ITASCAproject

HIGHER EDUCATION PARTNERSHIPS FOR PROSPERITY

A Vision For a New Skills and Innovation Economy Through Collaborations Among Higher Education Institutions, Employers, and Regional Communities

EXECUTIVE SUMMARY

Higher education[1] is critical for the health and prosperity of our Minnesota communities. Higher education provides many of the skills and innovations that drive regional economic growth, employment, quality of life, and competitiveness. Institutions of higher learning provide services that keep our communities viable.

Minnesota has a highly advanced post-secondary education system, with over 200 institutions serving nearly 500,000 students annually and a budget of roughly $7 billion.

Minnesota's historical strengths in higher education give it an advantage, yet there is an urgent need to take strategic action and make investments to create a next level of excellence in Minnesota higher education:

- Future economic growth and prosperity will require deeper and more relevant skills from the workforce and increased innovation from researchers, entrepreneurs, and businesses. It is estimated that Minnesota jobs requiring post secondary education will grow by nearly 8% from 2008 to 2018, while jobs requiring not more than a high school diploma will grow by only 3% over the same period. By 2018, 70% of Minnesota jobs will require post secondary education. [2]

- Competition for talent and innovation among regions and nations has intensified. Countries around the world are placing great emphasis on higher education, surpassing the U.S. in post-secondary educational attainment among 25-34 year olds by up to 40%.[3]

- Historical business models in higher education are under strain, as government funding of higher education has decreased markedly in recent years. Pressures on state budgets drove a 20% reduction of higher education funding per student on average nationally, and a 35% reduction in Minnesota from 2000 to 2010.[4] Budgetary pressures will likely continue in the foreseeable future, impacting both student and institution economics, and driving a need for institutions of higher learning to reach new levels of efficiency.

- A diverse array of online educational offerings and players are reshaping the higher education landscape.

With strong forces impacting higher education and the economy, we cannot wait to take action, but must actively lead and innovate to build a system of higher education in Minnesota that is not only relevant, but preeminent in the 21st century.

The Itasca Higher Education Task Force brought together leaders from Minnesota's higher education institutions and business community to identify strategies to build upon the strengths of our educational system and meet the challenges ahead, forming a four-part strategic vision for higher education in collaboration with businesses:

1 "Higher education" as used throughout this report refers to all forms of post-secondary education, including non-credential programs, less-than two year credentials, two-year degrees, four-year degrees, and graduate and professional education.

2 Georgetown University Center on Education and the Workforce, "Percent of Jobs Requiring Postsecondary Education in 2018," 2010

3 Percentage of adults holding associate's degree or higher. OECD Database. See Exhibit 5.

4 State Higher Education Executive Officers Organization. See Exhibit 7.

- Align academic offerings with workforce needs.
- Foster an ecosystem of research and innovation.
- Form new collaborations across higher education to optimize system-wide intellectual assets and efficiency.
- Graduate more students.

These four efforts have a single unifying theme: collaboration. Where higher education institutions and businesses have acted largely independently before, a new wave of collaborations amongst institutions and between those institutions and business – have the potential to create a fundamentally more powerful engine of learning, innovation, and economic growth for the state of Minnesota. While important collaborations have been undertaken in the past, the new efforts are directed at fostering partnerships with far greater intentionality and scale than previously imagined, creating the nation's foremost collaboration of educators and employers.

Because higher education has such strong links to regional economic and civic health, all Minnesotans and their organizations share interests in the strength of our higher education system. For Minnesota's future growth and prosperity, we call upon the state's citizens, families, students, businesses, policy makers, civic organizations, and educational organizations to unite in supporting strategic actions that build upon Minnesota's historic strengths to create a new era of innovation, transformation and excellence in higher education.

THE INCREASING SIGNIFICANCE OF HIGHER EDUCATION IN THE 21ST CENTURY

Higher education is widely accepted as providing people with paths to better jobs and increased quality of life. But what specifically are the benefits of higher education? More pointedly, why should Minnesotans care about excellence in higher education, and why is change needed more pressingly than ever before? These questions have three linked answers:

1. **Higher education dramatically improves the quality of life both for those educated and for others in the community.**

2. **Several of Minnesota's historical economic growth drivers (e.g., increases in high school completion and workforce participation) have limited capacity to fuel further expansion. The state needs new engines of economic growth, and higher education holds the promise to create growth and jobs.**

3. **In the global economy of the 21st century, higher education is key to Minnesota's remaining competitive nationally and internationally for the decades to come.**

While this Task Force focused explicitly on higher education, it must be emphasized that success in higher education builds largely on the foundation of strong PreK-12 education. Early education, basic skills, workforce and college readiness, and equal quality and opportunity for students of different racial and socio-economic backgrounds are among critical outcomes we must continue to advance within Minnesota's PreK-12 system.

Over a longer time horizon, a coordinated human capital strategy for Minnesota should connect strategic efforts to drive excellence in education across the PreK-12 and post-secondary systems. Nevertheless, there are presently large opportunities to enhance Minnesota's economic prosperity and competitiveness through direct transformation of higher education. Hence, this Task Force focused exclusively on higher education to direct attention and resources towards meeting specific goals.

Returning to our focus on higher education, each area of significance will be explored in greater detail below.

Exhibit 1

INDIVIDUAL AND COMMUNITY BENEFITS OF HIGHER EDUCATION

	Economic benefits	Other quality of life benefits
Individual benefits	▪ Higher employment ▪ Higher earnings ▪ Higher social mobility	▪ Health ▪ Other intangible benefits
Community benefits	▪ Increased wages for a broader community ▪ Greater economic competitiveness ▪ Job creation ▪ Increased innovation	▪ Participation in civic life (voting, volunteerism, engagement) ▪ Greater tax base ▪ Direct community services / outreach from higher education

1. Higher education dramatically improves quality of life both for those educated and for others in the community.

Higher education is linked to a range of economic and quality-of-life benefits for both individuals and communities, including higher employment and wages, better health, and greater civic participation (Exhibit 1).

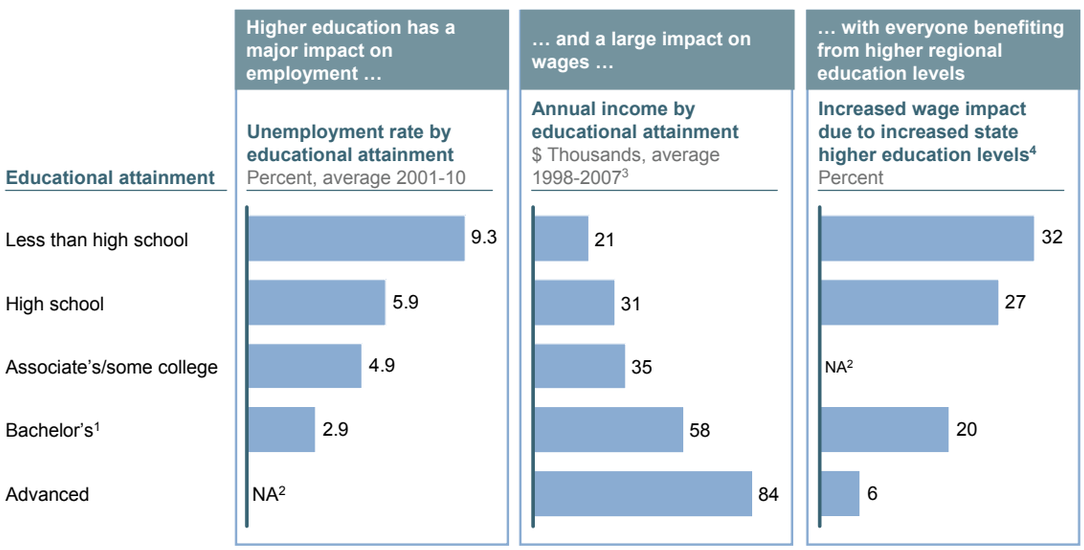
Higher education has significant effects on employment outcomes (Exhibit 2).

The linkage between higher education, higher employment, and greater earnings is substantial. Persons with bachelor's degrees earn nearly twice as much and are half as likely to be unemployed as their counterparts with only high school diplomas. Wage benefits accrue to all persons living in communities: states with greater levels of higher education have higher earnings even among those with high school diplomas or less.

