Self-Study Report

Transforming Discovery to Impact: Public Health in the 21st Century

School of Public Health
University of Minnesota

September 2014

Prepared for the
Council on Education for Public Health

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; to 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. The University's threefold mission of research and discovery, teaching and learning, and outreach and public service is carried out on multiple campuses and throughout the state.

The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.

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Executive Summary

From Discovery to Impact: Public Health in the 21st Century

The theme "From discovery to impact" has guided and inspired the School of Public Health's vision since 2007. It reminds us of the breadth, depth and importance of our missions. Through excellence in education, research and community engagement, the University of Minnesota School of Public Health advances health—from scientific discovery to public impact—by promoting health and preventing disease in the communities and populations of Minnesota, the nation and world, as well as by educating the next generation of public health professionals and scientists.

Since our last accreditation in 2007 the School has continued to nurture and grow its mission-driven work. The School continues strong in its dedication to research that makes a difference to public health. We have increased our global outreach. We have strengthened our education programs, and increased our investment in executive and interprofessional education programs. We have improved instructional design and support of faculty teaching and student learning. We have improved student services and our data collection and reporting systems.

While continuing to strengthen our programs, the School also casts an eye to the future – to discern what contributions we will make to the grand public health challenges of the 21st Century and to debate the changes in education, research and service needed to prepare students and support faculty as they confront these challenges.

As we look to 2030 (a mere 15 years hence), we are planning where and how we will continue to shape discovery to impact in the context of the daunting public health challenges that lie ahead: aging, obesity and chronic illness; the continuing threat of infectious disease; food security, water scarcity, climate change; the migration of people across the world to megacities. Geopolitical, economic and technological shifts capable of influencing population health are also underway. The challenges are global, yet they are also intensely local.

Our task is to understand these challenges in order to determine the knowledge and competencies our graduates will need and to design programs that will provide them excellent preparation for careers that could extend well past mid-century. Although we are in the initial stages of a formal planning process, we believe many of our recent actions build assets that will help us serve our constituents in the future. We also acknowledge that there is a continuing generational shift in the faculty and staff of schools of public health. We at Minnesota seek to nurture the next generation of faculty leaders in whose hands is the future of academic public health. Our younger faculty play a major leadership role in discerning our future mission-driven investments.

Through aggressive investment in digital coursework and programming, we have dramatically expanded access to public health education to students across the globe as well as to those close to home who juggle school, career and family obligations.

Digital technology has also enabled our faculty and students to expand research globally and the School to build partnerships with international partners in public health education. As a result, we have a significant global footprint today, a development that was yet a dream just a decade ago.

In another effort to prepare students for a more complex world, we have expanded opportunities for interprofessional education, particularly through our dual-degree programs. Today, students may choose from among 22 public health dual degrees. A forthcoming Ph.D. degree program in toxicology will also add an important option.

Academic research is quickly being reshaped by the shift from analog to digital data collection – and the change is upending traditional methods of gathering, processing and analyzing data. While the analog world was one of relative data scarcity, the digital world is the opposite—one of data deluge. Realizing the potential of "big data" in public health research will require sophisticated new methods to find meaning among the data and complex combinations of factors.

To build the School's ability to prepare students to conduct and analyze research in a big data world, the School recently established its first graduate degree program in public health informatics and hired faculty specializing in informatics and complexity analysis.

As our planning continues, we will take a hard look at our programs—particularly our core master of public health degree curriculum. Under the leadership of Kristin Anderson, Associate Dean for Learning Systems and Student Affairs, we hope to reframe our core public health master's program with competencies, such as strategic planning, leadership, systems approaches, professionalism, diversity, communications, and cultural competency—all of which are critical to effective partnership, collaboration and leadership.

As we look to the future, the School faces uncertainties as federal funding for public health research is reduced through sequestration and other Congressional budget cuts. Currently, about two-thirds of the School's annual revenue is from research grants. While School funding has not yet been seriously affected by these reductions, the impact of sequestration could be severe in future years if Congress fails to reach a new agreement.

