2015 University Plan, Performance, and Accountability Report

UNIVERSITY OF MINNESOTA
Driven to Discover℠

2015 University Plan, Performance, and Accountability Report

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Introduction

"To benefit the people of the state, the nation, and the world"

University Mission

The University of Minnesota, founded in the belief that all people are enriched by understanding, is dedicated to the advancement of learning and the search for truth; the sharing of this knowledge through education for a diverse community; and to the application of this knowledge to benefit the people of the state, the nation, and the world.

—University mission

This mission, carried out on multiple campuses and throughout the state, is threefold:

Providing an extraordinary education that generates knowledge, understanding, and creativity. We seek to develop students who become leading scientists and teachers, engineers and artists, health and business professionals and who contribute to their communities at every level.

Conducting breakthrough research that moves us forward. Our researchers improve our understanding of the world and how we work and live.

Partnering with communities to advance research, share knowledge, and provide students with powerful academic experiences that address the challenges of a diverse and changing world.

To support this mission effectively, the University is committed to:

Employing world-class faculty and staff who are innovative, energetic, and dedicated to the highest standards of excellence.

Stewarding an outstanding organization that is responsible with resources, dedicated to measuring and improving performance, and aligned to support the University's core functions of teaching, research, and outreach.

University Overview

The University of Minnesota, founded in 1851, seven years before the territory of Minnesota became a state, is Minnesota's flagship and land-grant university and one of its most important assets, as well as a powerful resource for the region, the nation, and the world.

The University is composed of five campuses with distinct roles, each campus contributing to the University's mission: the Twin Cities campus, where the University originated; the Duluth campus, which joined the University in 1947; the Morris campus, which became a system campus in 1960; the Crookston campus, added in 1966; and the Rochester campus, which was designated a system campus in 2006. The University is the state's only research university, and the Twin Cities campus is among the nation's most comprehensive institutions—one of only four campuses that have agricultural programs as well as an academic health center with a major medical school.

The University is the state's economic and intellectual engine. As a top research institution and one of only 62 members of the prestigious Association of America Universities, it serves as a magnet and a means of growth for talented people, a place where ideas and innovations flourish, and where discoveries and services advance Minnesota's economy and quality of life. As Minnesota's land-grant institution, the University is strongly connected to Minnesota's communities, large and small, partnering with the public to apply its research for the benefit of the state and its citizens.

Governance and Leadership

The University is governed by a Board of Regents elected by the Minnesota Legislature (See discussion on page 3 and list of current Regents in Appendix B). The president and vice presidents serve as the senior leaders of the University and the Twin Cities campus, which avoids the added administrative cost of a separate "system" office. Direct leadership for the remaining campuses is provided by four campus chancellors (See list of senior leaders in Appendix C).

Accreditation

All campuses of the University of Minnesota operate with the accreditation of the Higher Learning Commission. The Twin Cities campus has been accredited continuously since 1913. The Duluth campus has been accredited since 1968, while the Morris and Crookston campuses were first accredited in 1970 and 1971. The Rochester and Twin Cities campuses are accredited jointly. Each campus is accredited to offer the bachelor's degree; the Duluth campus is accredited to offer the master's degree and the Doctor or Education (Ed.D.) degree; and the Twin Cities campus is accredited to grant master's, doctoral, and professional degrees (See accreditation discussion on page 5).

Enrollment

Total enrollment at the University's campuses for fall 2015 was 66,651. Sixty-five percent of registered students were undergraduates. Non-degree-seeking students represented nearly ten percent of total enrollment. In 2014–15, the University granted 10,444 bachelor degrees, 3,540 master's degrees, 903 doctoral degrees, and 862 traditional professional degrees (M.D., D.V.M., D.D.S., Pharm.D., J.D., L.L.M.).

An Accountable University

"...[The regents shall] make a report annually, to the Legislature... exhibiting the state and progress of the University... and such other information as they may deem proper, or may from time to time be required of them."

—*University charter, 1851 Territorial Laws, Chapter 3, Section 16*

Since the University's inception over 160 years ago, public and University leaders have established and continuously reaffirmed a principle of accountability. Accountability for an institution as important and complex as the University of Minnesota, however, has myriad forms and interpretations. For some, accountability requires a discussion about the University's ability to address its mission. For others, accountability may necessitate a precise accounting of revenue and expenditures, an assurance of efficient and competent management of institutional resources, or records and institutional data about students and performance. Yet others may argue that accountability is best met by examining leadership and its ability to employ strategies that advance a vision. Still others understand accountability in terms of return on investment and so look for evidence of direct impacts to the State of Minnesota and it citizens.

The University's leaders take seriously this responsibility to be accountable, in all of the ways mentioned above. Among the participants engaged in the University's accountability relationships are its Board of Regents, senior leaders and internal units, faculty, state and federal authorities, citizen and nonprofit organizations, accreditation associations, and multiple media organizations.

University of Minnesota Board of Regents

Chapter 3 of Minnesota's 1851 Territorial Laws established the University of Minnesota and specified that "[t]he government of this University shall be vested in a board of twelve regents, who shall be elected by the Legislature." Later sections delineate specific powers to "enact laws for the government of the University"; "regulate the course of Instruction" and confer degrees and diplomas; regulate and prescribe tuition and fees; and select, manage, and control all University lands.

These twelve regents—eight who are elected to represent Minnesota's eight congressional districts and four who are elected at large—represent the interests and needs of the state and the citizens of Minnesota and, on their behalf, hold the University's senior leadership and administration accountable. The Board's fundamental accountability documents are the University Plan, Performance, and Accountability Report (www.academic.umn.edu/accountability); the University Operating Budget (www.budget.umn.edu/document.htm); and the University Capital Budget (www.cppm.umn.edu/master_planning.html).

Other accountability activities at this level include the president's report to the Regents at each of their regular board meetings, as well as monthly, quarterly, and annually mandated reports to the Board on topics such as student admissions and progress, faculty promotion and tenure, tuition rates, the independent auditors' report, real estate transactions, gifts, asset management, purchases of goods and services over $1 million, new and changed academic programs, academic unit strategic plans, NCAA reports on student-athletes, and presidential performance reviews. Such reports and presentations are archived on the Board of Regents website.

University Progress Card

Beginning last spring and continuing through the fall, the Board of Regents has engaged with the

administration on the development of a progress card framework to drive performance and support oversight. The effort focused on the question of the areas for which the Board of Regents should set specific aspirational goals. The Board's intent is to focus oversight on a limited number of measurable goals and trends that indicate or drive excellence, understanding that the University measures progress and accountability broadly throughout the institution in many ways, including the University's Plan, Performance and Accountability Report.

The Board has adopted a set of "gold" and "maroon" measures for this purpose. The gold measures represent data sources that are well understood and agreed upon, where there is the ability to set a quantifiable goal over a reasonable time period, and where the University can take actions to influence the results. The maroon measures are important trends and indicators, but the goals may be directional in nature or the measure may only need to be monitored, and University action alone is not likely to significantly influence the measure. The Board's intent is to monitor these measures on a regular basis to assess University progress in these important areas.

All of these progress card measures are connected to and more deeply informed by the broader discussion of performance and accountability found in the rest of this report. See page 6 for the current progress card and Appendix E for data definitions.

Major, University-level Accountability Activities

Senior leaders engage in reporting, communications, and other activities that address the University's accountability responsibility. Select examples include:

- The President's annual State of the University address.
- Studies such as the University's Economic Impact study (impact.umn.edu), which showed that the University creates $8.6 billion in total economic impact annually.
- Annual Report of University research activity (www.research.umn.edu/news/reports.html)
- Annual accounting of student services fee allocations (www.studentservicesfees.umn.edu).

- Public Engagement reports (www.engagement. umn.edu/our-impact/reports)
- Institutional success and demographic data managed by the Office of Institutional Research (www.oir.umn.edu)
- Annual Report on Real Estate (www.uservices. umn.edu/assets/pdf/RealEstate_2015.pdf)
- Annual Report on Sustainability (www.uservices. umn.edu/assets/pdf/Sustainability_2015.pdf)
- Energy Management and Utilities update (www.uservices.umn.edu/assets/pdf/ EnergyMgmtUtilities_2015.pdf)
- Facilities Condition and Utilization update (www. uservices.umn.edu/assets/pdf/FCA_2015.pdf)
- Capital Planning and Project Management Semi-Annual Report (www.uservices.umn.edu/assets/ pdf/CPPM_2015.pdf)
- Survey findings, including citizen, alumni, student, and employer satisfaction;
- University participation in higher education consortia, such as the Association of American Universities, Association of Public and Land-grant Universities, American Council on Education, and Committee on Institutional Cooperation.

Office and Program Reports

In addition to the major reports prepared at the institution level by senior leaders for the Board of Regents and other audiences, other offices and programs across the University produce reports or other accountability communications for an array of stakeholders. These include reporting done by University research centers; key administrative or student services areas; and annual reports to donors.

Government and Other External Organization Requirements

The University provides a number of annual or biannual reports to the Minnesota legislature and other organizations, including:

- Biennial Report to the Minnesota State Legislature, which showed that the University had exceeded all performance measures set forth by the Minnesota Legislature for fiscal year 2014;

- Postsecondary Planning: A joint report to the Minnesota Legislature by the Minnesota State Colleges and Universities and University of Minnesota;

- Compliance reports to such agencies as the U.S. Department of Education, National Science Foundation, National Institutes of Health, U.S. Department of Agriculture, National Collegiate Athletic Association, University Institutional Review Board, City of Minneapolis, Hennepin County, and Minnesota Office of Higher Education;

- Testimony to local, state, and federal governments;

- Assessment and evaluation reports to philanthropic foundations.

Institutional and Program Accreditation

One tool that holds the University accountable for academic quality is accreditation. Accreditation is the process of assuring and advancing the quality of higher education institutions' campuses, departments, and programs through reviews by outside agencies. Two types of accreditation, with varied breadth, apply to the University.

The first type of accreditation reviews an entire higher education institution and its programs for quality. Each University of Minnesota campus operates with full accreditation at the institutional level by the Higher Learning Commission.

The second type of accreditation involves evaluations by a specialized accrediting body associated with a national professional organization or with a specific discipline. At the University, over 200 academic programs are accredited by bodies such as the American Bar Association, Accreditation Board for Engineering and Technology, National Association of Schools of Music, National Council for Accreditation of Teacher Education, and Accreditation Council for Graduate Medical Education.

To learn more about both types of accreditation at the University, see www.academic.umn.edu/provost/reviews/accreditation.html.

Media and the General Public

Media organizations, such as the *Minnesota Daily*, *Pioneer Press*, *Star Tribune*, and Minnesota Public Radio, play an important role in holding the University accountable. The Minnesota Data Practices Act is a set of laws designed to ensure that the media and members of the general public have access to public records of government bodies at all levels in Minnesota. This access positions other parties to engage the University, to raise questions, and to verify information.

The University Plan, Performance, and Accountability Report

As noted earlier, Board of Regents operations policy identifies this report as one of three fundamental accountability and planning documents. It reports on the University's effectiveness in fulfilling its mission, while the operating and capital budgets report on the University's fiscal management.

Specifically, the University Plan, Performance, and Accountability Report:

- articulates the mission and vision of the University;

- identifies critical issues and challenges confronting the University;

- illustrates and analyzes longitudinal trends in key areas;

- provides a means for comparisons with peer institutions; and

- identifies areas for continued work.

The pages that follow align and connect to the mission of the University. Chapter 3 describes some of the planning underway at each campus to ensure future success and excellence. Chapters 4, 5, and 6 discuss the University's effectiveness in fulfilling the fundamental land-grant mission of teaching, research, and outreach. Chapters 7 and 8 address the University's effectiveness in supporting that mission by employing world-class faculty and staff and stewarding an outstanding organization.

University Progress Card

Gold Measures

Entering Year		2008	2009	2010	2011	Goal/Year
4-year graduation rate	Crookston	35.5%	34.7%	42.5%	44.5%	45%/2017 cohort
	Duluth	37.4%	37.5%	38.2%	39.0%	45%/2017 cohort
	Morris	57.4%	53.2%	53.4%	52.6%	60%/2017 cohort
	Rochester	NA	50.0%	50.0%	63.1%	60%/2017 cohort
	Twin Cities	58.1%	59.1%	60.9%	63.3%	65%/2017 cohort
Entering Year		**2006**	**2007**	**2008**	**2009**	**Goal/Year**
6-year graduation rate	Crookston	53.4%	46.6%	51.7%	48.4%	60%/2015 cohort
	Duluth	59.6%	66.7%	65.5%	66.5%	68%/2015 cohort
	Morris	64.2%	68.2%	73.5%	68.1%	80%/2015 cohort
	Rochester	NA	NA	NA	60.0%	60%/2015 cohort
	Twin Cities	73.2%	75.7%	78.7%	77.6%	82%/2015 cohort
Entering Year		**2007**	**2008**	**2009**	**2010**	**Goal/Year**
4-year graduation rates of Pell-eligible students—system		35.8%	41.7%	41.9%	43.9%	54%/2017 cohort
		2011–12	**2012–13**	**2013–14**	**2014–15**	**Goal**
Twin Cities freshman average ACT		27.5	27.7	27.9	27.9	>28.0
		2010–11	**2011–12**	**2012–13**	**2013–14**	**Goal/Year**
Institutional gift aid		$177M	$209M	$217M	$224M	$275M/2021
		FY2010	**FY2011**	**FY2012**	**FY2013**	**Goal/Year**
R&D expenditures		$786M	$847M	$826M	$858M	$900M/2021
		FY2011	**FY2012**	**FY2013**	**FY2014**	**Goal/Year**
Medical School ranking		29	28	27	30	Top 20/2021
		2008–09	**2009–10**	**2010–11**	**2011–12**	**Goal/Year**
Faculty awards N and (Rank: Public Universities)		23 (16th)	34 (7th)	25 (10th)	33 (5th)	35+ (Top 10)/2021
				2013	**2014**	**Goal/Year**
% Participation in Employee Engagement Survey				57%	64%	72%/2021
			FY2014	**FY2015**	**FY2016**	**Goal/Year**
Op-Ex—continued progress on $90M			$18.8M	$40.4M	$57.8M	$90.M/FY19

Maroon Measures

Strategic Focus	Performance Drivers/Outcomes	2008	2009	2010	2011	Goal
Undergraduate Education	Twin Cities transfer student 3-year graduation rate	60.1%	57.1%	39.3%	62.5%	>65%
		2010–11	2011–12	2012–13	2013–14	Goal
Graduate Education	Graduate and professional degrees awarded	5,309	5,291	5,242	5,270	>5,250
		2010–11	2011–12	2012–13	2013–14	Goal
Financial Accessibility	Median undergraduate debt at graduation—system	$24,730	$25,186	$24,880	$24,854	Grow no faster than CPI; Correct for federal/state policy changes
		2012	2013	2014	2015	Goal
Inclusive success	Students of color with a favorable sense of belonging on campus (SERU survey)	58.7%	59.2%	57.5%	57.3%	Match non-SOC response (currently 71.5%)
		2011	2012	2013	2014	Goal
Serving Minnesota Students	Percent of Minnesota high school graduates enrolling at the University as freshmen	10%	10.1%	10.5%	10.6%	Maintain historical access
	OR	2011	2012	2013	2014	Goal
Serving Minnesota Students	Percent of Minnesota high school graduates that elect to attend college in Minnesota and enroll at the University as freshmen	13.7%	13.9%	16.2%	16.7%	Maintain historical access
		2011–12	2012–13	2013–14	2014–15	Goal
Health Sciences	Enrollment in in-demand health science specialities (Nursing, Pharmacy, Dentistry)	2,021	1,988	2,000	2,051	>2,100
	The total combined fall enrollment in Academic Health Center schools and the AHC Center for Allied Health	6,176	6,268	6,292	6,194	>6,350
		2010–11	2011–12	2012–13	2013–14	Goal
Research	National public research ranking	8	8	9	9	Maintain top 10
	MN-IP agreements	NA	14	41	51	10% annual growth
		2010–11	2011–12	2012–13	2013–14	Goal
Land Grant Mission	Public service expenditures	$225M	$245M	$249M	$253M	>$254M
		2010–11	2011–12	2012–13	2013–14	Goal
Academic Excellence	Citations per faculty member	111	127	126	124	>125
			2000–05	2005–10	2010–15	Goal
	National scholarships awarded to students		31	52	75	>80 from 2015–2020
		FY2011	FY2012	FY2013	FY2014	Goal/Year
Operational Excellence	Spending on leadership & oversight vs. mission and mission support (%)	NA	8.8%	8.6%	8.3%	Decrease over time
	GSF in poor or critical condition (facility condition assessment)	7.43M	7.33M	7.61M	7.78M	Decrease over time
	Sustainability—Metric tons of green-house gasses (2008 base level: 728,000)	NA	556,2000	569,2000	573,100	50% reduction from 2008 levels by 2021 (364,000)
	Credit rating	Aa1	Aa1	Aa1	Aa1	Maintain per Board policy
		2001–04	2002–05	2003–06	2004–07	Goal
Athletics	Graduation Success Rate (GSR)	79.8%	83.1%	83.8%	86.4%	Maintain recent gains

Planning for Success

Each of the University's campuses has a distinctive history and strategy for contributing to the University's mission and vision in the way that best serves its students, the region, and the state. Together, the Twin Cities, Crookston, Duluth, Morris, and Rochester campuses contain a rich variety of academic departments and degree programs, all of them essential components of the University system.

The strengths of each campus complement one another and contribute to meeting the educational and workforce needs of the state. The following sections summarize how each campus is planning for success in achieving the University's mission summarized on page 1. Links to comprehensive campus strategic planning documents are listed in Appendix A.

Crookston

Duluth

Morris

Twin Cities

Rochester
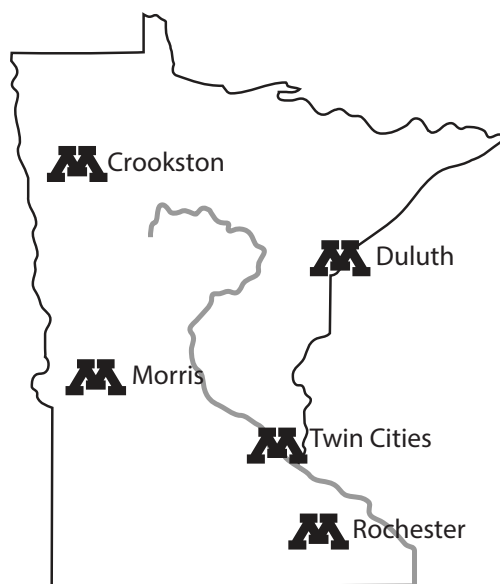
Twin Cities Campus

Founded

1851

Leadership

Eric W. Kaler, President
Karen Hanson, Senior Vice President for Academic Affairs
  and Provost

Colleges and Schools

Carlson School of Management
Center for Allied Health Programs
College of Biological Sciences
College of Continuing Education
College of Design
College of Education and Human Development
College of Food, Agricultural and Natural Resource Sciences
College of Liberal Arts
College of Pharmacy
College of Science and Engineering
College of Veterinary Medicine
Humphrey School of Public Affairs
Law School
Medical School
School of Dentistry
School of Nursing
School of Public Health

Degrees/Majors Offered

150 undergraduate degree programs; 179 master's degree programs; 103 doctoral degree programs; and 5 professional programs in law, dentistry, medicine, pharmacy, and veterinary medicine

Student Enrollment (Fall 2015)

Undergraduate	30,511	(60%)
Graduate	12,659	(25%)
Professional	3,635	(7%)
Non-degree	3,873	(8%)
Total	**50,678**	

Employees (Fall 2015)

Direct Academic Providers	6,641	(29%)
Fellows, Trainees, and Students in Academic Jobs	5,985	(26%)
Higher Education Mission Support	3,071	(13%)
Intercollegiate Athletics	123	(1%)
Facilities-Related Jobs	1,298	(6%)
Organizational Support	5,099	(22%)
Leadership	1,047	(5%)
Total Employees	**23,264**	

Degrees Awarded (2014–15)

Bachelor's	7,553	(60%)
Master's	3,308	(26%)
Doctoral and Professional	1,761	(14%)
Total	**12,622**	

Campus Physical Size (2015)

Minneapolis

Number of Buildings	162
Assignable Square Feet	10,959,938

St. Paul

Number of Buildings	98
Assignable Square Feet	2,507,588

Budget Expenditures (FY2016)

$3.4 billion

Planning at the University of Minnesota Twin Cities

The Twin Cities campus is in year two of implementing a ten-year strategic plan to accelerate advancement of excellence and impact in research, teaching, and outreach.

Approved by the Board of Regents in fall 2014, the strategic plan was developed with broad input over many months by a campus-wide workgroup and extended teams of faculty, staff, and students. The plan builds on the strengths of the campus as Minnesota's globally engaged research university and one of few major land-grant research institutions situated in a major metropolitan area. With a theme of "Driving Tomorrow," the plan recognizes the special opportunities and responsibilities the campus has to bring its resources more powerfully to bear on "Grand Challenges"—the most pressing and complex challenges of the state of the Minnesota and the world.

The plan frames many actions the campus will take over the next decade to fulfill its distinctive responsibilities as Minnesota's land-grant university, dedicated to serving the public good; and the state's designated research institution, charged with positioning Minnesota at the forefront of emerging knowledge and educating highly skilled workers, professionals, leaders, and global citizens to thrive in a diverse and changing world.

Strategic Priorities

Implementation of the plan will involve all sectors of the campus in initiatives and collaborations to strengthen transformative research, outstanding education, meaningful outreach, and productive collaboration, as captured in four key goal areas:

- **Leverage exceptional research and curricular strengths to address society's "Grand Challenges"**—develop and support more ambitious and innovative collaborations across disciplines as well as through new learning and career pathways that prepare students to be outstanding leaders, innovators, and global citizens.

- **Reject complacency to foster an invigorated campus culture of ambition, challenge, exploration, and innovation**—encourage intelligent experimentation and highest expectations in all aspects of our mission.

- **Recruit and retain field-shaping researchers and teachers from diverse disciplines and backgrounds**—make Minnesota a magnet for diverse high achievers and innovators who will advance excellence in research, outreach, and engagement and provide world-class educational experiences for graduate, professional, and undergraduate students.

- **Capitalize on the campus's unique location and its global reach to build a culture of reciprocal engagement**—expand partnerships and shared purposes to benefit the state and our students and to deepen Minnesota's connections around the globe.

Implementation Steps and Progress

Colleges and departments have been centrally involved in aligning programs and activities with the broader campus goals. The plan's priorities have been integrated into the compact planning and budget planning processes that shape academic directions and strategic investment decisions. Its goals have also been incorporated into work plans in the central administrative areas of undergraduate education, graduate and professional education, faculty and academic affairs, student affairs, equity and diversity, human resources, and other areas.

Initiatives and collaborations during the first full year of implementation have yielded specific campus accomplishments across the four goal areas, and progress has been made on larger institutional transformations.

Curricular and Research Transformations

The campus has placed special emphasis on jump-starting curricular and research goals as key components of the larger vision of a more nimble, integrative, and vitally engaged research university. A Grand Challenges Curriculum was launched in fall 2015, with courses focusing on foundational

competencies students can apply across a range of topics. The solution-driven courses, team-taught by cross-disciplinary instructors, immerse students in the process of discovery that is central to the University's mission. The innovative courses address issues with both local and global relevance and integrate diverse expertise, methods, and perspectives. Topics have ranged from fracking to global hunger to reconciliation and justice.

The undergraduate-level Grand Challenge courses are constructed to fulfill one of the current liberal education theme requirements (civic life and ethics, diversity and social justice, environment, global perspectives, technology and society). These curricular innovations, along with the development of related minors and theme courses, will open up new learning and career opportunities for students and will pave the way for faculty consideration of new approaches to liberal education requirements.

The campus will announce in early 2016 a slate of research priorities aligned with the Grand Challenges vision. Shaped by a vigorous campus-wide process led by distinguished faculty from many fields, the process is identifying areas where the campus can marshal interdisciplinary and collaborative strengths to have a powerful impact on critical challenges of the state and world. Specific criteria include global impact and local relevance, extent of existing faculty strength and leadership, disciplinary diversity, interconnection with education and external partners, and other key considerations outlined in the strategic plan.

The process brought faculty, staff, and students together to discuss many potential Grand Challenges. Five campus-wide forums took place in fall 2015, with each organized around a broad theme spanning various research strengths identified by the faculty: ensuring just and equitable societies; fostering human potential and well-being across the life course in a diverse and changing world; advancing human health; developing sustainable cities and resilient communities in a world of climate change; and securing food, water, and energy, today and for the future.

The outcome will be three to five Grand Challenges that will be embraced as institutional priorities. Efforts to broaden and deepen collaborations in the selected areas will dovetail with ongoing efforts by colleges and departments to build productive collaborations across structural and disciplinary boundaries.

The Grand Challenges identified will also build on existing areas of strength, such as MnDrive, and be synergistic with the system-wide strategic research goals of the Office of the Vice President for Research. The goals of the plan will be connected in a variety of additional ways with academic and administrative units across campus and with the plans of the Crookston, Duluth, Morris, and Rochester campuses. University leaders will engage both campus and external stakeholders in discussing progress toward goals and in refining the framework as a dynamic roadmap for the future.

Comparison Group Institutions

To assist with campus planning and assessing success, the Twin Cities campus has identified ten public research universities for primary comparison. While these institutions are among the most similar in size and complexity to the Twin Cities campus and the best available for comparison, the institutions have significant differences that should be noted.

Table 3-1 shows the variance among the eleven schools across type, scope, size, and students. It is important to note that this comparison group includes the very best public research universities in the United States. By choosing this peer group, the University intentionally measures itself against the highest standards in the nation.

Table 3-1. Comparison group institutions, Twin Cities campus

Institution	TYPE			SCOPE				SIZE				STUDENTS	
	Land Grant	City Size (2)	State Pop. (3)	Agricult. College	Law School	Med. School	Hospital	Under-grad. / Grad. & Prof.		Faculty (10)	R&D (11)	Top-10 HSR (12)	Percent in-state (13)
Ohio State U.–Columbus	●	Large	11.5	●	●	●	●	58,322 / 43,733 13,581		2,475	$815	61%	69%
Penn. State U.–University Park	●	Small	12.7	●	O(4)	O(5)	O(5)	47,040 / 39,958 6,499		1,596	$801	40%	56%
U. of California–Berkeley	●(1)	Mid-size	37.3		●			37,565 / 27,126 10,439		1,382	$744	98%	69%
U. of California–Los Angeles	●(1)	Large	37.3		●	●	●	41,845 / 29,627 12,212		1,625	$948	97%	73%
U. of Florida–Gainesville	●	Mid-size	18.8	●	●	●	O(6)	49,459 / 31,879 16,630		1,960	$709	75%	87%
U. of Illinois–Urbana-Champaign	●	Small	12.8	●	●	●	O(7)	45,140 / 31,875 12,181		1,741	$622	59%	71%
U. of Michigan–Ann Arbor		Mid-size	9.9		●	●	●	43,625 / 28,217 15,230		2,697	$1,349	NR	55%
U. of Minnesota–Twin Cities	●	**Large**	**5.3**	●	●	●	O(6)	**51,147 / 30,135 16,796**		**2,211**	**$877**	**47%**	**64%**
U. of Texas–Austin		Large	25.1	●	●	O(8)	O(8)	51,313 / 38,614 11,790		1,899	$585	69%	89%
U. of Washington–Seattle		Large	6.7		●	●	●	44,784 / 29,468 14,112		1,361	$1,176	NR	66%
U. of Wisconsin–Madison	●	Mid-size	5.7	●	●	●	●	42,598 / 29,302 11,904		2,004	$1,109	52%	60%

1 The U.C. System is the land-grant university of California.
2 City size estimates, U.S. Census Bureau, 2010.
3 State population in millions, U.S. Census Bureau, 2010.
4 The Penn State U. Law School is located on the Dickinson campus.
5 The Penn State U. Medical School is located on the Hershey campus.
6 Hospital affiliated with but not owned by campus.
7 The U. of I. Medical Center is located on the Chicago campus.
8 The U. of T. medical programs are located on several other campuses.
9 Fall 2014 enrollment. Total Enrollment includes non-degree seeking student, but undergraduate enrollment is based on degree seeking students. Institutional Common Data Sets.

10 Fall 2014 full-time instructional faculty with tenure or tenure-track appointments. Integrated Postsecondary Education Data System.
11 Fiscal year 2014 higher education research and design expenditures in millions. National Science Foundation Higher Education Research Survey (HERD).
12 Fall 2014 first-time students with high school rank (HSR) in the top 10 percent of the graduating class. (NR) indicates institutions not reporting high school class rank for their entering class. Institutional Common Data Sets.
13 Fall 2014 percentage of first-time students who are state residents Institutional Common Data Sets.

Duluth Campus

Founded

1895—Normal School at Duluth
1921—Duluth State Teachers College
1947—University of Minnesota Duluth

Campus Leadership

Lendley (Lynn) Black, Chancellor

Colleges and Schools

College of Education and Human Service Professions
College of Liberal Arts
Continuing Education
Labovitz School of Business and Economics
School of Fine Arts
Swenson College of Science and Engineering

Academic Partnerships

College of Pharmacy
Medical School

Degrees/Majors Offered

14 bachelor's degrees in 92 majors; two-year program at the School of Medicine and College of Pharmacy; 19 graduate programs; participates in six cooperative programs with the Twin Cities campus

Student Enrollment (Fall 2015)

Undergraduate	8,929	(82%)
Graduate	652	(6%)
Professional*	355	(3%)
Non-degree	942	(9%)
Total	**11,093**	

*Granted by Twin Cities campus, delivered at Duluth campus.

Employees (Fall 2015)

Direct Academic Providers	681	(37%)
Fellows, Trainees, and Students in Academic Jobs	214	(12%)
Higher Education Mission Support	245	(13%)
Intercollegiate Athletics	44	(2%)
Facilities-Related Jobs	167	(9%)
Organizational Support	427	(22%)
University Leadership	71	(5%)
Total Employees	**1,849**	

Degrees Awarded (2014–15)

Bachelor's	2,007	(89%)
Master's	232	(10%)
Doctoral	4	(1%)
Total	**2,243**	

Campus Physical Size (2015)

Number of Buildings	81
Assignable Square Feet	1,893,489

Budget Expenditures (FY2016)

$249 million

Planning at the University of Minnesota Duluth

Freshwater Research

The University of Minnesota Duluth (UMD) Strategic Plan, approved in 2011, is the product of an inclusive, collaborative process involving faculty, staff, and students as well as Duluth community leaders. Through this process the campus developed a revised mission, vision, core values, and six major goals. UMD's strategic plan has served as a roadmap to focus campus efforts on key priorities, including freshwater research.

Water is essential to life on earth, but clean freshwater is in limited supply worldwide. While the Upper Midwest has a relative abundance of freshwater, looming (or present) water crises across the nation and globe are threatening to disrupt food supplies and national security, and increasingly pit water-rich against water-poor regions. Even water-rich areas experience local problems with water supply and water quality. How is UMD addressing the "grand challenge" of providing clean freshwater to the region's communities, industries, and ecosystems?

UMD sits at the headwaters of one vast freshwater system, the Laurentian Great Lakes, and near the headwaters of another, the Mississippi River. Water directly or indirectly accounts for much of the wealth of this region.

The size and diversity of freshwater science, policy, and outreach that occurs in and around the campus makes UMD a state and national leader in freshwater research. The size and setting of the Duluth campus is ideal for close collaboration of faculty, undergraduate, and graduate students in freshwater research and provides UMD students with exceptionally strong preparation for postgraduate employment.

Freshwater research education and outcomes are integrated across campus through the work of faculty and staff associated with the Swenson College of Science and Engineering, Natural Resources Research Institute, Large Lakes Observatory, and Minnesota Sea Grant.

Freshwater Research at the Swenson College of Science and Engineering

Water—with a particular emphasis on freshwater—is one of the principal organizing themes of research across the Swenson College of Science and Engineering (SCSE), and is central to UMD's strategic plan for research. SCSE includes the science departments of Biology, Chemistry & Biochemistry, Physics & Astronomy, Earth & Environmental Sciences, and Mathematics & Statistics, as well as the engineering departments of Computer Science and Civil, Chemical, Electrical, and Mechanical & Industrial Engineering. The Large Lakes Observatory is also a component of SCSE, as is the multi-institutional Iron Range Engineering Program.

SCSE also works closely with the Natural Resources Research Institute to bridge basic, translational, and applied research across the disciplines at UMD. Freshwater research cuts across virtually all these programs. Major themes include:

- water quality and understanding specific impacts on surface and groundwater sources;
- water remediation, with a focus on mining—and other industrial-related impacts;
- effects of climate change on freshwater systems and their ecosystems;
- the natural chemistry and biology of large systems such as Lake Superior and the other Great Lakes, and the distributed network of other lakes and watersheds in Minnesota;
- invasive species and their impact on the ecology of water systems;
- use of water in agriculture, with a focus on water conservation and drought response of plants;
- water recovery and conservation in wastewater, industrial, and other anthropogenic processes; and
- technologies that reduce water usage in private, commercial, agricultural, and industrial settings.

Many of these studies include scientists and engineers working together across traditional disciplinary boundaries. SCSE scientists collaborate with policy and business experts and others on complex issues that go beyond the borders of traditional science and engineering. Scientists also work with area

stakeholders including the City of Duluth, St. Louis County, the State of Minnesota and its agencies; the U.S. Environmental Protection Agency and other government agencies; local, regional, statewide, and national environmental organizations; and the for-profit sector including the mining industries, forestry and paper industries, engineering firms, chemical, biochemical, and agricultural industries, materials science industries, and others. The goal is to focus primarily on regional issues of concern to Minnesota stakeholders, but recognizing that these issues, and their solutions, also have an impact on national and global levels.

Freshwater Research at the Natural Resources Research Institute

The National Resources Research Institute (NRRI) is focused on four goals:

1) characterize the quantity, quality, and distribution of freshwater ecosystems and resources in the region (including across the Great Lakes Basin);

2) provide tools and data to inform management and decision making by agencies, communities, nongovernmental organizations, and industries;

3) work individually or collectively with regional partners to develop strategies or tools to conserve rare resources, mitigate impacts of human activities on aquatic systems, and remediate or restore systems that have been impacted; and

4) train the next generation of professionals.

NRRI's research activities range from contributing to basic knowledge, providing tools and solutions to significant issues that affect the region's communities and industries, and advising government agencies and industries at all levels—including local, regional, national, and international entities. Specific areas of specialization include: developing environmental assessment tools and protocols to guide management and policy; assessing climate change impacts and identifying adaptation strategies; developing or evaluating water treatment technologies; creating data visualization and dissemination tools for large datasets.

The NRRI leverages its State Special funding heavily (more than 4x) with grants from a wide range of local,

state, and federal government agencies, and partner directly with industry to solve "real world" problems thereby enabling responsible development of the region's resources.

Freshwater Research at the Large Lakes Observatory

The Large Lakes Observatory (LLO) has a unique mission, the scientific study of the large lakes of Earth. This requires specific disciplinary and interdisciplinary expertise and infrastructure. LLO houses a diverse scientific team that works actively in the region and around the world to improve understanding of environmental change, ecosystem dynamics, and fundamental scientific processes occurring within these huge freshwater systems. It hosts the most scientifically capable research vessel on the Great Lakes, the R/V Blue Heron.

LLO is a leader within the Great Lakes research community in utilizing environmental sensors to record lake conditions and how they are changing. State of the art in situ observation systems, advanced analytical instrumentation, and a skilled scientific and maritime workforce allow LLO to address diverse scientific problems in the large lakes of Earth. LLO's mission is making advances in fundamental science, but LLO scientists also perform research with immediate social benefit, for example research on invasive species. Outreach activities are expanding and each summer hundreds of citizens experience the Blue Heron first hand through the popular Science on Deck lecture and tour series. LLO trains undergraduate and graduate students and hosts Postdoctoral scientists who are completing their training before launching their own independent careers.

Freshwater Research at Minnesota Sea Grant

By some measures, Lake Superior is an inland sea; according to the federal government, the other Great Lakes are too. That's why the National Oceanic and Atmospheric Administration's Sea Grant Program extends into the heart of North America, all the way to the University of Minnesota Duluth. Minnesota Sea Grant, the only Sea Grant program focused entirely on Lake Superior, seeks to maintain and enhance the state's coastal environments and economies through high-quality research and outreach. This

state-federal partnership annually supports research involving graduate students and opportunities for undergraduates to improve the scientific literacy of thousands of K–12 students. The program's staff also pursues outreach activities, some of which are cited internationally (i.e. Ballast Water Collaborative) and recognized nationally (i.e. Stop Aquatic Hitchhikers). Minnesota Sea Grant partners extensively to develop innovative solutions to complex coastal challenges and is proudly celebrating 40 years of Superior Science.

Comparison Group Institutions

For purposes of planning and assessment, the Duluth campus revised its peer list in recent years to include eleven higher education institutions as the primary group for comparison. These institutions are listed in Table 3-2 and were identified based on their similar academic programs, enrollment, degrees awarded, research activities, and their Carnegie Classification as Master's Medium Programs.