Higher education is clearly linked to substantially higher socio-economic mobility. The majority (62%) of children from the bottom income quintile who attain a college degree escape poverty, achieving earnings in the middle quintile or higher, compared with less than one-third of those without a college degree.[5]

Exhibit 2

HIGHER EDUCATION'S IMPACT ON EMPLOYMENT AND WAGES



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

SOURCE: Bureau of Labor Statistics; Economy.com; College Board; Education Pays

[5] Pew Charitable Trusts, Economic Mobility Project

In addition to its deep and numerous economic benefits, higher education also affords quality of life benefits that go beyond economics. Attainment of higher education is associated with *greater health*, including increased rates of health coverage, lower incidence of lifestyle health risks (e.g., smoking, obesity), and decreased exposure to dangerous work.[6] At the community level, higher education is linked to greater civic engagement; persons with a bachelor's degree or higher are 50% more likely to vote, and more than twice as likely to volunteer, than persons with not more than a high school diploma.[7]

Thus strong evidence shows that economic and quality of life benefits are enjoyed by individuals receiving higher education, while spillover benefits accrue to *all* persons living in communities with increased levels of higher education. While this report focuses primarily on the *economic* benefits of higher education, we must remember that higher education confers many deeply important *non-economic benefits* as well.

2. Several of Minnesota's historical economic growth drivers (e.g., increases in high school completion and workforce participation) have limited capacity to fuel further expansion. The state needs new engines of economic growth, and higher education holds the promise to create growth and jobs.

Minneapolis-St. Paul held an advantage over much of the rest of the country in job creation in the 1990s, but that advantage has since dissipated (Exhibit 3).

Improving high school graduation rates impacted economic growth from 1970-2000. In that period, Minnesota raised graduation rates from 58% to 88%, rising from 17th among states in 1970 to 2nd in 2000[8]. Concurrently, per capita income in the state rose from $21,000 to $41,000 (in constant 2010 dollars). But with already high levels of graduation, further gains were small: from 2000 to 2010, graduation rates moved from 88% to 92%, with income rising to $43,000. The state's achievements in raising high school graduation rates should be celebrated, but now we need to find new initiatives to propel Minnesota's growth in years to come.

Demographic forecasts indicate that labor force growth in Minnesota will be modest, with only a 7% total increase in the state's working age population from 2010-2030, a growth rate of less than 1% growth per annum.[9] Much of the impact to workforce growth comes from baby-boomer retirement.

To regain preeminence as a leading economic region, Minnesota must actively cultivate new engines of economic growth. Given demographic trends, Minnesota will need to drive economic gains by increasing labor productivity and innovation rather than workforce participation alone. Higher education is central to supplying the skilled talent and innovations that are major drivers of productivity and job creation. Therefore, it is essential that Minnesota continues to promote an exemplary higher education system.

6 Alliance for Excellent Education, "Dropouts, Diplomas and Dollars"

7 College Board; Education Pays

8 U.S. Census Bureau, Bureau of Labor Statistics, Minnesota State Demographic Center; all high school graduation rate and per capita income figures come from this source.

9 Minnesota State Demographic Center.

3. In the global economy of the 21st century, higher education is key to Minnesota's remaining competitive nationally and internationally for the decades to come.

In the new era of global trade, global commodities, and global labor markets, advantages in producing highly skilled labor and ground-breaking innovations are critical sources of regional competitive differentiation. In this global context, Minnesota competes for talent, innovations and business not only with other U.S. regions but also with other global centers; to compete successfully, the state must continue to build and distinguish its higher education system.

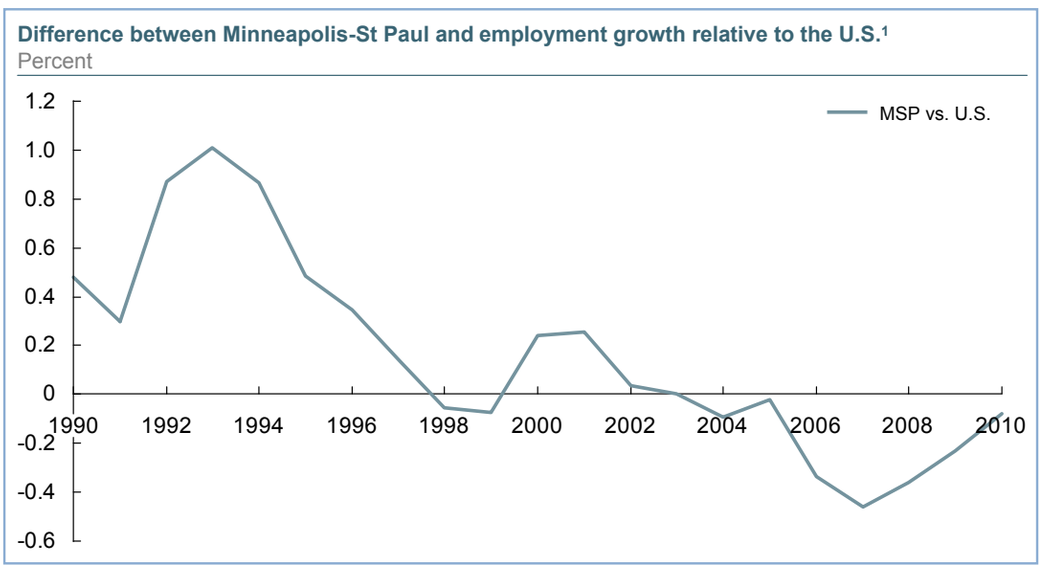
Leaders from around the world have been emphasizing the importance of higher education.

- "No issue will have a bigger impact on the future performance of our economy than education. . . . We can't allow higher education to be a luxury in this country. It's an economic imperative that every family in America has to be able to afford." – President Obama [10]

- "To be globally competitive and to secure the high skilled jobs of the future, Australia needs an outstanding, internationally competitive higher education system. . . . The Australian Government's goal is for this country to be amongst the most highly educated and skilled on earth, and in the top group of OECD nations for university research and knowledge diffusion." [11]

Exhibit 3

MSP METRO JOB CREATION VERSUS U.S. AVERAGE



1 3-year moving average difference between MSP and the U.S. using the given year and the previous 2 years for all historical data. Using total non-farm payroll data

SOURCE: Bureau of Labor Statistics

[10] President Obama's Remarks to the National Governors Association, February 27, 2012.

[11] Commonwealth of Australia, "Transforming Australia's Higher Education System," 2009

Nations around the world have been investing heavily in higher education; while the U.S. is a leader in higher education attainment among 35- to 64-year olds, in the younger cohort the U.S. is being surpassed by many countries (Exhibit 4).

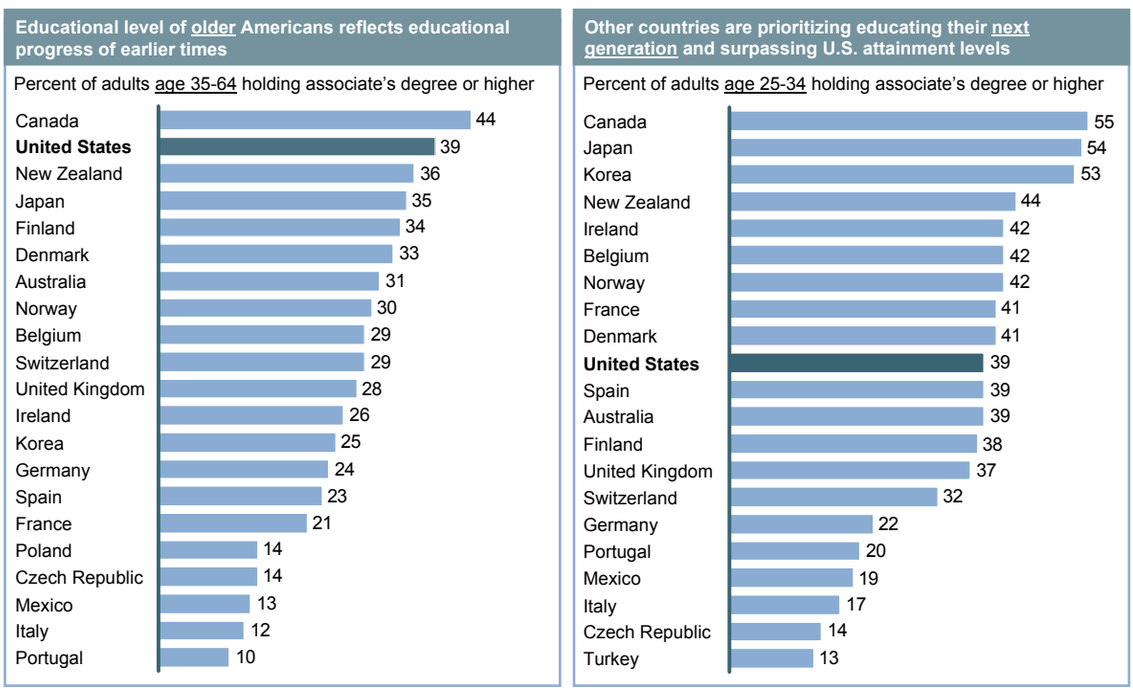
In an age when businesses may locate operations and headquarters anywhere in the world, and when highly skilled entrepreneurs, innovators, and employees can move to any number of desirable places nationally and internationally, Minnesota must have an education system capable of winning against global competition.

