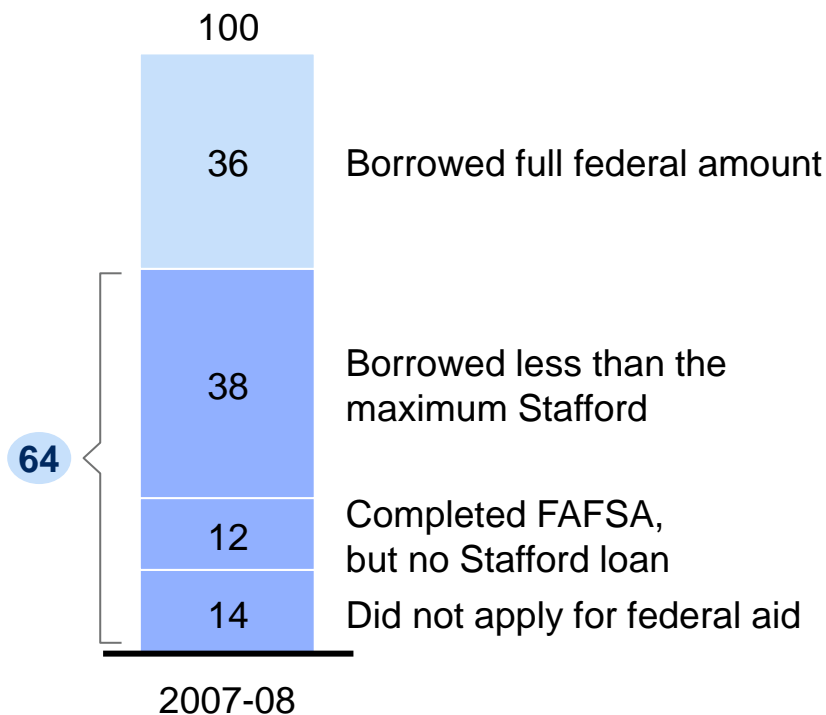
The majority of dropouts cited financial issues as their reason for leaving school, ...

% of college dropouts surveyed



... but 64% of students with private loans have not exhausted their federal funding options

% of private loan borrowers

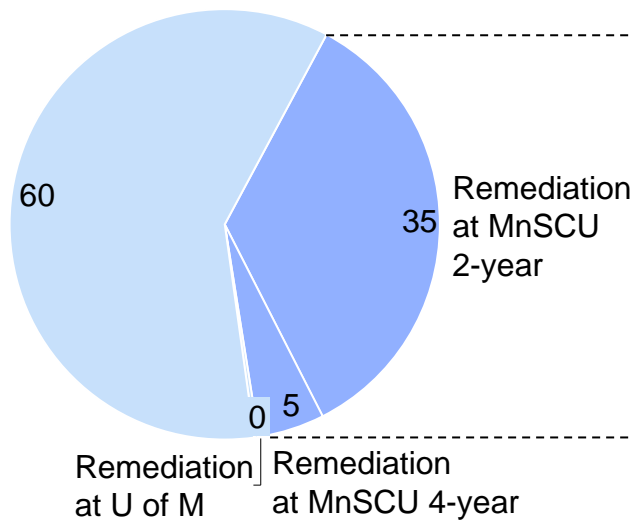


# Students with remedial needs are disadvantaged, even after completing developmental education

## Many Minnesota students need remediation ...

Percent of freshman at Minnesota Public Schools

■ Needs remediation  
■ No remediation need



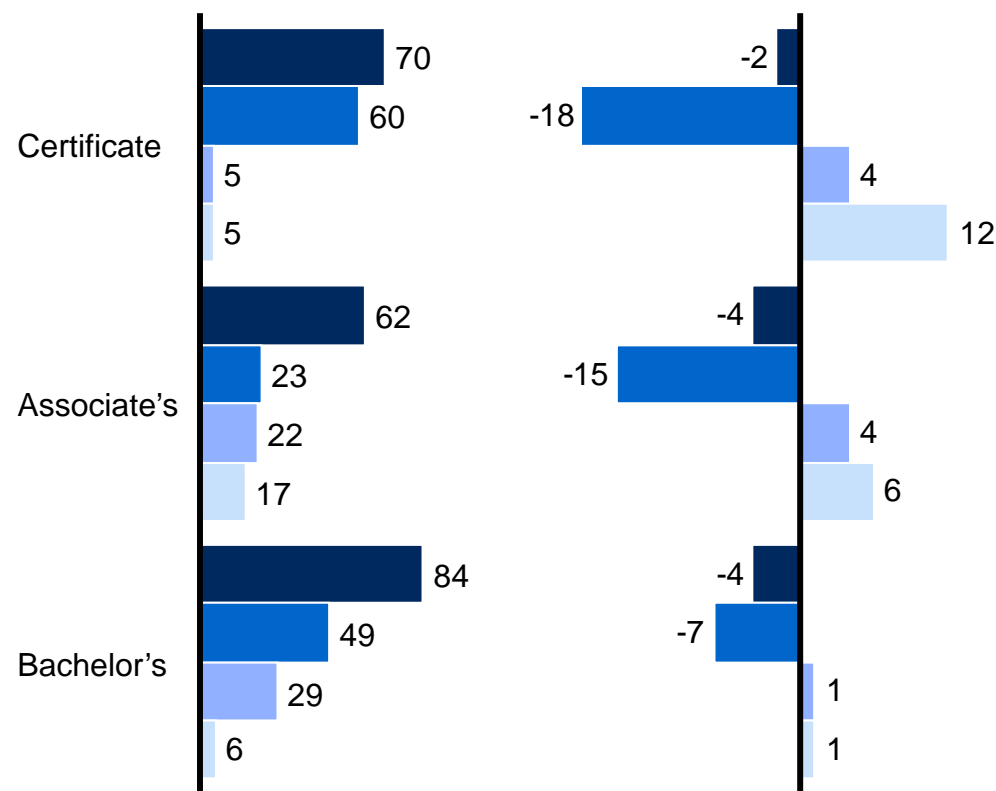
## ... but many students who receive remediation never graduate (MnSCU)