Table 3-2. Comparison group institutions, Duluth campus

	TYPE			SIZE	STUDENTS		
	Institutional Control	City Size	Highest Degree Offered	Total Enrollment	Percent Degree-seeking Undergrads	Percent Full-time	Percent In-state
CA Poly. State U.–San Luis Obispo	Public	Small	Master's	20,186	95%	97%	83%
Col. of Charleston	Public	Mid-size	Post-Master's Certificate	11,456	88%	95%	55%
Minnesota State U.–Mankato	Public	Small	Doctorate	15,387	80%	89%	85%
South Dakota State U.	Public	Small	Doctorate	12,543	80%	86%	56%
Southern Illinois U.–Edwardsville	Public	Mid-size	Doctorate	13,972	81%	85%	89%
U. of Mass.–Dartmouth	Public	Mid-size	Doctorate	9,111	79%	88%	94%
U. of Michigan–Dearborn	Public	Large	Doctorate	8,923	77%	69%	94%
U. of Minnesota–Duluth	**Public**	**Large**	**Doctorate**	**11,093**	**82%**	**96%**	**83%**
U. of North Carolina–Charlotte	Public	Large	Doctorate	27,238	81%	86%	91%
U. of Northern Iowa	Public	Mid-size	Doctorate	11,928	83%	92%	91%
Western Michigan U.	Public	Mid-size	Doctorate	23,914	77%	84%	87%
Western Washington U.	Public	Mid-size	Post-Master's Certificate	15,060	93%	93%	88%

Source: Integrated Postsecondary Education Data System.
Student data reflect Fall 2014 enrollment

Morris Campus

Founded

1910—University of Minnesota, West Central School of
    Agriculture
1960—University of Minnesota Morris

Campus Leadership

Jacqueline Johnson, Chancellor

Divisions

Education Division
Humanities Division
Science and Mathematics Division
Social Sciences Division

Degrees/Majors Offered

34 undergraduate degree programs; 9 pre-professional
programs

Student Enrollment (Fall 2015)

Undergraduate	1,741	(94%)
Non-degree	115	(6%)
Total	**1,856**	

Employees (Fall 2015)

Direct Academic Providers	170	(39%)
Fellows, Trainees, and Students in Academic Jobs	1	(<1%)
Higher Education Mission Support	56	(13%)
Intercollegiate Athletics	22	(5%)
Facilities-Related Jobs	53	(12%)
Organizational Support	115	(26%)
University Leadership	22	(5%)
Total Employees	**439**	

Degrees Awarded (2014–15)

Bachelor's	374

Campus Physical Size (2015)

Number of Buildings	36
Assignable Square Feet	599,370

Budget Expenditures (FY2016)

$56 million

Planning at the University of Minnesota Morris

The Morris campus's strategic plan was approved through its governance system in 2007, and has served as a guiding framework for campus initiatives since then. Recent reviews completed independently by the campus planning committee and senior leaders show that the campus has made progress toward or completed nearly two thirds of the 84 specific items included in the original plan. Select accomplishments are described in the following sections.

Academic Center for Enrichment

The Morris campus established a center for academic enrichment (ACE) to promote undergraduate research, study abroad, an "honors" experience, and national student scholarships. In the past several years, three Morris students have been named Truman scholars and two have been named Udall scholars. Nearly half of Morris students participate in faculty-mentored undergraduate research or artistic production by the time they graduate and 46 percent have studied abroad during their college career at Morris.

Enrollment Goals

The Morris campus has continued to increase and support its numbers of international students (now 11 percent of the degree-seeking student population) and students of color (now 27 percent of degree-seekers).

National Profile

The Morris campus has elevated its national profile as a public liberal arts college as evidenced by national rankings and by its receipt of several prestigious foundation grants—a Howard Hughes Medical Institute Grant to promote the success of students in biology; a Margaret A. Cargill foundation grant to develop a leadership program with an emphasis on sustainability; and a federal Student Support Services TRIO grant awarded in July 2015. Two summer bridge programs support the success of international students (STELLAR program) and Morris's twenty-one-year-old Gateway program supports the success of entering students from underrepresented groups.

In addition, the Morris campus has become a national leader in sustainability, a model community for renewable energy and sustainable living. The campus anticipates achieving the goal of carbon neutrality by 2020, primarily through the on-site generation of heat and power. In 2015, the Morris campus was named by the U.S. Environmental Protection Agency as a top thirty national organization for the on-site generation of power. On average, 60 percent of campus electricity comes from wind; the combined heating and cooling system uses local biomass to heat and cool the campus and puts money back into the local economy.

A new array of solar panels, funded through the Made in Minnesota program and installed in fall 2014, provides half of the electricity for the Morris campus's new residence hall, the Green Prairie Community. Morris students have led in the development of a recycling program and a cold weather composting program. All these initiatives provide a demonstration and research platform for faculty and for students in line with the Morris campus's liberal arts mission.

Community Engagement

The campus engages its local communities in a variety of ways, including through the Center for Small Towns, and in 2015 was named a Carnegie community engaged campus.

Plan for Future Success

The Morris campus plan includes facilities renovation; enhanced efforts to retain and graduate a diverse student population; "translation" of the liberal arts into meaningful work experiences; continued attention to the support of faculty; creative uses of eLearning and technology to enhance and expand the liberal arts, face-to-face mission; expansion of the living and learning laboratory in the region; and realization of the campus's role in contributing to a resilient community in the town of Morris.

Facilities Renovation

Historic buildings: The Morris campus has crafted a plan that combines campus resources, Higher Education Asset Preservation and Replacement funds, and repair and renovation funds to begin incremental modifications of these buildings.

Learning commons: The library on the Morris campus, constructed in 1967, has not been significantly renovated since that time and is in need

of dramatic improvement for access, to recognize the shift from print to digital sources, and the unique needs of 21st century learners. The campus plan includes a renovation of the library to provide a learning commons—a center that provides research, technological, and academic support for students in an environment that supports collaboration and the use of personal mobile devices.

Wellness Center: The Morris physical education center was built in 1970 prior to the adoption of Title IX, at a time when only men's sports were emphasized. The facility is not able to house the many female and male athletes who now participate in the Morris campus's 19 NCAA Division III sports programs. The campus plans a renovation that will repurpose the building to meet Title IX requirements and to refocus on wellness and student success.

Retention

The Morris campus's value proposition is strong, supported by its place in the market alongside much more expensive private liberal arts colleges and by the advantages found in being part of the University of Minnesota system. Recruiting and retaining new students and moving them toward graduation are among the campus's highest priorities. In the past two years, the campus has secured private foundation funds to address student success and retention issues for those who have traditionally been underrepresented in higher education, but there is more to be accomplished.

Translating the liberal arts: The Morris campus is piloting an initiative in fall 2015 that connects liberal arts and career goals beginning with registration and continuing through commencement. The aim of this program is to assist students in "translating" the liberal arts into meaningful workforce goals and further study in graduate and professional schools.

While Morris students from traditionally underserved backgrounds (first-generation college students, students from low-income households, American Indian students, and students of color) succeed at rates above the national averages, they persist and graduate at rates below their campus peers from more traditionally college bound backgrounds. In July 2015, the campus won a five-year U.S. Department of Education grant to establish a TRIO Student Support

Services program as part of the campus strategy to close these achievement gaps.

Faculty Recruitment

Morris campus faculty salaries have remained below their peer group averages for a number of years. Although funds have been reallocated in the past three years to address this issue, achieving competitive faculty salaries remains a campus priority. In addition, the Morris campus has reached a level of programmatic maturity that would permit the establishment of endowed professorships or chairs, particularly in signature areas and/or in areas where there are large numbers of student majors (e.g., American Indian Studies, STEM fields, economics). The campus's case statement for philanthropic support is expected to identify some of these opportunities.

eLearning

A task force on eLearning has made a series of recommendations which are being considered by the campus during fall 2015 semester. In addition, the Morris campus is piloting a number of initiatives that use technology and eLearning to expand and enhance the campus's face-to-face liberal arts mission. For example, in cooperation with the McPhail Institute in the Twin Cities, individual instrumental music instructors are conducting some of their lessons from the McPhail studios. This allows the Morris campus to retain highly qualified faculty for music lesson instruction without requiring dangerous winter travel.

Using interactive technology, the education program is enlisting the support of Minnesota teachers of the year as mentors in a seminar setting for its prospective teachers. The Morris campus is also part of a faculty collaboration supported by the TEAGLE Foundation whose purpose is the creation of online courses in American Indian studies for campuses with a significant number of American Indian students. The grant supports both the creation of these courses and also the presence of on-campus faculty mentors to enhance the online experience.

Expanding the Living/Learning Laboratory

Outdoor classroom: West central Minnesota provides a rich laboratory for finding solutions to a number of "grand challenges" that face the region and the nation. From invasive species to the impact of

climate change to sustainable agriculture, the size and location of the Morris campus positions it as a resource to address these issues. The Morris campus has completed predesign work for the creation of an outdoor classroom. A recent gift of 140 acres north of the Morris campus provides another opportunity for research, reflection, and discovery dedicated to the fostering of environmental stewardship.

Resilient communities: In the spirit of fostering the creation of resilient communities, campus leaders are in conversation with community leaders and private investors to explore ways in which the Morris community might develop as a demonstration platform

and model of sustainability in much the same way that the campus has. Under consideration currently is a partnership with the Morris Area schools to expand the campus composting initiative and a community-based, investor-owned project that would create a community solar garden.

Comparison Group Institutions

For planning purposes, the Morris campus has identified 15 higher education institutions as its comparison group (Table 3-3). This collection of comparable and aspirational peer institutions come closest to aligning with the Morris campus's distinctive identity as a public liberal arts college.

Table 3-3. Comparison group institutions, Morris campus

	TYPE			SIZE	STUDENTS		
	Institutional Control	City Size	Highest Degree Offered	Total Enrollment	Percent Degree-seeking Undergrads	Percent Full-time	Percent In-state
Albion Col.	Private	Small	Bachelor's	1,268	99%	99%	89%
Coe Col.	Private	Small	Bachelor's	1,436	95%	98%	38%
Concordia Col.–Moorhead	Private	Mid-Size	Master's	2,398	96%	99%	69%
DePauw U.*	Private	Small	Bachelor's	2,215	99%	100%	39%
Gustavus Adolphus Col.*	Private	Small	Bachelor's	2,457	100%	99%	79%
Kalamazoo Col.*	Private	Mid-Size	Bachelor's	1,461	98%	99%	58%
Lycoming Col.	Private	Mid-Size	Bachelor's	1,353	99%	99%	57%
Macalester Col.*	Private	Large	Bachelor's	2,073	99%	99%	13%
Mass. Col. of Liberal Arts	Public	Small	Master's	1,765	86%	90%	72%
St. Mary's Col. of Maryland	Public	Small	Master's	4,225	93%	94%	78%
St. Olaf Col.*	Private	Small	Bachelor's	1,721	97%	97%	94%
SUNY at Purchase Col.	Public	Small	Master's	3,034	99%	100%	44%
U. of Virginia's Col. at Wise	Public	Small	Bachelor's	2,183	68%	94%	92%
U. of Maine–Farmington	Public	Small	Master's	1,960	89%	95%	80%
U. of Minnesota–Morris	**Public**	**Small**	**Bachelor's**	**1,899**	**95%**	**97%**	**81%**
U. of N.C.–Asheville	Public	Large	Master's	3,845	89%	90%	84%

Source: Integrated Postsecondary Education Data System
Student data reflect Fall 2014 enrollment
*Aspirational peer institutions

Crookston Campus

Founded

1905—Northwest School of Agriculture
1966—University of Minnesota Crookston

Campus Leadership

Fred E. Wood, Chancellor

Departments

Agriculture and Natural Resources
Business
Liberal Arts and Education
Math, Science and Technology

Degrees/Majors Offered

34 undergraduate degree programs; 14 online majors,
 2 academic programs offered in China

Student Enrollment (Fall 2015)

Undergraduate	1,874	(66%)
Non-degree	949	(34%)
Total	**2,823**	

Employees (Fall 2015)

Direct Academic Providers	121	(39%)
Higher Education Mission Support	48	(16%)
Intercollegiate Athletics	29	(9%)
Facilities-Related Jobs	27	(9%)
Organizational Support	64	(21%)
University Leadership	18	(6%)
Total Employees	**307**	

Degrees Awarded (2014–15)

Bachelor's	401

Campus Physical Size (2015)

Number of Buildings	40
Assignable Square Feet	450,278

Budget Expenditures (FY2016)

$38 million

Planning at the University of Minnesota Crookston

The University of Minnesota Crookston is integral to the University's statewide land-grant mission. The college provides its unique contribution through applied, career-oriented learning programs that combine theory, practice, and experimentation in a technologically rich environment. UMC connects its teaching, research, and outreach to serve the public good. (campus mission adopted by the Board of Regents, May 2007)

The Crookston campus serves as the face of the University in northwest Minnesota and is an important regional asset and hub of activity. The campus leverages its own resources with those of the Northwest Research and Outreach Center, Extension, the State Economic Development Administration Center, local business and industry, and the community to serve the region as well as the entire state. It also serves as a regional economic driver with a significant economic impact of over $50 million.

Crookston is distinctive within the University system for hands-on experiential learning, a focus on teaching and technology, online learning, direct career preparation including required internships, and exceptional niche programs. It offers the University's excellence in a small campus environment and online in ways that afford students personalized attention and "face time" with faculty and staff; multiple options for student leadership and engagement through undergraduate research, clubs, activities, and NCAA Division II athletics; and a supportive student-centered learning environment where all students, including first-generation, less prepared, and at-risk students, can realize their potential and thrive.

A major focus of strategic planning is to achieve a critical mass of students on campus while strategically growing online enrollment. The campus maintains its strong commitment to offering a top-notch, robust experience for both residential and commuter students who complete their academic careers on campus. Simultaneously, online learning continues to be a strategic part of the academic programming, and the Crookston campus serves as an eLearning leader within the University system. This is approached

as an extension of the University's modern land-grant mission, as it provides access to educational programs in a way that appeals to students that differ demographically from the traditional college-aged student. Currently, 14 of Crookston's 34 baccalaureate programs are offered entirely online as well as on campus. Online-only students comprise slightly more than 50% of the total student population as of fall semester 2015.

Crookston is also an oasis of diversity in the region, enrolling students who come to campus from more than 20 countries and 40 states. For fall 2015, enrollment of domestic degree-seeking students of color is 13% of on-campus enrollment, and international students account for 11% of on-campus degree-seeking enrollment. This affords the campus and community opportunities for multicultural interaction and exchange.

The Crookston campus's two major sources of revenue are tuition and state support. Given current levels of state support and a desire to limit tuition increases, the only options for increasing revenue are enrollment growth, additional grant funding, and greater philanthropic support. While the campus exhibits extraordinarily lean operations, campus units continue to explore ways to gain efficiencies. Recruiting, retention, and graduation efforts have become a campus-wide focus and need to be increasingly effective, highly targeted, and sustained from matriculation to graduation. This is a heightened challenge because the number of Minnesota high school graduates is projected to remain relatively low for the next several years. Additionally, recruitment strategies for online students will need to be targeted and effective in an increasingly competitive market.

Campus Strategic Planning

Beginning in late 2013 and continuing into 2015, the Crookston campus initiated a new round of strategic planning. The Strategic Planning Leadership Team drafted three key documents (Future Business Model, Institutional Identity Statement, Strategy Screen) and recruited faculty and staff to three strategic work group initiatives: the Strategic Enrollment Management Committee, the Strategic Philanthropic Engagement and Regional Support Team, and the Strategic Institutional Excellence Team. A fourth

initiative was added in 2015 with a focus on diversity, inclusion, and engagement. The campus has also broadened the strategic discussion and participation across campus through the Faculty Assembly, Campus Assembly, the Crookston Student Association, and other venues such as open forums. Ultimately, the initiatives from these groups will be incorporated into the work of existing campus units.

Strategic Enrollment Management Committee (SEMC)

The SEMC addresses the major challenge of how to achieve and maintain a critical mass of students on campus while also growing online enrollment. Major priorities include the development of a campus-wide strategic recruitment and retention plan for one-, three-, and five-year enrollment targets for both on-campus and online students. Revised goals for student retention and graduation rates are also being discussed by SEMC as well as the campus administrative team. An additional goal is to establish enrollment strategies and tactics to meet both short-term and long-term enrollment goals, which will guide action plans for key issues such as advising, students of color, transfer students, and online students, among others. New recruitment materials have been developed, new student orientation programs are being enhanced to help transfer students better transition to campus, and a pilot mentoring program for new student athletes has been established. All units within Student Affairs are developing more effective and efficient ways to ensure that online students have access to similar service and support as on-campus students.

Strategic Philanthropic Engagement and Regional Support (SPERS) Team

The major goal of SPERS is to enhance and leverage support for the Crookston campus by engaging various internal and external constituencies, including current students and their families, alumni, faculty, staff, business and industry, community members, and donors to nurture a culture of philanthropy and pride. A major resulting accomplishment has been the development and implementation of the Crookston Campus-Community Connection or C4. This initiative is led by a planning board consisting of the Crookston chancellor and the mayor of the city of Crookston as

well as business and community leaders, students, faculty, and staff. With its inaugural meeting in April 2015, this group continues the work of building on and enhancing a strong campus-community relationship. Topics of interest include strategies to generate greater community support for the campus as well as ways to inform and encourage the utilization of local businesses and services by students, faculty, and staff.

Strategic Institutional Excellence Team (SIET)

The priority goal of SIET is to establish the Crookston campus as a premier resource for rural economic development. With the Center for Rural Entrepreneurial Studies as well as the Economic Development Administration Center for the state of Minnesota located on campus, the Crookston campus has significant resources upon which to build. Both of these organizations utilize University faculty, staff, and students as well as Extension professionals, and the educational experience of Crookston students is enhanced by engaging them in projects and research studies related to economic development and entrepreneurship. Working with the current host (UMD) of the Northwest Region's Small Business Development Center (SBDC), the Crookston campus is developing plans to host a regional satellite SBDC office in 2016 and, eventually, assume responsibility as host. Key to this initiative is identification of the leadership and organizational structure for the Crookston campus's planned Center for Rural Economic Development.

Diversity, Inclusion, and Engagement

Recognizing the importance of preparing students for the highly diverse world into which they will be graduating, the Crookston campus is, with increased intentionality, integrating diversity, inclusion, and engagement into campus conversations and programming this academic year, with a goal to include higher retention and graduation rates for all students. Enrolling students from more than 40 states and 20 countries and from both very urban and very rural areas, the Crookston campus reflects the diversity of the greater world and, as such, is a "laboratory" in which students can safely and openly explore difficult topics with people who are different from them. One of Crookston's highest priority goals for the 2015–16 academic year will be to develop

and implement plans and strategies to integrate more diversity, inclusion, and engagement on campus and in the community. Training and development programs and activities will be planned, implemented, and evaluated.

Aligning and Coordinating with the Twin Cities Campus Strategic Plan

The strategic initiatives from SPERS and SIET align well with strategic planning efforts on the Twin Cities campus since they focus on engaging various communities in the region and leveraging support for the Crookston campus and the University system. The planned Center for Rural Economic Development will involve regional partners to stimulate and grow the entrepreneurial culture and economic vitality of northwest Minnesota and the state. Additional opportunities for aligning and coordinating with the Twin Cities campus strategic plan reside in the grand challenges and the other focus areas. With a

planning approach that addresses opportunities and challenges as they arise, the Crookston campus's next big questions may well be: How will the Crookston campus help the University of Minnesota system respond to the world's grand challenges? How can the Crookston campus recruit and retain the very best educators? How will the campus strive for excellence and reject complacency? The Crookston campus's Strategic Planning Leadership Team will consider these questions as part of its ongoing work over the academic year.

Comparison Group Institutions

The Crookston campus has identified nine higher education institutions as the primary comparison group for planning and assessment. The comparison institutions were identified based on their similarities in academic programs, enrollment, rural setting, and other key characteristics. These institutions are listed in Table 3-4, with the variance among them shown.

Table 3-4. Comparison group institutions, Crookston campus

	TYPE			SIZE	STUDENTS		
	Institutional Control	City Size	Highest Degree Offered	Total Enrollment	Percent Degree-seeking Undergrads	Percent Full-time	Percent In-state
Bemidji State U.	Public	Small	Master's	4,986	88%	79%	91%
Dakota State U.	Public	Small	Doctoral	3,047	58%	65%	66%
Delaware Valley Col.	Private	Small	Master's	2,137	85%	92%	48%
Northern State U.	Public	Small	Master's	3,531	48%	81%	63%
U. of Maine–Farmington	Public	Small	Master's	1,960	89%	95%	80%
U. of Minnesota–Crookston	**Public**	**Small**	**Bachelor's**	**2,850**	**66%**	**67%**	**71%**
U. of Minnesota–Morris	Public	Small	Bachelor's	1,899	95%	97%	81%
U. of Pittsburgh–Johnstown	Public	Small	Bachelor's	2,869	100%	97%	96%
U. of Wisconsin–River Falls	Public	Small	Master's	6,198	87%	92%	47%
U. of Wisconsin–Stout	Public	Small	Master's	9,394	86%	84%	63%

Source: Integrated Postsecondary Education Data System (IPEDS)
Student data reflect Fall 2014 enrollment.

Rochester Campus

Founded

2006

Campus Leadership

Stephen Lehmkuhle, Chancellor

Campus Academic Programs

Health Professions
Health Sciences
Biomedical Informatics and Computational Biology[1]

Degrees/Majors Offered

One baccalaureate degree offered in two academic programs
One master's degree offered in one academic program
One doctoral degree available in one academic program

Academic Partnerships

Labovitz School of Business and Economics, UMD
Clinical Laboratory Sciences, UMTC
College of Education and Human Development, UMTC
School of Nursing, UMTC
Occupational Therapy, UMTC
School of Public Health, UMTC

Educational Collaborations

College of Science and Engineering, UMTC
Mayo School of Health Sciences

Biomedical Informatics and Computational Biology Partnerships

UMTC, Hormel Institute, Mayo Clinic, IBM,
National Marrow Donor Program, Brain Sciences Center

Student Enrollment (Fall 2015)

Undergraduate	402	(85%)
Non-degree	14	(3%)
Graduate[1]	58	(12%)
Total	**474**	

Employees (Fall 2015)

Direct Academic Providers	37	(37%)
Fellows, Trainees, and Students in Academic Jobs	8	(8%)
Higher Education Mission Support	21	(21%)
Organizational Support	27	(27%)
University Leadership	7	(7%)
Total Employees	**100**	

Degrees Granted (2014–2015)

B.S. (Health Science)	49
B.S. (Health Professions)	24
M.S. (Biomedical Informatics and Computational Biology)[1]	3

Campus Physical Size (2014)[2]

Number of Buildings	3
Assignable Square Feet	156,500
Land for Future Campus	2.65 acres

Budget Expenditures (FY2016)

$17 million

[1] An all-University graduate degree granted by the Twin Cities campus with the administrative home on the Rochester campus.
[2] All buildings are leased.

Planning at the University of Minnesota Rochester

Rapid changes in demographics and technology are driving paradigm shifts in higher education, transforming how knowledge is created and disseminated, changing the profile and the ways of knowing, and redefining learning. Educators must prepare students for jobs that do not yet exist and that will continue to transform, to solve problems as yet unknown, and use technologies not yet invented.

Although there is much ambiguity about the future impact these paradigm shifts will have on higher education, the Rochester campus has, over the past eight years, designed its programs, shaped the profile of its faculty and staff, and met its space needs in new and innovative ways. As a new campus, many of these innovations were driven by opportunities to explore different approaches to learning, such as developing an integrated curriculum by an interdisciplinary faculty housed in a single academic unit, or by connecting our students with existing assets in the community, such as establishing a partnership with the local YMCA to provide student recreational services.

The Rochester campus now enters its next phase of growth and development. Its principle strategy will be to build on the innovations that make the Rochester campus distinctive. The emerging institutional plan, entitled *UMR 2.0: Optimizing Distinctiveness*, articulates intentional actions to optimize distinctive strengths, enabling the Rochester campus to strategically adapt to the paradigm shifts underway in higher education. The plan has six core areas of distinctiveness, described in the following sections.

Customized Undergraduate Health Education

The first two years of the Bachelor of Science Health Sciences (BSHS) degree include a core curriculum for all undergraduates. Building on that foundation, students work with faculty and Student Success Coaches to plan and implement an individualized capstone experience during the senior year. Most "study away" in experiences as varied as directed research, internships, study abroad, or coursework at another university to accomplish a minor.

Individualized Care, Attention, and Guidance

Student Success Coaches are assigned to students for the entire four-year experience, for advising, career exploration, capstone planning, and general life-coaching. Faculty staff "Just ASK Centers," providing readily available academic support.

Connected Curricular Experiences

Faculty collaborate on research, teaching, and service in one, interdisciplinary department—the Center for Learning Innovation. Tenured and tenure-track faculty are designated as the "designers" of the curriculum with "student-based faculty" (lecturers and teaching specialists) working with them in teams to deliver and assess. The intentional connections in the curriculum include integration across disciplines, embedded liberal education outcomes, writing-integration, and health-sciences contextualized content.

Collaborative Culture

Faculty team-teach most undergraduate courses, expecting students to also work in teams in this "flipped" learning environment. Given the core curriculum in the first two years, students are automatically part of a learning cohort. Student development and academics are intentionally connected in the structure and administration of the Rochester campus. Student development professionals—as part of the Center for Learning Innovation—meet regularly with faculty. To further support collaboration, one Vice Chancellor supports both Academic Affairs and Student Development

Learner-centered core shaped by ongoing learning research

Tenured and tenure-track faculty have "teaching and learning research" as their primary scholarly area, with disciplinary work as secondary. These expectations—clearly delineated in tenure and promotion documents—provide continuous assessment data, used to enhance curricular and pedagogical decisions.

Community Immersion

The Rochester campus is integrated into the community. The community connections deepen

the learning and development of students as well as provide the physical space to teach, house, recreate, and provide healthcare services for those students. These programmatic and service-based relationships achieved by deep community connections will be further optimized through building a "community campus" (see *Envision UMR: A Campus Master Plan for the Next Chapter of Growth* at www.cppm. umn.edu/assets/pdf/umr_master_plan2014.pdf). The campus master plan outlines a phased approach to further embed the campus into the community, in alignment with the city and Destination Medical Community plans for downtown development. This planned development will increase the density, proximity, and interactivity with community-based partners, thereby stimulating more programmatic collaboration and more efficient use of shared spaces.

Education

Providing an extraordinary education that generates knowledge, understanding, and creativity. We seek to develop students who become leading scientists and teachers, engineers and artists, health and business professionals, and who contribute to their communities at every level.

Undergraduate, Graduate, and Professional Education

The University is committed to being accessible to a wide range of populations, attracting outstanding students, offering an exceptional education, and graduating students prepared for success.

The University has been able to show increasing success with each of these priorities over the years. What may be just as important, however, is explaining why University leaders identify these areas as priorities. Why, for example, does the University provide financial aid support to low-income and middle-income families? Why is it important that more and more high-ability Minneosta students are choosing to enroll at the University instead of leaving the state? Why is it important that the four-, five-, and six-year undergraduate graduation rates are significantly higher on every campus than they were ten years ago?

The answer is that success on each of these fronts is evidence of success toward achieving the University's mission.

An eduation at the University of Minnesota prepares students to be leaders, innovators, and global citizens. It is therefore crucial that students who have the ability to benefit from the University's opportunities have access to the University.

The better the student learning experience, the better chance these students will have to succeed. Higher graduation rates are important because they demonstrate that more students have been empowered to make the contributions to society that the University's mission envisions.

The following discussions of the undergraduate, graduate, and professional programs demonstrate the importance the University and its campuses place on providing an extraordinary education.

Undergraduate Education

TWIN CITIES CAMPUS

The University's commitment to the success of undergraduate students begins with outreach to prospective students and extends through recruitment, enrollment, retention, academic support, career services, graduation, and beyond. The University attracts outstanding undergraduate students, is accessible to diverse students with a range of backgrounds, and provides a world-class educational experience. Our graduates are positioned to be productive employees, thoughtful citizens, and creative leaders in solving the challenges of the 21st century.

The foundational principles for developing enrollment targets for new first-year and new transfer students on the Twin Cities campus include the following:

- Admit students who will benefit from the curriculum and who have a strong probability of graduating in a timely manner.

- Provide a high-quality education and student experience.

- Remain affordable to a broad cross-section of students.

- Incorporate ethnic, social, economic, and geographic diversity.

- Be attentive to state, national, and global workforce needs of the future.

- Enroll an appropriate balance of new high school students and transfer students.

- Partner with other Minnesota higher education systems to advance the state's common agenda, but maintain the University's mission to provide students with the opportunities and benefits of attending a world-class research institution.

Maintaining Access to the Twin Cities Campus

The University maintains a strong commitment to access to its degree programs—for Minnesota resident students, for students from a range of economic backgrounds, for students of color, and for first-generation students. Strategies to ensure access include targeted recruitment; holistic, need-blind review for admissions; and linking tuition strategies with financial aid strategies and enrollment management strategies.

Financially Accessible

As a public institution, the University supports access for qualified students. Review of applicants for undergraduate admissions is need-blind, meaning that a student's ability to pay is not a factor in determining admissibility. The University funds and administers a comprehensive financial aid program targeted to degree-seeking students and tailored to each student's circumstances, including merit-based aid to attract and support high-achieving students and need-based aid to maintain access for many talented students who otherwise would not be able to attend the University.

Total financial support to Twin Cities undergraduate degree-seeking students over the past three years is summarized in Table 4-1. The decrease in the total amount of loans over that period is notable, as is the shift of the proportion of total aid to include more gift aid and less loan aid.

One measure of financial accessibility is the percentage of students who are low-income, defined as federal Pell Grant recipients. In 2014–15, 24 percent of all degree-seeking students enrolled on the Twin Cities campus were Pell recipients. Looking at specific

Table 4-1. Total financial support to Twin Cities campus undergraduate degree-seeking students, 2013–14 and 2014–15

Aid Category	Aid Year 2013–14	% of total	Aid Year 2014–15	% of total
Gift Aid (scholarships, waivers)	$134,652,154	40%	$138,273,034	40%
Student Employment (including Work Study)	$26,117,835	8%	$26,522,725	8%
Loans (student and parent loans)	$168,267,646	50%	$165,524,062	48%
Total	$338,595,372	100%	$341,547,835	100%

groups of students: Minnesota resident students, 29 percent; freshmen, 21 percent; new transfer students, 29 percent. Those percentages have been relatively stable over the past five years. Another measure is the percentage of first-generation college students, defined as neither parent having completed a college degree. In 2014–15, 29 percent of all degree-seeking students on the Twin Cities campus were first-generation. Looking at specific groups of students: Minnesota resident students, 32 percent; new freshmen, 24 percent; new transfer students, 40 percent.

To assist Twin Cities campus students and their parents with managing the costs of college, the University has increased its resources and educational programming on financial literacy, including the "Live Like a Student Now So You Don't Have to Later" campaign. This program was recognized by the President and First Lady at the College Opportunity Summit held in Washington, D.C. in January 2014.

Welcome Week for new students includes a workshop on money management, and One Stop Student Services has trained financial counselors and a website that includes money management resources. A key point of the financial literacy messaging is that graduating in a timely manner is one of the best ways for students to manage the costs of their education.

Even before the recent media attention to student debt loads, the University was tracking student debt and developing strategies to help students. As shown in Table 4-2, trends over the past five years are moving in the right direction; the proportion of graduates with no debt is increasing, and the average amount of loan debt for those who have debt is stable.

Accessible to Transfer Students

Educating transfer students is an important part of the University's service to the State of Minnesota, and particularly important for the Twin Cities campus, as the flagship campus, which offers many undergraduate majors not offered elsewhere in the state. Of the 8,578 new students enrolling on the Twin Cities campus in 2014–15, 5,543 were freshmen and 3,035 (35 percent) were transfer students from outside the University. Over 40 percent of these new transfer students are coming to the Twin Cities campus from Minnesota State Colleges and Universities System institutions.

Transfer students add to the diversity of the Twin Cities campus. When compared to those who enter as freshmen, transfer students show higher proportions of first-generation students, African-American students, international students, and older-than-traditional-college-age students. The University focuses on admitting transfer students who can be successful in

Table 4-2. Student debt trends, Twin Cities campus, 2010–2015

Bachelor's Degree Recipients	2010-11	2011–12	2012–13	2013–14	2014–15
% of Bachelor's Degree Recipients with no student debt	34%	36%	38%	39%	40%
Average loan debt for those with debt	$27,086	$27,578	$27,158	$26,406	$26,091
Median loan debt for those with debt	$24,337	$24,646	$24,594	$24,433	$24,000

completing a degree program, and considers students for transfer admission once these students have a record of success in one or more years of college courses that are transferable to the University. Transfer student graduation rates have been going up, just as they have been for students admitted as freshmen. Of the 7,594 undergraduate degrees awarded on the Twin Cities campus in 2014–15, 37 percent were awarded to students who had transferred to the campus.

Accessible to Diverse Students

The University is committed to achieving excellence with a diverse student body and maintaining a respectful, welcoming environment for all students. This commitment encompasses diversity in many forms, including geographic origin, gender, racial-ethnic background, sexual identity, culture, disability, veteran status, and socio-economic background.

Over 700 veterans are now enrolled on the Twin Cities campus as degree-seeking undergraduates. The University Veterans Services Office assists these students with admissions processes; transitioning from military life to the role of a student; certifying, applying, and qualifying for veterans benefits; processing military leaves for those called to active duty; and connecting with other campus opportunities and resources.

From fall 2014 to fall 2015, the number of undergraduates of color on the Twin Cities campus increased from 5,740 to 5,920 (from 19 percent to 19.6 percent), and the number of international students increased from 2,642 to 2,787 (from 9 percent to 9.2 percent). For fall 2015, the percentage of undergraduate students from Minnesota was 66.2 percent. Students from 50 states and 89 countries were among the 30,135 undergraduates.

While the percentage of Minnesota students has been relatively consistent, there have been some shifts in the geographic origin of other U.S. students. The percentage of students from reciprocity states (Wisconsin, North Dakota, and South Dakota) has decreased, while the percentage from other states and outside the U.S. has increased. The increase in the numbers of students from other regions of the United States and from other countries reflects the University's commitment to enhancing the campus community through the inclusion of young people from differing countries, backgrounds, religions, and experiences.

Attracting Outstanding Students to the Twin Cities Campus

High-ability students increasingly seek to attend the University of Minnesota Twin Cities, as evidenced by the growing numbers of applications and the student preparation metrics of the incoming freshman class. Applications for admission have more than doubled over the past decade, from 20,532 prospective students seeking admission for fall 2005 to 46,166 for fall 2015. During that same time period, the average ACT for the new freshman class has improved significantly, from 25.1 to 28.2.

The large increase in number of applicants to the Twin Cities campus can be attributed to a growing awareness by prospective students and their families of the many improvements in undergraduate education on the Twin Cities campus. The academic preparedness and ability of our first-year students and the diversity among those students enrich the classroom experience and the campus social environment. Enhanced national recruitment efforts have helped to offset the declining numbers of Minnesota high school graduates, increase the geographic diversity of the student body, and bring workforce talent into the state of Minnesota. The fall 2015 freshman class includes students from 45 states and 41 countries.

The campus-wide University Honors Program attracts high-achieving students who have chosen to attend the Twin Cities campus over some of the nation's most selective institutions. The 2,200 students in our Honors Program benefit from a challenging, interdisciplinary approach, with rigorous honors courses and co-curricular experiences that draw on the expertise of our faculty and staff across the comprehensive range of disciplines on our campus. The profile of the 559 new fall 2015 Honors students showed an average ACT of 32.3 and average high school rank of 96.9 percent.

Offering a Great Student Experience on the Twin Cities Campus

The Twin Cities undergraduate educational experience is special because of its unique position in the world of public higher education:

- As the state's only research university and one of the very best research universities in the nation.

- As the state's public land-grant university.

- Located in the state capital, which provides many opportunities for internships with state agencies.

- Situated in a vibrant metropolitan area, with remarkably beautiful parks, lakes, and rivers; a lively social and cultural environment; and many Fortune 500 companies.

The University leverages these attributes to provide undergraduates with a world-class learning environment and student experience. The University is one of the most comprehensive in the world, offering 150 baccalaureate degree programs in a wide range of areas: astrophysics, child psychology, American Indian studies, entrepreneurial management, biomedical engineering, and music performance, to name just a few. Many students take even greater advantage of this breadth of opportunity by double-majoring or by completing a minor. The 135 minors offered include traditional disciplinary areas such as art history, biology, and mathematics, as well as emerging and interdisciplinary areas such as product design, family violence prevention, and sustainable agriculture.

As part of achieving the vision of the Twin Cities Campus Strategic Plan—to be preeminent in solving the grand challenges of a diverse and changing world—exciting new Grand Challenge Curriculum (GCC) courses are being developed, with the first GCC courses being offered in 2015–16. These courses address important global issues through a solution-driven, interdisciplinary approach to learning. GCC courses are taught by cross-disciplinary faculty who bring unique perspectives to the Grand Challenge being explored. For example, fall semester 2015 GCC courses include "Can We Feed the World Without Destroying It?" and "The Fracking Boom: Promises and Challenges of the Hydrocarbon Renaissance."

Such opportunities to have an impact on the world are valued by a majority of undergraduates. Data from the 2014 Student Experience in the Research University survey indicate that 85 percent of students surveyed considered opportunities to connect their academic work with community-based experiences important. Public engagement activities support student learning and development outcomes and help recruit students to the University who are looking for these engagement opportunities.

The Community Engagement Scholars Program is another option for students to immerse themselves in a rigorous community-based learning program. Through a cohort model, students take eight credits of service-learning coursework, participate in structured reflection sessions, volunteer for a minimum of 400 hours with a community organization, and complete a final capstone project in partnership with a community organization. Upon completion of the program, students receive official recognition at graduation and on their academic transcript. Today, the program includes 329 students, 35 of whom graduated in Spring 2015.

The University has agreed upon campus-wide undergraduate student learning outcomes, which state that, at the time of receiving a bachelor's degree, students:

- Can identify, define, and solve problems.

- Can locate and critically evaluate information.

- Have mastered a body of knowledge and a mode of inquiry.

- Understand diverse philosophies and cultures within and across societies.

- Can communicate effectively.

- Understand the role of creativity, innovation, discovery, and expression across disciplines.

- Have acquired skills for effective citizenship and lifelong learning.

Articulated learning outcomes are important as faculty develop curricula, plan courses, construct learning activities, and assess the learning that occurs in every aspect of the student experience: classes, service-learning, research opportunities, internships, and learning abroad.

Twin Cities undergraduate teaching facilities have been improved with state-of-the-art classrooms, including Bruininks Hall, which has more than a dozen high-tech, active-learning classrooms. Residence hall facilities and programming have been recently enhanced as well. The new 17th Avenue Residence Hall increased the on-campus housing capacity by 600 beds. A new Residential Curriculum Model was launched in all residence halls and apartment communities, based on five elements of well-being: career, social, financial, physical, and community, and reflecting the University's ongoing commitment to student engagement, retention, graduation, and success.