In addition to the competition coming from other regions and nations, sweeping change in teaching technologies and online offerings is reshaping higher education. Traditional institutions have launched online capabilities, and web-based profit and non-profit institutions have become major players in the educational arena. The ability to teach and learn at a distance will continue to fundamentally alter how higher education institutions serve students, compete, and collaborate with one another.

Faced with increasing competition and rapidly evolving technological change, it is imperative that Minnesota's higher education system be responsive to present and unfolding challenges and advance as an educational leader.

Exhibit 4

INTERNATIONAL COMPARISONS OF HIGHER EDUCATION ATTAINMENT



SOURCE: OECD database

A SNAPSHOT OF MINNESOTA'S HIGHER EDUCATION SYSTEM IN 2012

Exhibit 5

Overview of Minnesota's Higher Education System

University of Minnesota

- Five campuses: Twin Cities, Morris, Crookston, Duluth and Rochester
- **68,000 students** currently enrolled
- Grants ~14,000 degrees per year, 64% of them undergraduate, and
  - 90% of 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
- **434,000 students** (including both credit and non-credit[1])
- 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
  - 68,000 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 University, Capella University, and Rasmussen College, 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[2]: 468,000

Total institutions: 205

1 Includes 277,000 students in for-credit courses and 157,000 in non-credit courses
2 Total students from Minnesota Office of Higher Education; does not include students in non-credit courses
SOURCE: Minnesota Office of Higher Education; MnSCU budget request book; MnSCU website; UMN website; MPCC website

Minnesota is fortunate to have a broad and strong system of higher education (Exhibit 5).

Minnesota's higher education system has four major components:

1. The University of Minnesota, a land-grant, public university and major research and teaching institution;

2. The public Minnesota State Colleges and Universities (MnSCU) system, with its fifty-four campuses that serve urban and greater Minnesota;

3. Seventeen private non-profit colleges, including Augsburg, St. Scholastica, and Macalester, which offer diverse programs; and

4. Many private for-profit institutions, including many specialist institutions such as McNally Smith College of Music, Art Institutes International Minnesota, and online educators like Capella University and Walden University.

Minnesota's higher education system has many strengths

Our post-secondary education system in Minnesota has many positive attributes:

- **Unique breadth and depth in educational institutions**. Whereas many state education systems are defined by a small number of institutions, Minnesota has a great array of institutions with different missions, capably serving various program offerings, geographies, and student groups.

- **High rates of post-secondary enrollment and educational attainment**. Minnesota is 8th among states in the share of high school graduates enrolling directly in higher education. Completion rates in Minnesota private colleges are 9 points above peer averages.

- **World-class research institutions and graduate education.** The University of Minnesota is a major center of research and graduate and professional education – ranking 8th among U.S. public universities in R&D expenditures – and a national leader in food safety, agriculture, medical devices and clinical innovations. Minnesota's Mayo Clinic is a world leader in clinical practice and medical research.

- **Successful models of new thinking and innovation in higher education .** Examples include: The FastTRAC program, a MNSCU - DEED Partnership that provides rapid vocational credentialing to those without post-secondary degrees; Customized training to 125,000 workers annually through MnSCU-employer partnerships; U of M Academic Health Center's Corridors of Discovery, which is enhancing interdisciplinary collaboration in addressing major health problems (e.g., The Decade of Discovery: A Minnesota Partnership to Conquer Diabetes, led by The Minnesota Partnership for Biotechnology and Medical Genomics, and involves collaborative efforts by the University of Minnesota, Mayo Clinic and the state of Minnesota); and major on-line universities such as Capella and Walden, which are based in Minnesota.

- **Strong and diverse local economy and business community, with more Fortune 500 companies per capita than any other state.** A thriving local economy and high quality of life are critical components needed to attract and retain key talent in our state. Given the strong and diverse local economy and business community, there is extraordinary potential for more effectively leveraging the region's economic assets for the development of Minnesota's citizens, workforce, and innovative potential.

Financial trends in higher education

Higher education is funded in many different ways, but a few key trends can be observed. From 2000-2010, state support declined across the U.S., but Minnesota made deeper than average cuts to higher education funding on a per student basis. In the course of de-funding higher education, Minnesota lost relative position among states, transitioning from above average funding levels prior to 2003, to substantially below average funding levels since then (Exhibit 6).

On a percentage basis, Minnesota's cuts to higher education from 2000 to 2010 exceeded those of all but three other states—Georgia, Michigan and Ohio.[12]

[12] State Higher Education Executive Officers

As a consequence, over a similar time period, both net tuition and student debt (for students that take loans) grew substantially above the rate of inflation (Exhibit 7).

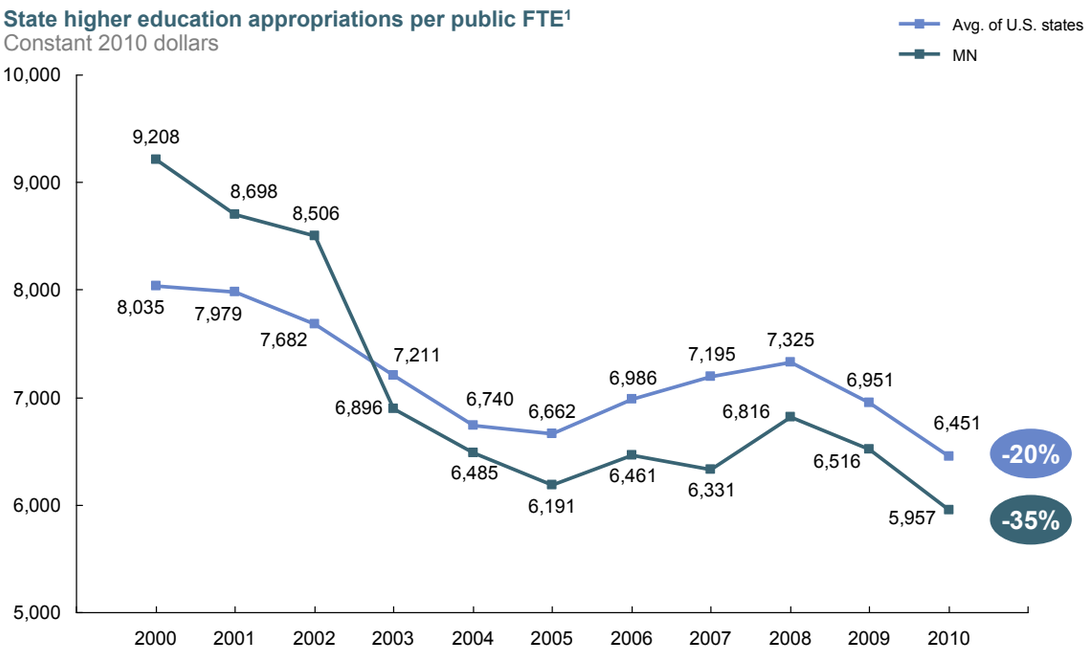
On a national basis, net tuition grew at least 3% faster than inflation for all major types of higher education institutions. This represents a significant increase in the price of higher education to students.