Despite changes and challenges ahead, we remain confident in our ability to fulfill our mission. We have the elements for success: Dedicated leadership, faculty and staff, top-caliber students, excellent programs on campus and online, and a reputation for innovation and excellence in teaching, research and service. There's no reason we cannot contribute in many and meaningful ways to the grand challenges of the 21st century—from discovery to impact.

1.0 The School of Public Health

1.1 Mission

The School shall have a clearly formulated and publicly stated mission with supporting goals, objectives, and values.

1.1.a. Required documentation: A clear and concise mission statement for the School as a whole.

The phrase *From discovery to impact,* adopted by the School in 2007, remains a guiding theme and critical component of our mission statement.

Mission

Through excellence in education, research and community engagement, the University of Minnesota School of Public Health advances health—from scientific discovery to public impact—by enhancing population health and preventing disease in the state, nation, and world.

The mission of the School reflects that of the University:

"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; to 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."

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.

1.1.b. A statement of values that guide the School.

The core values that guide the School toward fulfillment of our mission are:

- Discovery and innovation—We strive to generate and transfer knowledge for change that benefits all and advances the science of public health.
- Global engagement—Health is a global concern, therefore, the education and research agenda of the School must transcend local and national boundaries.
- Integrity—Our work reflects the highest standards of objectivity, professional ethics, and scientific rigor.
- Diversity—We embrace, respect, and value the uniqueness and differences among ideas, disciplines, and people.

1.1.c. Goal statements for each major function through which the School intends to attain its mission.

In 2012-2013, the School reviewed and reaffirmed goals it set in 2007 to achieve its mission. The goals define a vision for each of the School's core functions of education, research, and service.

Goal I: Prepare the next generation of public health professional, academic, and scientific leaders.

Goal II: Advance the School's leadership in public health research and discovery.

Goal III: Advance population health by engaging with communities worldwide.

1.1.d. A set of measurable objectives with quantifiable indicators related to each goal.

Objectives and outcome indicators for the School's three goals are provided below. Section 1.2.c. lists quantifiable indicators and targets for measuring progress towards these goals over the past three years.

Goal I: Prepare the next generation of public health professional, academic, and scientific leaders.

Objectives	Indicators
1: Recruit, admit, and educate students with strong potential for professional, academic, and scientific achievement in the field of public health.	• Number of applicants • Number of matriculates • GRE test scores for MPH students • GRE test scores for PhD students • GPA scores for admitted MPH students • GPA scores for admitted PhD students • MPH student graduation rates within five years • Placement rates of MPH and MHA graduates within 12 months of graduation • PhD student graduation rates within six years • Percentage of PhD graduates employed within 12 months of graduation • Percentage of students from underrepresented groups • Percentage male matriculates pursuing an MPH

Objectives	Indicators
2: Provide high-quality educational experiences grounded in competencies that support the academic and professional goals of the student.	• Student rating of teaching based on yearly student survey • Student satisfaction with the academic experience as measured in yearly survey • Ratio of degree-seeking students to core faculty • Percentage of core faculty teaching required courses • Number of participants enrolled in continuing professional education courses • Level of student satisfaction with continuing education in the Summer Institute as measured through course evaluations • Number of mentors available to advise students • Number of community partners recognized through adjunct appointments in the School
3. Recruit, retain, and reward outstanding faculty.	• Percentage of tenure-track faculty who receive promotion from associate to full professor within eight years • Percentage of tenure-track faculty who receive promotion from assistant to associate professor within eight years (this includes clock stoppages) • Percentage of faculty from underrepresented groups • Percentage of PhD students from under-represented groups • Compensation of full, assistant, and associate professors compared with averages at other peer schools of public health
4: Provide educational support through quality staff and infrastructure and alumni engagement.	• Level of student satisfaction with coordinators as reflected in the Yearly Student Survey • Level of student satisfaction with Career Services as reflected in the Yearly Student Survey • Annual tuition revenue in dollars • Institutional expenditures per full-time equivalent student • Percentage of staff from underrepresented groups • Participation in annual employee performance review process • Annual amount of scholarships and other subsidies awarded by School • Annual donor gifts to School in dollars • Number of School alumni who are members of UM Alumni Association

Goal II: Advance the School's leadership in public health research and discovery.