Preparing Twin Cities Campus Graduates for Success

The University is committed to providing students with a distinctive, world-class liberal education and rigorous coursework in a field of study. Initiatives concerned with the student experience are focused on enriching students' knowledge, skills, and abilities and equipping them for the challenges of the future in a diverse, changing, global society. Undergraduate student retention rates, graduation rates, and the

number of degrees conferred are among the measures that the University uses to assess the extent to which the University is challenging, educating, and graduating students. The University Progress Card includes the following goals for undergraduate education on the Twin Cities campus:

- 4-year graduation rate of 65% for the 2017 cohort
- 6-year graduation rate of 82% for the 2015 cohort
- Average freshman ACT score > 28
- 3-year graduation rate > 65% for transfer students

Retention and Graduation Rates

The Twin Cities campus has made significant progress over the last decade in improving undergraduate graduation rates. Retaining students after their first year is the first step toward timely graduation. Figure 4-A and Figure 4-B show the most recent results, with rates at their highest levels ever, including first-year retention now at 92.6 percent. As a result of this progress, the Twin Cities campus rates are competitive with comparable institutions. Table 4-3 ranks the graduation rates of the Twin Cities campus's comparision group institutions (which includes the most selective public research universities in the country), as well as the other public Big

Figure 4-A. Four-, five-, and six-year graduation rates of first-time, full-time undergraduate students, Twin Cities campus, classes matriculating in 2001–2011
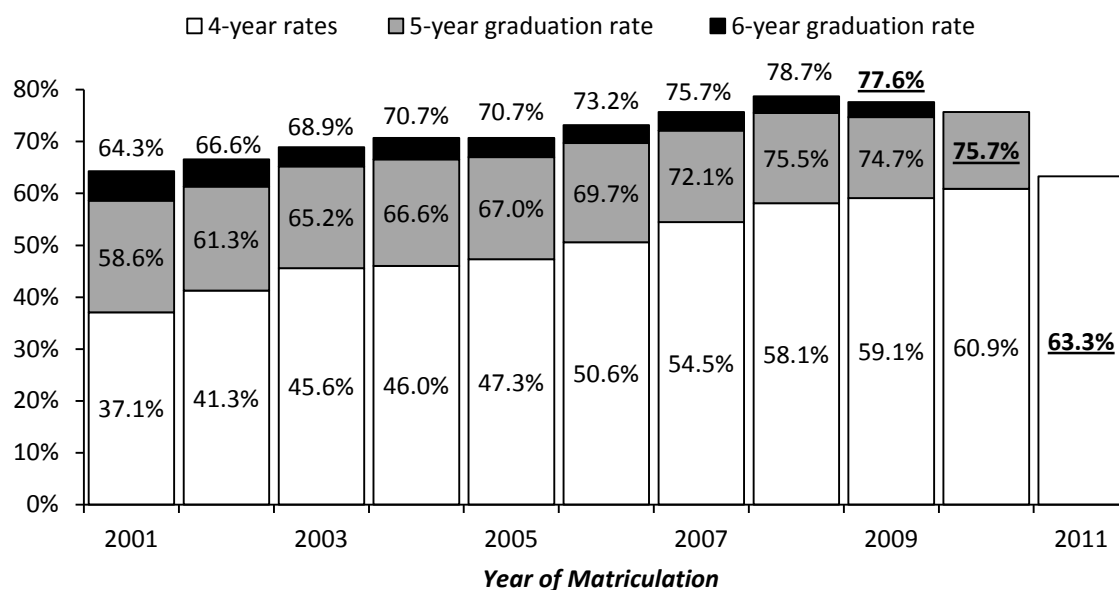
*Rates include graduates who transferred to another University of Minnesota campus. Graduation rates displayed in Table 4-3 are those reported to the national database (IPEDS), which counts only students who matriculated at and graduated from the same campus. As a result, the rates presented in the figure above differ slightly than those displayed in Table 4-3.

Source: Office of Institutional Research, University of Minnesota

Figure 4-B. First-year retention rates of first-time, full-time undergraduate students, Twin Cities campus, classes matriculating in 2004–2014
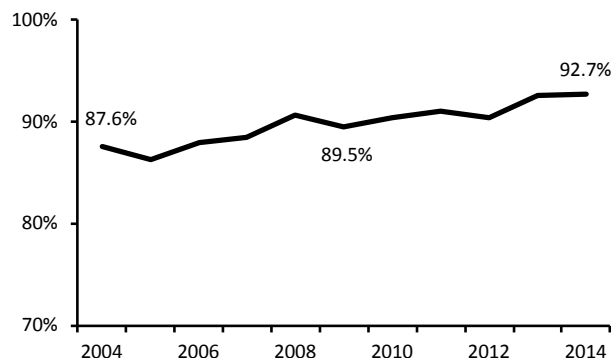
Source: Office of Institutional Research, University of Minnesota

Ten Conference universities. While the table lists graduation rates for classes matriculating in 2009 (the most recent data available for comparison), the most recent Twin Cities campus rates (displayed in parentheses) suggest that the campus will rank even better when data for those classes become available for comparision.

Retention rates for students of color have improved significantly, and for the fall 2014 entering class, are comparable to those for other students. Retention rates for low-income students (Figure 4-C) have also improved significantly, and are now above 90 percent.

Figure 4-C. New freshman retention by Pell status, Twin Cities campus, 2004–2014
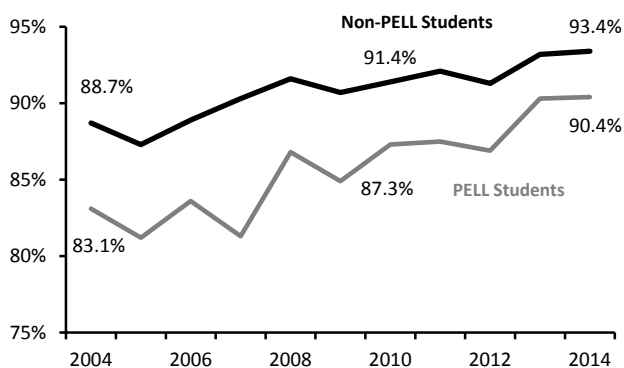
Source: Office of Institutional Research, University of Minnesota

Table 4-3. Retention (class matriculating in 2013) and graduation (class matriculating in 2009) rates sorted by four-year graduation rate, Twin Cities campus comparison group and Big Ten Conference institutions

	1st-year Retention Rate	4-year Graduation Rate
*U. of Michigan – Ann Arbor	97%	75%
*U. of California – Los Angeles	97%	73%
*U. of California – Berkeley	96%	73%
*U. of Illinois – Urbana-Champaign	93%	71%
U. of Maryland – College Park	96%	70%
*U. of Florida – Gainesville	96%	66%
*Penn. State U. – Univ. Park	93%	65%
*U. of Washington – Seattle	94%	61%
*Ohio State U. – Columbus	94%	59%
U. of Minnesota – Twin Cities	**92% (93)**[1]	**59% (63%)**[2]
*U. of Wisconsin – Madison	95%	57%
Indiana U. – Bloomington	89%	53%
*U. of Texas – Austin	94%	52%
Michigan State U. – East Lansing	92%	51%
U. of Iowa – Iowa City	86%	51%
Rutgers, State U. of New Jersey – New Brunswick	92%	50%
Purdue U. – West Lafayette	92%	47%
U. of Nebraska – Lincoln	84%	33%

Sources: Integrated Postsecondary Data System and Association of American Universities Data Exchange
*Comparison Group Institutions
[1] Most recent UM–TC 1st-year retention rate (class matriculating in 2014)
[2] Most recent UM–TC four-year graduation rate (class matriculating in 2011)

Degrees Conferred

The Twin Cities campus has increased by more than 25 percent the number of undergraduate degrees awarded over the past decade, from 6,043 in 2003–04 to 7,594 in 2013–14 (Figure 4-D). While it is important to track the total number of degrees conferred, in terms of contributing to the state's educated work force, additional factors also need to be taken into account. Accordingly, the Twin Cities campus is focusing on producing degrees that reflect a balance of external demand, capacity, and resources.

In response to changes in student interest and state and national employment needs, the Twin Cities campus is now awarding substantially more degrees in science, technology, engineering, and math (STEM) fields. From 2003–04 to 2013–14, the number of STEM degrees increased by 54 percent, from 1,938 to 2,983. STEM degrees awarded include all baccalaureate degrees in several broad categories as defined by the Department of Education. These STEM fields include agriculture, natural resources, engineering, computer sciences, biological sciences, physical sciences, mathematics, and health professions.

Figure 4-D. Undergraduate degrees awarded, Twin Cities campus, 2004–2005, 2014–2015
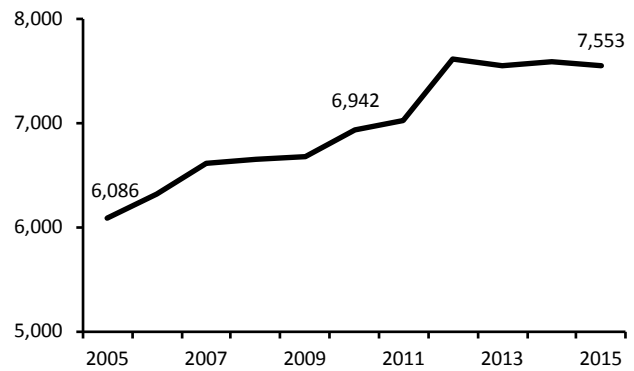
Source: Office of Institutional Research, University of Minnesota

DULUTH CAMPUS

Maintaining Access to the Duluth Campus

Affordable Access

With a unique combination of both land-grant and sea-grant missions, the University of Minnesota Duluth (UMD) occupies a distinctive place in the University system and is committed to being accessible to Minnesota students. Over 85 percent of UMD's undergraduate students are from Minnesota, with about half coming from the Twin Cities metro and half from greater Minnesota. In 2014, 28 percent of UMD's entering class were first-generation college students.

UMD ensures affordable access for students of all backgrounds and has expanded both merit and need-based scholarships to attract top-level students. In 2014, over 37 percent of UMD students qualified for the University of Minnesota Promise Scholarship, a multi-year scholarship for Minnesota resident undergraduates with a family income of up to $100,000. UMD offers Best in Class scholarships to students who rank either first or second in their high school class, and offers multiple financial aid strategies to all students such as scholarships, work study, and loans. Funding has increased significantly for financial aid to help students manage the cost of their education (Table 4-4).

Table 4-4. Student aid trends, degree-seeking undergraduates, Duluth campus, 2004, 2009, 2014

	2004	2009	2014
Gift Aid	$16.8m	$27.3m	$38.9m
Employment	$3.7m	$4.2m	$4.6m
Loans	$28.8m	$59.7m	$66.1m
Total Student Aid	$52.7m	$92.8m	$111.6m
% of Students Receiving Gift Aid	46%	48%	64%
% of Students Receiving Loans	58%	70%	66%

Source: Office of Institutional Research, University of Minnesota

Diversity

The Duluth campus has a renewed commitment to equity and diversity and has placed a high priority on creating an environment that is welcoming and respectful. A campus change team was named in 2010 and charged with developing campus-wide action plans at all levels to create a more inclusive environment for students, faculty, and staff. Efforts include increasing recruitment, retention, and support of diverse students, faculty, and staff; the integration of cultural diversity, cultural competence, and social justice topics into curriculum and campus life; increased training and development opportunities that promote equity, diversity, and social justice; implementation and rigorous enforcement of policies and procedures that advance cultural diversity and social justice, including progress on diversity initiatives as an explicit part of performance reviews of campus leadership.

In 2015, UMD students will be able to select apartments in which their roommates can be any combination of genders. UMD will be among the first wave of universities in the state to offer this Gender Inclusive Housing option. Other campus highlights include the Faculty and Staff of Color mentoring program. The project, "Building a Mentoring Culture that Supports Recruiting Faculty and Staff of Color," was awarded an Office of Equity and Diversity Transformation Award in 2014 and will continue into the 2015–16 academic year.

In 2013, UMD added a cabinet-level leadership position to facilitate campus climate training and development for faculty, staff, administration, and students. The Faculty Fellow began a process for Comprehensive and Integrated Intercultural Development through a Model for Institutional Change. The development of internal capacity for ongoing training includes the completion of eight cohorts (144 faculty, staff and administrators) in an intensive off-campus Intercultural Leadership Development initiative. Another two cohorts are planned for 2015–16. Internal capacity was also developed to provide the Equity and Diversity Certificate for staff and faculty. This system-wide certificate program is now being offered at UMD by UMD trainers, in collaboration with the Office of Equity and Diversity. In addition to serving on the

Chancellor's Cabinet, the Fellow also serves as co-chair of the Campus Climate Change team (CCT) alongside the Director of the Office of Cultural Diversity. The CCT continued into its fifth year with 18 unit change teams working on incorporating values of diversity, equity, and inclusion in every aspect of the institution.

The Duluth campus values diversity as a means of enriching the educational experience of all students and continues its strong commitment to building a more diverse student body. Admissions and collegiate student affairs units continue to aggressively recruit students of color. In addition, UMD's Strategic Enrollment Management Council has developed an action plan that provides a macro-level accounting of campus initiatives, outcomes, timelines, responsibility centers, and results supporting enrollment goals for students of color. Over the past decade UMD has experienced steady growth in the percentage of underrepresented students, as shown in Figure 4-E.

Transfer Student Initiatives

The Duluth campus is committed to increasing transfer student recruitment and academic success and has made a concerted effort over the past year to become a more "transfer-friendly" institution, including:

- UMD has partnered with Lake Superior College (LSC) on a project called *Link* which provides an education pathway for interested LSC students to complete their baccalaureate degree through UMD.

- In the fall of 2014, UMD launched the *Connect* initiative, a campus-wide, credit-based peer-mentoring program that pairs current transfer students with incoming transfer students to help smooth their transitions to UMD.

- The UMD Supportive Services Program created a two-credit T.A. training course to increase peer-to-peer leadership development.

- The Office of the Registrar and the Office for Students in Transition continue collaboration with Lake Superior College to pilot a Reverse Transfer process through May of 2016.

Attracting Outstanding Students to the Duluth Campus

Enrollment Management

Over the last three years, improved new student recruitment strategies and marketing have played a leading role in UMD's enrollment management strategy. Ongoing processes for analyzing internal and external enrollment data, establishing and monitoring enrollment goals, and identifying actions steps to meet those goals have resulted in enrollment increases of new high school students and the representation of students of color within those increases. In fall 2005, students of color made up 4.9 percent of UMD's entering freshman class. In fall 2014, the percentage was 12.2 percent (See Figure 4-F).

The Strategic Enrollment Management (SEM) Council, a campus governance subcommittee of the Committee for Strategic Planning and Budget,

Figure 4-E. Percent undergraduate students of color by fall term, Duluth campus, 2005–2015
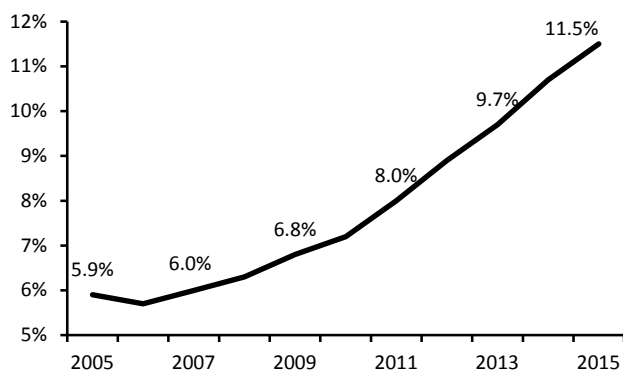
Source: Office of Institutional Research, University of Minnesota

Figure 4-F. Percent undergraduate students of color by fall term, Duluth campus, 2006–14
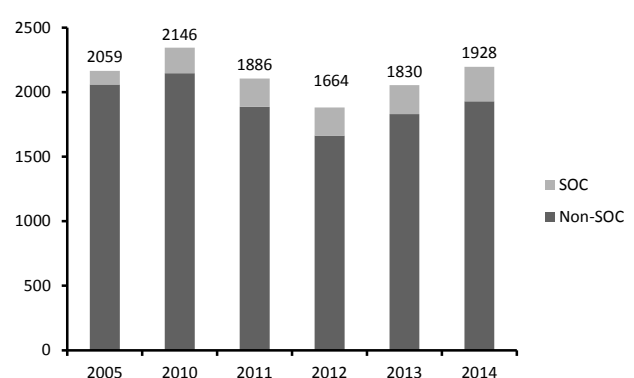
Source: Office of Institutional Research, University of Minnesota

continues to play a vital role in all aspects of UMD's enrollment management planning. In fall 2014, the SEM Council completed analysis of undergraduate program demand and capacity to identify two sets of enrollment opportunities: 1) programs with capacity for enrollment growth without additional resources, and 2) programs with enrollment demand beyond current resource capacity. In collaboration with the collegiate deans, this information was used to develop six SEM initiatives that had an impact on more than fifteen undergraduate academic programs. Each initiative was modeled to determine return-on-investment for the University, and received initial financial support from central resources. Ongoing assessment will take place to monitor goal achievement. Table 4-5 shows that these efforts have resulted in the number of new high school students entering UMD rising over the last ten years.

Offering a Great Student Experience on the Duluth Campus

The Duluth campus overlooks the shores of Lake Superior in a thriving community that offers over 11,000 acres of public space, more than 160 miles of hiking trails, and a vibrant arts scene. UMD takes pride in providing a high-quality living and learning experience, abundant opportunities for undergraduate and graduate research, and a strong presence in the cultural, economic, and intellectual life of the Duluth community. Providing an alternative to large research universities and small liberal arts colleges, UMD attracts students looking for a personalized learning experience on a right-sized campus of a major university.

Undergraduate students can choose from 14 bachelor's degrees in 92 degree programs across five collegiate units, including the Labovitz School of Business and Economics, the College of Education and Human Service Professions, the School of Fine Arts, the College of Liberal Arts, and the Swenson College of Science and Engineering. The Duluth campus offers graduate programs in 19 fields and six cooperative programs offered through the Twin Cities campus in addition to a two-year program at the University's School of Medicine Duluth and a four-year College of Pharmacy program.

Undergraduate Research

UMD continues to be a leader in undergraduate research, providing opportunities in research, scholarship, and creative activity. The Undergraduate Research Opportunity Program (UROP) program has a very high participation rate (more than 200 students annually, see Figure 4-G) Faculty grants and donor gifts add to the funding of undergraduate research, scholarship, and creative activity. Several departments at UMD have nationally recognized summer undergraduate research programs, the newest being the BURST program (Biological Undergraduate Research in Science and Technology).

All stakeholders on campus recognize the impact that undergraduate research, scholarship, and creative activity have in the academic life and future careers engagement of students. For example, donor and friend of UMD Jim Swenson valued his undergraduate research so much that the Swenson Family Foundation has funded summer research in chemistry and biochemistry every year for more than two decades. Brian Kobilka, the 2012 Nobel Prize winner in

Table 4-5. Fall enrollment, Duluth campus, 2005, 2010, 2012–14

	2005	2010	2012	2013	2014	Percent Change 2010 to 2014	Percent Change 2005 to 2015
Undergraduate	8,931	9,659	9,452	9,239	9,120	-1.3%	3.1%
Graduate	696	716	753	781	715	-8.4%	8.2%
Non-degree	607	1,004	932	874	903	3.3%	40%
Total	10,496	11,729	11,137	10,894	10,738	-1.4%	5.8%

Source: Office of Institutional Research, University of Minnesota

Figure 4-G. Total number of UROP students, Duluth Campus, 1998–2014
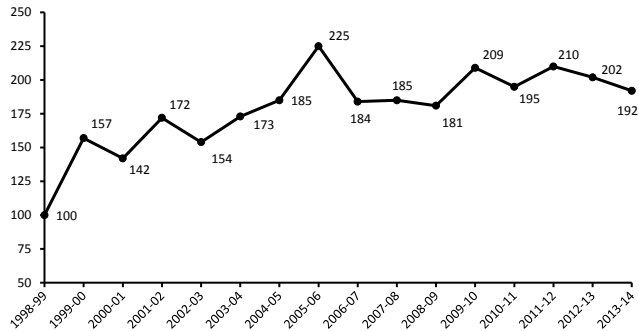
Source: University of Minnesota Duluth UROP

Chemistry, credits his involvement in undergraduate research with UMD professor Conrad Firling for much of his success as a scientist.

UMD celebrates undergraduate research and artistic activities with two Undergraduate Research/ Artistic Showcases each year. These half-day campus events feature student posters, computer demonstrations, art exhibits, and theatre productions, all providing information about projects completed by undergraduate students working with faculty mentors and include presenters from other system campuses.

UMD is a strong contributor to the research mission of the University system. With a research footprint that is proportionally larger than its size, UMD complements the Twin Cities campus in serving the needs of the State of Minnesota.

Internationalization

During 2014–15, the Duluth campus worked to implement the UMD Global 2020: Strategic Plan for Comprehensive Internationalization that was developed as part of its participation in the American Council on Education's International Laboratory during the previous two years. The current year's activities focused on creating an infrastructure for comprehensive internationalization and beginning to develop programs to achieve the UMD Global 2020 vision and goals.

Accomplishments to date include:

- creating an International Student Services Coordinating Council to enhance services to meet the needs of international students;

- creating indicators of goal achievement related to the UMD Global 2020 plan;

- mapping internationalization student learning outcomes (SLOs) to campus SLOs;

- creating an initial inventory on international partnerships as a basis for refining and enhancing these partnerships;

- creating a kick-off activity for the UMD Global 2020 plan and offering five workshops for faculty and staff that focused on internationalizing the curriculum and the campus;

- coordinating international and intercultural campus initiatives; and

- offering two "Global Café" activities that brought over 80 students, staff, and faculty to each event to experience and discuss international topics.

UMD plans to build on these foundational activities to implement the UMD Global 2020 Strategic Plan for Comprehensive Internationalization during 2015–16.

Recreational Sports Outdoor Program

UMD's Recreational Sports Outdoor Program (RSOP) has been a national leader in engaging students in healthy, active lifestyles and connections to the natural world through personal and professional experiences. RSOP offers a wide variety of active programming including intramural sports, fitness and wellness programs, sport and outdoor clubs, aquatics, kayaking and canoeing, climbing, environmental education, outdoor trips, and youth programming.

Almost 90% of UMD students participate in RSOP facilities and services. The overall RSOP and intramural participation rates are 20 percentage points above national benchmarks placing UMD among the top schools in the nation. The latest major benchmarking occurred in the spring of 2014. Results include that:

- 88.6% participate in RSOP programs and services;

- 78% indicated that RSOP was important in their decision to attend UMD;

- 81% indicated that RSOP was important in persisting; and

- 83% indicated that their academic performance improved due to participation.

Kirby Student Center

In the fall of 2015, UMD completed the two-year phased renovation of the Kirby Student Center. The project was intentionally implemented in stages to reduce the impact on students. A significant goal for this project was to create additional space for students within the existing footprint. By combining services, downsizing office space, and making effective use of architectural designs, the project created more than 4,000 square feet of new lounge, study, and meeting space for UMD students without increasing the size of the building.

The current renovation gives greater visibility to student government, programming board, student newspaper, and Greek Life organizations. A new meeting and performance space accessible to all 260 student organizations further highlights the contributions these groups make to student involvement at UMD.

Preparing Duluth Campus Graduates for Success

Retention and Graduation

UMD achieved its five- and six-year enrollment goals set by the Board of Regents in 2006. (Figure 4-H). Improvements in graduation rates have been achieved through a concerted effort to engage students in planning their degree progress using tools such as the Academic Progress Auditing System, the Graduation Planner, and the 30-60-90 Student Success Roadmap, which emphasizes credit goals and success-oriented activities on the path to timely graduation. During fall 2013, 68.4 percent of undergraduates were enrolled in 15 or more credits, a key benchmark of the Roadmap. This compares to 52.3 percent in 2006. Table 4-6 shows how the Duluth campus compares to its peer group institutions, using rates for the class matriculating in 2007, the most current data available.

Figure 4-H. Four-, five-, and six-year graduation rates of first-time, full-time undergraduate students, Duluth campus, classes matriculating in 2001–2011

□ 4-year rates   ▧ 5-year graduation rate   ■ 6-year graduation rate

Year	4-year	5-year	6-year
2001	26.1%	49.9%	55.3%
2002	25.9%	50.5%	56.1%
2003	25.8%	51.9%	57.6%
2004	28.8%	55.3%	60.3%
2005	29.1%	54.3%	60.4%
2006	30.6%	54.6%	59.6%
2007	32.9%	60.7%	66.7%
2008	37.4%	60.9%	65.5%
2009	37.5%	62.1%	**66.5%**
2010	38.2%	**60.8%**	
2011	**39.0%**		

Year of Matriculation
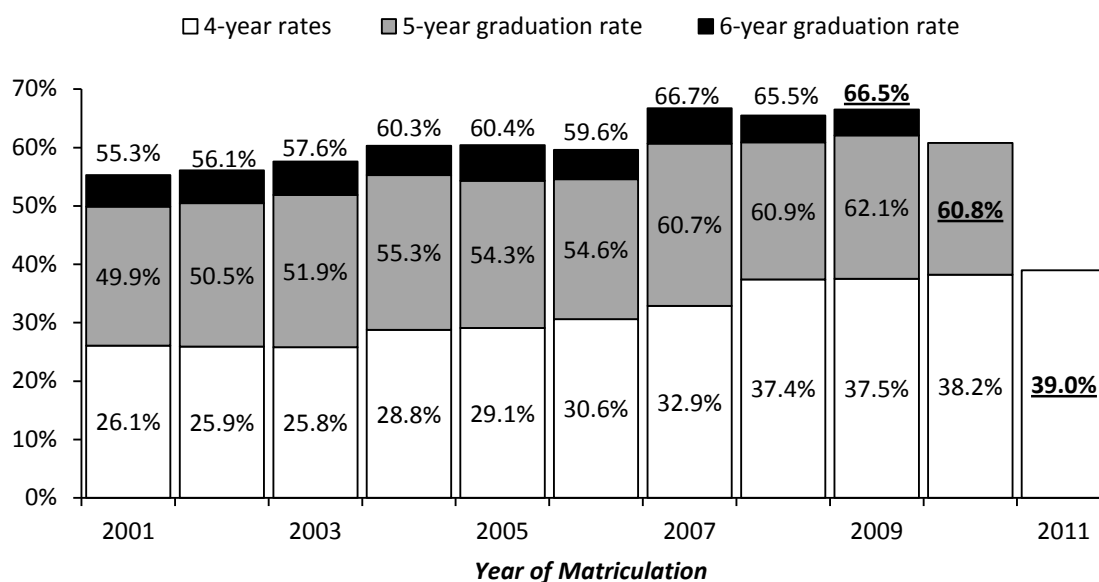
Rates include graduates who transferred to another University of Minnesota campus. Graduation rates displayed in Table 4-6 are those reported to the national database (IPEDS), which counts only students who matriculated at and graduated from the same campus. As a result, the rates presented in the figure above differ slightly than those displayed in Table 4-6.
Source: Office of Institutional Research, University of Minnesota

Improved graduation rates coupled with larger entering classes in 2008, 2009, and 2010 have led to a record number of undergraduate degrees being conferred. As Figure 4-I shows, UMD awarded 18.7 percent more degrees in 2014–15 than in 2004–2005.

Supporting Progress

Another critical component of enrollment management is student retention (Figure 4-J). In spring 2015, SEM Council communicated a campus-wide goal of increasing first-to-second year retention by three percent within the next three years and introduced a framework for achieving that goal. Identification of course, program, department, and unit-level action steps is currently underway, and a small pool of initiative grants will be distributed in fall 2015 to support these efforts.

Table 4-6. Six-year graduation rates (class matriculating in 2008), Duluth campus and comparison group institutions

	6-year Graduation Rate	Institutional Rank
CA Poly. State U.–San Luis Obispo	75%	1
Western Washington U.	72%	2
Col. of Charleston	67%	3
U. of Northern Iowa	64%	4
U. of Minnesota–Duluth	**59%**	**5**
South Dakota State U.	58%	6
U. of N.C.–Charlotte	55%	7
Western Michigan U.	54%	8
Minnesota State U.–Mankato	50%	9
U. of Michigan–Dearborn	50%	10
Southern Illinois U.–Edwardsville	50%	10
U. of Mass.–Dartmouth	47%	11
Comparison Group Average	58%	-

See footnote on Figure 4-H.
Source: Integrated Postsecondary Education Data System (IPEDS)

Figure 4-I. Undergraduate degrees awarded, Duluth campus, 2005–2015
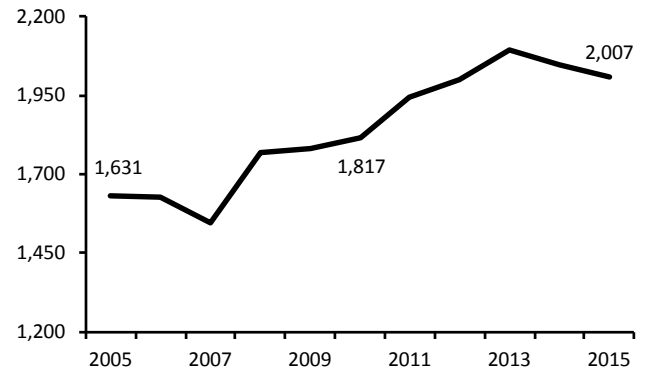
Source: Office of Institutional Research, University of Minnesota

Figure 4-J. First-year retention rates of first-time, full-time undergraduate students, Duluth campus, classes matriculating in 2004–2014
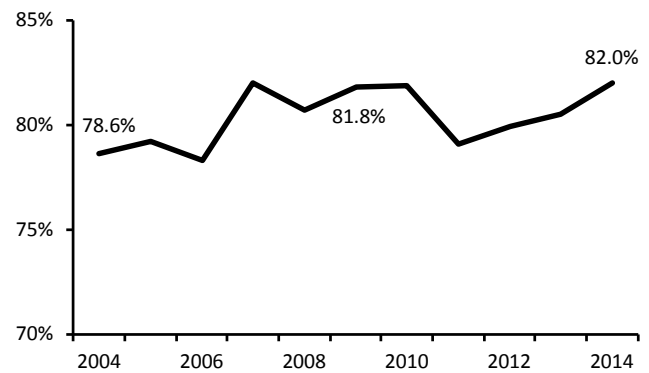
Source: Office of Institutional Research, University of Minnesota

MORRIS CAMPUS

As a public liberal arts college, the University of Minnesota Morris occupies a distinctive place in the landscape of higher education and within the University system. Morris is the only public liberal arts college so designated in the state of Minnesota by the Council of Public Liberal Arts Colleges. With its focus on undergraduates in a residential, human-sized, and community-based setting, it resembles the many private liberal arts colleges that populate the upper Midwest.

The campus mission unfolds within the context of the land-grant charge of the University system: the Morris campus provides a rigorous undergraduate liberal arts education, preparing its students to be global citizens who value and pursue intellectual growth, civic engagement, intercultural competence, and environmental stewardship. The Morris campus is a center for education, culture, and research for the region, nation, and world. The campus is committed to outstanding teaching, dynamic learning, innovative faculty and student scholarship and creative activity, and public outreach. The residential academic setting fosters collaboration, diversity, and a deep sense of community.

On the Morris campus, classes are taught almost exclusively by full-time faculty members, 98 percent of whom have earned terminal degrees in their fields. Morris campus faculty members are talented instructors and active in the production of scholarly and artistic works. In the past four years, the 125 Morris campus faculty members have authored over 300 books and well over 300 refereed journal articles, including many with students as coauthors.

Young as an institution of higher education—the first college class entered in 1960—the Morris campus was founded by community members in the region who advocated for a public liberal arts college on the Minnesota prairie. Preceded by two boarding schools—an American Indian boarding school and an agricultural boarding high school—the campus has a long history of serving the region, finding innovative solutions to complex problems, and providing access to students who would otherwise go unserved.

Maintaining Access to the Morris Campus

Enrollment Strategy

The Morris campus's enrollment strategy has been developed within the context of its 2007 strategic plan, with specific goals set to increase racial and ethnic diversity and to increase the number of international students while continuing to serve the west central Minnesota region and the state. In addition, the campus enrollment strategy aims at recruiting and retaining a talented group of undergraduates—the average ACT score for entering students has remained stable at 25 for at least ten years. The combined focus on selectivity and diversity in an undergraduate-focused residential setting makes Morris a unique campus within the University system and in the state.

Accessible to Minnesotans

The Morris campus is accessible to Minnesota students, many from traditionally underserved backgrounds. Nearly 80 percent of Morris students are from Minnesota; about a third are from the Twin Cities metropolitan area. The campus continues to serve students from Stevens County and the immediate region at approximately the same percentage as it always has—however there are fewer students in west central Minnesota than there were when the Morris campus opened in 1960.

Accessible to Students with Financial Need

One indicator of family financial need is found in the number of Pell grant recipients on a campus: thirty percent of Morris students receive federal Pell grants, supporting students with high financial need. Another indicator is found in median income: on the Morris campus, median income of families of Morris students who have completed the FAFSA is $81,159. Overall 82 percent of students receive financial aid.

Accessibility and Racial Diversity

The Morris campus's strategic plan set an enrollment goal of 25 percent students of color. In fall 2015, 27 percent of degree-seeking students on the Morris campus are students of color, the highest percentage in the University system (Figure 4-K). Of this, 18 percent

Figure 4-K. Percent undergraduate students of color by fall term, Morris campus, 2005–15
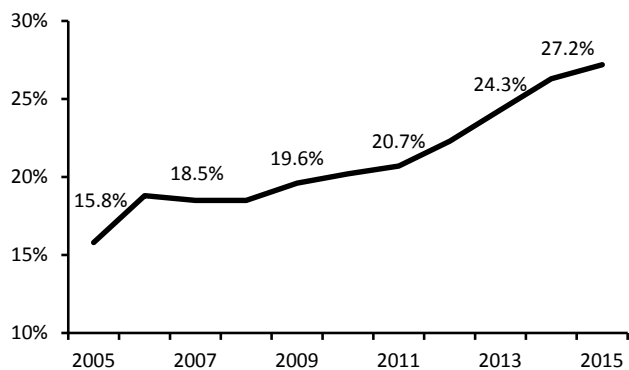
Source: Office of Institutional Research, University of Minnesota

are American Indian students, the highest percentage of Native students at a four-year, non-tribal institution in the upper Midwest. Moreover, when considering only the first-year class, students of color comprise 29 percent this fall. Morris's record of success in serving these students positions the campus particularly well to respond to the changing demographic trends in the region, the state, and the nation.

Accessibility and Underserved Students

Forty percent of the Morris campus's 2015 new first-year students will be the first generation of their family to graduate with a four-year baccalaureate degree, and approximately one third of Morris students overall are first generation. In 2014–15, two programs funded by the Great Lakes Guaranty Corporation provide academic coaching and support to students from traditionally underserved populations, including students of color, first generation, and low income students, to foster student success. In July 2015, the campus received a five-year federal Student Support Services grant of over $1 million, dedicated to supporting the success of underrepresented student groups.

Access and Affordability

Eighty-two percent of Morris campus students receive need-based, merit, and/or donor-funded financial aid. The campus offers three merit-based scholarships. An "achievement" scholarship is awarded to students who exhibit exceptional academic promise. In addition, two scholarships are awarded based on previous academic achievement and performance at a campus competitive scholarship day; students who receive these

scholarships enroll and persist at rates well above the Morris campus's average for admitted students.

In addition, a high number of Morris students (45 percent in 2014–15) benefit from UPromise Scholarships, and Morris campus gift dollars add to the financial support for students. In 2014–2015, over 400 students on the Morris campus received donor-funded scholarships, a number that has steadily increased.

In addition to the sources of financial support described above, the Morris campus offers a federally-mandated and state-statute–supported American Indian tuition waiver unique to the Morris campus and tied to its history as an American Indian boarding school. The waiver—though posing a financial challenge for the campus—provides an attractive incentive to qualified Native students (admitted with the same requirements as all students) to enroll and to persist, with educational benefit for these students and for the campus as a whole.

To provide support to students, the Morris campus's financial aid office reorganized its services to become the lead office as a "student one stop" with counselors who work one-on-one with students and their families to promote an understanding of financial aid—an especially important task given the high percentage of first-generation and high-need students the campus serves.

Attracting Outstanding Students to the Morris Campus

The Morris campus attracts talented, intelligent students who want to make a difference in the world. As noted above, the campus is selective, with an average ACT score of 25 for entering students. This number is noteworthy given the high percentage of Morris students from groups underrepresented in higher education.

Morris students have earned a reputation as smart and action-oriented, excelling within the classroom but also taking their learning out into the world. Morris students are responsible for a number of successful initiatives on campus, including the student-run recycling program; the composting initiative; the green revolving fund; the organic garden and the

Native American garden; and the weekend bus that transports students to and from the Twin Cities.

Morris students win national awards—including the American Indian Science and Engineering Society "best chapter" award and the Association for the Advancement of Sustainability in Higher Education student leadership award. In spring 2015, two Morris students won Fulbright scholarships and another earned a book contract with Michigan State University based on a senior art project focused on American Indian identity.

The Morris campus is nationally ranked by many national publications—including as a top ten public liberal arts college for the 17th year in a row by *U.S. News and World Report*; by the *Princeton Review* and Sierra Club; as a higher education best buy by *Forbes*; as one of the most interesting schools in the country by Fiske; and by the Environmental Protection Agency as one of the top 30 organizations in the country for on-site generation of power—in the company of Apple, Coca-Cola, and the U.S. Department of Energy.

Offering a Great Student Experience on the Morris Campus

The Morris campus offers a distinctive student experience, preparing students for success

and producing outcomes that matter. With its undergraduate, residential, human-sized community focus, the campus offers a distinctive value proposition as a public "private," providing the same focused experience as the upper Midwest's many excellent private liberal arts colleges, but at half or a third the price, even factoring in typical financial aid packaging at the privates. The Morris campus's ongoing efforts to create a model sustainable community make it an exciting destination for young people poised to invent a new future.