In many instances, increased reliance on tuition to support basic educational activities is a direct offset for declining government support of higher education. For example, within the MnSCU system, as support from the state fell by 45% from 2000-2012, state appropriations as a percent of system revenue fell from 67% of revenue to roughly 39%. Over the same period, tuition as a percent of system revenue rose from 33% to 61%. From 2000-2011, MnSCU's costs of educating students were actually *reduced* by 10%. [13] Hence, the primary driver of increased tuition at MnSCU has been the need to offset loss of government funding. The situation is similar at the University of Minnesota, where expenditures from tuition and state support on its mission of education, research, and outreach dropped 5% per student from 2000 to 2011. [14]

Exhibit 6

U.S. STATE FUNDING OF HIGHER EDUCATION 2000-2010

State higher education appropriations per public FTE[1]
Constant 2010 dollars



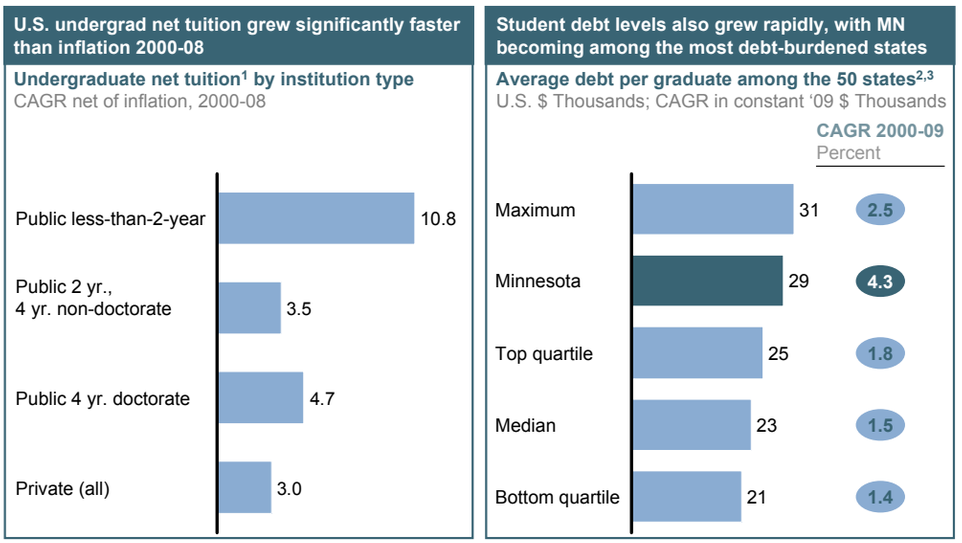
1 Educational appropriations include ARRA (American Recovery and Reinvestment Act) funds
SOURCE: State Higher Education Executive Officers

[13] MnSCU FY 2013 Operating Budget, Presentation to Board of Trustees, May 15, 2012

[14] Source: Presentation to the University of Minnesota Regents Worksession, October 2011. While the specific figures vary, similar dynamics of tuition increases offsetting reduced government funding are at play for many other institutions of higher education to students.

Exhibit 7

NET TUITION AND STUDENT DEBT GROWTH



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
SOURCE: National Center for Education Statistics; National Postsecondary Student Aid Studies 2000, 2004, 2008; The Institute for College Access & Success; College InSight

Increases in tuition are having significant impact on students. From 2000 to 2009, student debt levels have grown in real terms (net of inflation) at 1.4% per annum in most states, while students from many states amassed debt faster. Student debt in Minnesota grew at an alarming 4.3% per annum, making Minnesota one of the states with highest debt per student. Following this marked run up in debt, in 2010, the total amount of student debt in the U.S. surpassed the total amount of consumer credit card debt.

While it is not the intention of this report to advocate specific funding-related policy changes, it is clear that higher education funding has come out of balance. For higher education to be an ongoing source of prosperity and competitiveness for Minnesota, the funding of our students and institutions must be brought to a solid and sustainable path. Furthermore, higher education institutions must continue to innovate their operating models, substantially improving productivity and providing a higher return on student and public investments.

ITASCA HIGHER EDUCATION TASK FORCE: STRATEGIES AND FINDINGS

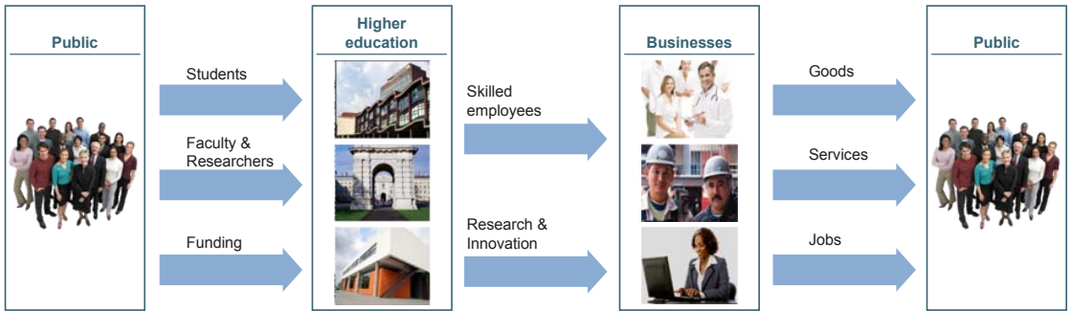
The Mission of the Itasca Higher Education Task Force

The Itasca Higher Education Task Force brings together Minnesota leaders to define, promote, and take direct action on strategies for advancing higher education in Minnesota as a means of enhancing economic prosperity, competitiveness, and quality of life for the state and citizens of Minnesota.

Traditionally, higher education institutions have operated independently from one another, producing skilled persons and innovations which then become inputs used by businesses. This simplified economic view is represented in Exhibit 8.

Exhibit 8

SIMPLE ECONOMIC MODEL OF HIGHER EDUCATION INTERACTION WITH BUSINESSES



The reigning feature of this interaction is independence:

- Higher education institutions act separately from one another, sometimes viewing each other as competitors rather than collaborators.
- Businesses treat higher education as supplying inputs to production. As a group, businesses only infrequently interact directly with higher education, and when they do so, they interact in a one-off manner, rather than addressing higher education with the collective voice of regional businesses.

Consider, alternatively, what would happen if higher education institutions and businesses took a much more collaborative, interdependent approach on matters of common interest (Exhibit 9).

Building this collaborative system would require implementing four key strategies. The first two strategies relate to information flowing from businesses to higher education institutions and students.

1. Align academic offerings with workforce needs: regional businesses collectively take a direct role in partnering with the regional higher education system on skill needs, actively communicating desired skills to higher education, and helping train students (through internships, course activities, financial support, shared training activities, partnerships, or other).
2. Foster an ecosystem of research and innovation: regional businesses partner with the regional higher education system to co-create research and innovation agendas, taking direct or supporting roles when appropriate.

With more information available regarding skill and innovation needs, businesses can better meet their needs; students can make more positive education and career choices, and more readily find rewarding employment upon completion; and higher education institutions can better utilize resources to meet employer and student demands, raising the value of their educational offerings.

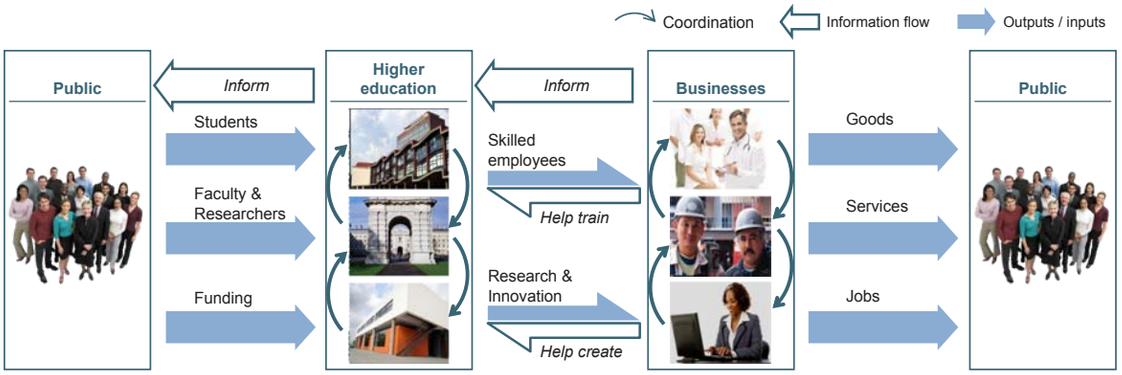
The next two strategies relate to moving from today's levels of efficacy and productivity within higher education institutions to even greater levels via collaborative efforts:

3. Form new collaborations across higher education to optimize system-wide intellectual assets and efficiency: higher education institutions across the state collaborate more with one another, acting in an effective, coordinated manner, leveraging system-wide best practices, assets, and scale to reach new levels of efficacy and efficiency.

4. Higher education takes systemic action to raise graduation rates.

Exhibit 9

SIMPLE ECONOMIC MODEL OF HIGHER EDUCATION INTERACTION WITH BUSINESSES



Making the state's higher education system more effective and productive would raise access, affordability and value for students. It would also raise the value offered and competitiveness of our higher education institutions versus those in other regions. Furthermore, this would boost the supply of valuable skills and innovations for our region's businesses, fueling their ability to grow output, create jobs, compete, and contribute to regional prosperity, while increasing the attractiveness of the region for new businesses to start or move here.