### Outcomes<sup>1</sup> for traditional students

Percent

### Difference in outcomes between traditional and remedial students

Percentage points



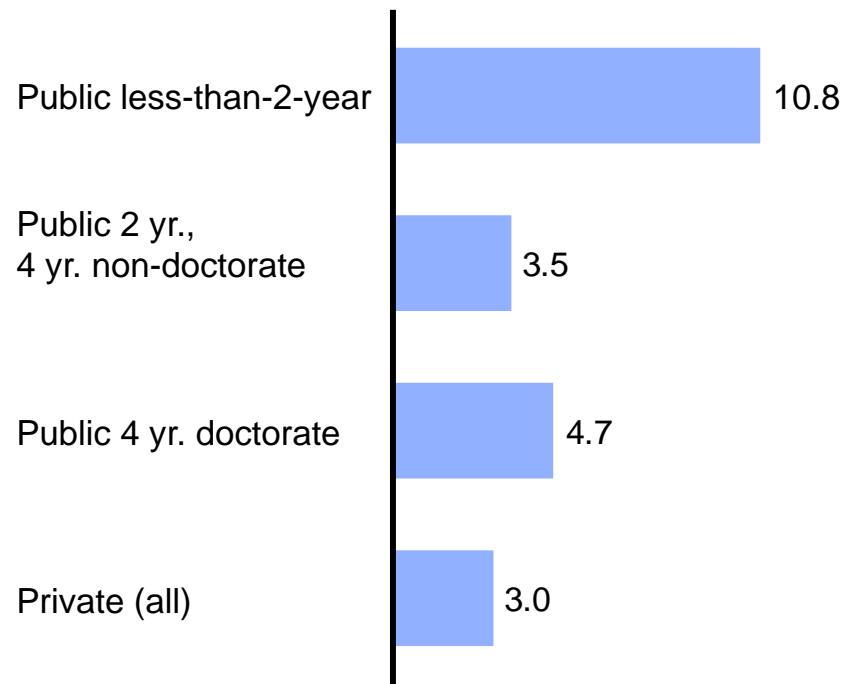
1 In 150% time

2 Still attending institutions after 150% time

# Nationally, net tuition has increased more rapidly than inflation, with corresponding major increases in student debt

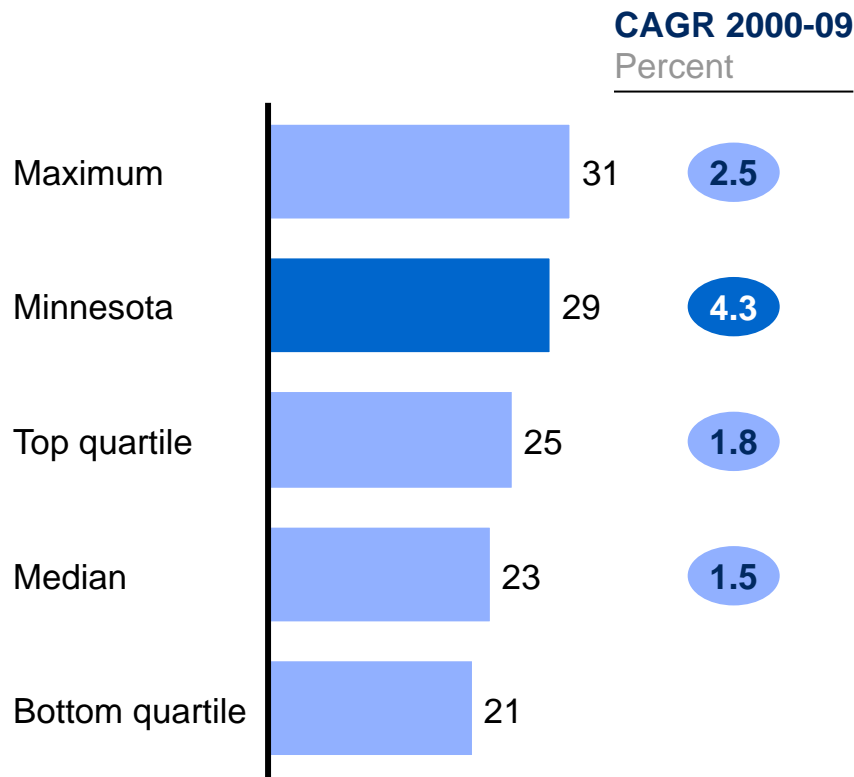
U.S. undergrad net tuition grew significantly faster than inflation 2000-08 . . .

**Undergraduate net tuition<sup>1</sup> by institution type**  
CAGR net of inflation, 2000-08



. . . student debt levels also grew rapidly, with MN becoming among the most debt-burdened states

**Average debt per graduate among the 50 states<sup>2,3</sup>**  
U.S. \$ Thousands; CAGR in constant '09 \$ Thousands



1 Net tuition includes tuition plus fees minus all grants

2 Average cumulative student loan amount borrowed among students who take loans. Includes less than 2 year, 2 year, and 4 year and above institutions

3 Nominal figures adjusted to 2009 dollars using federal funds composite deflator