With an average class size of 17 and a faculty/student ratio of 1:14, Morris students are taught almost exclusively by full-time faculty—a faculty with the University's highest percentage of Horace T. Morse award winners for excellence in undergraduate education. Morris supports a rich environment for student engagement. Virtually every student participates actively in campus and community life. The most recent National Survey of Student Engagement data show that 97% of Morris seniors participated in at least one (and 77% participated in two or more) high impact practices recognized for their transformational impact on student learning and success (e.g., service-learning, research with faculty, internship/field experience, study abroad, a culminating senior experience), well above students at other public liberal arts colleges. Key Morris engaged learning experiences are detailed in Table 4-7.

Table 4-7. Student engagement rates, Morris campus and comparison group institutions, spring 2014

	Morris Seniors	COPLAC	Bac LA	NSSE All
Completed a culminating senior experience (capstone, project, thesis)	94%	-17%	-9%	-25%
Attended art exhibits, plays, dance, music, theater, or other performances	89%	-24%	-11%	-31%
Participated in co-curricular activities during senior year	84%	-22%	-4%	-29%
Held a formal leadership position in a student group	67%	-18%	-1%	-24%
Worked on campus in a paid position during senior year	60%	-25%	-6%	-32%
Worked on a research project with a faculty member	51%	-8%	+1%	-14%
Studied abroad	46%	-24%	-4%	-25%

Source: National Survey of Student Engagement
This table presents the percentage of seniors engaging in an activity prior to graduation at Morris compared to Council of Public Liberal Arts Colleges (COPLAC) peers as well as Baccalaureate Liberal Arts colleges (largely private colleges) (Bac LA), and all four-year universities participating in the National Survey of Student Engagement (NSSE All).

Morris students serve as teaching assistants, are peer mentors and tutors, and present at professional conferences alongside their faculty mentors. These experiences, of the type and quality often reserved for graduate students, serve as a springboard for work and post-baccalaureate education.

Morris students are advised by faculty members, not by professional advisors, with a new master advisors program adding greater support for students and faculty advisors.

The Morris campus has a robust service learning and engagement program, partnering with 44 area agencies and organizations to enrich student learning and meet community needs. Cadres of students conduct community-based research and statistical analysis of real world issues for communities in the region through the Center for Small Towns; other students engage in research that benefits corporate entities, such as the Schneider Trucking "Truckers and Turnover" projects. In 2015, the Morris campus was awarded the Carnegie Classification for Community Engagement.

Study abroad promotes not only the Morris campus's mission of providing an environment for the development of global citizenship, but also gives students experience and maturity that serves them well when they leave the institution. Thirty-seven percent of Morris students have studied abroad by the time they graduate.

In Spring 2014, 90 percent of Morris seniors reported that, if they could start college all over again, they would go to Morris (8 percent above seniors at other liberal arts colleges) and 94 percent rate their overall educational experience at Morris as good or excellent, with the majority choosing excellent.

A Midwestern Higher Education Compact 2015 report ranks Morris as the most effective and efficient four-year university in Minnesota. The study's two metrics allow a more meaningful comparison of graduation rates and cost-per-graduate among disparate institutions taking into account differences in demographics and environments. Morris produces more graduates than expected (a high Effectiveness Score) while spending less than expected per graduate (a low Expenditures Score). Of the 634 high performing four-year institutions included

in the national report, Morris ranks in the top 5 percent. There are only 27 four-year universities in the nation that outperform Morris on both metrics simultaneously.

Preparing Morris Campus Graduates for Success

Ninety-five percent of Morris students who graduated in 2014 indicated that they were employed and/or in graduate or professional school one year after graduation; nearly one-fourth of Morris students proceed directly to graduate and professional school following graduation. Figure 4-L shows the total number of undergraduate degrees awarded.

The Morris campus continues to work to improve graduation and retention rates. In the past five years, the first-year retention rate reached a high of 88 percent, with a five-year average of 84 percent (Figure 4-M).

Figure 4-L. Undergraduate degrees awarded, Morris campus, 2005–2015
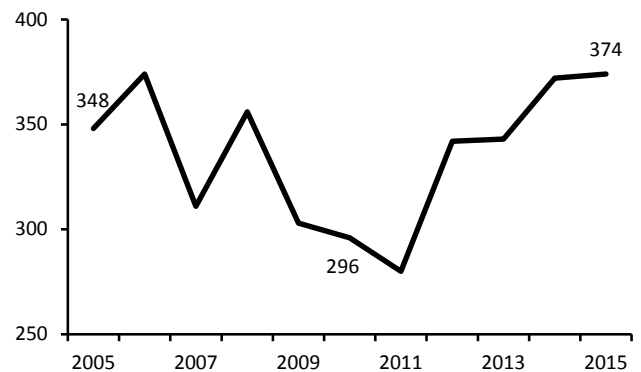
Source: Office of Institutional Research, University of Minnesota

Figure 4-M. First-year retention rates of first-time, full-time undergraduate students, Morris campus, classes matriculating in 2004–2014
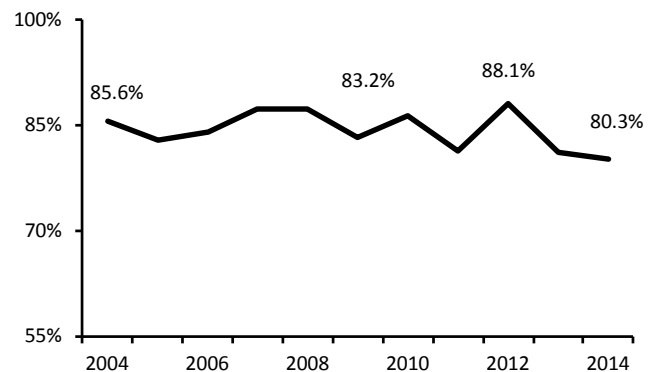
Source: Office of Institutional Research, University of Minnesota

Graduation rates continue to be high, with over 50 percent of students graduating in four years. The 2012 four-year graduation rate of 57 percent is the Morris campus's highest on record, a 17 percent increase since 1998. Five- and six-year rates are exceeding 65 percent (Figure 4-N). Table 4-8 shows how the Morris campus compares to its peer group institutions, using rates for the class matriculating in 2008, the most current data available.

The Morris campus has high graduation rates compared to its peers in the public sector and is working to reach the levels of its aspirational private college peers, who typically serve a more elite population of students.

The Morris campus is implementing a series of initiatives to increase student persistence and success, expanding advising, peer mentoring, and academic alert programs, and introducing individualized academic success plans, and parallel major program planning.

Figure 4-N. Four-, five-, and six-year graduation rates of first-time, full-time undergraduate students, Morris campus, classes matriculating in 2001–2011
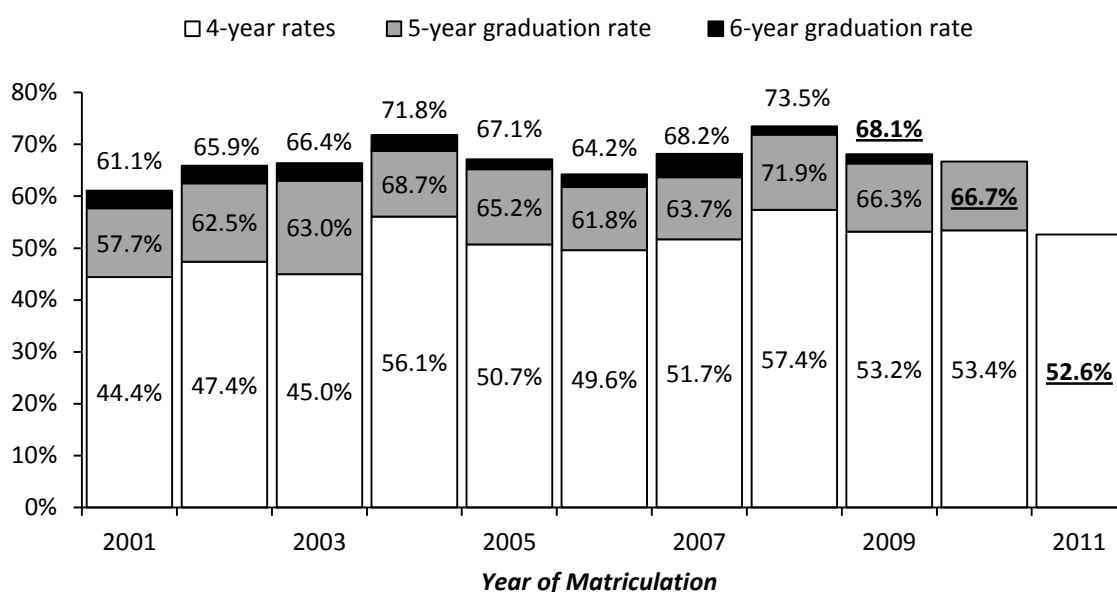
Rates include graduates who transferred to another University of Minnesota campus. Graduation rates displayed in Table 4-8 are those reported to the national database (IPEDS), which counts only students who matriculated at and graduated from the same campus. As a result, the rates presented in the figure above differ slightly than those displayed in Table 4-8.
Source: Office of Institutional Research, University of Minnesota

Table 4-8. Six-year graduation rates (class matriculating in 2008), Morris campus and comparable/aspirational peer institutions

	6-year Graduation Rate	Institutional Control	Institutional Rank
Macalester Col.*	90%	Private	1
St. Olaf Col.*	89%	Private	2
Kalamazoo Col.*	82%	Private	3
Gustavus Adolphus Col.*	81%	Private	4
St. Mary's Col. of Maryland	81%	Public	4
DePauw U.*	80%	Private	5
Albion Col.	72%	Private	6
Concordia Col.–Moorhead	72%	Private	6
Coe Col.	70%	Private	7
SUNY at Purchase Col.	67%	Public	8
U. of Minnesota–Morris	**67%**	**Public**	**8**
U. of N.C.–Asheville	64%	Public	9
Lycoming Col.	62%	Private	10
U. of Maine–Farmington	54%	Public	11
Mass. Col. of Liberal Arts	52%	Public	12
U. of Virginia's Col. at Wise	42%	Public	13
Comparison Group Average	70%	-	-

See footnote on Figure 4-N
Source: Integrated Postsecondary Education Data System (IPEDS)
*Aspirational peer institutions

CROOKSTON CAMPUS

Maintaining Access to the Crookston Campus

The Crookston campus attracts a diverse group of high potential students—both traditional and non-traditional—from across the state, country, and globe. They typically choose Crookston because they seek a supportive small campus experience, a distinctive academic program, and/or a personalized online experience connected to workforce needs. The campus serves as an important access point to University of Minnesota programs for citizens living in northwest Minnesota. Accessibility is reflected in enrollment trends, and the Crookston campus had maintained an eight-year trend of enrollment growth, followed by fall semester 2015's 1,874 undergraduate student enrollment, nearly equal to fall 2014.

As shown in Figure 4-O, of Crookston's total degree-seeking students, 14.7 percent identify themselves as students of color, and, based on country of citizenship, Crookston's student body includes representation from 26 countries (fall 2015). In addition, the campus has

Figure 4-O. Percent undergraduate students of color by fall term, Crookston campus, 2005–15

Source: Office of Institutional Research, University of Minnesota
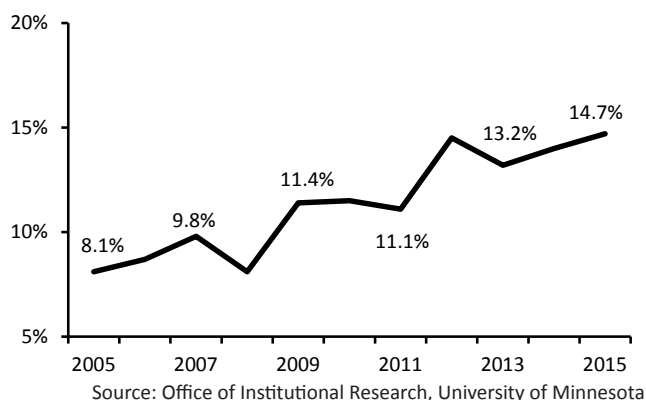
a long history of serving students from low socio-economic backgrounds. Recruitment of these students is part of an intentional strategy that aligns with the Crookston campus's core values, which include diversity.

For fall 2015, 46 percent of new high school graduates attending the Crookston campus are first-generation students. These students benefit from the campus's

personalized focus on teaching and advising as well as its small class sizes and numerous leadership opportunities. Conditionally admitted and at-risk students—and essentially all students—also benefit from the Crookston campus's small classes and personalized and supportive environment.

The Crookston campus is extremely cost efficient and cost effective, as demonstrated by the relatively low expenditure per degree within the University system. It also offers the lowest tuition rate within the system, in part, to serve students with the lowest average family income. For fall 2015, students enrolled at Crookston:

- come from families with the lowest average household income for students who applied for and received financial aid (Crookston $65,392; Morris $88,928; Rochester $91,429; Duluth $98,746; Twin Cities $99,098);

- receive the need-based Federal Pell Grant at a higher rate than students at the other system campuses: (Crookston 33%; Rochester 31%; Morris 30%; Duluth 26%; Twin Cities 23%); and

- are significantly more likely to be first generation college students: (Crookston 46%; Rochester 42%; Morris 39%; Duluth 29%; Twin Cities 28%).

Since it began offering baccalaureate degrees in 1993, the Crookston campus has drawn a steady number of transfer students who are seeking the prestige of a University of Minnesota degree. The graduation rate for these students is 62 percent. Due to historically strong relationships with two-year colleges, the Crookston campus has developed nearly 100 articulation agreements with 26 community and technical colleges across the Upper Midwest.

The Crookston campus has a strong record of being nimble and rejecting complacency—consistent with the Twin Cities campus strategic plan—and it has a demonstrated history of adapting to and embracing new technologies such as online learning. Crookston's initial online degree program had its first graduates in 2001. Today, 14 of the 34 majors are offered fully online as well as on-campus, and over 50 percent of total degree-seeking student enrollment is composed of online students (Figure 4-P). An extension of the modern land grant mission, these online degree programs allow working professionals the opportunity

Figure 4-P. Total enrollment and online enrollment, Crookston campus, fall 2006–2015

Legend:
- ☐ Total Degree Seeking Students
- ■ Student Seeking Degrees through Online Delivery

Year	Total Degree Seeking Students	Student Seeking Degrees through Online Delivery
2006	1056	21
2007	1142	93
2008	1207	149
2009	1310	262
2010	1462	355
2011	1600	471
2012	1802	678
2013	1813	818
2014	1876	935
2015	1874	963

Source: University of Minnesota Crookston
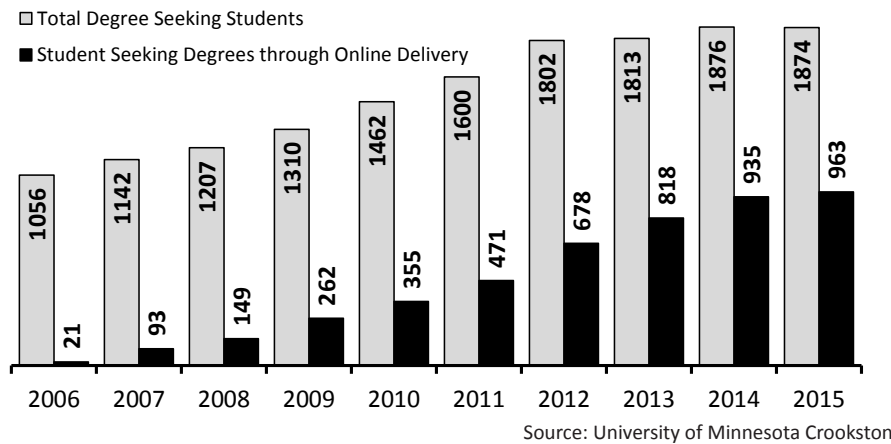
to complete their bachelor's degree and advance within their career path when traditional programs don't meet their needs. Students attending online overwhelmingly fall into the non-traditional category. The average age of these students is 33 (with 81% over 25), they are enrolled for an average of 9 credits, and are currently employed. Most have already completed a significant number of college credits (an average of 70 transfer credits). While the majority are Minnesota residents (68 percent), there is rich diversity among Crookston's online students, with 16 percent identifying as students of color and 27 countries represented (fall 2015).

In addition to degree-seeking students, the Crookston campus serves other non-traditional students. For example, College in the High School (CIHS) and Post-Secondary Enrollment Option (PSEO) students are high school students concurrently earning college credit, and they comprise 94 percent of Crookston's 974 (fall 2015) non-degree students. Through these programs, the Crookston campus helps make higher education accessible and more affordable for students and their families, and gives them the flexibility to graduate from college more quickly or to take lighter course loads while balancing working, internship requirements, conducting undergraduate research, and/or participating in intercollegiate athletics.

Attracting Outstanding Students to the Crookston Campus

The Crookston campus attracts outstanding students through its distinctive learning environments and

academic programs. The Crookston campus's marketing theme "Small Campus. Big Degree." is reinforced by the reasons students give for choosing to attend. Of the respondents to the new student survey in fall 2015, 78 percent indicated the size of campus was a reason for selecting the Crookston campus, 73 percent indicated that the Crookston campus was their first-choice college, and 64 percent indicated the type of academic programs available was a reason.

Distinctive majors attract excellent students. The Crookston campus offers several majors that are not found elsewhere in the University system, including agricultural systems management, agronomy, applied health, aviation, criminal justice, equine science, golf and turf management, horticulture, manufacturing management, quality management, and software engineering. The pre-veterinary option in animal science and equine science has been growing for many years, drawing students from across the United States. It has also developed a distinctive measure of quality: in just the past six years, 43 percent of Crookston graduates with a pre-vet emphasis have gone on to veterinary school (the national average of successful applicants is approximately 10%). Additionally, the campus's animal science major has developed an international reputation. In 2014–2015, 38 veterinary students from Brazil took courses on campus through a one-year exchange offered by the Brazilian government.

The Crookston campus is continuing work to expand the capacity for undergraduate research consistent with the increasing numbers of students who indicate a desire to continue their education beyond the

baccalaureate degree. Through careful hiring of new faculty and cost-effective space renovations, opportunities for students to engage with faculty in research are growing.

Outstanding students are also attracted to Crookston's Honors Program, which includes an honors proposal course that culminates in an honors essay, research, or creative project that requires a public defense.

Technology is embedded throughout the curriculum. The Crookston campus's innovative and longstanding laptop initiative puts computers in the hands of all full-time, on-campus students and faculty members. A pilot group of students is evaluating a tablet/laptop hybrid computer. A specialized informatics laboratory suite offers students the opportunity to work with emerging technologies. This lab is used by students from many different majors, but it is especially important to software engineering students who use it to develop software and engage in research. And online coursework offers flexibility not just for online-only students but also for on-campus students with class schedule conflicts.

The Crookston campus has a culture of continuous improvement. For example, during the 2014–2015 academic year, faculty collected and analyzed data on student learning outcomes. In 2015–2016, they will use their finding to improve student achievement. In preparation for the once-every-eight-years Comprehensive Quality Review accreditation site visit in November 2015, the Crookston campus submitted documents and action projects related to data-driven decision making, which involved developing metrics and a campus-wide dashboard. This site visit precedes reaffirmation of accreditation by the Higher Learning Commission.

The Crookston campus has continued to utilize existing programmatic strengths as well as current faculty expertise to offer an expanded array of majors for students. With very little associated cost, this helps drive additional enrollment through recruitment and retention, and provides new and current students with more choices. In December 2014, two new majors were approved by the Board of Regents—English and International Business—both of which became available to students in January 2015. Two additional majors—Exercise Science & Wellness and Medical

Laboratory Science—were approved by the Board of Regents in June 2015 and became available to students in fall semester 2015. The Board of Regents also approved a new major in Agricultural Education, which was reviewed by the Minnesota State Board of Teaching and granted licensure approval in October 2015.

Offering a Great Student Experience on the Crookston Campus

Students receive outstanding support and have an enriching experience through small class sizes, strong personalized advising and access to faculty, experiential learning, and opportunities for undergraduate research, among other factors.

The Crookston campus's small class sizes offer students personalized attention and greater access to faculty members for advising and mentorship. Presently, 82 percent of on-campus classes have 25 or fewer students. The largest class is 64 students, and the average class size is 18. Online classes, which average 22 students per class, still offer a very personalized quality educational experience.

A longstanding hallmark of the Crookston campus is its focus on experiential learning. Students learn concepts and actively apply them through projects, simulations, field trips, site visits, community engagement and service learning projects, and interactions with professionals in the field. An internship experience is required of on-campus students. Online students also complete an internship unless their work experience allows them to waive the internship requirement. Most academic majors have a corresponding student club or organization. These contribute to the student experience by providing opportunities for student interaction, community engagement, and professional/career development. Many classes and student clubs also incorporate service learning projects working with the campus's Office of Community Engagement. In 2014–15 Crookston students volunteered a total of 12,570 hours of volunteer service.

NCAA Division II athletics provides student-athletes with balanced opportunities for academic excellence,

leadership, and honing athletic skills. In 2014–15, 24 percent of Crookston's student-athletes earned Northern Sun Intercollegiate Conference All-Academic Team honors, recognizing 3.2 or higher GPAs. Students continue to cite Division II athletics as a reason they choose to attend the Crookston campus, and student-athletes comprise 25 percent of Crookston's on-campus enrollment.

While Crookston faculty members' primary focus is on teaching, many also conduct research and engage in scholarship, frequently involving students in that work. Such faculty mentorship and role modeling offer students excellent graduate school preparation. There is growing interest in and support for undergraduate research by faculty from all academic departments. In addition to one Undergraduate Research Opportunities Program project, 17 Crookston Student Research and Creative Works projects were funded in 2014–15. Three Crookston students have submitted proposals to present their projects at the 2015 National Conference on Undergraduate Research, and another presented her project at an international conference in Ontario, Canada. Another student's undergraduate research project led to a research internship in Nancy, France. Two faculty members are working to integrate active, ongoing research into the undergraduate curriculum throughout all microbiology lab sections. Several faculty members also engage in the scholarship of pedagogy. This applied research, which is often based in the faculty member's discipline, contributes directly to Crookston students' learning experience while also spreading valuable pedagogical insights through publications and presentations.

In the area of internationalization of the curriculum, the Crookston campus works closely with various departments on the Twin Cities campus, including the Global Programs and Strategy Alliance, the Learning Abroad Center, the Confucius Institute, International Students and Scholars Services, and the Center for Educational Innovation. Two biology faculty members mentored faculty in the 2014–15 cohort of the University-wide Internationalizing Teaching and Learning Program. These same faculty members are currently seeking grant funding to internationalize the Crookston campus's entire biology program.

The Crookston campus provides a safe and welcoming environment for its students, employees, and visitors.

The campus will strive and continue its efforts to be ranked among the safest public campuses in Minnesota and among the safest in the country.

The Crookston campus has been recognized for its quality programs by such organizations as *U.S. News & World Report*, which not only ranked the campus as #1 in the category Top Public Regional Colleges–Midwest for 2014, 2015, and #2 for 2016, but also ranked Crookston online programs among the top quartile in the category Best Online Bachelor's Programs for 2014 and 2015, earning a #34 rank nationally (of 215 schools) in 2015. The Midwest Higher Education Compact, in its 2014 report "The Effectiveness and Efficiency of Postsecondary Institutions in Minnesota," gave the Crookston campus an effectiveness rating of "Very High." And the campus was listed among the top ten "safest college campuses in the U.S." by *College Factual* as reported in *USA Today* in January 2015.

Construction of the new campus Wellness Center began in June 2015. Scheduled to be completed by fall 2016, the facility will aid in recruitment and retention efforts, offer on-campus students an important space to develop wellness habits, and supplement the existing living-learning environment in many ways. Additionally, students enrolled in Crookston's newly approved major in Exercise Science & Wellness as well as the established major in Sport & Recreation Management will take advantage of the facility as a learning laboratory.

Preparing Crookston Campus Graduates for Success

The Crookston campus continues to improve retention and graduation rates, and students are positioned to be successful and productive employees and citizens. Over the 2014–15 academic year, 401 bachelor's degrees were awarded (Figure 4-Q), down slightly from the historic high of the previous year, but still nearly double the number of 2005.

There is a national and state interest in meeting workforce needs in science, technology, engineering, and math (STEM). In fall 2015, 63 percent of Crookston's on-campus and 26 percent of online students were enrolled in STEM-related majors, such as agriculture, natural resources, environmental

Figure 4-Q. Undergraduate degrees awarded, Crookston campus, 2005–2015

Source: Office of Institutional Research, University of Minnesota

Figure 4-R. First-year retention rates of first-time, full-time undergraduate students, Crookston campus, classes matriculating in 2004–2014
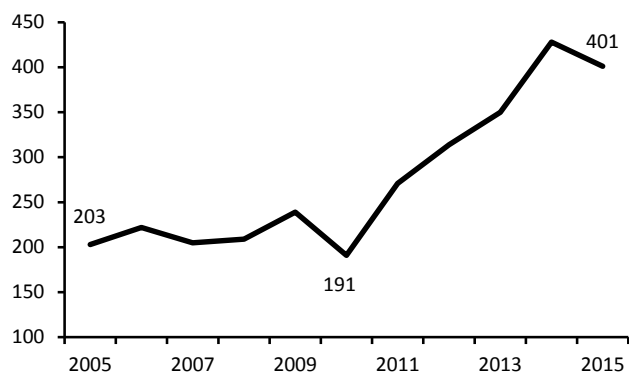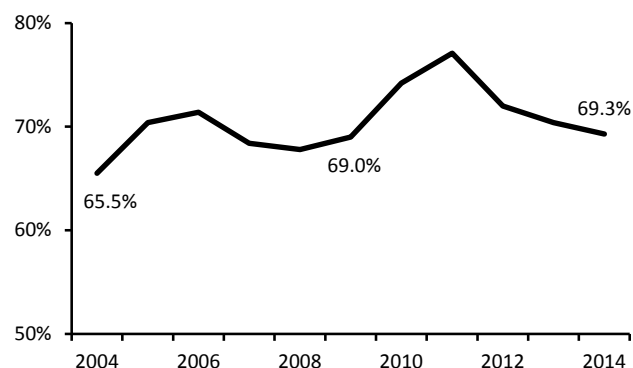

Source: Office of Institutional Research, University of Minnesota

sciences, software engineering, information technology, and biological and health sciences.

Work to improve graduation rates began before the 2006 strategic planning efforts established goals to improve the campus's four-, five-, and six-year graduation rates to 40, 50, and 55 percent. The campus met the goal of 50 percent of those entering in fall 2008 graduating in five years. In the summer of 2015 new graduation rate goals were set: the four-year target graduation rate for students entering in fall 2016

and graduating in 2020 is 45%; the six-year target graduation rate for this class is 60%. Recent trends indicate rates are up from the entering classes of 2000–2004. The first-year retention rate is higher than it was ten years ago (Figure 4-R), while the four-year graduation rate of the entering class of 2011 nearly doubled that of the entering class of 2001 (Figure 4-S). Table 4-9 shows how the Crookston campus compares to its peer group institutions, using rates for the class matriculating in 2007, the most current data available.

Figure 4-S. Four-, five-, and six-year graduation rates of first-time, full-time undergraduate students, Crookston campus, classes matriculating in 2001–2011
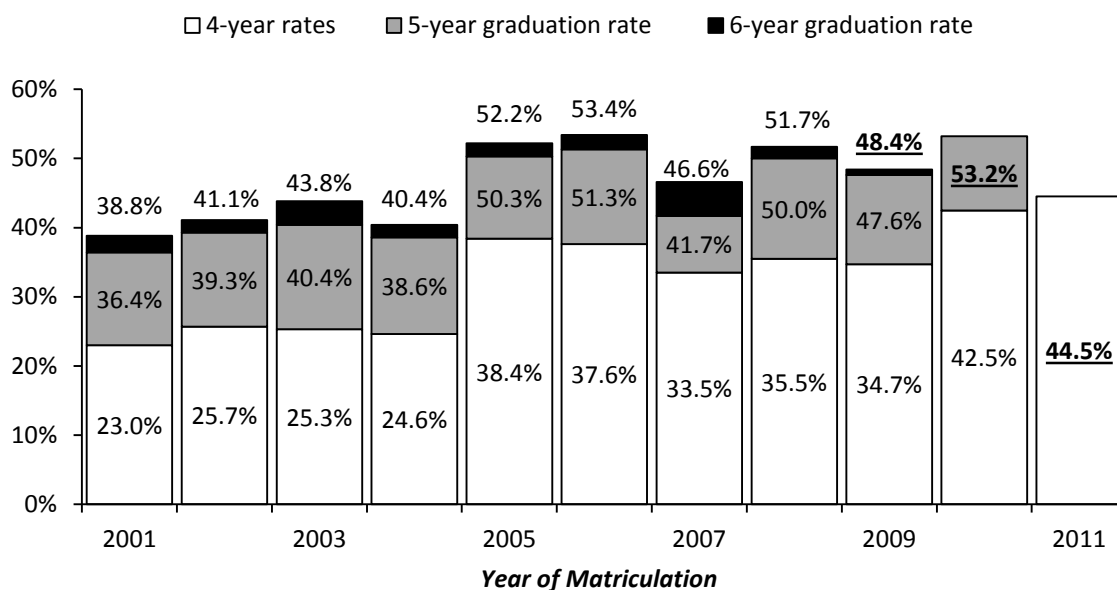
*Rates include graduates who transferred to another University of Minnesota campus. Graduation rates displayed in Table 4-9 are those reported to the national database (IPEDS), which counts only students who matriculated at and graduated from the same campus. As a result, the rates presented in the figure above differ slightly than those displayed in Table 4-9.

Source: Office of Institutional Research, University of Minnesota

The most recent rates suggest that the campus will rank better when data for those classes become available for comparision.

Crookston's broad-based Strategic Enrollment Management Committee (SEMC), which was created in 2013, continues its charge to guide campus efforts to achieve and maintain a critical mass of students on campus while also growing strategically online. In 2014–15 academic year, all Crookston units developed plans and strategies to contribute to recruitment and retention efforts.

In 2015–2016, new on-campus students at Crookston will have the opportunity to take the StrengthsFinder Assessment and to participate in Strengths-related programming in an effort to increase student engagement and persistence. With Student Affairs taking the lead, faculty and staff will help students engage in meaningful discussions about individual strengths, majors, and career-life planning. New Student Orientation has been reconceived as a semester-long experience designed to keep new students connected with each other and the campus.

Table 4-9. Six-year graduation rates (class matriculating in 2008), Crookston campus and comparison group institutions

	6-year Graduation Rate	Institutional Rank
U. of Minnesota–Morris	67%	1
Delaware Valley Col.	58%	2
U. of Maine–Farmington	54%	3
U. of Wisconsin–River Falls	54%	3
U. of Wisconsin–Stout	53%	4
U. of Pittsburgh–Johnstown	51%	5
U. of Minnesota–Crookston	**48%**	**6**
Northern State U.	46%	7
Bemidji State U.	45%	8
Dakota State U.	41%	9
Comparison Group Average	52%	-

See footnote on Figure 4-U
Source: Integrated Postsecondary Education Data System (IPEDS)

ROCHESTER CAMPUS

The University of Minnesota Rochester is distinctive in its approach to undergraduate education. With a health sciences focus, students explore the wide array of healthcare career pathways while completing an innovative, integrated common core in their first two years. This interdisciplinary, integrated coursework includes mathematics, physics, chemistry, biology, Spanish, literature, philosophy, writing, and history. Students progress through this integrated coursework toward defined learning and development outcomes.

Offering a Great Student Experience on the Rochester Campus

Extraordinary Core Curriculum and Research-Fueled Instruction

Pedagogical decisions are made through a collective process, based on teaching and learning research:

- Flipped classrooms are the norm.
- Rigor begins on day one. For example, first-year students start with Organic Chemistry in a unique model supported by UMR learning research.
- Relevance and efficiency are standard, as liberal education objectives are contextualized in the health sciences.
- Academic support is personal and available in the Just Ask center staffed by teaching and subject-matter specialists.
- Relationships are central. Student development support is personal and available with the unique Student Success coaching model.
- Collaborative teaching teams enhance student learning and development.
- Writing instruction is integrated in the curriculum and supported by writing specialists.
- Collaborative and active learning are routine.
- Community-based learning is valued and thus required.
- Grand challenges of 21st-century healthcare frame student learning and development in and out of the classroom.

- Intentionality and coordination in the design and assessment of the curriculum further enhances student learning as faculty commit to "our curriculum" rather than "my course."

Extraordinary Customization

As students emerge from their foundational learning and development having participated in intentional career pathway exploration, a customized learning experience occurs in their junior and senior years. During this culminating portion of their undergraduate experience, all students engage deeply in community-based learning, after which they determine, propose, enact, and present a capstone experience tailored to their emerging interests. Nearly half of our students study away during their capstone experiences. Though most complete a Bachelor of Science in Health Sciences, other students at this level may apply for and complete the Bachelor of Science in Health Professions (BSHP) in sonography, echocardiography, radiography, or respiratory care.

Extraordinary Expectations for Success and Evidence-Driven Decisions

This distinctive undergraduate educational journey is guided by a success coach, with student learning and development outcomes assessed in both curricular and co-curricular endeavors. Results of research on learning with students will soon be used to optimize identified arenas of distinctiveness.

Maintaining Access to the Rochester Campus

Given the Rochester campus's commitment to student success through personalized academic and life coaching, the rigor of the Rochester campus is accessible to a wider-range of students than many health sciences programs.

The campus recruits, values, and remains accessible to students with interest and aptitude in the health sciences, including:

- in-state and out-of-state students
- low- and middle-income students
- students of color

- first-generation students

- international students

- transfer students

In addition to the Rochester campus's continued efforts to improve the undergraduate education experience and student outcomes, the campus is working to meet a challenge for the health care industry: workforce diversification. There are many reasons the industry values diversity in the healthcare workforce, but according to a U.S. Department of Health and Human Services report, one of the most compelling reasons is that a "more diverse health professions workforce…will lead to improvements in public health" (2006). In other words, greater diversity leads to improved health outcomes.

The Rochester campus is uniquely positioned to take on this challenge. Rochester campus graduates of color succeed at the same or greater rates than their peers, which supports the effectiveness of the campus's educational model to prepare minority and underserved students for successful careers in healthcare. To further address this challenge, the campus is organizing the Health CORE (Community of Respect and Empowerment) Pipeline Initiative.

The program builds on the Rochester campus's strengths in undergraduate health sciences education and builds in additional research support and best practices in living and learning communities. The mission is to enhance diversity and inclusivity within the Rochester student experience through intentional community development and support.

Initially the Health CORE program will serve 20–25 students but can be expanded based on the availability of funding.

In addition to the CORE program, the Rochester campus is developing living and learning communities around international students and students on a path of recovery from addiction. The Global Connections program initiative aims to support the success of international and domestic Rochester students who will model intercultural competence, global citizenship, and commitment to solving global health challenges within the healthcare field. The ROC! Recovery on Campus program is focused on students that are on a positive path to recovery from addiction.

Students in the ROC! Program are expected to model transformational living, civic engagement, and high-integrity leadership within the healthcare field.

The required student development courses support the accessibility of our curriculum to both transfer and traditional students. The path for transfer students who wish to enter the Health Professions program has recently been enhanced, with a transfer coordinator serving their specific needs. Retention rates (as shown in Figure 4-T) are one indication of this accessibility and academic support. The Rochester campus is committed to inclusivity, striving to become a diversity pipeline for healthcare workforce development needs.

As depicted in Figure 4-U, UMR is moving steadily toward its goal: a percentage of undergraduate students of color equal to or higher than the percentage of people of color in the general population of Minnesota.

Figure 4-T. First-year retention rates of first-time, full-time undergraduate students, Rochester campus, classes matriculating in 2009–2014
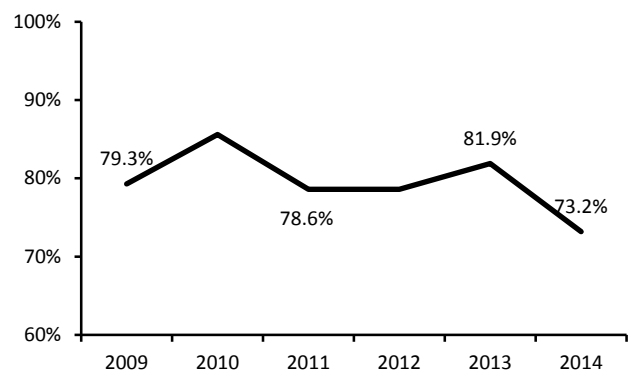
Source: Office of Institutional Research, University of Minnesota

Figure 4-U. Percent undergraduate students of color by fall term, Rochester campus, 2010–15
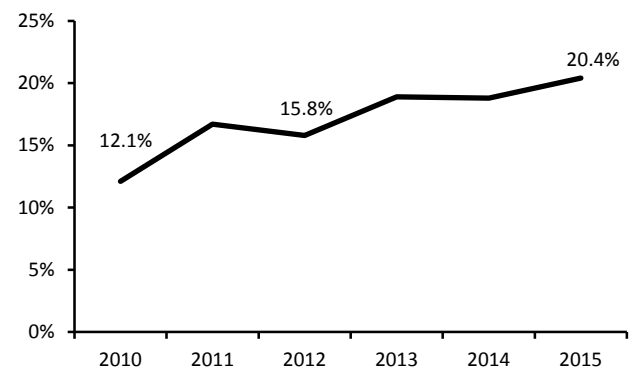
Source: Office of Institutional Research, University of Minnesota

Preparing Rochester Campus Graduates for Success

Three classes of students have now graduated from Rochester. Figure 4-V indicates those graduate numbers, with increases expected each year. Of the students who have graduated in our first two classes, nearly all have "finished in four," an initiative and commitment that is core to the Rochester approach to undergraduate education (see Figure 4-W).