In addition to the four strategies above, two enablers support positive change: statewide education data systems and effective governance. Enhanced data reporting and infrastructure play an important role in the increased information sharing envisioned in collaborative efforts across the state higher education system.

Overall, the Task Force believes collaborations promoting the four strategies outlined above can dramatically enhance higher education in the state of Minnesota, which in turn will provide a new growth engine for regional businesses and community prosperity.

It should be emphasized that in all four strategy areas significant efforts are already under way, involving higher education institutions, businesses, students, community partners, and policy makers. The purpose of advancing the four strategies is to create a shared higher education vision for Minnesota that will greatly enhance collaborative efforts, with breadth and depth enough to usher in a new era of growth and prosperity for the state. Specific findings and details related to each strategy follow.

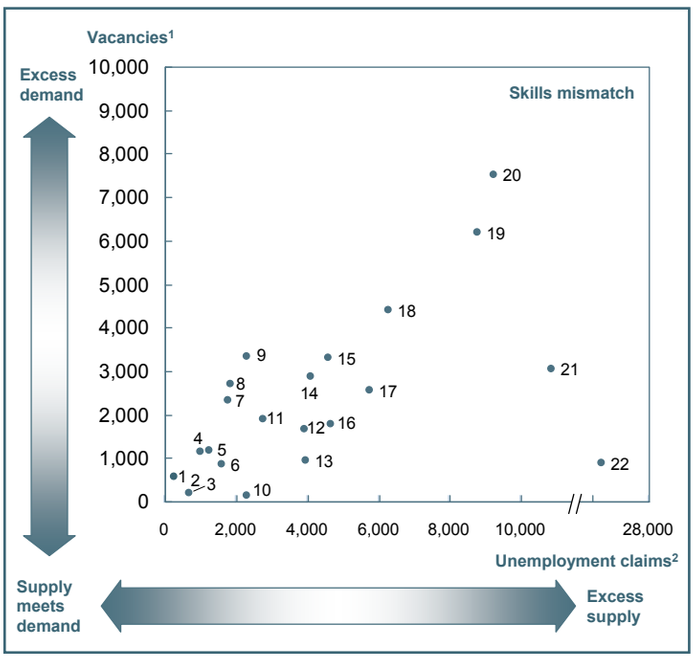
Strategy 1: Align academic offerings with workforce needs

To produce goods and services and compete in the global economy, Minnesota's businesses seek employees with strong occupational and foundational skills. Occupational skills are particular to given industries and careers, and include specific technical and trade knowledge (e.g., nursing, computer engineering, architecture, precision manufacturing, and mining). Foundational skills are widely applicable, and include skills such as critical thinking, creativity, communication, team work and project management.

Skill gaps appear in various ways. Nationally, employers report difficulty in filling open positions – 64% of surveyed employers reported difficulty in finding qualified applicants for positions, and 57% of employers reported experiencing significant impact due to not being able to fill open positions.[15] There are often skill deficiencies even among those hired. Among surveyed employers, 63% reported that many recent college graduates are not well prepared for success in the global economy.[16] Gaps can appear in the occupational skills needed in certain industries and specific jobs, but are also widespread in the foundational skills needed broadly across industries; over 80% of employers said higher education programs should put more attention on developing foundational

Exhibit 10

MINNESOTA JOB VACANCIES AND UNEMPLOYMENT CLAIMS BY OCCUPATION



Occupational Group (in order of least unemployment)

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

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

[15] McKinsey Global Institute "U.S. Jobs Survey" (2011), Manpower Group
[16] Association of American Colleges and Universities, "How Should Colleges Prepare Students To Succeed in Today's Global Economy?" (January 2007), survey on four-year graduates

skills including communication and critical thinking.[17] Skill deficiencies have costs including remediation, reduced productivity, and limited advancement potential.

In Minnesota, comparing job vacancies and unemployment across occupational groups suggests considerable opportunities for helping people find in-demand positions through training and placement (Exhibit 10):

Several occupations—such as Healthcare Practitioners and Technical Occupations and Personal Care and Service Occupations—have more job vacancies than unemployment, suggesting demand for certain skills outstripping supply. Other occupations—such as Construction and Extraction Occupations and Production Occupations—have more unemployment than job vacancies, suggesting supply of certain skills outpacing demand. Many occupations show relatively high numbers of both job vacancies and unemployment, suggesting skill gaps or mismatches within an occupation that prevent successful placement of industry-tenured persons. While aggregate level data such as this make it difficult to draw actionable conclusions, gaining further understanding into the exact nature of skill gaps and mismatches within occupations—whether they are traceable to occupational skills, foundational skills, or other factors—allows for better remedies.

Closing skill gaps is good for employers, employees, students, and regional economies. Employers benefit from having less unfilled positions and more productive employees. Employees benefit from better ongoing employment, wage, and career prospects. Students benefit from greater success in finding quality, suitable positions and better chances of advancement. (College students cite preparing for a career or profession as the leading purpose of a college education.[18]) Minnesota benefits, becoming a more appealing location for employers and students, and through productivity-driven growth.

The strategic vision of aligning academic offerings with workforce needs is in essence a vision for a vastly more effective skills market in Minnesota with the following features:

- Greater transparency into the skills needed for careers in Minnesota's economy, as
  - — Employers communicate their skill needs directly to the higher education system.
  - — Students are systematically made aware of employer skill needs, education options, and career options, so they can make better choices as they progress through their education.
- Businesses becoming active partners with higher education to help impart desired skills and experiences to students.
- Greater transparency into the skills possessed by students at different stages of their degrees or credentials, to enhance students understandings of their strengths and options throughout the education and job-finding process; to aid higher education institutions' identification of student needs for additional training or remediation; and to improve employers' matching job openings with persons well prepared for success.
- Increased activity and partnership between business and higher education in life-long learning and upskilling efforts, adding to the valuable skill base of adults already participating in the economy.
- Greater collective coordination and investment across businesses, higher education and communities in preparing our students for successful futures.

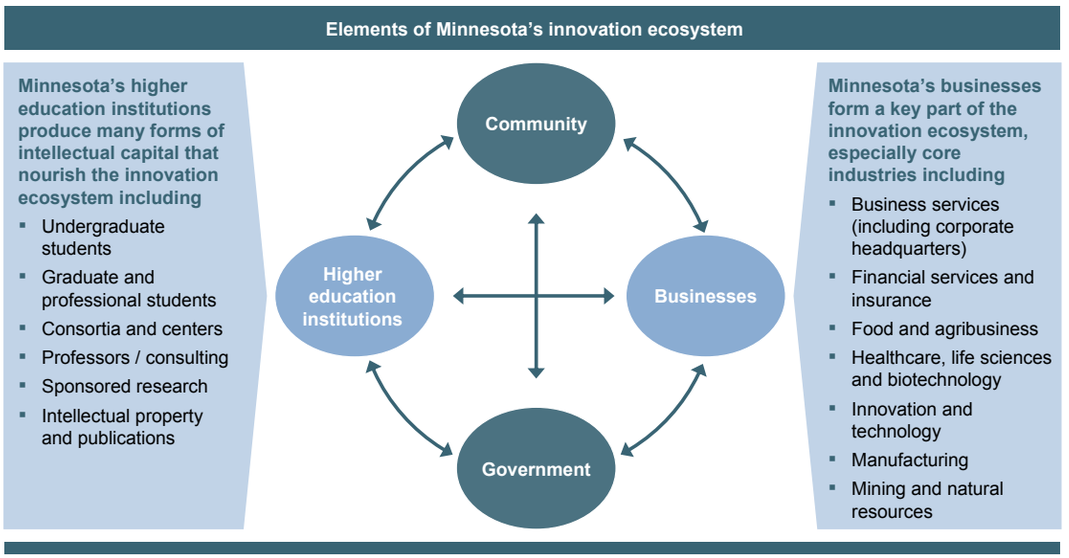
This emphasis on skills is not designed to flatten a rich and nuanced educational experience into a single-dimensioned vocational training for all persons. It is intended to help our students navigate our educational system and economy, to help them find good jobs, to prepare them for enduring career success, to enable their lifelong growth, and to strengthen our regional community in doing so.

[17] Association of American Colleges and Universities and Hart Research Associates "Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn" (2010) [1]

[18] College Board and Art & Science Group, LLC, "Student Poll Volume 6, Issue 2" (2008)

Exhibit 11

AN ABSTRACT VIEW OF MINNESOTA'S RESEARCH AND INNOVATION ECOSYSTEM



Strategy 2: Foster an ecosystem of research and innovation

Research and innovation require complex webs of relationships. Their "ecosystem" involves research and teaching institutions, businesses, policies and policy makers, financiers, entrepreneurs, and regional communities. To heighten research and innovation output and impact, the ecosystem's functioning must be improved by building on its strengths and addressing its challenges (Exhibit 11).