Objectives	Indicators
5: Support opportunities for scientific discovery.	• Amount of sponsored-grant dollars per full-time faculty member • Number of annual sponsored-grants/contracts awarded • Total research expenditures in dollars • Percentage of assistant professors who receive external funding within two years of hire • Number of students holding research positions within the School
6: Disseminate and communicate research findings and evidence-informed practice to scientific communities, policy- and decision-makers, and public health professionals.	• Number of peer-reviewed publications per faculty member per year • Number of students participating in Research Day

Goal III: Advance population health by engaging with communities worldwide

Objectives	Indicators
7: Foster collaborative leadership through local, national, and global partnerships.	• Percentage of faculty engaged in international research, education, and service collaborations • Percentage of faculty members serving in leadership roles in professional associations
8: Promote faculty and student participation in programs of service to public health practice.	• Percentage of faculty serving as members of professional associations, community based organizations, community advisory boards, etc. • Number of students with Community Engagement contracts • Percentage of faculty providing testimony, advice or technical support to administrative, legislative, community, and judicial bodies

1.1.e. Manner in which the mission, values, goals, and objectives were developed, including a description of how various stakeholder groups were involved in their development.

The mission, values, goals, and objectives of the School have been developed, and periodically revised, through a consensus process. In fall 2012 the School's Executive Team, which is chaired by the Dean, reviewed and revised the mission statement, goals, and objectives. The revised mission statement, goals, and objectives were presented at faculty meetings for discussion and fine-tuning. Following the discussions, members of the Dean's Operations Team made revisions and refinements and then submitted the statements to the rest of the School and community partners for consideration and comment. Input was sought from the School's Education Policy Committee, the Student

Senate, and the Alumni Board. Their collective feedback was considered and incorporated to develop the current statement of mission and supporting goals and objectives.

In fall 2013 a similar process occurred to create and arrive at consensus on the School's core values.

1.1.f. Description of how the mission, values, goals, and objectives are made available to the School's constituent groups, including the general public, and how they are routinely reviewed and revised to ensure relevance.

The Dean regularly calls attention to the School's mission, goals, and objectives in annual faculty and staff meetings, public presentations, and School publications. The mission statement, goals, and objectives, as well other key guiding documents, are available online for public review and comment (for additional information, please see the Electronic Resource File).

The CEPH accreditation cycle regularly prompts us to review our guiding statements to be sure that the School achieves its mission in conjunction with its core values. In fall 2012 the Assistant Dean for Education Operations met with the School Alumni Association Board and Student Senate to discuss the reaccreditation process, and the School's mission, values, goals, and objectives.

1.1.g. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- The School has clearly articulated its mission, values and supporting goals, objectives, and indicators by which to measure progress toward goals.
- The School provides opportunities for faculty, staff, students, educational partners, and community members to comment on its goals and objectives.

Weaknesses

- Review and revision of goals and objectives typically begin with the School's Executive Team. The team then presents its recommendations to the rest of the School and to community partners for consideration. This approach may inadvertently discourage input from faculty members and other constituents if the recommendations appear to be all but complete. To address this possibility, the team has actively invited feedback through the School's website, the SPHere electronic newsletter, meetings, and presentations.

1.2 Evaluation

The School shall have an explicit process for monitoring and evaluating its overall efforts against its mission, goals, and objectives; for assessing the School's effectiveness in serving its various constituencies; and for using evaluation results in ongoing planning and decision-making to achieve its mission. As part of the evaluation process, the School must conduct an analytical self-study that analyzes performance against the accreditation criteria defined in this document.