Alumni of the Bachelor of Science in Health Sciences are moving into incredibly diverse experiences following graduation, including but not limited to:

- Medical School
- Health Care Administration
- Health Care Policy
- Veterinary School
- Varied Ph.D. Programs
- Health Care Research
- Law School
- Health Care Technology
- Pharmacy School
- Physician Assistant School
- Public Health Education
- Dental School
- Naturopathic Medicine
- Sports Medicine
- Medical Lab Science

One hundred percent of Bachelor of Science in Health Professions graduates passed their exams and are employed in the fields of echocardiography, radiography, respiratory care, and sonography.

Of the 2015 graduating class, 96% graduated in four years or less, with 100% of BSHS students completing a faculty-supervised capstone experience. Of those graduates, 61% are employed and 36% had been admitted into graduate school prior to graduation. Over all, graduates' self-reported data at the time of commencement indicate that that 64% of 2015 graduates expect to attend a health-sciences related graduate or professional school.

Figure 4-V. Undergraduate degrees awarded, Rochester campus, 2013–2015
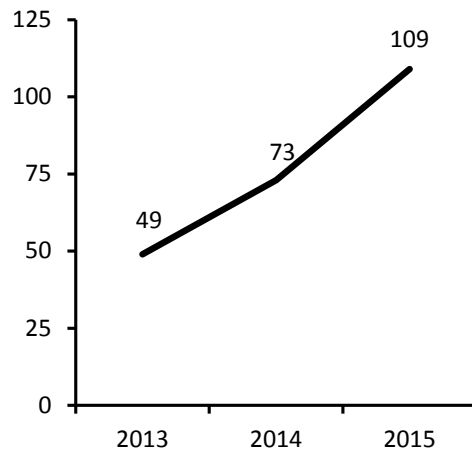
Source: Office of Institutional Research, University of Minnesota

Figure 4-W. Four- and five-year graduation rates of first-time, full-time undergraduate students, Rochester campus, classes matriculating in 2009–2011

Year of Matriculation
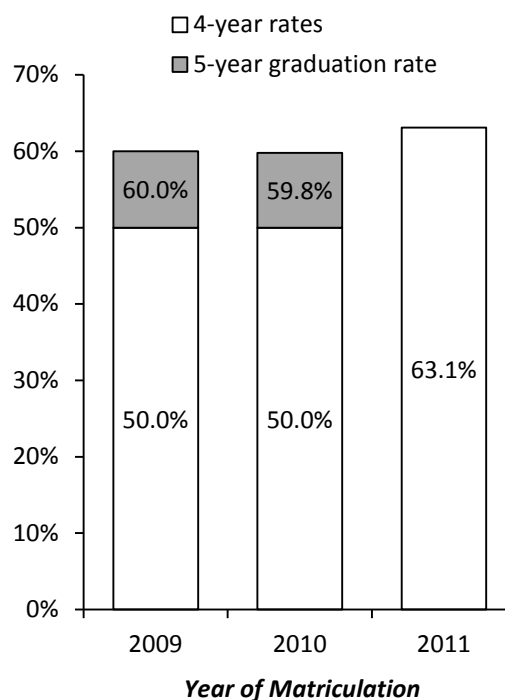
*Rates include graduates who transferred to another University of Minnesota campus.

Source: Office of Institutional Research, University of Minnesota

Extraordinary Future UMR 2.0

Having established a nationally distinctive undergraduate health sciences program in the campus's first seven years, the Rochester campus will now work to remain agile, effective, and innovative in addressing the ever-evolving 21st century needs in higher education and healthcare. For example:

- to further serve student learning and development, the campus will explore additional avenues for partnerships that serve community-based learning and customized capstones;

- to further the individualized care of students, the Rochester campus will document, assess, enhance, and share its Student Success Coach model;

- to further students' academic achievement while addressing the challenges of higher education, the Rochester campus will document, assess, enhance, and share its Collaborative and Integrated Teaching model; and

- to share the Rochester campus story nationally and continue to grow, the campus will invite dialogue with other higher education innovators.

Graduate Education

Graduate education is fundamental to the University's vision to improve the human condition through its research, teaching, and outreach mission.

Graduate students fuel the engine of research and discovery, with the passion and skills necessary to address the most important and complex problems facing communities, states, nations, and the world. They are the next generation of innovators—those who will provide leadership in the 21st century. They generate new knowledge with their groundbreaking and field-shaping research and serve as enthusiastic ambassadors for the University through their employment in industry and engagement with the community.

The reputation of the University rests in large part on the quality of its graduate programs. The Graduate School—in close collaboration with collegiate leaders and graduate program faculty and staff on the Twin Cities, Duluth, and Rochester campuses—is responsible for ensuring the quality of the graduate education enterprise by:

- recruiting and retaining highly prepared students from diverse populations;
- supporting academic program review and assessment; and
- graduating students for success to pursue a broad range of careers and contribute to society.

Recruiting and Retaining Highly Prepared Students from Diverse Populations

Recruiting a high-quality, diverse student body is largely dependent on the reputation of the graduate program and the University, but also on comprehensive recruitment efforts, competitive financial packages, and a user-friendly and responsive admissions process.

Office for Diversity in Graduate Education

Recruitment of graduate students is predominantly the responsibility of the colleges. The Graduate School and the Office for Diversity in Graduate Education (ODGE), a subunit of the Office for Equity and Diversity, support the efforts of the colleges as coordinators and collaborators.

In fall 2014, ODGE set several recruitment goals for the 2015–16 incoming cohort, including:

- three percent year-to-year increase in the number of applications from students of color;
- 15 percent growth in the size of the prospective student of color database; and
- increased participation in the Community of Scholars program.

A renewed focus on connecting and following up with prospective students, together with Graduate Admissions Office initiatives, contributed to an increase in the number of applications from under-represented students for the 2015–16 academic year by 4.7 percent from the previous year.

The National Name Exchange Database (NNED) was established to help match graduate schools with minority students interested in graduate education. In one year, the size of this national database has grown almost 17 percent to 8,529 underrepresented prospective students, in part due to ODGE staff efforts to encourage other universities to motivate undergraduate students of color to pursue graduate education.

Through a more intense outreach effort, a greater number of students are participating in the Community of Scholars Program (COSP), an initiative that works toward creating an institutional environment that supports the academic and professional success of graduate students who are underrepresented in academia. In particular, there has been a 50 percent increase in the number of students taking advantage of the Writing Initiative, which not only provides assistance in dissertation writing, but also the skills for students to effectively communicate their research and expertise.

Overall enrollment has been declining at both the master's and doctoral levels for the past few years. Of the five race/ethnicity groups, White has shown the biggest reduction, 14% and 17% for doctoral and master's level, respectively. Although the number of Black doctoral students and Asian master's students have decreased, their proportions to the total number of enrolled students have remained about the same. (Figure 4-X and Figure 4-Y).

Figure 4-X. Doctoral enrollment by race/ethnicity, University of Minnesota, 2010–2015
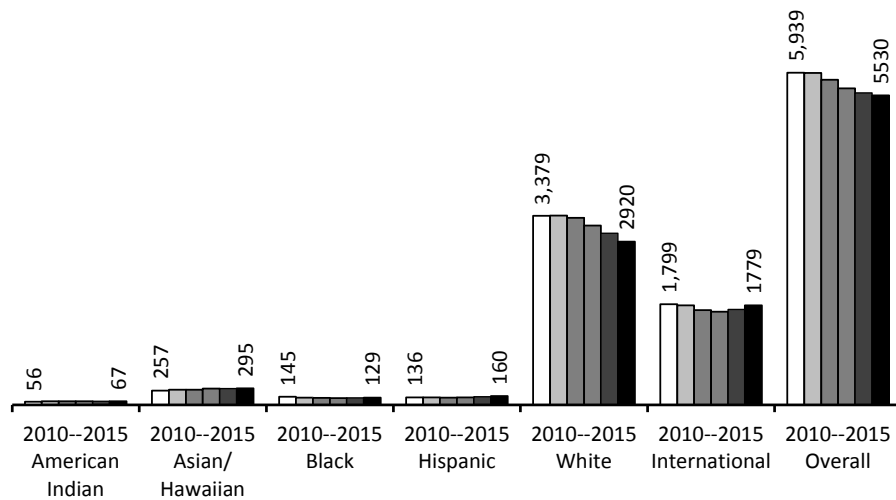
Source: Office of Institutional Research, University of Minnesota

Figure 4-Y. Master's enrollment by race/ethnicity, University of Minnesota, 2010–2015
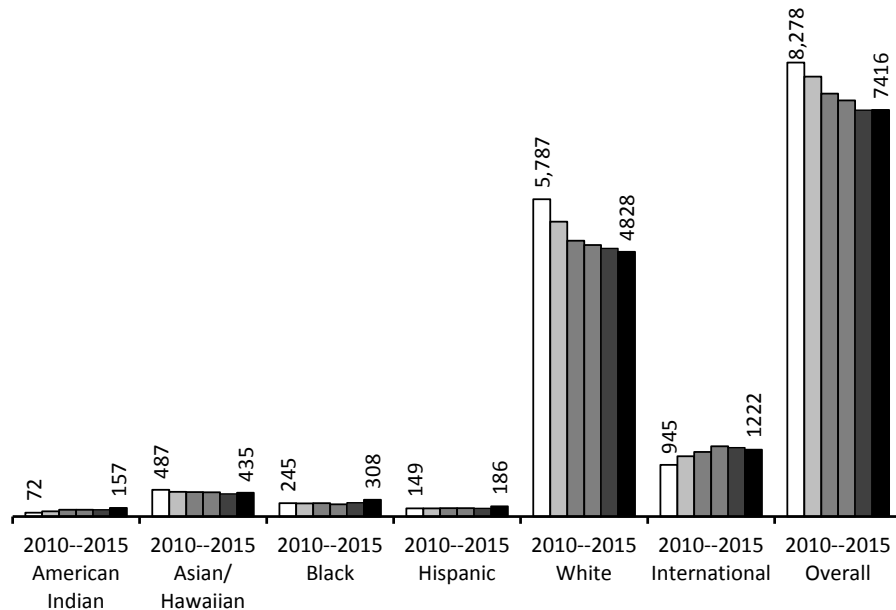
Source: Office of Institutional Research, University of Minnesota

Campus-Wide Recruitment Council

The Campus-Wide Recruitment Council, coordinated by the Office for Diversity in Graduate Education, shares ideas and best practices in effective and efficient recruiting strategies with an emphasis on underrepresented groups. Examples of the group's activities from the past year include the sharing of tables at recruitment fairs or conferences to reduce costs; developing diversity statements that reflect the unique population of Minnesota; and maintaining online resources to promote the recruitment of a diverse graduate student body. Membership in the group has grown to 35; its collaborative efforts have resulted in a larger University of Minnesota presence at Graduate Education Fairs targeted to underrepresented groups.

Student Funding Support

An important part of effective recruitment efforts, especially for high-quality doctoral students, is the ability to provide competitive financial packages. Programs and colleges are responsible for allocating resources to provide funding offers to attract and matriculate prospective students. Financial support may come in the form of teaching and research assistantships, fellowships, traineeships, or tuition waivers. In response to market competition, some colleges have substantially increased the stipend level for their fellowship awards. For example, first-year fellowships offered by the College of Liberal Arts have increased from $22,500 per academic year to $25,000 in 2014–15. These fellows also receive a supplementary stipend of $5,000 per year for four years following the first year of support. The University continues to invest heavily in graduate education and there has been a notable increase in the amount of O&M funding to support graduate assistants, fellows, and trainees (Table 4-10), partly due to the MnDRIVE Initiative that offers more research work opportunities for graduate students. However, the highly challenging environment for grant funding combined with the volatile investment return for endowment funds have led to a decline in the amount of sponsored and other funds spent to support our graduate students.

To supplement collegiate funding support, the Graduate School administers several University-wide competitions such as the Thesis Research Travel Grant, Interdisciplinary Doctoral Fellowship, Bridging Funds, Doctoral Dissertation Fellowship, and the Graduate Summer Research Internship Initiative that enable students to dedicate more time and effort to research and encourages more timely degree completion. For example, the Doctoral Dissertation Fellowship continues to show that it is effective in reducing the time to degree for outstanding students across most disciplines (Figure 4-Z).

University graduate students continue to be competitive in securing prestigious external fellowships. Most new National Science Foundation Graduate Research Fellowship awards have been from current students. For the third year in a row, the University was named a "Top Fulbright Producing University" in 2015 (Table 4-11). Other prestigious, competitive fellowships that have been awarded to University students in the past year include National Institutes of Health Predoctoral Individual National Research Service Award, American Heart Association Predoctoral Fellowship, and Ford Foundation Fellowship, to name a few.

Graduate Admissions Initiatives

In addition to the development of a more efficient, user-friendly and paperless application process, the integration of a constituent relationship management

Table 4-10. Total funding for Graduate Assistants, Fellows and Trainees Based on Expenditures from FY10 to FY15

	FY10	FY11	FY12	FY13	FY14	FY15	5-year change
O&M	$73,183,417	$76,123,646	$77,661,581	$77,640,828	$78,387,582	$83,807,619	+14.5%
Sponsored	$58,051,303	$62,476,228	$59,606,642	$57,445,165	$56,448,220	$57,063,613	-1.7%
Other	$27,552,637	$22,545,978	$23,099,737	$26,176,348	$25,838,896	$25,554,690	-7.3%
Total	**$158,787,356**	**$161,145,852**	**$160,367,960**	**$ 161,262,341**	**$160,674,699**	**$166,425,921**	**+4.8%**

Source: Office of Institutional Research, University of Minnesota

Figure 4-Z. Impact of Doctoral Dissertation Fellowships (DDF) on median time to degree (in years) for Ph.D. degrees awarded, University of Minnesota, 2005–2015

Legend:
- ■ Years to Degree for Students Not Nominated for DDF
- □ Years to Degree for Students Nominated for but not Awarded DDF
- ■ Years to Degree for Students Awarded DDF

Field	Not Nominated	Nominated not Awarded	Awarded DDF
Arts and Humanities	7.2	7.1	6.2
Business	5.8	5.7	5.7
Education	6	5.7	4.8
Engineering	5.4	5.2	5
Life Sciences	5.3	5.4	5.3
Physical and Earth Sciences	5.8	5.5	5.2
Social and Behavioral Sciences	6.1	6.6	5.9
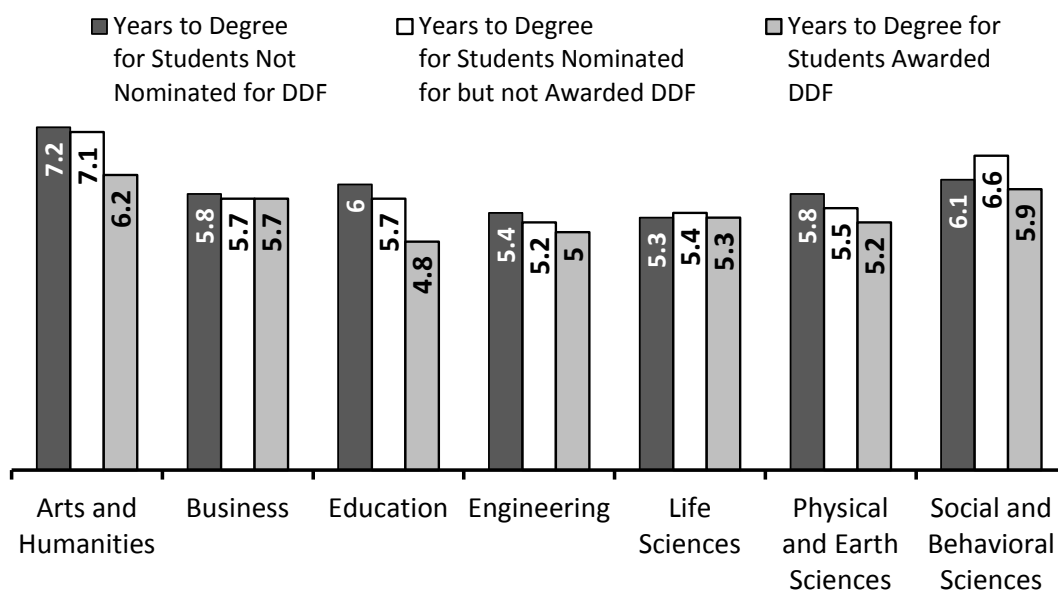
Source: Graduate School, University of Minnesota

module, CONNECT, to the admissions system better supports the collegiate recruitment efforts and communication with prospective students. The implementation of "AppReview," designed to make the electronic review of applications by faculty more efficient and secure, has been well received by graduate programs. The result is that the Graduate School is able to serve more programs and process more applications without increasing administrative expenses (Table 4-12).

To encourage a more diverse pool of applicants, the Graduate School now offers application fee waivers for both active duty members of the military and veterans

Table 4-11. Number of National Science Foundation Fellows and Fulbright Scholars, 2008–2016

	NSF Fellows	Fulbright Scholars
2008–09	28	8
2009–10	33	5
2010–11	49	9
2011–12	68	4
2012–13	86	6
2013–14	94	3
2014–15	106	5
2015–16	110	6

Source: Graduate School, University of Minnesota

Table 4-12. Number of new applications processed by the central graduate admission system, University of Minnesota, 2009–2015

	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	5-year change
Doctoral	6,780	7,727	7,821	7,975	7,546	7,597	+15%
Master's	6,410	7,403	8,303	8,966	9,160	9,964	+59%
Certificate	92	110	87	87	120	357	+288%
Total	13,282	15,240	16,211	17,028	16,826	17,918	+38%

Source: Graduate School, University of Minnesota

as well as McNair Scholars who are high-quality low-income, first-generation, or underrepresented students. During 2014–2015, 148 applicants benefited from this application fee waiver. Some colleges are also providing application fee waivers to targeted student groups that are consistent with their diversity goals.

Supporting Academic Program Review and Assessment

Regular review and assessment—both internal and external—are necessary to understand how well the University is building, maintaining, and improving its graduate programs, and how well these programs are serving their students.

Guidelines for the Evaluation of Graduate Programs

The Graduate Education Council (GEC) Academic Program Subcommittee, formed in fall 2014, consists of faculty members elected to the GEC through a University-wide election, a graduate student representative selected by the Council of Graduate Students, and staff from the Graduate School. It was charged by the Vice Provost and Dean of Graduate Education with developing a set of criteria to help evaluate graduate programs and to identify those that warrant more in-depth analysis and discussion. The list of criteria is intended to provide a consistent starting point for evaluating research-based graduate programs with a primary emphasis on the Ph.D. degree. Programs failing to meet some of the outlined criteria will have the opportunity to respond and engage in constructive dialogue with collegiate and University leaders to implement a feasible action plan for the future.

Graduate Program Goals Initiative

Efforts to identify and articulate graduate student learning goals started in the fall of 2012. During 2013–14, ten pilot programs across three campuses successfully identified goals and developed strategies to achieve them. By the end of 2014, all graduate programs were expected to articulate a set of program-specific graduate student learning goals and an assessment plan. To assist with the task, the Graduate School created guidelines for the development of program goals, shared samples of documents submitted by the ten pilot programs, and presented

workshops. It is expected that the program goals documents and the evaluation plans will be reviewed periodically to respond to changes in the various fields and to the changing landscape of higher education.

Graduate Student Data

The Graduate School is responsible for maintaining public data about graduate programs, including application, admission, matriculation, enrollment, time-to-degree, completion rates, and outcomes. This year, the Graduate School developed an online resource to support graduate programs' assessment efforts. The Quality Assessment Allocation Plan website provides access to student data at the collegiate, broad field, and programmtic levels. Having ready access to core student data allows programs and colleges to continuously monitor the overall progress and success of their graduate students, identify potential issues, and implement changes in a timely manner.

At the institutional level, the six- and eight-year doctoral completion rates for entering cohorts from 2004 to 2008 have been trending higher. Greater proportions of international graduate students complete their doctoral degrees while some cohorts of students of color have shown lower completion rates than White students (Table 4-13). To help address this issue, the Graduate School will provide student data collated by race/ethnicity to individual graduate programs as part of the next cycle of the Quality Assessment Allocation Plan. This will allow faculty to identify positive trends as well as areas for improvements. It will also help them develop strategies, best practices, and action plans to promote timely degree completion, especially for students of color.

Graduating Students for Success

As graduate students pursue their research, they acquire skills that will be beneficial to them and to the public long after degree completion. They develop the ability to work autonomously, yet also collaboratively; to think critically; to function across disciplines; to pursue answers to difficult questions; to undertake projects with uncertain outcomes; and to inspire others with their passion and ideas. Whether they seek careers in academia or industry, graduate students

Table 4-13. Six- and eight-year doctoral (Ph.D., Ed.D., D.M.A.) completion rates by ethnicity, University of Minnesota, 2004–2009

	2004-05 Cohort		2005-06 Cohort		2006-07 Cohort		2007-08 Cohort*	2008-09 Cohort*
	6-year	8-year	6-year	8-year	6-year	8-year	6-year	6-year
American Indian	33%	42%	33%	56%	30%	50%	75%	33%
Asian/Hawaiian	45%	62%	35%	56%	55%	69%	45%	36%
Black	39%	52%	26%	48%	24%	45%	19%	28%
Hispanic	23%	38%	26%	48%	50%	61%	25%	32%
White	38%	54%	38%	56%	43%	60%	42%	44%
Non-specified	34%	50%	45%	60%	74%	83%	48%	44%
International	51%	68%	53%	72%	56%	68%	56%	58%
All Students	42%	58%	42%	61%	48%	63%	47%	48%

*8-year completion data not yet available
Source: Graduate School, University of Minnesota

contribute to the advancement of society through discovery, the generation of new knowledge, and engagement with the community. With the changing job market for students with graduate degrees, it is critical that the University prepares and motivates them to pursue and succeed in a wide spectrum of careers.

Graduate and Professional Education Assembly

In April 2015, students, faculty, and staff explored the topic of broadening career options for graduate students at the Graduate and Professional Education Assembly, an annual event intended to create a climate for University-wide collaboration and networking across diverse disciplines and to advance a broad conversation about the development of graduate and professional education across the institution. This year's topic addressed the critical national need to ensure that graduate students, especially doctoral students, take full advantage of the many career options available to them.

Panelists from Minnesota Fortune 500 companies and non-profit organization were invited to share their thoughts and insights on what employers are looking for from prospective employees with graduate degrees, what the University and students can do to prepare themselves for different career pathways, and how students can highlight and present the transferable

skills that they have acquired through graduate studies to potential employers.

Graduate Research Summer Internship Initiative

As part of the University's effort to broaden career options and research experiences for graduate students, the Graduate School launched a pilot project seeking applications from students who were able to secure a research internship during summer 2015. Applicants were asked to demonstrate how the proposed research project would enhance the student's dissertation research; how it would benefit both the student and the host organization; how the skills and experience gained would advance career readiness and options; and that the student had the support of his or her advisor.

Approximately 50 applications were received and through competitive review, 23 students were awarded with stipends of $4,000 each. Priority was given to applications from students in non-STEM fields who don't typically experience an internship—paid or unpaid—as part of their graduate student training. Many students indicated that without the stipend award, they would not be able to take advantage of such an internship experience. Reviewers of the proposals noted the high potential for many of the research projects to have a significant public engagement component. The benefits of this program

extend beyond the students or the host site but also to the community and society. Upon completion of the internship, both the student participants and the host organizations were asked to provide their thoughts on the experience, the outcomes of the internship, and how this initiative could be improved.

While the initial phase of the program was limited to students in research-based doctoral programs (Ph.D. and D.M.A.), the goal is to expand the program to all research-based graduate students in the future.

Publicly Engaged Graduate Education

Community-based experiential opportunities involving graduate students is a key strategy for incorporating public engagement with academics. Programs and initiatives are designed to connect graduate students with social issues in real time that will likely enhance students' academic, professional, personal, social, career, and civic development.

Graduate level community-based research and scholarship opportunities such as thesis and capstone projects, internships, and clinical practica are routinely found in many academic programs. For example, students in the Humphrey School of Public Affairs' Master of Public Policy are required to complete a 400-hour community-based internship, and students in the Masters of Urban and Regional Development complete a capstone experience in partnership with a community-based client.

The Resilient Communities Project also provides opportunities for graduate students to take part in publicly-engaged research and learning. The project, which is co-sponsored by the Center for Urban and Regional Affairs and the Institute on the Environment, connects communities in Minnesota with the wide-ranging expertise of University of Minnesota faculty and students to explore and address pressing local issues in ways that advance sustainability and resilience. In partnership with the City of Rosemount during the 2014-2015 academic year, 29 locally identified projects were matched with 45 University courses across 20 departments and 10 colleges at the Twin Cities and Duluth campuses, providing more than 400 students with community-engaged sustainability research and education opportunities. The University received national recognition for this project as the recipient of the 2015 Midwestern

Association of Graduate Schools/Educational Testing Services Award for Excellence and Innovation in Graduate Education.

Career Networking Event

Another initiative that aims to encourage graduate students to consider different career options is the Career Networking Event each spring. This is a unique opportunity for talent-seeking companies and experienced, well-educated, potential employees to connect. Several hundred graduate students, postdoctoral researchers, and alumni, representing a wide variety of disciplines and backgrounds, networked with representatives from over 70 organizations—from nonprofits to government agencies to Fortune 500 companies. In a post-event survey, 51 percent of respondents reported that they made connections that will help them in their future employment search; 72 percent planned to follow up with at least one of the employers they met at the event.

Doctoral Research Showcase

An important transferable skill that most employers look for is the ability to communicate effectively to different audiences. The Doctoral Research Showcase provides a causal and conversational environment for recipients of the Interdisciplinary Doctoral Fellowship and the Doctoral Dissertation Fellowship to present their research to faculty, staff, students, and friends of the University with diverse backgrounds and from different fields of studies. The event also offers a glimpse of the future of many disciplines and of the world's future faculty and intellectual leaders. More than 80 fellows participated in the 2015 showcase. In addition, monthly Doctoral Dissertation Seminars provide opportunities for Doctoral Dissertation Fellows to present and discuss their research before their peers.

The Interdisciplinary Commons

In 2014–15, the Graduate School launched the Interdisciplinary (ID) Commons, a new initiative intended to foster graduate student interactions across disciplines. The ID Commons provides space and programming for graduate students to network, collaborate on projects, present papers and dissertation chapters to peers, and learn about relevant topics

through panels and workshops. Being able to work in teams, especially ones that cross disciplinary boundaries, is another desirable skill sought by prospective employers.

UMD Graduate School Breakfasts

Started in fall 2014, UMD has sponsored twice weekly breakfasts, with the goals of facilitating informal interactions among faculty and graduate students in disparate disciplines and fostering innovative approaches in teaching, research, and scholarship. To stimulate conversation, these have featured "Speed Research" presentations—short faculty or student presentations often focusing on new projects or research directions. Over 1,200 graduate students and faculty, representing all five UMD colleges, participated during the 2014–15 academic year.

Discovery across Disciplines Showcase

To further encourage graduate students to pursue interdisciplinary research opportunities, the Graduate School, with sponsorship from the Office of the Vice President for Research, organized the Discovery across Disciplines Showcase in October 2014 and again in October 2015. The events highlighted the exciting and engaging work of more than 50 of the University's interdisciplinary research centers and institutes. Graduate students, faculty, and postdoctoral associates networked with the directors of these centers, learned about the research work that is being conducted, and discussed potential collaborations across disciplines in seeking answers to some of the world's most pressing challenges.

Professional Education

Providing Quality Health Education

Health professions education occurs primarily through 13 programs in the Academic Health Center (School of Dentistry, Medical School, School of Nursing, College of Pharmacy, School of Public Health, College of Veterinary Medicine, and the Center for Allied Health Programs) and associated programs and centers on the Twin Cities, Duluth, and Rochester campuses These programs enroll students at the bachelor's, master's, and doctoral degree levels (Table 4-14). In collaboration with affiliated health systems, the University also trains over 1,200 pharmacy, medical, and dental primary care and specialty residents each year.

Table 4-14. Fall 2014 enrollment and degrees awarded in health professional programs, all campuses

Program	UMN School	Degree Awarded	Campus	Fall 2014 Enrollment	Degrees Awarded 2014
Dental Hygiene	School of Dentistry	B.S.	Twin Cities	45	24
		M.D.H.	Twin Cities	10	4
Dental Surgery		D.D.S.	Twin Cities	416	109
Dental Therapy		B.S.D.T & M.D.T	Twin Cities	22	9
Medicine	Medical School	M.D.	Duluth, Twin Cities	958	219
Mortuary Science		B.S.	Twin Cities	60	23
Physical Therapy		D.P.T.	Twin Cities	148	56
Nursing	School of Nursing	B.S.N.	Rochester, Twin Cities	422	117
		M.N.	Twin Cities	126	62
		D.N.P.	Twin Cities	334	98
Pharmacy	College of Pharmacy	PharmD.	Duluth, Twin Cities	668	155
Public Health	School of Public Health	M.P.H.	Twin Cities	450	198
Healthcare Admin.		M.H.A.	Twin Cities	135	93
Occupational Therapy	Center for Allied Health Programs	M.O.T.	Rochester, Twin Cities	96	44
Medical Lab Sciences		B.S.	Rochester, Twin Cities	93	37
Veterinary Medicine	College of Veterinary Medicine	D.V.M.	Twin Cities	403	97
Total				**4,386**	**1,345**

Source: Office of Institutional Research, University of Minnesota

Enrollments in most of the health professions programs have remained consistent over the past five years, with several exceptions (Figure 4-AA). Enrollment gains in the School of Nursing are due to growth in the Master of Nursing program and the establishment and growth of the Doctor of Nursing practice (DNP) program. The School of Public Health enrollment gains come from growth in the Master of Health Care Administration program. The College of Veterinary Medicine enrollment gains are due to planned incremental class size increases.

Health professions program admissions continue to be competitive. In the 2014–15 academic year, the Twin Cites campus of the medical school had the highest number of applications, n=4118, for 160 open positions (Table 4-15).

In 2014, the University granted 1,345 health professions degrees, up slightly from 1,324 degrees granted in 2013 (Table 4-14).

The Academic Health Center colleges and schools:

- train more than 70 percent of Minnesota's health professional workforce;
- award more than 80 percent of the state's medical degrees;
- educate nearly 75 percent of the state's dentists;

- produce two thirds of all Doctor of Nursing Practice graduates in the state;
- produce two thirds of the state's pharmacists; and
- educate 40 percent of Minnesota's practicing veterinarians.

Academic Health Center health professionals provide care for more than one million patients each year through hospital and clinic sites throughout the state. In addition, each of the schools and colleges has community outreach programs aimed at serving underserved populations throughout the state:

- The College of Pharmacy trains students on two campuses (Twin Cities and Duluth) and ensures all students serve at least one clinical rotation in a rural community throughout Minnesota.
- The School of Dentistry has established eleven outreach sites throughout the state, including a model dental clinic in partnership with UCare, and provides much needed dental services to underserved communities.
- The College of Veterinary Medicine (CVM) has confronted a national shortage of food animal veterinarians with innovative programs such as VetFast, which speeds the process of training veterinarians for high priority needs. VetLead is a program offered to high achieving students of

Figure 4-AA. Enrollment trends in health professional programs, all campuses 2010–2014
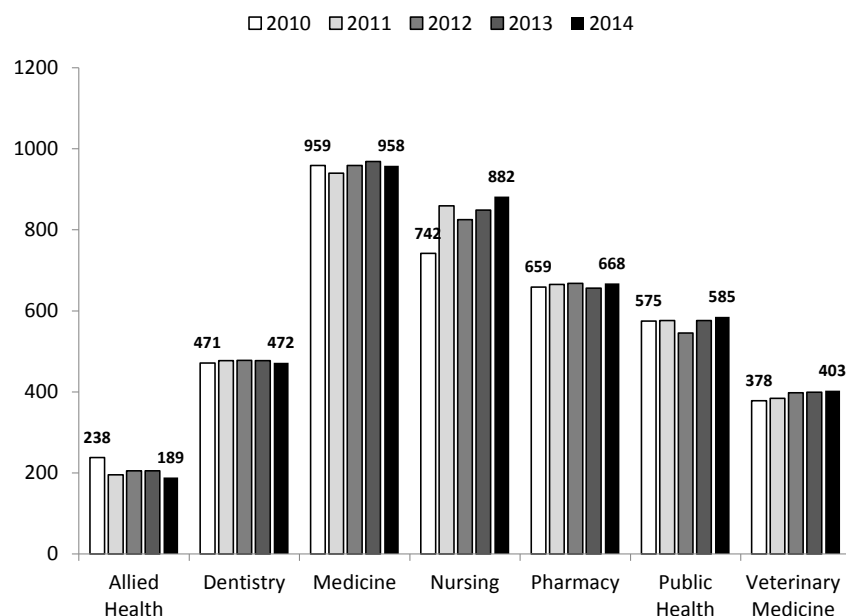
Source: Office of Institutional Research, University of Minnesota

Table 4-15. Fall 2014 enrollment in health professional degree programs, all campuses

Program	Applications	Offers	Enrolled
Medical Lab Science B.S.	98	53	47
Dental Therapy M.D.T	14	10	8
Dental Hygiene B.S.	85	27	24
Dentistry D.D.S.	1,195	198	110
Medicine-Duluth	1,541	98	60
Medicine-Twin Cities	4,118	246	160
Nursing, B.S.N.	692	163	146
Doctor of Nursing Practice	198	139	126
Master of Nursing	224	68	63
Master of Occupational Therapy	476	112	49
Pharm.D.	932	253	167
Master of Public Health	971	523	207
Veterinary Medicine D.V.M.	960	164	103
Total	**11,504**	**2,054**	**1,270**

Source: Office of Institutional Research, University of Minnesota

color from Florida Agricultural and Mechanical College, which guarantees CVM program acceptance to students during their second year of undergraduate study. The Doctor of Nursing Practice program is the largest in Minnesota and has expanded to help meet the state's growing health care needs.

- More than 1,800 students and residents and 1,000 faculty members from the Medical School provide care at urban and rural hospitals and clinics across Minnesota.

Graduation rates in the health professions programs are very high. The five-year graduation rates for 2010 matriculating classes across most of the health programs exceed 90% (Figure 4-BB).

Given the mounting concerns about student debt, student financing of health professions degrees is monitored by the programs. In a review of loan data from selected health professions programs, 70 percent to 90 percent of 2014 graduates reported the use of loans to finance their education (Table 4-16). Over 75

percent of the students in doctoral training programs (DDS, DNP, MD, PharmD) supported their education through loans.

The health professions programs place significant emphasis on training health professionals that value differences and demonstrate culture competence to meet the needs of the populations they serve. Active recruitment and retention of students, staff, and faculty from underrepresented groups is critical to increase diversity in the healthcare workforce. Racial, ethnic, and gender distributions (respectively) are illustrated in Table 4-17 and Figure 4-CC.

The student population of the Medical Laboratory Sciences Program is one of the most culturally diverse undergraduate programs at the University, with an average of 40 percent students of color. In 2014, 43 percent of the Medical Laboratory Sciences students (n=93) self-identified as multicultural. These students are also multilingual speakers of English representing an array of twelve different primary language backgrounds including Akan, Amharic, Arabic, Cambodian, Cantonese, Chinese, Kiisi/Swahili,

Figure 4-BB. Graduation rates for 2010 cohort
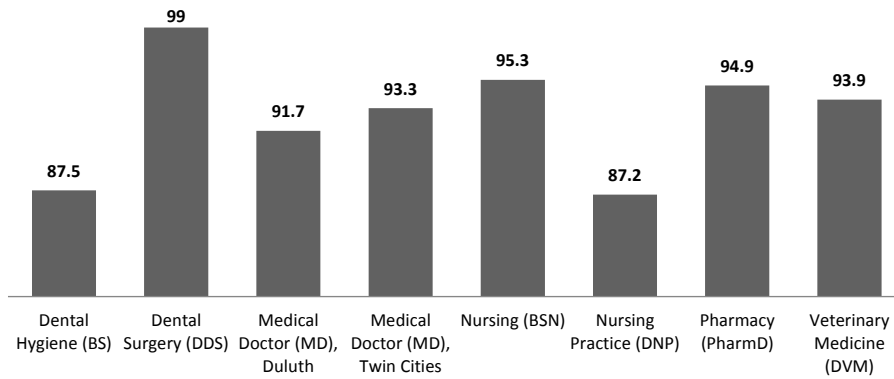
Source: Office of Institutional Research, University of Minnesota

Table 4-16. Health professional student loans, all campuses, 2014

	Number of Graduates	% with Loans	Average Loans
Doctor of Dental Surgery (D.D.S.)	109	85	$229,620
Medical Doctor (M.D.)	219	90	$159,723
Doctor of Pharmacy (Pharm.D.)	155	89	$140,937
Master of Nursing (M.N.)	62	81	$54,035
Bachelor of Science in Dental Hygiene (B.S.)	24	67	$38,152
Doctor of Nursing Practice (D.N.P.)	98	77	$72,311
Bachelor of Science in Nursing (B.S.N.)	117	77	$33,214

Source: Office of Institutional Research, University of Minnesota

Table 4-17. Racial and ethnic diversity of students enrolled in health professional programs, all campuses, 2010–2014

	2010	2011	2012	2013	2014
American Indian	1.8%	1.5%	1.5%	1.4%	1.3%
Asian/Pacific/Hawaiian	7.4%	7.2%	8%	8%	8.4%
Black/African American	4.1%	3.6%	3.3%	3.7%	3.9%
Hispanic	2.2%	1.8%	1.6%	1.7%	2.1%
International	2.3%	2.5%	2.8%	3.1%	2.8%
White	76.4%	73.6%	72%	70.8%	71.3%
Unknown	5.8%	9.8%	10.8%	11.3%	10.2%

Source: Office of Institutional Research, University of Minnesota

Figure 4-CC. Health professional students by gender, all campuses, 2010–14
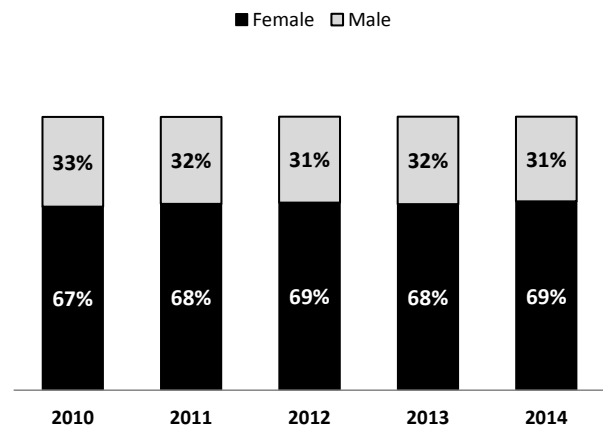
Source: Office of Institutional Research, University of Minnesota

Korean, Oromo, Russian, Somali, and Vietnamese. The program serves as a gateway for diverse student populations to enter the healthcare workforce.