Within a research and innovation ecosystem:

- Higher education plays a critical role, as a nexus of new ideas, a center of learning, and a hub of powerful research infrastructure.
- Businesses also conduct research and development. There are also critical roles for businesses large and small, entrepreneurs, and venture capital in bringing innovations to the marketplace.
- Government plays multiple roles. It is often a direct funder of research and innovation ventures. Government also sets tax policy, budgets, and laws that strongly impact the ease or difficulty of innovation and commercialization within a region.
- The regional community plays an important part as well. Regions with appealing quality of life and strong cultures of innovation are able to attract, retain, and connect key research, innovation, and entrepreneurial talent.

At the heart of Minnesota's research and innovation ecosystem is the University of Minnesota. In 2010 UMN had nearly $800 million in R&D expenditures, ranking 8th among U.S. public universities and 13th among all U.S. universities. By R&D expenditures, UMN stands in truly elite company, ahead of many well-known institutions, including MIT, Yale, Berkeley, and Harvard. UMN's R&D ranking is even more notable in light of the fact that Minnesota as a state ranks 21st in population.

While R&D activity has been robust, commercialization from UMN research has also risen. A panel of university commercialization experts noted, "the University of Minnesota [Office of Technology Commercialization] has an outstanding track record of accomplishments that put it at the highest ranks of university tech transfer offices." [19] In late 2011, UMN launched "Minnesota Innovation Partnerships," or MN-IP, a pre-paid licensing agreement that greatly simplifies the R&D partnering process for the university and businesses.

Minnesota is also home to the Mayo Clinic, another nationally pre-eminent research institution. With a total of $555 million in funded science in 2010, the Mayo Clinic is an established leader in clinical treatment and medical innovation.

Other institutions of higher learning are also present in Minnesota's research and innovation ecosystem. Critical applied research, specialty research, and real-world problem solving happens at MnSCU, many private universities and other institutions. Furthermore, the state's graduate and professional students, who play a critical role in research and innovation, complete their undergraduate studies across the spectrum of Minnesota institutions of higher learning.

A vision of fostering an ecosystem of research and innovation in Minnesota has several concrete implications:

- Building relationships among research and innovation talent
  - — Enhancing the web of relationships among Minnesota researchers and innovators: there is no substitute for personal relationships, exchange of ideas, and powerful cross-fertilizations across disciplines. For example, the University of Minnesota's Industrial Partnership for Research in Interfacial and Material Engineering (iPRIME) brings researchers from over 40 companies together with faculty members to work on pre-competitive and nonproprietary research.
  - — Forming intentional R&D collaborations among related institutions and businesses: among its higher education institutions and businesses, Minnesota has concentrations of expertise in food sciences, medical devices, financial services, and other areas. New collaborations among related institutions have the potential of leveraging collective knowledge and assets towards mutually beneficial ends.
  - — Further developing the region as a talent magnet for innovation talent including researchers, graduate students and professional students.
- Creating a supportive environment
  - — Enacting tax policies and other laws that increase the ease of research ventures, business collaborations and new ventures.
  - — Attracting an increasing pool of entrepreneurial talent and venture capital to support the commercialization of innovative ideas.
  - — Building a culture and reputation for innovation and entrepreneurship: being known nationally and internationally as a region that values and welcomes innovators and entrepreneurs is an important element of attracting and retaining key talent over time.

[19] From letter to UMN following review of Office of Technology Commercialization by peer tech transfer office executives, 2010.

This situation is by no means unique to Minnesota, and a recent report from the National Research Council entitled "Research Universities and the Future of America" highlights ten recommendations. They include ways of revitalizing the partnership between universities, state and federal government, and business to improve university research and its applications; ways of strengthening institutions to enable more productiviity; and ways of building a talent pipeline. These recommendations should also inform our future plans. [20]

Strategy 3: Form new collaborations across higher education to optimize intellectual assets and efficiency

Minnesota's higher education landscape includes over 200 institutions. Historically, these institutions have operated largely independently of one another, often competing for students and resources.

Meeting the demands of the 21st century will require these institutions to operate more like a well-coordinated fleet, instead of ships passing in the night. While meaningful degrees of independence and competition are desirable, the room for collaboration and collective success is great. Through improved cost-sharing and course planning the system can realize major efficacy and productivity gains.

Many meaningful collaborations already exist across several of Minnesota's higher education institutions. A partial listing of examples includes:

- UMN and MnSCU collaborate on many academic programs.
- The Associated Colleges of the Twin Cities, a consortium of five private liberal-arts colleges and universities, promote collaborative efforts such as cross-enrollment and joint purchasing.
- The Minnesota Higher Education Technology Association joins Chief Information Officers of higher education institutions in pursuit of educational excellence and operational efficiency through collaborative efforts and shared resources.

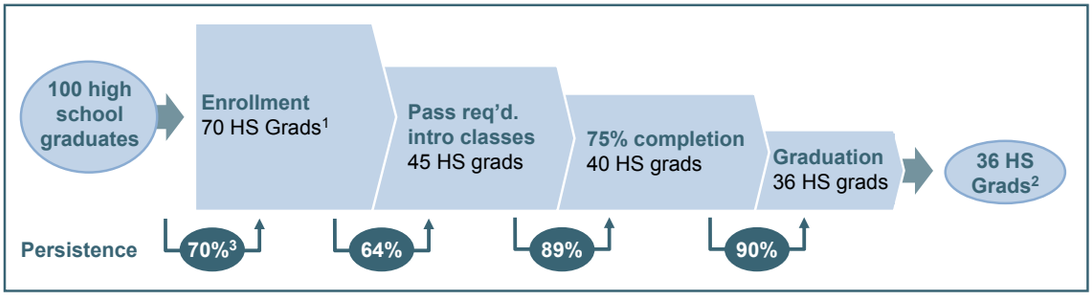
A vision for collaboration among higher education institutions would build upon existing efforts and relationships to achieve new levels of intentionality, scale, and impact. Concrete features of such collaborations could include:

- *Greater leverage of system-wide intellectual assets.* Minnesota's 200+ institutions have different specialties, program offerings and focuses, ranging from theory to application to generalist practices. Leveraging the strengths across the system in intentional program partnerships or more open cross-enrollment agreements could create additional benefits for students, teachers and employers across the state. A promising example is the nanotechnology partnership of UMN and MnSCU, which combines theoretical and applied strengths to create a program with even greater relevance to students and the marketplace.
- *Further system-wide leverage of operational best practices and combined scale.* While institutions may continue to compete to some degree for students and faculty, they are generally not competitive in their back-office operations. 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.
- *Educational excellence through mission differentiation plus collaboration.* Many institutions have broadened their offerings to appeal to diverse student interests and capture further market share. While such a

[20] Source to the National Academies Press. www. nap.edu

Exhibit 12

MINNESOTA HIGH SCHOOL GRADUATE ENROLLMENT AND COMPLETION OF 2-YEAR AND 4-YEAR POST-SECONDARY DEGREES



- The primary loss points in the funnel are
  - Between high school graduation and enrollment
  - Between enrollment and gatekeeper completion
- While this does not track any one subset of schools, it is representative of the general trends students experience across Minnesota

1 While 70% of new undergraduates are recent high school graduates, 30% of enrollees are older students. For simplicity in presentation, these other students are not included in figures above, however their advancement and completion rates once enrolled closely track the rates shown
2 Graduating within 150% time (e.g., completing 4-year programs within 6 years, and 2-year programs within 3 years)
3 Graduated in the spring and enrolled the following fall

Note: Based on a weighted average graduation rate in Minnesota of 51% calculated from IPEDS
SOURCE: IPEDS; Minnesota Office of Higher Education; team analysis

strategy has economic rationale for a single institution, it is suboptimal for a system (or portfolio) of institutions. At the system level, specialization allows for institutions to serve certain functions with high degrees of excellence and efficiency, while the needs for diversity in offerings can be met by collaborative agreements across institutions. Within the state system, some program redundancies are needed on an ongoing basis to provide geographic access and choices for students. Nevertheless, well executed, a program of mission differentiation plus collaboration could advance the entire system performance, conferring competitive advantage over other regions. There are of course challenges to organizing such differentiation and collaboration among independent and partially competing organizations; however, a strong aspiration with the right leadership and incentives could drive major systemic improvements.