1.2.a. Description of the evaluation processes used to monitor progress against objectives defined in Criterion 1.1.d., including identification of data systems and responsible parties associated with each objective.

To achieve its mission, goals, and objectives, the School engages in a year-round planning and evaluation process at several levels. The School uses data from multiple sources to inform its decision-making. Centrally maintained programs such as PeopleSoft and UM Reports are good sources of School-wide data. The Academic Health Center is responsible for data systems that support performance reviews of staff. The School, aided by information received from SOPHAS, maintains data systems that track admissions, and student progress. The School's Office of Admissions and Student Resources maintains grading, course evaluation, and student survey systems to report on the educational progress and experience of students. And, the recently implemented Tableau software system provides business data to assist with strategic resource decisions.

The School's leaders regularly and systematically share data with Divisions, Programs, the Student Senate, the Faculty Consultative Committee, and the Education Policy Committee. For example, the Yearly Student Survey results are shared, discussed and integrated into strategic and program planning in the following ways:

- The Dean shares and discusses the results of the entire survey with members of the Executive Team and incorporates key findings into the annual fall faculty meeting
- The Assistant Dean for Education Operations shares and discusses the results with the Education Policy Committee, the Office for Admission and Student Resources, the Program Coordinators, and the Student Senate
- The Program Directors discuss and utilize program specific feedback with their faculty colleagues, program coordinators and students.

As the School begins to assume increased responsibility for graduate program review, a pilot program, called Graduate Review and Improvement Process (GRIP), is being monitored by the School's Education Policy Committee (EPC). GRIP is a project with the College of Education and Human Development, the Graduate School and the Department of Organizational Leadership, Policy, and Development aimed at identifying more effective processes for evaluating and improving graduate-level academic programs. The EPC will evaluate processes identified by the pilot to determine if any could be applied to meet School needs. In addition, the School's Division of Biostatistics conducted an external review of its educational and research programs in April 2014. Its experience and results could provide a model for other divisions.

Processes to support information collection and evaluation

Responsible Unit	Data, Documents, Information, Key Events	Purpose	Frequency
Office of Admissions and Student Resources	Applications and admissions reports	• Quality and complement of prospective students	Monthly during admission season
	Active student report	• Academic planning	Each September
	Course evaluations	• Curricular improvement	End of each term
	Yearly Student Survey	• Educational and extracurricular improvement	Each spring
	Community engagement contracts	• Recognize student volunteer experiences and assure liability coverage	Ongoing
	Affiliation Agreements	• Document partnerships with field experience organizations and assure liability coverage	Ongoing
	Student guidebooks	• Provide current information on University, School, and degree program policies, procedures, requirements, and resources	Each August
Office of the Dean	Compact Document	• Report on the School's progress, initiatives, and request financial support	Annually
	All-School faculty meetings	• Share information on key initiatives, new hires, state of the School	Twice a year
	Faculty and staff reviews	• Improve performance and plan for professional development • Provide documentation of educational, research, and services contributions of each faculty member	Annually
	Faculty retreats	• Discuss critical topics and collect input and opinions from faculty members	Annually
	Advances Magazine	• Provide a printed outreach piece to all alumni highlighting key School initiatives and accomplishments	Twice a year

Responsible Unit	Data, Documents, Information, Key Events	Purpose	Frequency
Career Services Center	Field experience module	• Provide feedback for staff and students about past field experiences	Ongoing
	Career Survey	• Provide information on job location and compensation of recent graduates • Assess job market as it relates to School graduates	Ongoing
	Field Experience Contract	• Provide a systematic process to review and approve a student's field experience plan and activities, electronically	Ongoing
Education Policy Committee	Report on Core Courses	• Assure quality of MPH Core	Each term
	Meeting Minutes	• Communicate key topics and decisions	Monthly
Alumni Board	Meeting Minutes	• Communicate key topics and decisions	Six times per year

In addition, the School actively seeks feedback from the public health community to inform its evaluation and planning. Ongoing inquiry into public health practice and emerging training and education needs is conducted through discussions with members of advisory boards to the School's majors and centers, as well as with attendees at major national and regional conferences at which the School participates or exhibits.