Other health professions programs also reflect a commitment to student diversity. The Duluth campus of the Medical School is ranked second in the nation for graduating American Indian students. Twenty-five percent of the students enrolled in the PharmD program self-identify as multicultural. Of the 471 students enrolled in the School of Dentistry programs (DDS, dental hygiene, and dental therapy), 23.4 percent self-identify as multicultural. In School of Nursing programs (DNP, MN and BSN), 18.4 percent students self-identify as multicultural. Eighteen percent of 832 students enrolled in the Twin Cities campus of the Medical School self-identify as multicultural. Twenty-five percent of the students enrolled in the master of health care administration and master of public health programs self-identify as multicultural.

The University's health sciences schools are dedicated to a mission to train the next generation of health professionals, to discover and develop new treatments and cures for health issues, and to provide the best possible health care for patients and families throughout Minnesota. The programs also generate significant economic impact and help address core issues that affect the health and wellbeing of all of our communities.

- Workforce Development: Academic Health Center (AHC) programs train nearly 70 percent of Minnesota's healthcare workforce in more than 1,500 clinical training partnerships across Minnesota. The AHC is home to the state's only pharmacy, dentistry, and veterinary medicine programs. Half of medical school graduates choose to become primary care doctors.

- Health Impact: Faculty and residents deliver care through hospitals and clinics across Minnesota, including underserved rural and urban communities. University of Minnesota Physicians (UMP) is the second largest integrated clinical practice in the Twin Cities. University of Minnesota Health, a partnership between UMP and Fairview, delivers leading edge care throughout the state.

- Economic Impact: The AHC is a $1.6 billion enterprise with business partnerships that have helped create a thriving bioscience industry in Minnesota.

- Research Impact: AHC faculty oversee nearly $400 million in research grants each year, accounting for more than half of the University's entire research portfolio. The Clinical and Translational Science Institute, supported by a $51 million Clinical and Translational Science Award by the NIH, helps researchers bring their discoveries into practice and to improve human health.

National Center for Interprofessional Practice and Education

As the home to the National Center for Interprofessional Practice and Education, the Academic Health Center continues to be a national leader in interprofessional education. The National Center, a unique public-private partnership created in October 2012, is charged by its funders—the University along with the Health Resources and Services Administration, the Josiah Macy Jr. Foundation, the Robert Wood Johnson Foundation, the Gordon and Betty Moore Foundation—to co-create and evaluate approaches to healthcare and education focused on teams and patient partnerships. The center's mission is to offer and support evaluation, research, data, and evidence that catalyzes the field of interprofessional practice and education (IPE) and leads to better care, added value, and healthier communities.

A primary effort in the National Center's work is forming and supporting educational and clinical partnerships in the building of a Nexus within healthcare systems; where practitioners, communities, patients, families, educators, and students collaborate seamlessly to enhance care delivery, improve population health, and lower costs through establishment of partnerships and shared responsibility for health professions education and advancement of collaborative practice models. These innovation models form the Nexus Innovations Network.

The network currently includes 16 projects in ten states. Research in network sites covers a wide array

of topics, focusing on clinical practice, community engagement, on-site training and classroom interprofessional learning. Data from these projects will help grow the evidence about the effectiveness of IPE on healthcare cost, quality, and outcomes.

An essential component to the Nexus Innovations Network's success is a first-in-the-nation data repository focused on health and education outcome improvement, the National Center Data Repository (NCDR), in which data from innovations network projects is collected. The NCDR uses standard definitions, data aggregation, and advanced analytics, including National Center standardized data sets, educational and research data, and existing national and federal databases. The National Center gathers, synthesizes, and shares key findings and analysis from the Nexus Innovations Network and NCDR through reports, briefs, scholarly contributions, and other literature containing best practices for the development, implementation, and evaluation of IPE models.

One of the network sites is the Minnesota network, composed of local partners including: Community University Health Care Center (CUHCC), Bethesda Family Medicine Clinic (practice site for the St. Joseph's Family Medicine Residency), Broadway Family Medicine Clinic (practice site for the North Memorial Family Medicine Residency), Phalen Village Family Medicine Clinic (practice site for the St. John's Family Medicine Residency), Smiley's Family Medicine Clinic (practice site for the University of Minnesota Medical Center Family Medicine Residency), and the University of Minnesota Physicians Women's Health Specialists Clinic at University of Minnesota Medical Center.

Given the rapid transformation of healthcare environments to achieve the goals of providing patient-centered care, improving community health outcomes, and reducing healthcare costs, it is important that the University health professions programs evolve to educate future professionals to work effectively in these transforming environments. To support these efforts, the 1Health initiative is integrating interprofessional education across the Academic Health Center (AHC) and other University health professions schools and programs. The

components of the 1Health effort are designed to foster and support the development of the essential competencies of collaborative practice: development of shared values and ethics, understanding and appreciation of roles and responsibilities of other health professionals, interprofessional communication skills, and competencies in team work.

The 1Health team, composed of faculty and staff from dentistry, medicine, nursing, and pharmacy and the AHC Office of Education, works closely with the Interprofessional Practice and Education Committee, which is composed of faculty representatives from 20 University health professions programs to advance and support development of education and training opportunities for team-based and collaborative practice.

The 1Health curriculum consists of three sequential phases:

Phase I—Orientation: The Foundations of Interprofessional Communication and Collaboration course provides tools to support student learning for effective communication, collaboration, and teamwork. In fall 2015, 1,025 students from 14 different professional programs are participating in the course.

Phase II—Necessary Skills: Learning activities in this phase provide students opportunities to develop the necessary skills to work interprofessionally. In fall 2015, a Community Teacher program is being piloted in which teams of students from medicine, nursing, and pharmacy partner with a patient in the community with a chronic disease. The teams of students visit with their teacher in a variety of clinical settings followed by a debriefing session with their classmates to share what they have learned. In spring 2015, a team communication skills course was piloted with 139 students from dental hygiene, nursing, occupational therapy, and social work. This course was offered again in fall 2015.

Phase III—Expertise in Practice: The final phase of the 1Health initiative consists of the experiential portion of interprofessional education. Starting fall 2014, all students in pharmacy, bachelors of nursing, occupational therapy, and social work and most medical students participated in an embedded

interprofessional observational activity within a required clinical rotation. This activity has been expanded to other professions in fall 2015.

Rural Interprofessional Reimbursements

The Academic Health Center provides financial assistance to students doing rotations in rural communities. In summer 2015, this program was refocused to advance interprofessional practice and education among students and practitioners by integrating interprofessional learning objectives into student training experiences in rural communities. Additionally, through preceptor and site development, the number of exemplary interprofessional learning sites where health professions students rotate will be increased.

Evolving Health Professional Programs

New professions are emerging as healthcare transformation continues. To prepare students for these changing environments, the health professions schools and programs are developing new degree programs, implementing curricular innovations, and establishing new clinical practice models and programs.

New Degree Programs

In the fall of 2009, the University made a formal request to the Commission on Dental Accreditation (CODA) to accredit its newly created dental therapy education program. The Commission is the only entity to accredit dental education programs and historically set the national standards for educating dentist, dental hygienists, and dental assistants. In August 2015, CODA voted to authorize the accreditation of dental therapy education in the U.S., a move that is expected to support the expansion of dental therapy to other states. The School of Dentistry's leadership in dental therapy education has attracted international attention, specifically in Africa where the School's expertise has been requested by programs in Rwanda and Ghana.

In 2014, the Center for Spirituality & Healing launched a Master of Arts degree in Integrative Health Coaching. The University was the first accredited four-year university to offer a post-baccalaureate certificate in health coaching and a Master of Arts degree. Other major universities, such as Duke, Harvard, Vanderbilt, and Mayo Medical Center, have subsequently begun

to offer such programs. The University's new program enrolled 22 students in fall 2014 and 25 students are entered the program in fall 2015.

Health Coaching is a new profession designed to holistically meet the needs of clients. Many healthcare disciplines are educated to see issues of health through a limited lens. In contrast, health coaching is practiced from a whole person perspective that views the client as intrinsically healthy, whole, wise, and the ultimate expert in their own healing journey. Although health coaches do not diagnose or treat illness, they can assist those with pathological conditions to enhance their health and change their lifestyle patterns. Health coaches are becoming integral members of interprofessional healthcare teams.

The Center for Bioethics now offers a Clinical Ethics Post-baccalaureate Certificate Program. The program supplements the Center's M.A. program and graduate minor; it offers a graduate-level educational opportunity for practicing professionals including physicians, nurses, social workers, chaplains, and others working in healthcare. Through class work and practical experience, students master the knowledge and skills necessary for work in clinical ethics, including participation on ethics committees, clinical ethics consultation services, institutional and regional clinical ethics policy bodies such as organ allocation committees or brain death committees, support for institutional staff development programs in their professional fields, or simply being better prepared to meet the ethical challenges that arise in their work.

Curricular Changes

The School of Dentistry established the Team Care Clinic, a multi-student (D.D.S., Dental Hygiene, Dental Therapy) clinic, which provides efficient and effective patient-centered care utilizing each team member to the top of his or her scope of practice. The current five-chair pilot program is expanding to 16 chairs and incorporates direct provision of care by faculty as well as General Practice Dental Residents. Early data shows increased patient and provider satisfaction as well as increased productivity.

The School of Dentistry and the College of Pharmacy are partnering to optimize care for patients with multiple medications and chronic conditions in the

General Dentistry Clinics. This collaborative approach provides opportunities for interprofessional education and collaborative practice between the pharmacist, dental student, dental hygiene student, dental therapy student and the dental school clinical faculty to provide medication therapy management services and oral healthcare in a single visit for patients with limited access to care.

The School of Dentistry received a five-year $1.7 million grant from the Health Resources and Services Administration aimed at expanding access to care in underserved communities in rural Minnesota. The initiative will integrate Interprofessional Education and use dental therapists as providers. The new care model will blend medical, dental, and dental therapy students in rural clinics, giving patients a full spectrum of oral healthcare.

The College of Pharmacy is undergoing curriculum revision to sequence and integrate courses using active-learning techniques. Beyond the didactic curriculum, the college is examining the experiential curriculum to create opportunities for competency performance assessment. The college invested to build two technology-enhanced classrooms (one in the Twin Cities and one in Duluth) to support team-based learning and other active-learning formats.

Students in the Master of Occupational Therapy program partner with the Disability Resource Center and various groups both on and off campus to conduct job evaluations assessing risk for physical and cognitive health. Groups of OT students, under faculty supervision, interview workers, employers, conduct on-site evaluations, and submit written recommendations to the supervisors.

In 2014, the College of Veterinary Medicine hosted the International One Medicine One Science conference (iCOMOS), attracting nearly 300 participants from 14 countries who discussed and explored groundbreaking science behind One Health and the issues at the interface of animals, humans, and the environment. The conference and workshops led by a distinguished panel of presenters representing academia, government organizations, foundations, funding agencies, and corporations provided insight for addressing and working collaboratively on issues related to global challenges.

The Minnesota Veterinary Institute is a unique collaboration of the Minnesota Veterinary Medical Association, the University's College of Veterinary Medicine, and the Veterinary Hospitals Association formed to elevate the quality and quantity of continuing education programs available to veterinary practitioners and technicians. The Institute's course design enables veterinarians to study one subject in-depth and immediately apply their newly learned lecture material by participating in hands-on wet labs. The Institute's combination of lectures, wet labs and online interactive case studies will help to develop the knowledge, skills, and expertise to successfully implement changes into clinical practices. The first year of the series focused on veterinary dentistry and oral surgery; the second year on feline health, medicine, and surgery. The third year, scheduled to start in February 2016, will focus on gastroenterology.

To enhance the clinical training experiences of medical students, the Medical School has developed two new programs focused on providing longer clinical experiences at a single site and with a specific focus. These new programs complement the traditional block rotations where students rotate to different sites for up to eight weeks. Education in Pediatrics Across the Continuum uses a competency-based framework to redesign a medical education pathway from early in medical school through completion of residency focused on pediatrics. VA Longitudinal Undergraduate Medical Education (VALUE) is a ten-month longitudinal integrated clerkship for third-year medical students taking place at the Minneapolis VA Health Care System and focused on providing education in multiple specialties with a focus on quality improvement and patient safety. These new programs are modeled after the successful Rural Physicians Associates Program and Metropolitan Physician Associate Program that embed students in rural or urban underserved clinical practices for nine months during their third year of medical school.

Clinical Initiatives

The School of Nursing opened its first nurse-led clinic in downtown Minneapolis in 2015. The new University of Minnesota Health Nurse Practitioners Clinic is a primary care interprofessional clinic that serves as a clinical placement site for nursing and pharmacy students.

The College of Veterinary Medicine is responding to national demand for increased training and emphasis on primary and preventive care for companion animals with the creation of a Preventive Care Center at the University's Veterinary Medical Center. CVM has also developed a program called VeTouch, offering free basic clinical care for low-income Twin Cities' residents.

Providing Quality Legal Education

The University of Minnesota Law School offers an outstanding comprehensive legal education that prepares students to become skilled and ethical leaders in the legal profession.

Recruit Highly Prepared Students from Diverse Populations

In recent years, the Law School has recruited a qualified, talented, and diverse student body. Last year's entering class of 193 J.D. candidates had a median LSAT at the 90th percentile nationally and a median GPA of 3.77. Twenty percent of the students are of color, and another 13 percent come from other countries. The Law School has increased its LL.M. class to 66, bringing talented lawyers from around the world to Minnesota for a one-year master's program designed to introduce them to the U.S. legal system.

The Law School has pursued multiple strategies to enhance student recruitment. Students are more inclined to apply to highly ranked schools, and the Law School has maintained a top-20 *U.S. News and World Report* ranking. In addition, the Law School has expanded its efforts to recruit promising students through a combination of scholarships, fee waivers, admissions outreach efforts, and the development of web and print promotional materials. Faculty members are extensively involved in recruitment through phone calls to admitted students and attendance at recruiting events and informal meetings with visiting applicants.

The Law School has also taken steps to improve diversity. For the past six years, the Law School has sponsored the Minnesota Pre-Law Scholars Program, a comprehensive, summer-long law school preparation program that is targeted to underrepresented Minnesota residents. The Law School has also experimented with alternative admissions programs and is considering additional ones, and it has increased its acceptance of transfer students, which allows selection on the basis of proven performance at other law schools.

Applications to the Law School have declined roughly 32 percent in the last two years in keeping with national trends (though applications were at historic highs in the two years before that). Nonetheless, the Law School is on track to recruit another very talented class for next year, although the size of the J.D. class will be smaller than in the recent past. The Law School has compensated in part by increasing its enrollment of LL.M. students, adding a Master's in Patent Law program, and reducing expenses.

Extraordinary Education

The Law School offers one of the most rigorous and comprehensive legal education programs in the country. Almost all J.D. candidates graduate in three years except for those earning joint degrees in other University programs. The Law School's innovations in its curriculum place the Law School at the forefront of a small group of law schools leading the transformation of legal education nationally and internationally. These changes are designed to integrate doctrine, theory, professional values, and lawyering skills throughout the curriculum, and to educate students in a progressive arc about the full range of lawyering concepts and skills.

Recently launched initiatives to advance these goals include:

- First-year electives in international law, corporate law, procedural law, and perspectives on the law, bringing internationalism, business skills, and critical thinking about legal theory and legal systems into the formative first year;
- New offerings that emphasize statutory and regulatory drafting skills;
- Introduction of Law in Practice as a required first-year course integrating doctrine and skills, and engaging students with practitioners and judges;
- Early implementation of the American Bar Association's experiential learning requirement a year ahead of most law schools, with a robust offering of simulations and live client clinics;

- A new concentration in civil litigation with advanced practical and theoretical courses designed to teach analytical and advocacy skills;

- Capstone courses with a multidisciplinary focus to help train students to be problem-solving, innovative lawyers with the skills to work in multiple legal and professional contexts; and

- Leadership foundations program, designed to expose students to basic business concepts and core leadership skills.

Ensure Affordable Access for Students of All Backgrounds

The Law School has sharply increased scholarship support for its students. Roughly 91 percent of last year's entering class received scholarships, with an average scholarship amount of $27,099. Nonetheless, access and affordability remain important concerns. The average law student who graduates with debt owes about $90,000 for law school alone (the national average is even higher). The Law School will continue to make fundraising for student scholarships one of its highest priorities. In addition, the Law School will continue its efforts to contain costs and to keep tuition increases to the lowest level feasible.

Research

The Law School is rated among the top 20 law schools nationally in faculty productivity. From September 1, 2013 to September 1, 2014, law school faculty authored 11 books, 37 book chapters, and 52 law review articles. Faculty publications have received numerous awards that illustrate the depth and range of faculty scholarship. Professor Christopher Roberts' book, *The Contentious History of the International Bill of Human Rights* (Cambridge University Press, 2014), won the American Sociological Association's Gordon Hirabayashi Human Rights Book Award. Professor June Carbone's book, *Marriage Markets: How Inequality is Remaking the American Family* (Oxford University Press, 2014) (with Naomi Cahn), was named a top ten book pick in *Newsweek* and *The Economist*. Professor Jessica Clarke's article, "Inferring Desire," 63 Duke L.J. 525 (2013), was selected by the Williams Institute and UCLA School of Law to receive the Dukeminier Award and Ezekiel Webber prize. The Dukeminier Awards recognize

each year's best sexual orientation and gender identity law review articles. Professor Barry Feld's most recent book, *Kids, Cops, and Confessions: Inside the Interrogation Room* (New York University Press 2013) received the 2015 Outstanding Book Award from the Academy of Criminal Justice Science. Professor Heidi Kitrosser's book, *Reclaiming Accountability: Transparency, Executive Power, and the U.S. Constitution* (University of Chicago Press, 2015), was awarded the 2014 IIT Chicago-Kent College of Law / Roy C. Palmer Civil Liberties Prize.

Public Service Outreach

The Law School has numerous initiatives that involve community engagement. The Robina Institute, a privately funded program begun in 2011, is currently working on several research projects, including four in the Sentencing Law and Policy Program Area that take a close look at issues that states and jurisdictions face in sentencing policy and guidelines: the Probation Revocation Project; the Parole Release and Revocation Project; the Criminal History Project; and the Sentencing Guidelines Repository Project. The Corporate Law Institute works with local businesses and provides assistance to returning veterans and the street law program sends law students into local high schools. In addition, Professor Mark Kappelhoff received the prestigious U.S. Attorney General's Award for Exceptional Service from Attorney General Loretta Lynch. The award—the highest given by the Justice Department for employee performance—honors Kappelhoff for his instrumental role in the civil rights investigation of the police department in Ferguson, Mo., following the fatal shooting of Michael Brown. Professor Herbert Kritzer has been awarded the Law and Society Association's (LSA) Ronald Pipkin Service Award for sustained and extraordinary service to LSA for more than 35 years. And the Immigration Clinic won a major case before the U.S. Supreme Court. Kristi Rudelius-Palmer, co-director of the Human Rights Center, received the Edward O'Brien Award for Human Rights Education.
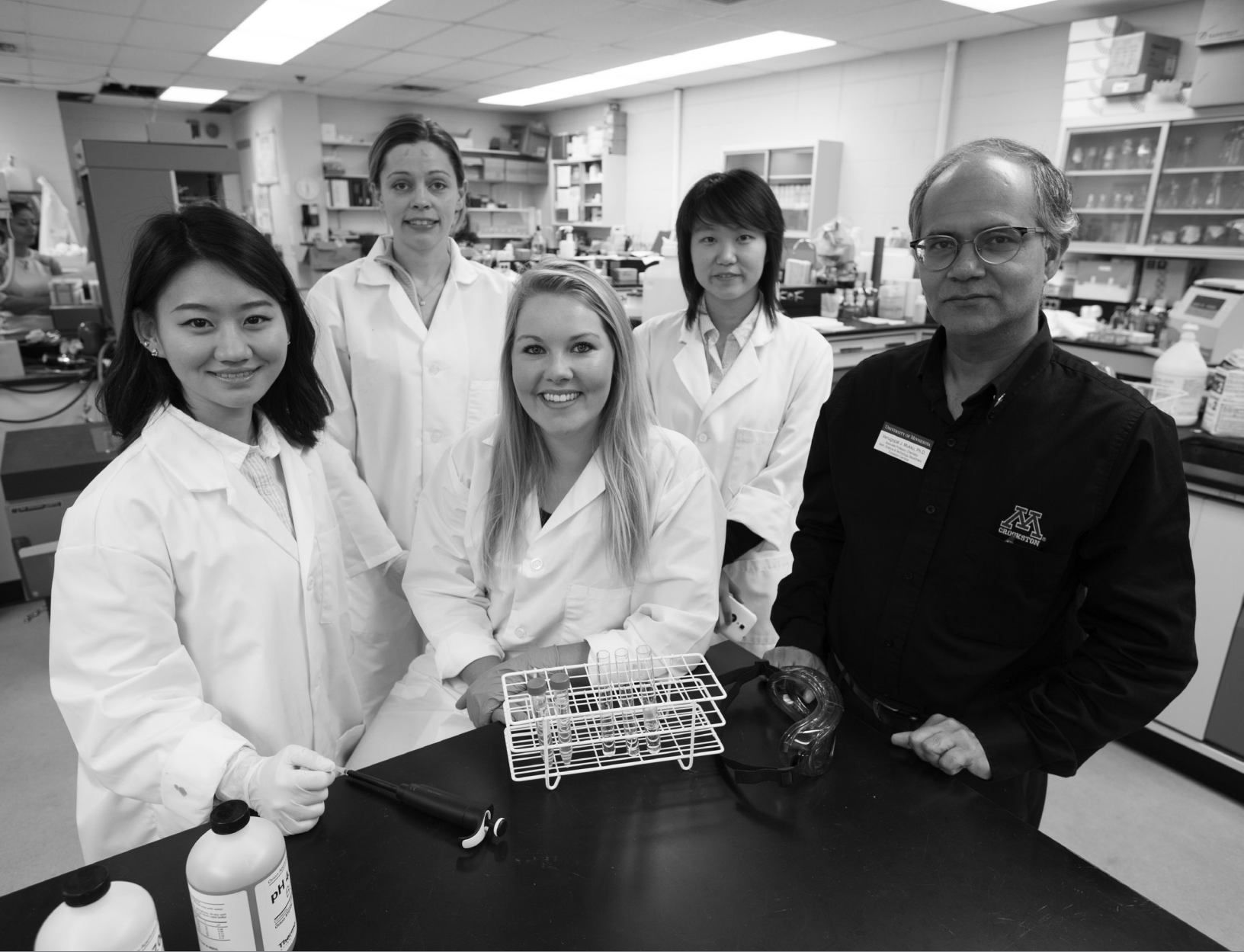
Research and Discovery

Conducting breakthrough research that moves us forward. Our researchers improve our understanding of the world and how we work and live.

Introduction

As noted on page 1, the University's research mission is to generate and preserve knowledge, understanding, and creativity by conducting high-quality research, scholarship, and artistic activity that benefit students, scholars, and communities across the state, the nation, and the world.

With this mission as a guide, the University completed year one of its five-year research strategic plan, Five Years Forward, with partners across the University system. In alignment with the Twin Cities strategic plan and other campus plans, the research plan builds upon the University's many strengths and creates opportunities to bring researchers together through collective inspiration and discovery.

Enhancing Research Excellence

The University seeks to enhance research excellence by investing in research infrastructure and faculty and educating our students for the challenges and opportunities of tomorrow. As the state's major research university, the University plays an integral role in Minnesota's academic research and knowledge creation. The University ranks ninth among public universities in research spending, with more than $850 million in research expenditures (Table 5-1), and it generates an estimated $8.6 billion annual economic impact for Minnesota.

An April 2015 report, "America's Knowledge Economy: A State-by-State Review," highlights public research universities as crucial contributors to the knowledge economy, providing advances in knowledge and technology that drive innovation, attract jobs and foster economic growth.

According to the report, the impact of academic research in Minnesota, home to the University of Minnesota and the Mayo Clinic, exceeds the national average for nearly all fields of study. Minnesota ranks third in the nation for the number of publications produced per $1 million spent on research and has the highest number of publications per capita in the Midwest.

The report also highlighted medicine as the field Minnesota research has the most impact on, noting that almost 27 percent of the state's research pertains to the medical sector — the highest of any state—and its medical research is cited 32 percent more than the national average.

The University's Academic Health Center (AHC) faculty typically oversees more than $400 million in research grants each year, accounting for half of the University's research portfolio. The AHC's Clinical and Translational Science Institute, supported by a $51 million Clinical and Translational Science Award by the NIH, helps researchers bring their discoveries into practice and to improve human health. As one example, the results of one international clinical trial co-led by School of Public Health Professor James Neaton involving 215 sites in 35 countries were released in May of 2015 and provided a strong recommendation for starting HIV-infected persons on anti-retroviral drugs sooner rather than later.

Institutional Support

Over the past six years, the Office of the Vice President for Research has provided more than $20 million a year to researchers through several funding programs.

Research Infrastructure Reinvestment

The Research Infrastructure Investment Program is one way the University ensures it maintains robust, state-of-the-art equipment to support research and academic endeavors, even as federal funding for research stagnates nationwide. These improvements to research infrastructure are key to catalyzing research and innovation, and support the University's talented researchers as they explore new ideas, form interdisciplinary partnerships, and make groundbreaking discoveries.

In 2015, over $2 million dollars were matched one-to-one by funds from supporting colleges or centers, totaling over $4 million awarded. Thirteen proposals in at least five colleges and twelve centers and institutes across the University's colleges and campuses were chosen for funding, ranging from a new 3D bioprinting facility that uses living tissue to create transplantable organs to an expansion of the Multisensory Perception Laboratory, where researchers can measure audio-visual perception in a variety of simulated environments.

Table 5-1. Top 15 institutions reporting largest research and development expenditures, 2012–14

		2013–2014		2012–2013		Percent Change 2012–13
		Total*	Public Rank	Total*	Public Rank	
1	Johns Hopkins U.	$2,169 million		$2,106 million		3%
2	U. of Michigan–Ann Arbor	$1,375 million	1	$1,323 million	1	4%
3	U. of Washington–Seattle	$1,193 million	2	$1,109 million	3	7%
4	U. of Wisconsin–Madison	$1,124 million	3	$1,170 million	2	-4%
5	U. of California–San Diego	$1,076 million	4	$1,074 million	4	0%
6	U. of California–San Francisco	$1,043 million	5	$1,033 million	5	1%
7	Harvard U.	$1,013 million		$799 million		21%
8	Duke U.	$993 million		$1,010 million		-2%
9	U. of North Carolina–Chapel Hill	$973 million	6	$885 million	7	9%
10	U. of California–Los Angeles	$967 million	7	$1,003 million	6	-4%
11	Stanford U.	$945 million		$903 million		4%
12	Massachusetts Inst. of Technology	$901 million		$824 million		8%
13	Columbia U.	$889 million		$889 million		0%
14	U. of Pittsburgh	$873 million	8	$867 million	8	1%
15	**U. of Minnesota–Twin Cities**	**$858 million**	**9**	**$826 million**	**9**	**4%**

Source: National Science Foundation, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, 2014

Minnesota Futures

The Minnesota Futures program supports extraordinary research by nurturing interdisciplinary ideas. The two-year grants, which are supported by technology commercialization revenue, fund research opportunities that cross disciplinary and professional boundaries and support in-depth research that aims to address society's grand challenges. Since 2008, the Minnesota Futures grants have supported research by faculty who go on to win substantial grants and whose innovations reach the market to potentially improve the lives of millions.

The 2015 Minnesota Futures grants include two projects that advance new approaches to disease treatment, including one that combines the University's strengths in genome engineering and biotechnology to explore new methods to generate cells used in drug development.

Grant Match/Grant-in-Aid

The Grant-in-Aid of Research, Artistry and Scholarship Program provides grants to support scholarly and artistic activities of faculty and their graduate students to foster excellence throughout the University. Grant-in-Aid (GIA) projects represent the breadth and depth of University research in all disciplines and fields. While anyone can apply for GIA funding, it plays an especially important role by providing new professors and emerging researchers opportunities to pursue research and scholarship that may not yet have received external funding. In the past five years, $15 million has been awarded through the GIA program.

Research Opportunities for Students

An important part of the educational experience at the University is the opportunity for students at all levels on all five campuses to engage with outstanding research faculty, not just in the classroom, but also in new research and creative projects. Undergraduate students can develop valuable skills through the Undergraduate Research Opportunities Program, and can present their research findings at campus symposia and a national conference dedicated to undergraduate research. Graduate and professional students work alongside faculty in the laboratory, the archives, and the studio, helping to generate new knowledge and creative works. Graduate and professional research roles prepare students to become future faculty as well as leaders in higher education, business, government, and non-profit organizations around the world.

Renewing Our Commitment to Research Ethics

Just as it is committed to high quality clinical research that can lead to treatment of many of our most vexing diseases, including cancer, diabetes, and AIDS, the University is dedicated to meeting, upholding, and exceeding the highest ethical standards in research practices involving human participants.

In the past year, the University has undergone a rigorous review and assessment of its human research policies and practices and is now undertaking a major initiative to enhance its human research protection program. Some key areas of enhancement include: reinforcing an ethical culture, more education and training for investigators and staff, changes to IRB processes and policies, new approaches for managing conflicts of interest, and increased community participation and oversight. Once fully implemented, these improvements will ensure that the well-being of research participants remains at the center of all University research activities and establish a program that will serve as a national model.

Advancing Transdisciplinary Partnerships

The University advances transdisciplinary partnerships by encouraging collaboration among researchers and disciplines to derive new concepts and approaches and enable new ways of understanding.

Minnesota's Discovery, Research and InnoVation Economy (MnDRIVE)

MnDRIVE is a landmark partnership between the University and the state that aligns areas of University strength with the state's key and emerging industries to produce breakthrough research that addresses our state and society's greatest challenges. In the first biennium, $34.5 million has been authorized for more than 210 MnDRIVE projects across the four research areas involving nearly 630 researchers in 103 departments, 21 colleges and three campuses (Twin Cities, Duluth and Morris).

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With these funds, the four MnDRIVE areas have hired 321 people, including 28 faculty, 112 graduate students and 63 staff/technicians, and have conducted some substantial outreach: more than 500 meetings, symposia, workshops, and conferences with more than 30,000 attendees ranging from researchers to industry partners. Because of this work and collaboration, MnDRIVE researchers in total leveraged $57 million in state, federal, and private funding from major companies and agencies such as Boston Scientific, the National Science Foundation, the U.S. Department of Agriculture, and the National Institutes of Health. These groups have also submitted 41 disclosures for inventions. However, one of the most promising successes to date is the fate of MnDRIVE students: so far, eleven students have graduated with 100 percent employment into academia, industry, and non-profit organizations. Of these, six students have been employed by Minnesota industries such as Medtronic, Ecolab, and Noran Neurologics.

The Transdisciplinary Research Program promotes cross-disciplinary, collaborative research that addresses at least three of the four MnDRIVE research areas. In 2014, nearly $6 million was awarded

to twelve transdisciplinary research projects. True to their nature of breaking down academic barriers, the transdisciplinary projects brought researchers together from across many fields of study. For example, a project using precision agriculture systems to help farmers curb the harmful effects of soybean aphids on their soybean crops brought together experts not just in entomology, but in industrial design, applied economics, and aerospace engineering and mechanics.

In total, the twelve projects spanned three University campuses and involved researchers from across ten colleges and 24 departments. They also hired 82 people to help drive research forward, including 33 staff, 16 post-docs, 20 graduate students and 13 undergraduate students. The twelve transdisciplinary projects have already resulted in at least three new inventions.

Increasing Informatics Capabilities

The University of Minnesota Informatics Institute (UMII) was founded in January 2014 to foster and accelerate research across the University system in agriculture, arts, design, engineering, environment, health, humanities, and social sciences through informatics services, competitive grants, and consultation. UMII serves as the link to connect the research community to the services related to managing data across the data life cycle. UMII works directly with high-throughput facilities to provide data analytics services to their users, and collaborates with both the Minnesota Supercomputing Institute and Office of Information Technology to develop seamless solutions for data storage and compute solutions.

The Minnesota Supercomputing Institute (MSI) is a nexus for leading-edge research in scientific computing, for fostering interdisciplinary research on campus, and for enabling public-private collaborations. With approximately 600 research groups, MSI plays a key role in enabling high-impact research and recently acquired a world-class supercomputing system, called Mesabi. Mesabi means "immense mountain" in Ojibwe and is the name of the chief iron ore deposit in the U.S., located in the Iron Range in northern Minnesota. Not only is this name steeped in Minnesota natural history, it also tied to an informal term for supercomputers, "Big Iron." Mesabi is among the top ten fastest academic supercomputers

in the country. It was designed to handle complex and massive scientific data sets coming from the life, health, and social sciences and the more traditional high-performance computing tasks common to the engineering and physical sciences.

Grand Challenges Research

Grand challenges are, simply stated, society's most complex and vexing problems. The focus on grand challenges research is part of the vision to enhance exceptional cross-disciplinary research strengths and expand collaborations for greater impact. Indeed, the goal is for the University to be preeminent in solving the grand challenges of a changing world. The overarching goal, however, is for institutional transformation—making the cultural and systemic changes that remove barriers and disincentives and support faculty scholarship in new ways. The identification of research grand challenges through a faculty-based process is one approach, but many opportunities are being created to foster and reward interdisciplinary and disciplinary research. The two-year-old MnDRIVE initiative provides one glimpse at what success and culture change looks like. The faculty's innovations in disciplinary, interdisciplinary, and publicly engaged research are all efforts that collectively move the institution toward transformational change.

Publicly Engaged Research

Public engagement, in part, is the partnership of university knowledge and resources with those of the public and private sectors to enrich scholarship, research, and creative activity. Through these partnerships, engaged research can address critical societal issues and contribute to the public good. The local knowledge of community partners can be an important complement to the scientific inquiry that University researchers provide to address problems— with a focus on working with the community, rather than doing for the community.

Public engagement also serves as a strategy for enhancing research. By partnering with local, regional, and international community residents, agencies, businesses, governmental agencies, and others, public engagement can leverage research funding, provide new opportunities for faculty, enrich the student educational experience, and enhance

the University's contributions to addressing issues in local and broader societies. Faculty members in departments and centers across the University have developed quality partnerships with external entities that have leveraged research funding and have implemented research that focused on addressing important societal issues. See the following Outreach, Service, and Engagement chapter for select examples of community-engaged research.

Accelerating the Transfer of Knowledge

Economic Development

The Office of University Economic Development (UED) was established in 2014 to address an increasing need for public-private partnerships in economic development. The office's mission is to strengthen the University's ties to business and community partners and help grow and diversify Minnesota's economy. Today UED serves as a public face for economic development at the University, helping external partners connect with resources, services, and expertise at the University across all its campuses, and promoting internal collaboration across the breadth of its economic development activities

UED has had three primary focus areas during this past year:

- Providing a portal ("Front Door") for potential collaborators to connect with University resources and capabilities and helping University faculty and staff connect with external resources (e.g., industry). Over a twelve-month period, UED received and dispatched over 200 requests for connectivity support and hosted events on campus that included local, national, and international businesses and economic development groups.

- Co-leading the Corporate Engagement Workgroup (CEW) with the University of Minnesota Foundation. The vision of CEW is to connect the University's extensive innovation and talent resources with the needs and goals of private sector partners. The group includes representatives of each Twin Cities college and system campus, and meets regularly to manage a portfolio of active corporate partners and a discovery portfolio.

CEW's work to date has resulted in new public-private partnerships as well as a broadening of economic engagement with existing industry partners

- Engaging in a series of economic development meetings around the state. UED organized and made nine Greater Minnesota community visits to publicize the office's goals and resources, to discuss current community needs identified by local business and economic development leaders, and to explore possible areas of partnerships with the University. The visits renewed and strengthened connections with the University's campuses in Crookston, Duluth, Morris, and Rochester and several Research and Outreach Centers, and Extension leaders across the state. Communities visited included Owatonna, Austin, Morton, St. Cloud, Brainerd, Fergus Falls, Fosston, Duluth, and Eveleth.

Technology Commercialization

The University is committed to accelerating the transfer of knowledge by creating opportunities for public-private partnerships that move information out of the University and into the world where it can do the most good.

To this end, the Office for Technology Commercialization (OTC) has contributed to these successes:

- The University experienced another record year in fiscal year 2015 with 16 startups. This is the sixth consecutive year of a record number of startups

- Since the OTC-Venture Center was formed in 2006, University startups have raised in aggregate over $205 million in investment capital.

- The University has launched 84 startups, with over 80 percent still active, and has developed a strong startup pipeline.

- Minnesota Innovation Partnerships (MN-IP) has led to 196 agreements with over 130 companies. MN-IP has two programs:

  ○ Try and Buy Program: A low-risk, low-cost trial to University technology, including pre-set, industry-friendly licensing terms. Minnesota companies receive discounts.

○ Create Program: Streamlines the process to both sponsor research and licensing the resulting intellectual property with standard industry-friendly terms using pre-set terms for an upfront fee or choosing to negotiate the licensing terms later.

- The Discovery Capital investment program provides seed investments for the most promising University startups. Launched in 2014, the program offers $350,000 in seed funding with a requirement that the investment be matched by an external partner. To date, four companies have been approved for funding consideration.

- The University was one of only three institutions awarded a National Institutes of Health Research Evaluation and Commercialization Hub (REACH) grant that, combined with matching funds from the University, will total $6 million over three years. The MN-REACH program provides University-wide commercial expertise and resources to help develop and commercialize diagnostics, therapeutics, preventive medicine, and medical devices. It is expected to select and fund 10–20 research projects a year.