Strategy 4: Graduate more students

Only half of the students who enroll in higher education complete a degree in a timely manner. This is detrimental to students, many of whom accumulate student debt but never fully realize the benefits of a post-secondary degree. It also reduces the impact of Minnesota's higher education investments, when students who begin higher learning do not complete their programs (Exhibit 12).

Reasons why students don't enroll in higher education or complete a program of study tend to fall into a few main categories of known barriers.

Perceived and real financial barriers

Students can *perceive* financial barriers if they are without adequate information or guidance to understand the benefits versus costs of higher education, the alternatives for funding affordable higher education, or how to find and secure

funding for education. Not understanding financial options or the processes to secure funding affects many: half of students with private loans do not exhaust their options for federal funding, and 13% do not apply for federal aid at all. [21]

Real financial barriers include funding shortfalls, schedule conflicts with needed work, or the opportunity cost of forgoing earnings during higher education. Escalating tuition at most schools is a barrier to enrollment and completion for many students.

Social barriers related to navigating the higher education experience

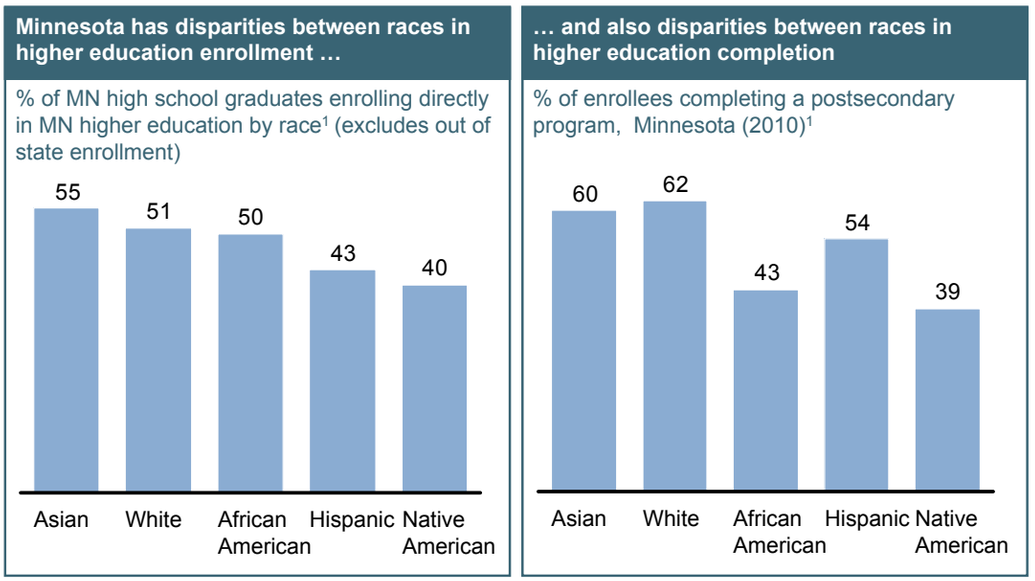
Programs of higher education have many mandatory processes and thresholds: completing applications and financial forms; registering for courses; registering for health and other student services; or meeting assignment and test schedules. Many students do not have the social preparation or personal support networks (e.g., informed parents, friends and mentors) to help them make positive choices at the many decision points arising through a program of higher education on the path to completion.

Academic barriers to engaging in and completing higher education programs

Many students who do not enroll in higher education feel that it is not to their tastes or that they have a low probability of successfully completing the academic requirements. Once in an institution of higher education, many students struggle to satisfy their program's introductory or advanced requirements; 40% of Minnesota's public higher education students require one or more developmental courses. [22]

Exhibit 13

DIFFERENCES IN HIGHER EDUCATION ENROLLMENT AND COMPLETION BY ETHNICITY



1 5-year average rates of Minnesota high school graduates enrolling directly in MN higher education, 2006-2010.The average total in-state participation rate was 51%, with an additional 20% of MN high school graduates enrolling directly in higher education out of state
2 Completing 4-year program within 6 years times
SOURCE: Minnesota Office of Higher Education, IPEDS

[21] The Project On Student Debt, "Private Loans: Facts and Trends" (July, 2011)
[22] Minnesota State Colleges and Universities and the University of Minnesota, "Getting Prepared: a 2010 report on recent high school graduates who took developmental/remedial courses"

Enrollment and completion rates also differ across student groups, with achievement gaps visible among students of different socio-economic or ethnic backgrounds (Exhibit 13).

A host of student support measures provide successful remedies to these barriers: financial aid addresses real economic needs, while student guidance can address perceived financial barriers, social, and academic issues. With known solutions to known needs, the challenge is largely one of resources: securing enough student support capacity to help students in need in times of need.

A vision of graduating more students from Minnesota higher education has several concrete features:

- 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 understand financial aid alternatives and are able to complete aid processes.
- Students graduate high school with the skills needed to engage in an appropriate form of higher education if they so choose.
- 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 ethic 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.

LONG-TERM STRATEGIES, NEAR-TERM ACTIONS

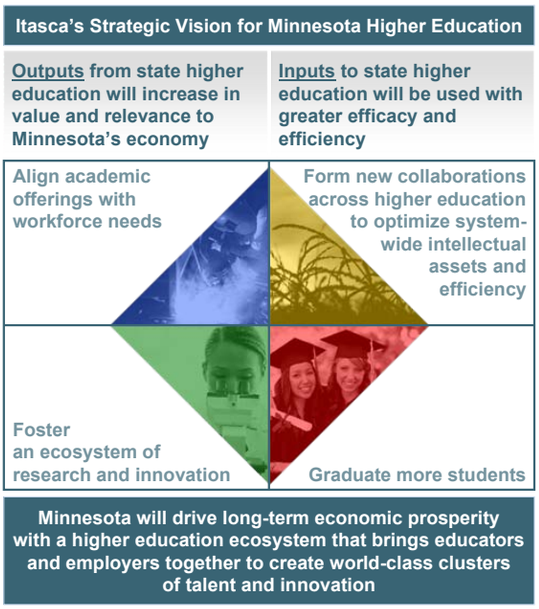
The Itasca Higher Education Task Force included leaders from Minnesota corporations and higher education institutions. It set out to assess higher education across Minnesota and carefully consider what strategies can create major, lasting positive change.

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 (Exhibit 14).

Some changes can be created quickly; others will take years of concerted effort to build. The Itasca Higher Education Task Force aspires to be an enduring influence for positive change in Minnesota's higher education landscape. While it may take direct action in only a limited number of areas, Itasca hopes to inform higher education efforts and policies, and to help connect and empower higher education and business collaborators across the state.

The Itasca Higher Education Task Force will take direct action in a few carefully selected areas. In choosing activities to pursue, the Task Force considered challenges it could uniquely address, versus areas that are largely addressable by higher education institutions themselves, or by other existing community partners.

Exhibit 14



The Task Force will sponsor key actions within each of the four strategies:

- **Enhancing workforce alignment:** several large workforce initiatives have recently been launched in Minnesota.[23] The Task Force will seek to enhance existing efforts by driving further business participation from human resources and line of business experts, who have deep expertise on workforce skill needs and can offer valuable insight. The Task Force will further establish benchmark assessments to measure the type and quality of skills students attain from higher education compared to those desired in the market. Lastly, the Task Force will create new means for informing students of skill needs and related program and career options (to close information gaps and help students make better education and career choices) as well as new means of engaging students directly, including a dramatic increase in internships statewide.

[23] Minnesota workforce efforts include (but are not limited to) the Skills@Work campaign by the Governor's Workforce Development Council and the United Way; a Workforce Assessment effort by partners including MnSCU, DEED, The Minnesota Chamber of Commerce, local Chambers of Commerce, the Governor's Workforce Development Council, Greater Twin Cities United Way, Minnesota Workforce Centers, and Minnesota Initiative Foundations

- **Fostering the regional environment of research and innovation:** the Task Force will establish new research and innovation partnerships among Minnesota's businesses and higher education institutions, and identify opportunities to leverage program strengths across the higher education system (such as new programs combining theoretical and applied capabilities across institutions).

- **Creating new operational collaborations among higher education institutions:** the Task Force will facilitate a procurement study across Minnesota's higher education institutions. Opportunities to leverage best practices or system scale will generate savings, which can then be reinvested in higher education. The procurement study is intended to be the initial phase of what can become an enduring set of dialogues and efforts to deepen collaborations across institutions and realize ever greater efficacy and efficiency over time.

- **Graduate more students:** Increasing graduation rates, helping students and the state maximize the value generated by their investments in education. While supporting students to increase graduation rates is largely an effort that happens inside educational institutions, the Task Force will aid these efforts through enhanced transparency, accountability to clear targets, and further support where needed.