1.2.b. Description of how the results of evaluation and planning described in Criterion 1.2.a. are monitored, analyzed, communicated, and regularly used by managers responsible for enhancing the quality of programs and activities.

The School has long monitored, analyzed, communicated, and used the results of its planning and evaluation activities to enhance the quality of its programs in a variety of ways. For example, the School invested in a course evaluation system that releases course grades to all students by a specified date, but earlier to students who complete the course evaluation. This incentive to submit a course evaluation provides the School with timely and robust data so that instructors can improve their teaching, address course content issues, and adjust scheduling and assignments to provide a better educational experience for students.

In addition, in 2009, the School hired an Assistant Dean for Education Operations. This position is charged with ensuring greater cohesion and connection between systems and operations, and between governing committees and implementation. Through the Assistant Dean's efforts, the results of evaluations and planning are more clearly

presented and regularly discussed in the Education Policy Committee and during annual planning activities and events.

The Yearly Student Survey provides another example of how data is used to enhance the educational programs. Each spring, results of the Yearly Student Survey are distributed to the Dean, Associate Deans, and Division Heads and customized reports are created and shared with each Program Director and Coordinator, the Student Senate, the Alumni Board, and the Communications Team. The survey results are used to support decision-making and planning at many levels within the School.

Results from the School's evaluation and planning processes are also analyzed, communicated, and used to enhance the quality of its programs as illustrated in the following examples:

- New directives have been developed and communicated to address strategic priorities and achieve future excellence in traditional and emerging areas of education, research, and service. For example, through planning done at the January 2014 retreat, the School has decided to pursue research opportunities in the area of aging, chronic disease, and mental illness.
- New processes have been developed to continually improve the management and operations of the School and its administrative units. For example, the newly revised field experience contract provides more robust tracking of students pursuing international field experiences.
- Reviews of academic programs have led to improved instructional and practicum components.
- Analysis of competency-based curricula has helped ensure alignment of course learning objectives with program competency sets.
- Faculty and staff reviews have contributed to professional development and performance alignment.
- Yearly Student Survey, focus groups, and exit interviews have provided information helpful in planning and continuous quality improvement.
- Ongoing inquiry into the emerging training and education needs of the public health workforce has provided essential information for new program development.

1.2.c. Data regarding the School's performance on each measurable objective must be provided for each of the last three years.

Outcome indicators and targets to measure progress to goal are outlined in Section 1.1.d. The School's Executive Team and its Education Policy Committee developed the targets for each outcome indicator after considering national norms, the School's historical data, planning documents, and input from leadership.

Goal I: Prepare the next generation of public health professional, academic, and scientific leaders *(includes Objectives 1-4).* *Footnotes appear at bottom of final table.*