- MIN-Corps is the University's site for I-Corps (Innovation Corps), part of the National Science Foundation's (NSF) programming that focuses on expanding scientists' skill set out of the laboratory to translate their discoveries into the commercial world. NSF funding provides University teams with micro-grants to fund initial prototyping and customer research. Funding is provided as part of a 14-week curriculum in which students and faculty are paired with industry mentors to test their assumptions and search for a sustainable business model. This interdisciplinary effort is led by the Holmes Center for Entrepreneurship, the College of Science and Engineering, and the Office for Technology Commercialization.

Promoting a Culture of Serendipity

As a top-ten public research institution, the University promotes a culture of serendipity where researchers can come together across departments, colleges, and disciplines—and with colleagues and communities outside the University—to think creatively and cultivate new ideas.

Convergence Colloquia

The Convergence Colloquia are a new series of multi-disciplinary gatherings that advance cutting-edge research to develop innovative solutions and build long term partnerships that improve the world.

The colloquia serve as action-oriented think tanks focusing on critical issues for communities—from building smarter cities to exploring alternative energy sources to improving water quality to securing the food supply—that bring together University researchers with private, public, and nonprofit stakeholders to identify strategic collaboration opportunities that can lead to significant impact at the local, state, national, and global scales. Two colloquia, on smart cities and infrastructure and aging, took place in 2015.

Outreach, Service, and Engagement

Partnering with communities to advance research, share knowledge, and provide students with powerful academic experiences that address society's most challenging issues.

Introduction

The University's three-fold mission includes the imperative to partner with communities to advance research, share knowledge, and provide students with the real-time, real-life academic experience. To this end, the University has put in place a comprehensive Ten-Point Plan that focuses on what contemporary higher education calls the "new engagement." This new engagement shifts the focus away from traditional, uni-directional outreach efforts to more academically integrated activities in which the University's research, teaching, and learning efforts are designed to address societal issues through reciprocal, mutually beneficial partnerships.

Reciprocal public engagement is one of the four interrelated goals that support the vision of the University as preeminent in solving the grand challenges of a diverse and changing world. Although initially anchored in strategic planning for the Twin Cities campus, this vision—which supports dynamic University-community partnerships to advance discovery, create pathways for students, and benefit the state of Minnesota and the world—is consistent with the goals and strengths of all five campuses and their various colleges.

The University's Ten-Point Plan supports building long-term relationships with public and private sectors and connects community engagement to all aspects of the institution's identities—a land-grant university, an institution of higher learning, a research university, and a public university. Publicly engaged research, teaching, and outreach initiatives enhance the University's capacity to produce research of significance, to improve educational experiences of students, and to be a source of knowledge and solutions for communities. The University's campuses are located across the state, in thriving metropolitan areas and rural regions with agricultural strengths and traditions. The University leverages the distinctive strengths and location of each campus to engage with a range of partners—communities, businesses, nonprofits, civic and governmental bodies, arts and cultural organizations.

While notable engagement programs exist across each campus and region of the state, a renewed emphasis on engagement among faculty members will further integrate engaged research, teaching, and outreach. This emphasis includes the creation of a strategic collegiate engagement committee that specifically supports academic units and their faculty. Enhanced communications to elevate the understanding and recognition of engagement activities and the inclusion of University-wide metrics for engagement are key actions that are underway.

Leading Nationally as an Engaged University

A significant national accomplishment for the Twin Cities campus was its recent re-designation as a Community-Engaged University by the Carnegie Foundation for the Advancement of Teaching. The Twin Cities campus was first designated as a community engaged campus in 2006, and—with 156 other public and private institutions—was honored in the Foundation's first reclassification process. Along with the Twin Cities campus re-designation, the Morris campus received the initial community engagement designation, along with 83 other first-time institutions nationwide.

In addition, the University was named one of four regional winners of the 2015 W. K. Kellogg Foundation Community Engagement Scholarship Award. The award recognizes programs that demonstrate how colleges and universities have redesigned their learning, discovery, and engagement missions to become even more involved with their communities. As a finalist, the University was honored as a regional model at the national level as part of the C. Peter Magrath Community Engagement Scholarship Award, facilitated by the Association of Public and Land Grant Universities.

This past year, three of the University's campuses were nationally recognized by their designation to the 2014 President's Higher Education Community Service Honor Roll, which recognizes institutions of higher education that support exemplary community service programs and raises the visibility of effective practices in campus-community partnerships. The Honor Roll's Presidential Award is the highest federal recognition an institution can receive for its commitment to community, service-learning, and civic engagement. Both the Crookston campus and

the Morris campus were designated to the honor roll, and the Twin Cities campus was designated with distinction.

In addition, the University remains an active member of national and international peer networks devoted to strengthening and leading higher education's "new engagement" agenda. These include: Campus Compact; Imagining America; the Council of Engagement and Outreach of the Association of Public and Land-Grant Universities; Coalition of Urban Serving Universities; Committee on Institutional Cooperation Engagement Council; Community-Campus Partnerships for Health; National Academy for Community Engagement Scholarship; International Association for Research on Service-Learning and Community Engagement; Coalition for Urban and Metropolitan Universities; National Review Board for the Scholarship of Engagement; Engagement Scholarship Consortium; and the Talloires Network

Deepening the Culture of Publicly Engaged Research and Teaching

Several strategic initiatives were advanced to strengthen and deepen the integration of local, regional, national, and international public engagement into faculty research, academic curricula, and student learning. Facilitated by the system-wide Office for Public Engagement in partnership with other University units, these initiatives included engagement recognitions, policy developments, and actions that promote the principles of high quality, reciprocal university-community engagement. A few examples from the 2014–2015 academic year include:

- The annual President's Community-Engaged Scholar Award recognizes one faculty member annually for exemplary engaged scholarship that addresses critical societal issues. Each college nominates one faculty member for this award. This year, the award was presented to School of Public Health professor Kathleen Call. Call's research focuses on the extent to which health insurance coverage translates to health care services among culturally diverse, immigrant, young, and low-income populations. Recognition of ten additional finalists included work in fair housing policy, urban bird population data collection by citizens, and the state mathematics standards.

- The Public Engagement Council, a University-wide deliberative body that addresses critical issues concerning public engagement, advanced 15 policy issues including setting standards for community-engaged scholarship that can guide department- and college-level promotion and tenure review committees in assessing the quality and scholarly value of faculty members' community-engaged research, teaching, and public engagement; and streamlining various transactional processes for community partners who collaborate with the University.

- Eight Engaged Scholar Workshops supported faculty and staff members on enhancing their capacities to address students' intercultural development, to leverage research for change, to engage students more effectively in diverse communities, among other topics.

- The establishment of a set of Issue Area Networks facilitated the convening of faculty and staff from over 100 University centers, institutes, and academic units to coordinate and align their community-engaged work on five societal issues: Food; Economic Development; Education and Youth; Equity and Diversity; and Transportation. The networks serve as coordinated hubs for University-sponsored community-engaged research and teaching efforts that address critical issues in these areas.

In addition to University-wide policy and strategic initiatives, many colleges and departments emphasize community, civic, and public engagement in their research, teaching, and outreach priorities.

Addressing Societal Issues through Public Engagement

The University's publicly engaged research, teaching, and outreach activities address a broad range societal issues across a diverse set of communities, settings, and regions. A sample of the societal issues that are addressed through public engagement is offered below.

Economic Development
- With a goal of attracting 1,000 sustainable-wage jobs to north Minneapolis by 2018, the Robert J. Jones Urban Research and Outreach-Engagement

Center's **Northside Job Creation Team** (NJCT) partners with business owners and community stakeholders to actively identify potential sites and facilities for start-up and relocation of businesses. The NJCT is a collaboration representing major stakeholders including the City of Minneapolis, the Governor's Urban Initiative Board, Minneapolis Public Schools, Minneapolis Urban League, Pillsbury United Communities, and the local business and faith communities. University partners in the project include Carlson School of Management's Carlson Consulting Enterprise, the Center for Urban and Regional Affairs, and Duluth's Natural Resources Research Institute.

- The **Center for Economic Development** works to strengthen the viability of the Duluth region as a recognized leader in small business development and assists local entrepreneurs and businesses to grow and succeed.

- Duluth's **Natural Resources and Research Institute** (NRRI) is composed of scientists, engineers, and business specialists whose activities include economic development efforts, applied research and development efforts, and active engagement in environmental studies. A state special appropriation of $3 million is leveraged into an annual operating budget of approximately $14 million. NRRI employs about 150 individuals on a full-time-equivalent basis and relies primarily on grants and contracts to accomplish its program objectives. These objectives focus on three prime areas: minerals, both ferrous and non-ferrous; forest products; and water and the environment.

- The Morris campus's **Center for Small Towns** (CST) takes on a series of community projects, many focused upon specific development needs of communities in West Minnesota. A major example of CST's focus on development of community capacity was seen in its hosting, in conjunction with Springboard for the Arts, the 2015 Rural Arts and Culture (RAC) Summit. The event brought together scholars, artists, community leaders, and art-enthusiasts from across the Midwest for three days of presentations and networking, with a goal of linking the arts and economic development. On a scale of both large and small, CST works to make connections through networking,

brainstorming, and practical work that local towns and region need. It focuses the University's attention and marshals its resources toward assisting Minnesota's small towns with locally identified issues while creating applied learning opportunities for faculty and students.

- The Crookston campus's **Center for Rural Entrepreneurial Studies** (CRES) provided technical assistance to six regional entrepreneurs through course-embedded projects and individual student projects, engaging more than 20 undergraduate students in these activities. In addition to providing technical assistance, CRES provided training sessions to more than twelve regional entrepreneurs through partnerships with the IDEA Competition and the EDA Center, co-sponsored an entrepreneurial speaker for the campus and local communities, and conducted entrepreneurial presentations at two local high schools.

- The **Metropolitan Design Center** (MDC), within the Twin Cities campus's College of Design, explores how an integrated urban design approach makes metropolitan communities more livable and sustainable. Using the Twin Cities area as a laboratory, the MDC's teaching, research and outreach programs bring university faculty and graduate students together to participate in critical design and research investigations of issues that make livable and sustainable cities possible.

Environment and Sustainability
- In early 2015, the Crookston campus's **Center for Sustainability** collaborated with the Northwest Regional Sustainable Development Partnership and the City of Crookston to create a part-time sustainable community outreach coordinator position, which was filled by a recent Crookston graduate. One of the major objectives of the position was to assist the City of Crookston obtain "GreenStep City" designation, which occurred. Other notable projects included coordinating an assessment of a number of Crookston buildings for solar energy retrofitting, providing support to expand the trail development in the community and campus, leading the effort to establish a community garden project on flood-zone land

along Riverside Avenue, and helping energize the Sustainability Destiny Driver of the Crookston In-Motion planning initiative.

- Extension's **Water Resource Program** engages and educates community leaders and public facility managers as they make decisions about policy and practice that protect the state's lakes, rivers, and streams. In 2014, the program informed a statewide plan to better manage septic systems within Minnesota's 87 rest areas.

- The **Clean Energy Resource Teams** project (CERTs) is a statewide public-private partnership that helps to convert individuals and businesses to clean energy resources. Staffed in part by Extension's Regional Sustainable Development Partnerships, CERTs campaigns in 2014 sought energy savings in convenience stores and turkey farms, along with continuing efforts to achieve savings in holiday lighting. To date, the project has tracked 10.9 billion BTUs in annual energy savings or energy offset by renewable energy. In 2014, BTU savings was the equivalent of heating 136 Minnesota homes for an entire winter.

- The University's **Sea Grant College Program** engages citizens in using science-based understanding of the environment to address issues concerning Lake Superior and Minnesota's aquatic resources and related economies. Focused on four areas—healthy coastal ecosystems; sustainable coastal development; safe and sustainable seafood supply; and coastal community resilience—the program facilitates interactions among the public and scientists to enhance communities, the environment, and economies along Lake Superior and Minnesota's inland waters by identifying information needs, fostering research, and communicating results.

- The Institute on the Environment's **NorthStar Initiative for Sustainable Enterprise** (NiSE) works with practitioners to understand and act on the sustainability challenges facing the world's rapidly expanding production and consumption systems. The initiative brought together scholars and practitioners to improve interdisciplinary understanding of sustainability within global production and consumption systems, and

developed "user-inspired" research and decision tools to effectively act on these systems.

Food and Agriculture

- The **Center for Animal Health and Food Safety** hosted four regional meetings across the United States for food industry and government agency personnel about the business continuity plans with and for the egg, broiler, and turkey industries. Engaging industry communities and policy makers about continuity plans became urgent during the Highly Pathenogenic Avian Influenza outbreak, which had affected farmers in over 20 counties by summer 2015.

- A new **Healthy Foods, Healthy Lives Institute** grant funded research project builds the capacity of small farms, increasing the supply of safe local food, and improving student health in the Minneapolis Public Schools. In year one, the **Building Capacity for Small, Immigrant and Minority Farmers to Participate in Institutional and Wholesale Produce Markets in Minnesota** project made it possible for the Minneapolis schools to purchase over 29,000 pounds of produce from local sustainable farmers in fall 2014, an increase of over 40 percent from fall 2013. Grantees anticipate an increase in year two to potentially 45,000 pounds of fresh produce.

- The **Evaluating Food Safety and Health Impacts of an Alternative Poultry Production Model** project researches and verifies food safety and the nutritional health aspects of an innovative poultry production system that is accessible to low-income and beginning farmers. The poultry production system creates an avenue into agricultural entrepreneurship for low-income immigrants. Preliminary findings show that poultry produced using this method is safe for human consumption under sufficient nutrient management and appropriate harvesting techniques.

- Extension's **Institute for Agricultural Professionals** has a long history of educational events that bring the newest research to the fields. A 2014 evaluation of this event showed that each agricultural professional brings information from the event to an average of 46 clients managing an

average of more than 46,000 acres, suggesting a potential impact on four million acres of farmland in the region. Of respondents, 75 percent planned to use the session to make recommendations to others and 54 percent planned to share knowledge with growers and the general public.

- The **Minnesota Food Charter** was unveiled at the 2014 Food Access Summit. Minnesota is a leader nationally in food access and health, as the fifth state to institute a food charter. The charter is a shared roadmap for how all Minnesotans can have reliable access to healthy, affordable, safe food. The University's Healthy Foods, Healthy Lives Institute served as the organizational home for the Food Charter Steering Committee, and contributed staff time and financial support. Partners included the Minnesota Department of Health's Statewide Health Improvement Program, which secured a grant from the Centers for Disease and Prevention, and The Center for Prevention at Blue Cross and Blue Shield of Minnesota, among others.

Health, Medicine, and Well-Being

- Many statewide programs offered by **Extension** bring nutrition education to populations at risk of poor health due to poor food consumption. For example, one school-based program reached 397 students at 22 elementary schools. Evaluation proved that the program increased the propensity of youth to try new foods and had a healthy effect on behaviors among other members of the family. Moreover, based on a "Day in a Life" questionnaire completed by students, there was an increase in fruit intake between October 2012 and 2013 that was maintained a year later.

- The **Center for Bioethics** sponsored a free public lecture that drew more than 1,700 participants and focused on questions of ethics, race, and scientific discovery as told through the true story of Henrietta Lacks. The Center also engaged the public through its community education series, "Mini Bioethics Academy," and its monthly seminar series.

- The **Clinical and Translational Science Institute**'s Office of Community Engagement for Health has fostered new community partnerships that are improving the patient experience,

improving the health of the populations, and reducing the cost of care. Partnerships evolved from a town hall forum at the Minnesota Council of Nonprofits annual meeting that was hosted by the Institute. Three University researchers described their research, and a facilitated discussion elicited feedback from the more than 100 attendees about community-engaged research at the University. Over 30 attendees requested follow-up from Institute researchers. To date more than half of those requests have resulted in a community-University partner match.

- Rochester's Community Collaboratory course allows students to participate in sustainable and meaningful partnerships between the campus and the surrounding community. One example is **Family Service Rochester**, where students collaborate with the Neighbors Helping Neighbors project to support elders remaining in their homes in a specific Rochester neighborhood. Rochester students have developed a survey to understand the needs of the elders of that neighborhood and have reached out to determine who is willing to help.

- The **Consortium on Law and Values in Health, Environment & the Life Sciences** is leading groundbreaking research on the hot-button issue of whether families are entitled to the genomic data of a research participant (including after death) to evaluate their own health risks. This research is funded by a five-year grant from two National Institutes of Health organizations, the National Cancer Institute and the National Human Genome Research Institute, and is guiding national policy on family access to genomic data.

- **Project BreakFAST** is a National Institutes of Health-funded study in partnership with 16 rural Minnesota high schools to improve access, awareness and use of breakfast programs among students. Housed within the Department of Family Medicine and Community, the project tracks a variety of outcomes including health, academics and personal factors like food insecurity and attitudes about the benefits of breakfast at school and home. Led by Professor Marilyn Nanney, the research team works with a wide range of stakeholders—from students to kitchen workers,

janitors, teachers, and principals—to develop the student-targeted campaigns. As a result, schools have been reporting a doubling and tripling of student participation in school breakfast programs

Homelessness

- Managed through the Minneapolis/Hennepin County Office to End Homelessness, **Heading Home Hennepin** is a comprehensive plan designed to reduce homelessness through attention to six key areas: prevention, outreach, housing opportunities, service delivery improvements, capacity building for self-support, and system improvements. A partnership among the Center for Urban and Regional Affair's Hennepin-University Partnership, the Humphrey School of Public Affairs, and Heading Home Hennepin, the project engages University graduate students in research that identifies patterns of shelter use among families in Hennepin County. The Heading Home Hennepin plan received national attention for empowering homeless families to become more self-sufficient and for helping to reduce family shelter use in Hennepin County by 30 percent in the last year.

Interdisciplinary Public Engagement

- The **Center for Urban & Regional Affairs Faculty Interactive Research Program** encourages University faculty members to carry out research projects that involve a significant public policy issue for the state or its communities, and that include active engagement with groups, agencies, or organizations in Minnesota involved with the issue. Four projects were funded for the coming academic year that focus on the personal stories of members of the indigenous community, fostering a skilled workforce for the sewn products manufacturing industry, youth activities and diversity in the Twin Cities metro area, and the Twin Cities built environment and extreme warming events.

- **Healthy Food, Healthy Lives Institute** facilitated the engagement of two faculty research teams representing the College of Science and Engineering, College of Veterinary Medicine, the College of Food, Agricultural, and Natural Resource Sciences, School of Public Health, and

the College of Liberal Arts to address issues of food safety and diet-related chronic disease and obesity.

- Through five research and creative collaboratives, the **Institute for Advanced Study** residential fellows, faculty, and staff members worked with community partners to address juvenile sex trafficking, developed research techniques involving dancers and scientists, used performance and food for community building, taught at-risk students how to create digital stories, engaged students in river education and service, and examined the resiliency of Duluth's infrastructure in terms of equity and climate change.

- The Crookston campus continued its "**Meet Crookston Through Service**" program where, as part of New Student Orientation, incoming students complete community engagement and service projects throughout the Crookston community. Before classes begin, students help prepare elementary school classrooms, clear cross-country ski trails, trim trees at local parks, work with animals at the humane society, assist with building Habitat Houses, make apple pies with residents of an assisted living center, prepare playground surfaces, pack boxes at the food bank, assist with work at historical museums, and many other projects. Community partners share in the dinner celebration, and students learn about many community opportunities. Students feel a sense of accomplishment as they work with a group of new friends whom they might not otherwise work with in this unique setting.

- **UMR CONNECTS** is a weekly professional speaker series with the objective of connecting the community to the University of Minnesota Rochester. The program is designed around monthly themes and Rochester campus staff coordinate and offer free presentations, panel discussions, and performances to Rochester residents, students, and visitors to the Mayo Clinic. The program allows the campus to showcase the institution and the great diversity of talent and knowledge within the southeastern Minnesota community and throughout the University system. In the past year, UMR

CONNECTS has served more than 3,500 people and explored topics including: spirituality and world religion; tackling tough questions related to bioethics and modern medicine; overcoming terrorism; natural disasters; adapting today to protect the future; the forgotten in our communities due to prison, poverty, and homelessness; the amazing human brain and many other topics. The program has reached out to more than 10,000 people since its inception.

- The **Robert J. Jones Urban Research and Outreach-Engagement Center** has created a set of interdisciplinary faculty teams to tackle the question: "Why is there an achievement gap in the context of Minneapolis- St. Paul and what promising practices are helping close that gap?" Six University of Minnesota researchers from medicine, social work, education, and other fields work in partnership with Generation Next, a nonprofit whose mission is to dramatically accelerate educational achievement of all children from early childhood through early career through an aligned partnership of community stakeholders. The researchers zero in on disparities and the structural roots of the achievement gap to create a scholarly roadmap that works in tandem with other University and Generation Next-based efforts.

Youth and Education

- Over 100 middle and high schools across Minnesota, representing over 55,000 students, implemented **Ramp-Up to Readiness**, a school-wide program designed to help prepare all students for post-secondary success. The program leads students through a research-based sequence of activities and workshops that prepare them for postsecondary success.

- **Cedar Riverside Explorers**, a partnership with the Cedar Riverside Community School, the West Bank Community Coalition, Augsburg College, and the University of Minnesota Community Relations held a series of excursions to the University of Minnesota and Augsburg College for eleven middle school children from the Cedar Riverside Community School. This partnership was made possible by a grant from the U of M Good Neighbor Fund/Vikings Partnership Fund.

The purpose of the excursions is to expose youth participants to the rich cultural opportunities in the West Bank neighborhood and to higher education; to make connections between the youth and University students; to provide opportunities for the youth to think more broadly and earlier about post–high-school educational opportunities; and to hear and think about careers paths. A sample of excursions includes meeting with members of the Somali Student Association; a "Chemistry in the Classroom" experience from the Department of Chemistry; and an urban farming experience at the Cornucopia gardens on the St. Paul campus.

- The Robert J. Jones Urban Research and Outreach-Engagement Center's (UROC) ongoing **Sex Trading, Trafficking and Community Well-Being Initiative** is an academic-based initiative on the forefront of tackling the problems related to sex trading, prostitution, and sex trafficking through research. The initiative focused on the problem at large and how north Minneapolis and other urban communities can take action steps to end sex trafficking of young people in Minnesota.

- The Crookston campus is a founding and active member of the **College Collaborative**, a collective effort of the economic development organization IMPACT 20/20 (www.impact2020.org) and the region's five post-secondary institutions: Bemidji State University, Northland Community and Technical College, Northwest Technical College, White Earth Tribal and Community College and the University of Minnesota Crookston. Primary goals include increasing the college- and career-readiness of the region's high school students, and educating high school students on regional career opportunities. The College Collaborative is positioned to improve high school and college graduation rates, college retention, and meet the talent needs of the region's employers. Activities include seminars and information sessions at regional high schools on various topics regarding preparation for college and career options.

- Research shows less than half of American children can expect to live with both biological parents. **Extension** delivered information about effective co-parenting to separated

parents—especially those in contentious divorce proceedings. This program has operated for over a decade, and is now available online. In 2014, thousands of parents completed the program. At a six-month follow-up, 54 percent of parents reported a significant decrease in conflict observed by children. Further, parents reported significant improvement in their ability to cope compared to others going through divorce or separation.

- The Duluth campus has a longstanding commitment to Native American education and has numerous programs supporting this priority, including an undergraduate degree program in American Indian Studies, Ojibwe language revitalization, the American Indian Project in the Department of Social Work, and extensive programming in education, where UMD has become a leader in culturally responsive teacher education models to serve Native American populations. The Master of Tribal Administration and Governance (MTAG) program was developed in full collaboration and consultation with the American Indian tribes across Minnesota and Wisconsin. Building on the success of the MTAG program, UMD began a new undergraduate program, the **Bachelor of Tribal Administration and Governance** (BTAG) in the fall of 2015.

For a more complete list of the societal issue areas the University addresses through research, teaching, and outreach, visit http://engagement.umn.edu.

Operational Excellence: Faculty and Staff

Employing world-class faculty and staff who are innovative, energetic, and dedicated to the highest standards of excellence.

Introduction

The University of Minnesota's success in achieving its mission and solving the grand challenges of a diverse and changing world can only be accomplished through its exceptional faculty and staff. With more than 25,800 employees system-wide, and with faculty and staff accounting for about 62 percent of the University's total spending, people are by far the institution's most important resource. As a knowledge-based organization, the University's research and discoveries, teaching, community outreach, and public service depend on recruiting, retaining, and sustaining the highest caliber of talent.

The University is committed to providing its faculty and staff with competitive compensation, benefits, development opportunities, and a supportive work environment to foster employee engagement and wellbeing so they can achieve the University goals.

A Highly Engaged Faculty and Staff

Creating a culture in which employees are fully engaged in their work benefits both the organization and the individual employee. University leaders identified employee engagement as key to attracting and retaining top talent, while also aligning faculty and staff efforts in support of the mission.

A highly engaged workplace fosters collaboration and innovation, removes barriers to employees completing their work, and supports resilience, wellbeing, and high performance. The University's employee engagement goal is to increase productivity, satisfaction, and the quality of service across all colleges, units, and campuses by developing effective work environments.

The University launched a research-based program in 2013 to measure faculty and staff engagement. The program includes an annual employee engagement survey and partners with leaders to review the survey results for their units and departments with their teams and to work collaboratively with their teams to take actions based on the strengths and opportunities the survey identified. Administered to over 18,000 faculty

and staff on all five campuses, the survey measures two drivers of engagement: 1) commitment and dedication, and 2) effective environment.

The second annual survey was conducted in the fall of 2014, with 64 percent of faculty and staff responding—the highest employee respone rate ever for a University employee survey. The response rate for staff rose eight percentage points from 60 to 68 percent, while faculty responses increased five points from 47 to 52 percent (Figure 7-A).

Results for 2014 show the University continues to have very high levels of faculty and staff commitment and dedication. Employees continue to feel motivated to go beyond their day-to-day job responsibilities. Faculty and staff experience the University as a respectful and empowering environment, according to survey results. They also report high levels of pride in working for the University. Staff experience increased in respect, recognition, training, and support for innovation compared to results from the previous year. Faculty report that their work is challenging, interesting, and a good fit for their skills. In addition, faculty rated their professional and career development opportunities favorably.

The survey also identified several opportunities for improving employee engagement. These include developing greater confidence in college leadership and department-level strategies and goals, as well as individual goal alignment. In addition, faculty and staff have emerging concerns about collaboration and teamwork within and between departments. Reducing barriers to productivity for faculty and staff and building a more inclusive academic environment for

Figure 7-A. Faculty and staff engagement response rates, University of Minnesota, 2013–2014
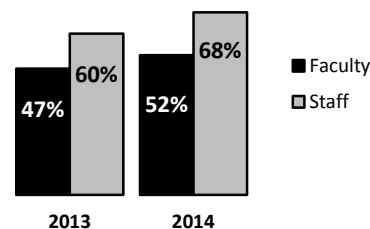
Source: 2013 University of Minnesota Employee Engagement Survey

faculty are additional opportunities identified in the 2014 results.

To help leaders and supervisors act on the results of the survey, faculty and staff formed communities of practice to share best practices. Colleges and units appointed engagement leads to help senior leaders and human resources staff implement action plans. Online resources were nearly doubled to over 150 self-reflection questions, tools, tips, and action-planning guides.

The University has one of the most robust higher-education engagement programs in the nation. Our processes and results have been presented nationally and internationally to human resource academics and practitioners from other colleges and universities.

An Employer of Choice

In April 2015, *Forbes* magazine named the University of Minnesota one of America's Top 100 Best Employers. The award reflects the University's multifaceted efforts to attract and retain talented faculty and staff, with competitive salaries and benefits, challenging and rewarding work, clear paths for advancement, a comprehensive compensation package, and a strong emphasis on health and wellbeing. The University strives to maintain a compensation package that is competitive with peers and labor markets, as directed by the Board of Regents. At the same time, compensation must be balanced with the University's overall need for cost containment and efficiency. The portion of the University's total budget spent on compensation has remained relatively stable (roughly 61 percent to 62 percent) since 2009.

Faculty Satisfaction

In fall 2013 and winter 2014, the University participated in Harvard University's Collaborative on Academic Careers in Higher Education (COACHE) survey. The survey—which was administered on the Twin Cities campus and covered responses to questions about perceptions of tenure, institutional climate, culture and collegiality, institutional policies and practices, and global satisfaction—has produced benchmark data that will inform faculty development work aimed at fostering a culture of support and success.

The results of the survey include comparisons with other peer universities and thus provide helpful data about faculty satisfaction levels at other institutions. The University compares favorably in a number of areas, including those associated with promotion and tenure and facilities. Moreover, overall satisfaction is high (69 percent of faculty responded they would select the University of Minnesota again, peers 67 percent); the University compares well as a place of work (72 percent, peers 65.2 percent) and in terms of satisfaction with benefits (83 percent, peers 69.3 percent). The survey also provides valuable and actionable information about areas in which the University can improve, such as departmental climate and engagement.

National and International Faculty Recognition

The University of Minnesota actively promotes distinguished faculty as they compete for national and international research and teaching awards. In cooperation with distinguished faculty members, previous award winners and senior leadership, efforts are being made to:

- strategically understand and communicate the nomination procedures for the most prestigious national awards;
- form partnerships with deans and chairs to identify strong candidates, as well as potential nominators;
- actively support nominators and candidates during the application processes; and
- advocate appropriately on behalf of University of Minnesota nominees.

The research, teaching, and service of the faculty continues to be celebrated through research professorships, institutional teaching awards, and recognition of various types of institutional service. Faculty also continue to garner considerable recognition for their scholarly pursuits.

In the last five years, faculty members at the University have been recognized in many major academic award categories, including the prestigious American Academy of Arts and Sciences (six), Guggenheim Fellowships (six), the Institute of Medicine (three), the National Academy of

Engineering (three), the National Academy of Public Administration (two), and the National Academy of Sciences (three).

In 2014, G. David Tilman (Ecology, Evolution, and Behavior) was the recipient of two major international awards: The Balzan Prize from the International Balzan Prize Foundation as well as the BBVA Foundation Frontiers of Knowledge Award. In 2015, Reuben Harris (Biochemistry, Molecular Biology & Biophysics) was named a Howard Hughes Medical Institute Investigator, and Elizabeth Wilson (Public Affairs) was the recipient of the new Carnegie Fellowship from the Carnegie Corporation.

Effective Faculty and Staff Development

The Leadership and Talent Development unit in the Office of Human Resources has created a new leadership development approach targeting specific development opportunities for leaders at all levels to help the University meet its strategic priorities. Both faculty and staff have a wide array of resources to help them develop the skills to achieve results, set and follow a vision, engage others, collaborate, and be accountable for their actions and development.

Research shows that leaders learn and retain insights best when they apply their knowledge immediately. In keeping with this research, the University has shifted from offering only in-person training to a broader, experience-based approach that includes in-person learning, online self-paced learning, assessments, on-the-job experience, group projects, peer accountability, and coaching.

Programs include:

- A cohort program for mid-level leaders, in which several people from the same college or unit work on common challenges via small-group discussions and activities, case studies, and individual assessments.
- Leadership Essentials, a four-day course for supervisors to strengthen core leadership skills.
- Supervisory Essentials, an in-person and online program on key University supervisory policies.

Job Equity and Clear Career Paths

In October 2015, the University completed its major Job Family Study, a comprehensive two-year redesign of its decades-old job classification system. The study examined all Civil Service and Academic Professional and Administrative positions on all five campuses—about 10,500 employees. The effort was part of the University's commitment to operational excellence, with the goals of:

- Attracting and retaining talented employees by
  - Providing more clearly defined job titles and career paths
  - Ensuring salary ranges are competitive with the general job market
- Creating equity among similar jobs across the University
- Streamlining HR practices by replacing outdated classifications and more efficiently administering job classifications and compensation

To conduct the study, the University identified 18 broad job families, such as campus operations, information technology, and student services. More than 7,500 positions were examined, using job descriptions written by employees, extensive analyses of similar jobs in other universities and the private sector, and discussions with supervisors and advisory groups of peers within each unit. From that information, the study established a clear job classification structure and salary ranges. The study will provide a foundation for strategic workforce planning for years to come.

Faculty and Academic Leadership Development

Professional development opportunities and support for faculty throughout their careers are essential to fostering a workforce that is engaged, connected, thriving, and achieving. To that end, the University provides and encourages a number of programs and initiatives designed to ensure faculty and instructional staff have opportunities to learn, grow, and advance.

The **Center for Educational Innovation** is a new system-wide center (consolidating the Center for Teaching and Learning, and the Office of eLearning) that supports effective delivery of instruction across the spectrum from face-to-face to massively online

(MOOCs) at all levels of instruction offered at the University. The Center has three high-level goals: 1) a coordinated service model to ensure that instructional support resources support institutional priorities; 2) alignment of academic technology investments and academic priorities; and 3) clarification of the University's strategy for curricular innovation. Center staff work with faculty and academic units to advance curricular innovation through centrally and locally funded initiatives, workshops, and consultations with faculty.

Academic chairs and heads—department executive officers—also play a critical role in establishing and nurturing a productive working environment for their faculty and staff. The University offers a comprehensive, full-year **Provost's Leadership Program for Academic Chairs and Heads**, specifically targeting new chairs and heads and focused on mentoring faculty and staff, handling student issues, and addressing diversity and faculty life-course issues. **"Talking Heads"** is a new leadership development initiative for department executive officers in which chairs and heads meet regularly to share best practices and learn about key leadership challenges across the University.

The University also holds workshops for chairs and heads on a wide variety of topics, including promotion and tenure, post-tenure review, and annual reviews of faculty to ensure that these leaders are knowledgeable about policies and procedures.

In addition, the University has greatly expanded its participation in the **CIC Academic Leadership Program**, sponsored by the Committee on Institutional Cooperation (CIC). University faculty participants in this program meet with a wide range of University leaders to discuss paths to leadership, roles of administrative offices, and decision-making. These meetings supplement three weekend seminars. The **Women's Faculty Cabinet** provides leadership to improve and enrich the academic and professional environments for women faculty on the Twin Cities campus. The cabinet recommends and responds to University policies affecting women faculty and promotes the University's efforts in recruiting, mentoring, and retaining women faculty.

A Healthy and Giving Community

Promoting health and wellbeing in the workplace carries benefits not just for employees but for the University. Making sure employees have the resources to maintain and improve their overall wellbeing leads to higher employee engagement, satisfaction, retention, and performance, and it can moderate health insurance costs. To that end, the University offers a robust menu of health and wellness benefits, which have been shown to carry a significant return on investment.

Committed to the Wellbeing of Faculty and Staff

The concept of wellbeing goes beyond health insurance and benefits. High-performing companies and institutions recognize that employees thrive and are more productive in a culture of health, wellness, happiness, and support. The University emphasizes a comprehensive approach to employee wellbeing, which includes:

- a total compensation package that includes salary, medical and dental benefits, disability and life insurance, flexible spending accounts, long-term care insurance, and retirement;

- an award-winning Wellness Program;

- Boynton Health Service, with programs that include primary and dental care, a mental health clinic, physical therapy, a women's clinic, urgent care, and more;

- a state-of-the-art recreation center;

- the Center for Spirituality & Healing, which offers innovative, multidisciplinary programs for whole-body care, as well as workshops and lectures on wellbeing, Mindfulness-based Stress Reduction, and other topics;

- the Employee Assistance Program, which provides confidential consulting and referrals for any personal or work concern affecting wellbeing, from relationships to substance abuse to stress;

- financial counseling that offers employees and family members up to six free sessions a year; and

- a farmers market on campus, which invites local farmers to sell their fresh vegetables, berries,

and flowers from July to October. The weekly market is sponsored by a dozen University units, including Boynton Health Service, Cornercopia Student Organic Farm, and the Bicycle Commuter Program.

Comprehensive, Affordable, and Competitive Health Benefits

The University's self-insured health program, UPlan, provides a full complement of medical and dental benefits, along with short-term and long-term disability coverage.

Through careful management, UPlan has saved $30 million in costs since 2010. Approximately 95 cents of every dollar goes to care, well above the Affordable Care Act's standard of 85 cents (Figure 7-B).

The University aggressively manages its health benefits costs by:

- self-insuring with UPlan;
- negotiating with vendors for cost savings and establishing performance guarantees;
- managing pharmacy costs through increased generic-drug usage;
- introducing restricted-network plan options such as using care system networks as base plans and promoting its Accountable Care Organization—a low-cost, narrow-network plan emphasizing outcomes rather than fees for service; and
- promoting a strong wellness program.

Figure 7-B. Cumulative cost savings, University of Minnesota, 2010–2014
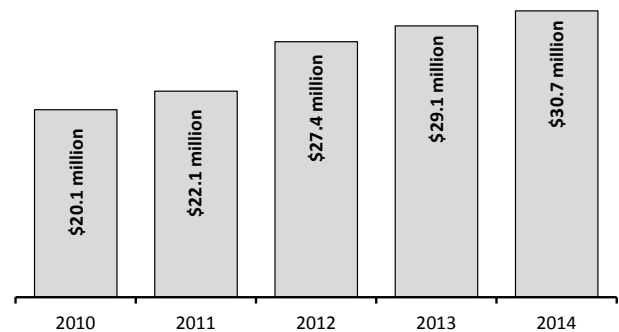
Source: Office of Human Resources, University of Minnesota

For the 2014–15 year, the UPlan's health care costs are projected to trend below the national average for the sixth year in a row (Figure 7-C). Medical plan premiums will not increase in 2016, and there will be no plan changes.