The vastness of the higher education system and the complexity of issues it faces entails that not all of today's important issues can be addressed simultaneously. The Task Force considered other significant topics such as ongoing rapid technology change in education, changes to traditional federal and state funding sources and the need for sustainable funding of institutions and students, the emergence of skill-based credentials, and other issues.

The Task Force's intention has not been to dismiss any of these and other vitally important concerns, but rather to initiate its efforts on those priorities where it can best effect near-term positive change. It is the hope of the Task Force that a coalition of education supporters in Minnesota will continue to dialogue, to grow in its membership, connections and efforts, and to take on and positively impact the critical issues facing education and our statewide community.

Photo courtesy of Minnesota State University, Mankato.

CONCLUSION

Higher education is a cornerstone of enduring prosperity for the state of Minnesota. All Minnesotans – our business people, policy makers, members of civic organizations, educators, students, and workers, of all political preferences and all backgrounds – have an interest in promoting excellence in the state's higher education system. Similarly, all Minnesotans stand to lose should higher education be ignored or actively dismantled in the region.

The four strategies emerging from the Task Force's findings share the common theme of collaboration: new alliances among higher education institutions, and new partnerships between business and higher education. While many important collaborations are already under way, these new efforts are directed at building partnerships with far greater intentionality and scale than previously imagined, creating the nation's foremost alliance of educators and employers.

We call on the citizens, families, students, businesses, policy makers, civic organizations, and philanthropic entities, and educational organizations of Minnesota to make a united stand in support of higher education, building on the state's history of excellence in post-secondary education. We ask for your voice and your active support in helping transform Minnesota higher education, moving from a strong current position to a system even better poised for the challenges and opportunities of the 21st century, where collaborations among higher education institutions, businesses, and community partners create a rich network that fuels the region's learning, innovation, growth and prosperity for decades to come.

Photo courtesy of Macalester College

APPENDIX

An overview of Minnesota's economy by sector provides helpful context to Itasca's higher education strategies.

A SNAPSHOT OF MINNESOTA'S ECONOMY BY SECTOR

Sector	Percent of Gross State Product, 2011	Revenue Growth CAGR 2002-2011[1]	Percent of MN Employment, 2011	Employment Growth CAGR 2002-2011
Financial Activities	22%	2%	6%	0%
Trade, Transportation, & Utilities	17%	2%	18%	-1%
Manufacturing	14%	3%	11%	-2%
Professional and Business Services	12%	2%	12%	1%
Education and Health Services	10%	3%	17%	3%
Government	9%	-1%	14%	0%
Information	4%	4%	2%	-2%
Construction	3%	-5%	3%	-3%
Leisure and Hospitality	3%	1%	8%	0%
Agriculture	2%	7%	3%	-1%
Other Services (except Public Admin.)	2%	-2%	4%	0%
Natural Resources and Mining	0%	-2%	0%	0%

1 In constant 2005 dollars

SOURCE: U.S. Bureau of Labor Statistics: Current Employment Statistics, Quarterly Census of Employment and Wages; Moody's Analytics Estimates

Key observations:

- Minnesota has a diverse economy, with no sector accounting for more than 25% of gross state product (GSP).
- Sector size by employment does not directly track size by percent of GSP.
- Six of Minnesota's largest seven sectors (by GSP) have posted 2% compound annual growth 2002-2011 in real terms.
- Employment growth of 1% or greater CAGR 2002-2011 appears for only two of eleven sectors.

Itasca's higher education efforts in partnership with Minnesota businesses will take sector and cross-sector approaches where appropriate. We ask for sector and cross-sector specialists to enhance these efforts by adding expertise in identifying specific opportunities for workforce, innovation, or other improvements.

About this report

The Itasca Project sponsored this report to better understand the performance of Minnesota's higher education system and to identify strategies that should be implemented for higher education in Minnesota to drive long-term, sustainable economic growth and prosperity.

The recommendations are based on research and analysis conducted by McKinsey & Company, a global management consulting firm.

Methodology for the project included analyzing public data sources, reviewing literature and studies on higher education performance, interviewing experts, and benchmarking other regions. The research included interviews of over 60 external experts, including business leaders, higher education leaders, and policymakers.

This report concludes the first phase of the project, which involved fact-finding and identifying opportunities. The second phase, which includes communications, advocating, and implementation continues.

About the Itasca Project

The Itasca Project is an employer-led alliance drawn together by an interest in new and better ways to address regional issues that impact our future economic competitiveness and quality of life in the Twin Cities area. Its 60-plus participants are primarily private-sector CEOs, public-sector leaders, and the leaders of major foundations based in the Twin Cities region.

Officers

Position	Name and Company
Chairperson	Mary Brainerd, President and CEO, HealthPartners
Vice-chairperson	Richard Davis, Chairman, President, and CEO, US Bancorp

Task Force

This higher education effort was led by a Task Force convened by The Itasca Project.

Chair

Name	Position	Organization
Greg Page	Chairman and CEO	Cargill

Task Force Members

Name	Position	Organization
Jim Campbell	Retired, Chairman & CEO	Wells Fargo Minnesota
Richard Davis	Chairman, President & CEO	US Bank
Kathy Gaalswyk	President	Initiative Foundation
Eric Kaler	President	University of Minnesota
Jay Lund	President & Chief Executive Officer	Andersen Corporation
Kim Nelson	Sr. VP, External Relations; President, General Mills Foundation	General Mills
Ken Paulus	CEO	Allina
Brian Rosenberg	President	Macalester College
Steven Rosenstone	Chancellor	Minnesota State Colleges and Universities
Andy Slavitt	CEO	OptumInsight
Judy Werthauser	Vice President, Human Resources	Target

Advisory Group

The Itasca Project would like to thank the Advisory Group for their guidance and advice

Name	Position	Organization
Calvin Allen	Senior VP of Corporate Strategic Planning and Human Resources	HealthPartners
Sherri Allen	Superintendent	Mankato Public Schools
Collin Barr	President	Ryan Companies
Kathleen Blatz	Former Chief Justice	Minnesota Supreme Court (Retired)
Mary Brainerd	CEO	HealthPartners
Craig Broman	President	St. Cloud Hospital
Bill Burns	Attorney at Law	HANFT FRIDE
Marilyn Carlson Nelson	Chairman	Carlson
Sarah Caruso	President and CEO	Greater Twin Cities United Way
Brenda Cassellius	Commissioner	Minnesota Department of Education
Alex Cirillo	Retired Staff Vice President	3M
Angie Craig	VP Human Resources	St. Jude
Cathy Cruz Gooch	Founder	Catallia Mexican Foods
Ric Dressen	Superintendent	Edina Public Schools
Les Fujitake	Superintendent	Bloomington Public Schools
Bill George	Former CEO, Medtronic; Professor of Management Practice at HBS	Medtronic (Retired) Harvard Business School
Kevin Gilligan	Chairman, CEO & Director	Capella University
Susan Heegaard	Vice President, Educational Achievement	Bush Foundation
Bob Hoffman	VP for Strategic Business, Education and Regional Partnerships	Minnesota State University - Mankato
Eric Jolly	President	Science Museum of Minnesota
Sean Kershaw	President	Citizens League
Kevin Kopischke	President	Alexandria Technical & Community College

Name	Position	Organization
Tim Mulcahy	VP Research & Development	University of Minnesota
Russ Nelson	President	Nelson, Tietz & Hoye
David Olson	President	MN Chamber of Commerce
Scott Peterson	Executive VP & Chief Human Resources Officer	The Schwan Food Company
Bryan Phillips	Senior Vice President, Legal and Human Resources, General Counsel and Secretary	SurModics
Mark Phillips	Commissioner	Department of Employment and Economic Development
Larry Pogemiller	Director of Office of Higher Education	Minnesota Office of Higher Education
Paul Pribbenow	President	Augsburg College
Carolyn Roby	VP Wells Fargo Foundation Minnesota	Wells Fargo
Julie Schnell	President	Services Employees International Union
David Sparby	Senior Vice President & Group President	Xcel
Jean Taylor		
Traci Tapani	Co-President	Wyoming Machine
Kathy Tunheim	President & CEO	Tunheim Partners
Sandy Vargas	President & CEO	The Minneapolis Foundation
Prince Wallace	CEO	Independent Packing Services
Andy Wells	President	Wells Technology
Inez Wildwood	Manager, Talent Acquisition and Development Chair, Governor's Workforce Development Council	Allete