Over the years the University has also been very assertive in creating programs for controlling costs. For example, the University created a special pharmacy program to better manage prescription costs. Strategies have included developing a Medication Therapy Management pharmacist network, providing health coaching options for employees who are managing multiple medications and medical conditions, and strategic consulting with the College of Pharmacy on overall program decisions. As a result, generic-drug use is now at 83%. The number of

Figure 7-C. Aggregate health care trend, University of Minnesota, 2008–2015

Source: Office of Human Resources, University of Minnesota

Faculty & Staff

98
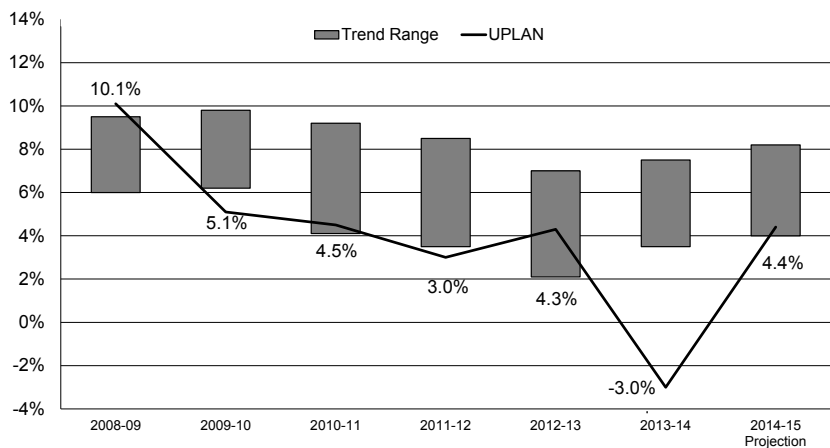
prescriptions per member has declined steadily since 2010 and is well below the number for non-member employees (Figure 7-D).

Strong Return on Investment for Wellness Program

For more than ten years, the University has offered an extensive Wellness Program to increase the health, fitness, and wellbeing of its faculty and staff on all of its campuses. The program has been very well received by employees, and the University is continually looking for ways to enhance its offerings. By participating in University-sponsored wellness programs, employees can earn points that translate into $400 to $600 in savings on their insurance premiums. Wellness programs include health assessments, weight management, exercise, and disease management. Enhancements for 2015–16 include:

- an improved StayWell website, as a result of testing with users;

- a diabetes management program;

- new recreation and wellness additions, such as yoga and fitness classes for all UPlan employees and spouses; and

- a group health-coaching program from Boynton Health Services.

Figure 7-D. Number of prescriptions per employee per year, and per member per year, 2010–2014
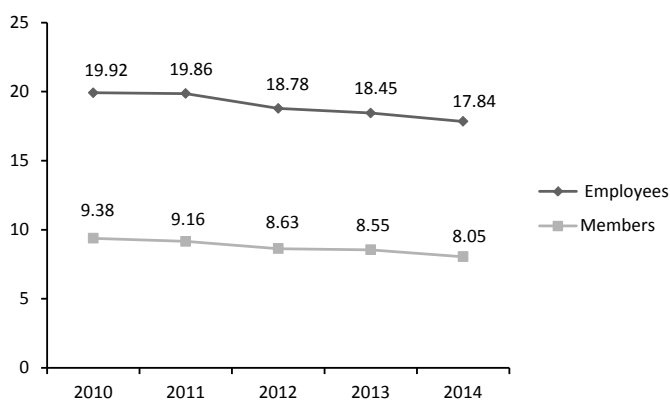
Source: Office of Human Resources, University of Minnesota

In 2015, the Wellness Program won two Wellness by Design awards from Hennepin County. The Gold award honors organizations in the county that have demonstrated a strong commitment to a healthy workplace. The Green award recognizes workplaces that minimize their impact on the environment.

Emphasizing the health, wellbeing, and quality of life of our faculty and staff in turn leads them to be more fully engaged and positive about their jobs. As an important byproduct, it also significantly reduces the University's health insurance costs. The Wellness Program has been shown to return $1.63 to the University for every dollar invested.

Financial Counseling Program

Last year the University began offering employees and their families confidential financial counseling through LSS Financial Counseling, Minnesota's largest provider of community-based financial education. Employees and family members can receive up to six free sessions a year with a certified financial counselor, who can help create a budget, increase retirement savings, manage student loans, and set financial goals. In the first year of the program, more than 700 employees took part in workshops or one-on-one counseling. The average debt reduction after counseling was $4,161.

Community Fund Drive

University employees believe in giving back to their community. The annual Community Fund Drive, an employee-run campaign to raise funds for local nonprofit organizations, has been a University tradition since 1931. In the last 20 years alone it has raised nearly $20.5 million for worthy causes in Minnesota. The campaign works with seven nonprofit federations, such as the Greater Twin Cities United Way and Community Health Charities of Minnesota, representing nearly 500 organizations. Giving back is itself a component of wellbeing. Recent research has found that the simple act of donating money or volunteering enhances personal wellbeing and can lead to improved psychological and physical health.

Operational Excellence: Organization

Stewarding an outstanding organization that is responsible with resources, dedicated to measuring and improving performance, and aligned to support the University's core missions of teaching, research, and outreach.

The University's mission is delivered through its people and its space. After people, the construction, operation, and maintenance of the University's campuses represents the next largest share of University spending. Exceptional faculty and staff are free to do their best work when the campus is safe, the facilities are optimized, and operational efficiencies maximize resources available for direct mission. Stewarding the investments made by generations of students and their families—as well as state lawmakers, citizens, and donors—is a responsibility University leaders take very seriously.

A Productive, Efficient Organization

Optimizing the University's Physical Assets

The University's capital strategy group guides planning and vision for the future of capital assets system-wide. A key initiative underway is the development of a building-by-building strategy. Under this initiative, Facilities Management is working to identify needs in each of the University's 916 buildings, and to classify them as "keep up / catch up," "sustain," or "dispose" based on a combination of factors including facility condition, historic consideration, programmatic relevance, and adaptability. With this information, the University and its colleges and departments can plan investments and prioritize projects accordingly. The effort is nearly complete for buildings on the Twin Cities campus, and will be expanded to system campuses at a later date.

Enterprise Systems Upgrade Program

This comprehensive upgrade to the student, human resources, and finance systems launched on April 20 with minimal business disruption after nearly three years of planning, design, development, and testing. Hundreds of technologists and business partners played key roles in this effort, which involved the deployment of the new MyU portal, a new Reporting Center, and the connection of more than 700 tertiary and linked systems to the new PeopleSoft environment. Prior to The Upgrade, the University's PeopleSoft environment was ranked the second most customized implementation in the world. It was outdated and inefficient, with most systems having not been updated since 1998. The Upgrade allowed

the University to maintain support and compliance, while providing additional benefits such as decreased reliance on customizations, streamlined and updated processes, and a platform for continued development and implementation of technologies that drive the University's academic mission. Specific benefits include:

- Integration of business processes
- Automation of employee time sheets and time-off requests, expense management, purchasing, and hiring
- More detailed, consistent, and accurate data and reports
- A personalized online portal that allows:
  - Employees to get individualized notifications and financials
  - Employees to update personal and benefits information electronically
  - Employees to make purchases and order supplies online
  - Students to see real-time class schedules, grades, and wait lists
  - Students to get billing and financial aid information online
  - Faculty to get easy access to research, teaching, grading, and advising tools
  - Supervisors to coordinate recruiting and hiring online
- Streamlined financial workflow, approvals, and budget checking
- Improved data for workforce trend analyses so managers can make better, more informed decisions
- Tax and regulatory compliance

eProcurement

In 2012, the President's Operational Excellence committee endorsed a recommendation to implement a robust eProcurement tool now known as U Market. The purpose of implementing U Market was to provide the University community with clear, simple, integrated, and efficient product/supply shopping, invoice processing, and purchase reporting, as well as one-stop assistance for customer support,

distribution, and materials management. U Market went live July 1, 2013, on time and under budget. In FY 2015, surpassing the successes of the initial year of operations, U Market increased sales volume by 17 percent, increased the number of electronic purchase orders by 21 percent, and decreased purchasing card spend with represented suppliers by 31 percent. Based on the second-year volumes, U Market saved the University an estimated $2.5 million in procurement costs.

System-Wide U Card

The U Card, the University's official identification card, underwent a redesign in 2014. The card's design was simplified and moved from a horizontal to vertical orientation to allow the card to be used as an ID badge as well as an access card, eliminating the need to produce two separate IDs. All five campuses participated in the design and the plastics request for proposal. Coordinating efforts saved all five campuses on the overall cost of cards and, for the first time, the University has a consistent U Card look across the system. Existing cards will remain valid and will be in circulation until they reach the end of their useful life.

Housing Strategy

A cross-functional team has developed a comprehensive Twin Cities campus housing strategy addressing students' housing needs across their time at the institution. Recognizing the need for greater coordination and strategy between University and non-University housing, this group put forward fourteen recommendations for action. Key among those are a reaffirmation of the University's commitment to providing a residence hall experience for all first-year students, limiting the use of expanded housing to residential spaces beginning in the fall of 2016, the development of a second-year experience program to be delivered in privately operated housing, and establishing a scholarship fund for students who would otherwise not be able to afford a residence hall experience.

System-Wide Admissions Communications

System admissions directors were charged to identify system-wide approaches to admissions at the University. In response to recommendations of this group, a system-wide admissions website was developed to act as a portal to the University of Minnesota for prospective students. This portal page functions as a "front door" to the University and promotes the unique nature of our distinct campuses. The site includes a general overview and important statistics for each campus, links to campus athletics, clubs, and organizations, campus imagery, and testimonials specific to each campus. A coordinated promotional campus and major/program poster was designed, printed, and mailed to all high schools in Minnesota. This mailing includes overview information and a major/program offering chart that helps high school counselors and teachers promote options and opportunities available at campuses across the University of Minnesota system. Additional events for high school counselors and educators were promoted with materials that coordinate with the website and mailings.

Consolidation of Helpdesk and User Support Functions

The Office of Information Technology (OIT) continues to work with administrative and academic units to align the provision of direct helpdesk support to end users. By rethinking the use of a key helpdesk service management tool, the University has realized an administrative savings in excess of $750,000, which enabled OIT to expand core helpdesk services to nearly every college and unit in the University at no additional cost.

Cross-Organizational IT Capital Planning Governance

Administrative and academic unit leaders across the organization worked with the Office of Information Technology to implement a new cross-organizational Information Technology Capital Planning process. Developed using best practices from peer institutions and the private sector, the process is designed to engage broad leadership engagement in IT priority setting and decision making for IT initiatives requiring a spend of $1 million or more.

Ensuring a Safe University

The Twin Cities campus building access program was completed in fall 2014, and automated the primary entrances of all buildings on the East Bank, West Bank, and Saint Paul campuses while reducing hours those facilities are open to the public. In addition,

UMPD worked in collaboration with Federal agencies to conduct an investigation into and serve warrants on a cell phone trafficking ring. This effort drastically reduced the market for stolen mobile devices and is one factor among many credited with a significant reduction in crime in the near-campus neighborhoods. A continued focus on sharing responsibility for safety, especially among transportation modes and during evening and nighttime hours, will remain an important part of campus safety efforts.

Research Safety

The Research Safety Program completed the second cycle of laboratory audits. Comparison data indicate measurable improvement in the 2014 data when compared to 2013. The total number of laboratories audited dropped from 880 to 630 as the program has reduced auditing of lower hazard labs to every other year while continuing to visit higher risk labs annually. In addition to tracking improvements in key safety indicators, the 2015 lab auditing program is being used to track implementation of laboratory hazard warning signage and laboratory specific emergency preparedness plans.

Building Codes Realignment

The University's Building Code Division (BCD) has realigned the Building Inspector (BI) territories, dividing the state from north to south. BCD will be providing dedicated BI inspection services to the north campuses and any University properties roughly north of Itasca with a mobile office presence on both the Crookston and Duluth campuses. The BI role will expand to include not only inspections but also to plan review and inspection coordination between the campuses, project managers, contractors, and the Twin Cities inspection office. This change will increase efficiencies in permit issuance, inspection scheduling and coordination, travel, as well as provide a greater BCD presence in these locations. In addition, the use of new permit software modules and mobile devices have increased efficiencies for field inspectors in approving and accessing permit and inspection information from statewide locations.

Emergency Planning and Preparedness

The Department of Emergency Management (DEM) received a nationwide competitive pre-disaster mitigation grant to write a system-wide all-hazards mitigation plan. An in-depth hazard identification and risk/vulnerability assessment is part of the planning activity and has included important stakeholders in the process. The result will be a strong mitigation plan at each campus that will lead to well defined projects for future federal funding opportunities. DEM also updated guidance and policy for critical operating units for Continuity of Operations Plans. The plan is divided into steps which identify the critical actions to be taken when an emergency occurs that affects the operations of a department. It also identifies day-to-day proactive steps to be taken by the department to ensure that critical systems are backed-up and available with limited to no interruption. This is a system-wide initiative.

Financial Effectiveness

The desired financial outcome for the University of Minnesota is support for the vision of the University through the generation and allocation of resources; the control of costs; and the conscientious management of tuition and fees. The University must meet current and future financial needs, while remaining financially solvent and viable. One measure of financial effectiveness is the set of ratios used by Moody's Investors Services for the purpose of assigning a debt rating to the University. These ratios, compared to Moody's Aa1 median, paint a picture of the University's financial health (Table 8-1).

Based on these ratios, and a variety of other financial considerations, such as the University's strength of management, the demand for University mission activities (instruction, research, and public service), and the predicted state support for the University, Moody's has consistently assigned a debt rating of Aa1, one notch below AAA, the top rating possible.

A second measure of financial effectiveness is the ability of the University to produce an operating budget on an annual basis that appropriately balances planned expenditures within available resources, addresses the existing or emerging financial challenges in specific units, invests in priority initiatives, holds costs down for students, and is ultimately approved by the Board of Regents. The University has continued to achieve this goal by developing an annual budget process that holds all units accountable for the

Table 8-1. Moody's Investor Service ratios

1. Total Financial Resources to Direct Debt University 6/30/14 = 3.42 Median = 2.33	Measures the ability of the University to cover its direct obligations with all its financial resources: divide total financial resources (all net assets, except capital assets) by direct debt. The higher the ratio, the stronger the financial condition of the institution.
2. Expendable Financial Resources to Direct Debt University 6/30/14 = 2.43 Median = 1.77	Similar to the first ratio, but this one includes only "expendable" resources, those available for immediate expenditure, divided by direct debt. If expendable funds = long term debt, the ratio would be 1.0. Again, the higher the ratio, the stronger the financial condition of the institution.
3. Actual Debt Service to Operations University 6/30/14 = 3.62 Median = 3.3	Measures the debt service burden on the annual operating budget: debt service (principal plus interest) divided by total operating expenses. A high ratio indicates a greater burden on the budget, which could compromise the ability of the institution to meet its goal of supporting the vision of the University.
4. Expendable Financial Resources to Operations University 6/30/14 = .95 Median = .73	Measures the relative time the University could operate without new additional revenue: "expendable resources" divided by the total operating expenses for the year. A ratio of .5 would mean the institution could operate for six months without additional resources. The higher the ratio, the better the financial outlook.

Source: Office of Budget and Finance, University of Minnesota

financial activities that occur within them, and yet allows leadership to make decisions that advance University priorities and address significant financial needs. The financial model requires transparency in decision making by academic leadership and a concentrated effort on the part of all support and administrative units to provide value-added, excellent service. It promotes incentives for sound fiscal management and continuous improvement, as all units benefit from lowering costs and maximizing revenues. Under this model, the University has consistently produced a balanced budget while improving quality, growing revenues, and increasing the demand for its programs and services.

Financial/Budget Efficiency

In recent years, the global economic downturn resulted in budget challenges at the state level and for the University. From 2008 to 2012, the state appropriation to the University dropped by almost $140 million. This drop in revenue, coupled with the need to maintain quality and cover regular and unavoidable increases in operating costs, led the University to implement moderate tuition increases and extensive expense reductions and internal reallocation of resources. The budget process required every unit to review its operations and make decisions that would increase revenues where possible and reduce expenses throughout. Even with a slight uptick in state appropriations for the current and last biennia (an incremental $31 million in fiscal year 2014, $14

million in fiscal year 2015, $26.6 million in fiscal year 2016, and $0 in fiscal year 2017), the University has continued to increase efficiency; to produce more and better outcomes with less waste and financial burden on students. Two bold efforts demonstrate this continued commitment:

- **Administrative Reductions:** Following discussions with the state legislature during the 2013 legislative session, President Kaler announced that he would meet and exceed their expectations for administrative reduction at the University. He committed the University to implementing $90 million of strategic reductions in administrative costs over a six-year period (fiscal years 2014–19). Through the annual budget process, every unit is asked to propose actions that will result in identifiable expense cuts to activities outside of direct mission (instruction, research, and public service). In the first two fiscal years of this plan (2014 and 2015), $40.4 million of such reductions were implemented, and the approved budget for fiscal year 2016 includes an additional planned reduction of $17.4 million. After three years, the University has achieved and specifically planned $57.8 million toward the $90 million goal.

- **Tuition Relief:** For the last two biennium, the University's request to the state included a renewed partnership related to tuition. If the state would commit to supporting the University with an incremental increase in appropriations

of $14.2 million in both fiscal years 2014 and 2015, the University would commit to holding the resident undergraduate tuition rate at the 2012–13 academic year level for both years of the biennium. The first proposal was successful: both the state and the University made and honored that commitment. For the current biennium, the University again proposed a tuition freeze: if the state would commit to supporting the University with an incremental increase in appropriations of $21.5 million in fiscal year 2016 and $22.2 million in fiscal year 2017, the University would commit to holding the resident undergraduate, graduate, and professional tuition rates at the 2014–15

academic year level (resulting in a four-year freeze for resident undergraduate students). The state supported this request in part with an appropriation increase of $11.1 million in fiscal year 2016. In response, the University followed through this year with tuition rate increases that reflect the appropriation change: an increase of 1.5 percent on the resident undergraduate rate and an average increase of 2.5 percent on the resident graduate and professional rates. In addition, the University budgets during this time frame have included historically low increases in other required fees and room and board costs, with total increases 2.2 percent or less on all campuses.

APPENDIX A:
KEY DATA SOURCES
AND WEB LINKS

Key Data Sources

Association of American Universities Data Exchange	aaude.org
Association of American Universities	www.aau.edu
Association of Research Libraries	www.arl.org
Institute of International Education	www.iie.org
National Center for Education Statistics	nces.ed.gov/ipeds
National Institutes of Health	www.nih.gov
National Research Council	www.nationalacademies.org/nrc
National Science Foundation	www.nsf.gov

University of Minnesota Links

Twin Cities Campus	www.umn.edu
Strategic Plan	strategic-planning.umn.edu
Duluth Campus	www.d.umn.edu
Strategic Plan	www.d.umn.edu/chancellor/planning
Morris Campus	www.morris.umn.edu
Strategic Plan	digitalcommons.morris.umn.edu/camp_doc/11
Crookston Campus	www.crk.umn.edu
Strategic Plan	www3.crk.umn.edu/chancellors-office/strategic
Rochester Campus	www.r.umn.edu
University of Minnesota Extension	www.extension.umn.edu
Research and Outreach Centers	
North Central Center at Grand Rapids	ncroc.cfans.umn.edu
Northwest Center at Crookston	www.nwroc.umn.edu
Southern Center at Waseca	sroc.cfans.umn.edu
Southwest Center at Lamberton	swroc.cfans.umn.edu
UMore Park at Rosemount	www.umorepark.umn.edu
Urban Research and Outreach-Engagement	uroc.umn.edu
West Central Center at Morris	wcroc.cfans.umn.edu

University of Minnesota Links, Continued

Academic Health Center	www.health.umn.edu
Board of Regents	www.regents.umn.edu
Controller's Office	www.controller.umn.edu
Global Programs & Strategy Alliance	www.global.umn.edu
Office for Equity and Diversity	diversity.umn.edu
Office for Public Engagement	www.engagement.umn.edu
Office for Student Affairs	www.osa.umn.edu
Office of Budget and Finance	www.budget.umn.edu
Office of Senior Vice President for Academic Affairs and Provost	www.academic.umn.edu/provost
Office of Institutional Research	www.oir.umn.edu
Office of the President	www.umn.edu/president
Office of University Relations	university-relations.umn.edu
Office of Vice President for Research	www.research.umn.edu
University Libraries	www.lib.umn.edu
University of Minnesota Alumni Association	www.minnesotaalumni.org
University of Minnesota Foundation	www.giving.umn.edu/foundation

APPENDIX B: BOARD OF REGENTS

APPENDIX C:
Senior Leadership

Eric W. Kaler	President
Karen Hanson	Senior Vice President for Academic Affairs and Provost
Ann Aronson	Chief Marketing Officer and Deputy Chief of Staff to the President
Kathryn Brown	Vice President for Human Resources
Erin Dady	Special Assistant to the President for Government and Community Relations
William Donohue	General Counsel
Beth Goetz	Interim Athletic Director
Bernard Gulachek	Interim Vice President and Chief Information Officer
Brian Herman	Vice President for Research
Brooks Jackson	Vice President for Health Sciences and Dean of Medical School
Gail Klatt	Associate Vice President for Internal Audits
Lisa Lewis	President and CEO of the University of Minnesota Alumni Association
Richard Pfutzenreuter	Vice President and Chief Financial Officer
Amy Phenix	Chief of Staff to the President
Kathleen Schmidlkofer	President and CEO of the University of Minnesota Foundation
Chuck Tombarge	Chief Public Relations Officer and Deputy Chief of Staff to the President
Pamela Wheelock	Vice President for University Services
Lendley Black	Chancellor, University of Minnesota Duluth
Jacqueline Johnson	Chancellor, University of Minnesota Morris
Stephen Lehmkuhle	Chancellor, University of Minnesota Rochester
Fred E. Wood	Chancellor, University of Minnesota Crookston

APPENDIX D:
Tables and Figures

5 Research and Discovery

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8 Operational Excellence: Organization

APPENDIX E: Progress Card Measures Definitions

GOLD MEASURES

Measure

4- and 6-year graduation rates, by campus

Definition/Discussion

The percentage of first-time, full-time new entering freshmen that graduated within four or six years. The University counts as a successful completion a student that first enrolls at any U of M campus and graduates from any U of M campus in the given timeframe. (For federally reported measures, a student must begin and graduate from the same campus to be counted as a successful completion for that institution.)

The four-year graduation rates reported in 2021 will be based on the 2017 entering cohorts, while the six-year graduation rates in 2021 will be based on the 2015 entering cohorts (this year's cohorts). The Provost on the Twin Cities campus and Chancellors on the system campuses were asked to set reasonable stretch goals for their individual campuses given incoming student characteristics, availability of degree programs, and peer comparisons.

Measure

4-year graduation rates of Pell-awarded students (system)

Definition/Discussion

The percentage of first-time, full-time new entering freshmen who received federal Pell grants their first year and graduated within four years.

This is a system-level measure of undergraduates at all campuses. Similar to overall 4-year graduation rates, this measure takes an incoming cohort of students receiving Pell grants and examines their graduation levels four years later. Ideally financial need would not be a barrier to graduation, yet we know that Pell eligibility can also correlate with other graduation risk factors such as being a first-generation student.

The ultimate goal for these students would be to bring their graduation rate up to that of the student body as a whole. Although this may be unrealistic in a shorter time frame, the proposed goal grows the graduation rate of Pell-awarded students at twice the rate of the proposed growth rate for the student body overall

Measure

Twin Cities entering freshman average ACT

Definition/Discussion

The composite score on the ACT for entering students. The ACT uses a 36-point scale on four multiple-choice testing areas: Math, English, Science, and Reading.

A long-time measure of the academic preparedness of the incoming class, the average score of the freshmen class has been rising steadily, from 24.8 in 2003 to 27.9 in 2014. However, given state demographics, natural limits, and the desire to meet multiple goals for the incoming class (including opportunity for students of color, students from diverse socio-economic backgrounds, and students across Minnesota), it is unlikely that the University will see or desire a significant increase in this measure in the near future.

The University is proposing a goal of exceeding an average ACT of 28.0 while continuing to monitor student access to a University education.

Measure

Institutional gift aid (system)

Definition/Discussion

The total amount of student gift aid provided by the University across all campuses. Gift aid includes Promise scholarships, admissions scholarships, collegiate and department scholarships, athletic scholarships, Regents scholarships, and graduate assistant tuition benefits. This measure does not include state or federal grants, student employment, or loans.

While there is no "correct" level of institutional gift aid, the University has a long standing commitment to making education as affordable as possible for our students, and increasing gift aid through fundraising and institutional resources is an important strategy in meeting that commitment. The goal represents a 3 percent annual increase in institutional gift aid through 2021.

Measure

R&D expenditures

Definition/Discussion

The total dollar amount of research and development expenditures defined and collected annually by the National Science Foundation through the Higher Education Research & Development Survey. All institutions receiving federal research funding are required to participate in the survey, and the data is comprehensive of all sources of R&D expenditures.

Though this measure includes the many sources of institutional R&D funding, the largest source continues to be federally sponsored funding. The federal investment in sponsored research projects has been flat for several years and is predicted to remain so for the foreseeable future. Despite this, the Office of the Vice President for Research has proposed a goal that would increase our R&D expenditures by nearly 5 percent over the next few years.

Measure

Medical School ranking

Definition/Discussion

An annual ranking based on the total amount of grants from the National Institute of Health to medical schools as analyzed by the Blue Ridge Institute for Medical Research.

Medical school rankings have traditionally been based on National Institute of Health (NIH) awards to U.S medical schools in a given year. In 2014, the University of Minnesota's medical school received nearly $145 million in NIH awards, ranking it 30th in the country. As additional context, the University of California – San Francisco Medical Center was the top-ranked school in the country, with $480 million in NIH awards. Minnesota was 4th in the Big 10, behind Michigan (12th), Northwestern (22nd), and Wisconsin (27th). The Mayo Clinic in Rochester was 19th in the country in 2014.

Senior Vice President and Dean of the Medical School Brooks Jackson has stated the desire to return to being a "Top 20" medical school. The 20th ranked school in 2014 was the Baylor College of Medicine with $191 million of NIH awards, so this is an ambitious goal over a relatively short time period.

Measure

Faculty awards

Definition/Discussion

The number of prestigious national awards received by faculty in the arts, humanities, sciences, engineering, and health fields as measured annually by the Center for Measuring University Performance (MUP) at Arizona State University.

The MUP analyzes and ranks research universities in nine different areas, including the number of prestigious national faculty awards. The twenty-four awards included in their analysis are the Guggenheim Fellowships, MacArthur Foundation Fellowships, National Humanities Center Fellowships, and NSF CAREER awards.

This measure can be quite variable from year to year, but the University desires to maintain its place among the top 10 public research universities with regard to prestigious national awards. The ranking goal requires approximately 25-30 of these faculty awards annually, and the numeric goal of 35 or more faculty with annual awards aligns with our strategic emphasis on faculty excellence.

Measure

Participation in the employee engagement survey (system)

Definition/Discussion

The system-level survey response rate for faculty and staff on the annual Employee Engagement survey. Though employee engagement is a nebulous concept to attempt to measure at the all-University level, a private-sector standard is to measure participation in such a survey, such that local-level units can receive as much rich and comprehensive data as possible. The University proposes to measure faculty and staff participation in this survey.

Although employee survey participation is already high compared to other higher education institutions, the University proposes to increase participation by 2 percent with each administration of the survey.

Measure

Operational excellence

Definition/Discussion

The President has set as a goal a minimum of $90M in cost savings over a six-year period (FY14-FY19). The cost savings are identified annually in the budget process, and must come from categories not directly related to mission activities of instruction, research, or public service.

The goal for this measure is $90M by FY19.

MAROON MEASURES

Measure

Twin Cities transfer student 3-year graduation rate

Definition/Discussion

The percentage of students who previously attended a postsecondary institution outside the University system and graduated within three years of transferring to the Twin Cities campus.

Though not generally reported on a nation-wide basis, the ability to graduate transfer students is an equally important and worthy goal to our traditional freshman graduation rate. There is, of course, more variability in these cohorts, with some students entering with 30 credits or less, while a few come in with as many as 90 credits. The 3-year graduation rate would be roughly approximate to the 5-year traditional rate, understanding the additional variability among these students. Much like goals for increasing the traditional 4- and 6-year rates, the University believes it should also increase these graduation rates.

The University is proposing a goal of exceeding a 65 percent graduation rate for transfer students.

Measure

Graduate and professional degrees awarded (system)

Definition/Discussion

The total number of master's, doctoral, and professional degrees awarded annually across the University.

The University is the primary generator of graduate and professional degree recipients for the State of Minnesota. The ongoing need for an educated workforce, both throughout the general population but also at the highest levels of education, requires the University to maintain our priorities in this area.

Graduate enrollments have predictably been falling as the economy has improved. However, the University has been opening new programs at the professional master's level, filling demand for new emerging areas in technology, business intelligence, international law, and other fields. The University will need new programs such as these to maintain current degree completions above 5,250 per year.

Measure

Median undergraduate debt at graduation (system)

Definition/Discussion

The median amount of student debt accumulated by undergraduates with student debt at the time of their graduation.

This measure can be heavily influenced by many factors, only some of which the University controls. Along with tuition and institutional aid policies, other factors that influence student debt include federal and state financial aid policies, program choice and time to degree, and student and parent behaviors and choices. Because this measure is relevant to all students in the U of MN system, we monitor this at the all-University level.

The University proposes a goal of limiting increases in the median amount of cumulative debt for undergraduates with debt to no greater than the consumer price index, with adjustments according to state and federal policy changes. Although a wide variety of factors will influence this measure, it is an important priority for the Board and administration to continue to monitor.

Measure

Students of color with a favorable sense of belonging on campus (SERU survey)

Definition/Discussion

Percentage of undergraduate students of color responding agree or strongly agree to the statement "I feel that I belong at this campus." Data is collected as part of the Student Experience in the Research University (SERU) survey, administered annually to all undergraduates on the Twin Cities campus.

The University's goal is to improve the campus climate and sense of campus belonging for all students. The goal for this measure would be to have the student of color favorable sense of belonging metric match the non-student of color response. The data source for this measure is the SERU survey.

Measure

Percent of Minnesota high school graduates enrolling at the University of Minnesota as freshmen

Definition/Discussion

The percentage of all Minnesota public high school students receiving a diploma who enroll the following fall on a University of Minnesota campus.   This measure is then sensitive to increases and decreases to the number of high school graduates over time, while still ensuring that the University is accountable for serving Minnesotans in the important area of undergraduate education.

The goal for this measure is to maintain the historical access of Minnesota high school graduates to the University of Minnesota.

OR

Measure

Percent of Minnesota high school graduates that elect to attend college in Minnesota and enroll at the University of Minnesota as freshmen

Definition/Discussion

This measure differs from the percent of Minnesota high school graduates attending the University of Minnesota only in that it restricts the analysis to those students electing to go to college and choosing to stay in Minnesota. About 40% of Minnesota high school graduates either elect to attend a post-secondary institution outside of Minnesota, or do not go to any college immediately after high school. Those high school graduates are not included in this metric.

The goal for this measure is to maintain the historical access of Minnesota high school graduates to the University of Minnesota.

Measure

Enrollment in health science specialties with shortages (Nursing, Pharmacy, Dentistry)

Definition/Discussion

The annual fall enrollments in health sciences fields identified by the Minnesota Department of Employment and Economic Development's Labor Market Information Office as leading to Occupations in Demand in Minnesota.

The University has a crucial role in meeting the need for growing the health care workforce across the state. In particular, the University recognizes its ability to meet the needs for health care professionals in high demand

throughout the state, and has prioritized enrollments at all educational levels in the fields of nursing, dentistry, and pharmacy.

The University proposes to increase enrollments to greater than 2,100 students in these fields.

Measure

Total enrollment in the AHC schools and Center for Allied Health

Definition/Discussion

The total combined fall enrollments in the Academic Health Center schools of Dentistry, Medicine, Nursing, Pharmacy, Public Health, and Veterinary Medicine, and the Center for Allied Health. This measure includes enrollments on the Twin Cities, Duluth, and Rochester campuses.

In keeping with the goals of the AHC's strategic plans and recommendations from the Governor's blue-ribbon committee on the medical school, expanding access to health education across the AHC is a key component in returning to national leadership in healthcare training, research, and care. In addition to the state-level demand for healthcare workers identified in the preceding measure, expanding enrollments across the AHC addresses the growing needs for doctors and other health professionals across a wide variety of in-demand specialties at the state and national levels.

The University proposes to increase enrollments to above 6,350 students, an increase of over 156 students.

Measure

National public research university ranking

Definition/Discussion

The annual ranking by the National Science Foundation of public higher education institutions according to total annual research and development expenditures.

Reported annually by the Vice President for Research, the public research university rankings are compiled from the Higher Education Research & Development Survey completed by all institutions receiving federal research funding. While the total R&D expenditures metric is our primary measure of research productivity, monitoring the ranking allows the administration and Board to evaluate the relative competitiveness of the University.

The University continues be among the top 10 public institutions on this measure and should strive to stay at this high level understanding that there will be year-to-year variance.

Measure

Minnesota intellectual property agreements

Definition/Discussion

The total number of intellectual property agreements executed annually through the MN-IP Program.

Over the past few years the University has as a priority making it easier for business to partner with the University to transform discoveries into innovative solutions. MN-IP is designed to improve access to university-developed technology while reducing the risk and cost associated with licensing intellectual property (IP) and sponsoring research. Programs to both help create and license University IP have been developed, and increasing the number of agreements is an important policy direction.

With limited "trend" data for this emerging program, it is unclear what the optimal rate for increasing the annual number of MN-IP agreements should be.   Thus, we suggest a goal of increasing agreements 10 percent year-over-

year, with updated information provided by the Vice President for Research as it becomes available.

Measure

Public service expenditures (system)

Definition/Discussion

The University's total annual expenditures on public service. The University records its mission-related expenditures into instruction, research, and public service categories.

There are no agreed-upon comprehensive measures of public service and outreach in higher education, in part because public service and outreach informs so much of what we do as a land-grant institution. The wide range of activities and expenditures included broadly under public service and outreach makes it difficult to identify a single measure of progress. While exploring and defining a more comprehensive measure, the University proposes to continue to monitor our overall expenditures.

The University has had a staunch commitment to public service and outreach as a core mission function and plans to keep its expenditures above $245 million annually.

Measure

Average citations per faculty member

Definition/Discussion

The number of times a recent faculty publication is cited by scholars during a five-year period as measured by Academic Analytics, a data analytics source provider. The total number of citations is averaged across all faculty at the institution and pertains to works published within that same five-year period.

There are several different services for faculty citation counts, none of which are comprehensive. The University proposes to further discussion of this measure by using currently available data from Academic Analytics, a national leader in academic scholarship data and analytics, and exploring data options for use across campus, including by the libraries and the Faculty and Academic Affairs office.

The specific goal of maintaining an average citation count per faculty above 125 annually may be updated with different data sources, but the goal's emphasis on faculty scholarship and excellence will continue.

Measure

National scholarship awards to students

Definition/Discussion

The number of prestigious national awards annually received by University undergraduates. The seven leading student awards included in this measure are the Beinecke, Churchill, Truman, Rhodes, Fulbright, Goldwater, and Astronaut awards.

These awards represent a wide variety of fields and expertise and are some of the most prestigious student awards in the world. Any given year can be quite variable in the number of awards our students apply for and receive; additionally, many of these leading awards have limitations based on location of the students' institution or home residence.

For these reasons, we are proposing looking at the next five year block (2015-20) of awards, with an attempt to exceed the previous half decade. However, we will be able to give the Board annual updates on our progress on this measure.

Measure

Spending on leadership & oversight vs. mission and mission support

Definition/Discussion

The percentage of University expenditures on leadership and oversight as determined by the University's internal cost benchmarking study, which has divided all University expenditures into mission, mission-support, and leadership & oversight categories since 2012.

One purpose of this study is to ensure that the university continues to make investments in mission-related activities, while limiting new investment where possible in oversight and overhead. The University now has three years of data, and has shown the ability to contain leadership & administrative costs. However, monitoring levels vs. setting an actual target is probably prudent, as many variables go into this metric.

The University proposes to maintain and continue to try to decrease the percentage of spend on leadership & oversight, understanding that there is a natural floor for this percentage of expenditures.

Measure

University square feet considered in "poor" or "critical" condition

Definition/Discussion

The number of gross square feet of University facilities system wide rated through the Facilities Condition Assessment as being in "poor" or "critical" condition.

The University has for a number of years completed a comprehensive facility condition assessment (FCA) on many of its buildings. Beginning in 2013 this was extended to all buildings system wide with an enhanced methodology.

The University proposes a goal of tracking the total number of gross square feet considered either "poor" or "critical" by this methodology and decreasing the total square footage in these categories over time.

Measure

Sustainability – Metric tons of greenhouse gasses

Definition/Discussion

The number of metrics tons of greenhouse gasses produced annually across the University.

Board of Regents policy on Sustainability and Energy Efficiency directs campus operations to reduce emissions to the environment. In addition, the institution has committed to regular greenhouse gas inventories as part of the American College and University Presidents' Climate Commitment, and the Minnesota state legislature has also established emission reduction requirements for buildings constructed with state funds.

In 2008, when we first began measuring greenhouse gas emissions, the University set as a goal a 50 percent reduction in emissions (364,000 metric tons) by 2021.

Measure

University credit rating

Definition/Discussion

Moody's Investors Services routinely monitors the University's credit rating and takes into account several factors related to the University's overall financial health, student demand, financial statement analysis, state support, and analysis of the University's management strength. Moody's credit ratings range from a high of Aaa to C.

The University wishes to maintain its current credit rating per Board policy.

Measure

Athletics graduation success rate (GSR)

Definition/Discussion

The percentage of first-time, full-time undergraduates in Division I athletics who begin at the Twin Cities campus as freshmen or transfers, receive athletic aid their first year, and graduate within six years of their first term at any institution. The GSR excludes student athletes who leave the University in good academic standing with remaining athletic eligibility.

Though it functions much like a traditional graduation rate statistic, the GSR is a measure unique to intercollegiate athletics. The GSR holds colleges accountable for graduating those student athletes who transfer into the University and but also does not penalize an institution's graduation rate for student athletes that transfer or leave an institution with athletic eligibility and in good academic standing.

The University ranks very highly already in this measure and would like to maintain the significant gains of the past several years.

UNIVERSITY OF MINNESOTA
Driven to Discover℠

The University's mission, carried out on multiple campuses and throughout the state, is threefold:
research and discovery; teaching and learning; and outreach and public service.