Objective 1: Recruit, admit, and educate students with strong potential for professional, academic, and scientific achievement in the field of public health.				
Indicators	**Target**	**2011–2012**	**2012–2013**	**2013–2014**
Number of applicants	2,000	1,671	1,697	1,643
Number of matriculates	350	384	347	379
GRE test scores for admitted MPH students	Q of 65% and V of 65%	Q: 58% V:75%	Q: 64% V:78%	Q: 61% V:73%
GRE test scores for admitted PhD students	Q of 80% and V of 80%	Q:73% V:80%	Q:77% V:87%	Q:87% V:89%
GPA scores for admitted MPH students	3.4 mean	3.5	3.51	3.5
GPA scores for admitted PhD students	3.4 mean	3.56	3.6	3.62
MPH student graduation rates within five years	80%	62.9%[1]	62.9%[2]	60.6%[3]
Placement rates of MPH and MHA graduates within 12 months of graduation	80%	MPH: 62%[5] MHA: 67%[5]	MPH: 76%[6] MHA: 96%[6]	MPH: 82%[12] MHA: 77%[12]
PhD student graduation rates within six years	80%	62.9%[7]	65%[8]	68.6%[12]
Percentage of PhD graduates employed within 12 months from graduation	90%	71%[5]	100%[6]	86%[12]
Percentage of students from under-represented groups-MPH	25%[4]	15.8%	17%	20.1%
Percentage of students from under-represented groups-MS	25%[4]	22.4%	9.1%	13.5%
Percentage of students from under-represented groups-MHA	25%[4]	16.4%	9.7%	17.4%
Percentage of students from under-represented groups-PhD	25%[4]	15%	18.5%	16.1%

Percentage of male matriculates pursuing an MPH	30%[4]	22%	18.9%	23.8%

Objective 2: Provide innovative, high-quality educational experiences for learning throughout completion of degree programs and across the public health career continuum.

Indicators	Target	2010–2011	2011–2012	2012–2013	2013–2014
Student rating of teaching based on yearly student survey	50% very satisfied		36%	41%	33%
	40% satisfied		49%	46%	59%
Student satisfaction with the academic experience as measured in yearly student survey	75% very satisfied		55%	58%	52%
Ratio of degree-seeking students to core faculty (FTE)	10 to 1		7.0 to 1	6.8 to1	7.4
Percentage of core faculty teaching required courses	70%		74%	72%	68%
Number of participants enrolled in continuing professional education courses	Increase each year	not available	56,615	66,707	23,509[15]
Level of student satisfaction with continuing education in the Summer Institute as measured through course evaluations (6 pt scale)	5 pts		5.47	5.42	5.25
Number of mentors available to advise students	Increase each year	not available	213	209	231
Number of community partners recognized through adjunct appointments in the School	≥80		164	167	148

Objective 3. Recruit, retain, and reward outstanding faculty.				
Indicators	**Target**	**2011–2012**	**2012–2013**	**2013–2014**
Percentage of tenure-track faculty who receive promotion from associate to full professor within eight years	50%	45%		
Percentage of tenure-track faculty who receive promotion from assistant to associate professor within eight years (this includes clock stoppages)	80%	89%		
Percentage of faculty from underrepresented groups	23%	16%	16%	15%
Percentage of PhD students from underrepresented groups	25%	15%	18.5%	16.1%
Compensation of professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $176,106 2012-13: $183,804 2013-14: $188,189	$184,681	$197,162	$202,555
Compensation of associate professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $120,319 2012-13: $126,404 2013-14: $128,486	$115,778	$121,877	$123,918
Compensation of assistant professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $100,252 2012-13: $106,043 2013-14: $107,810	$92,301	$99,436	$100,282

Objective 4: Provide educational support through quality staff, infrastructure, and alumni engagement.					
Indicators	**Target**	**2010–2011**	**2011–2012**	**2012–2013**	**2013–2014**
Level of student satisfaction with coordinators as reflected in the yearly student survey	65% very satisfied		64%	63%	50%
Level of student satisfaction with Career Services as reflected in the yearly student survey	65% very satisfied		50%	58%	58%
Annual tuition revenue in dollars	TBD-Pending implement-tation of enrollment manage-ment system	$16,816*	$17,913*	$18,773*	$18,574*
Institutional expenditures per full-time equivalent student	Increase each year	$157,066	$150,567	$153,706	$151,505
Percentage of staff from under-represented groups	30%		13%	14%	16%
Participation in annual employee performance review process	100%		92.9%	84.2%	83.5%
Annual amount of scholarships and other subsidies awarded by School	Increase each year	$532,726	$833,659	$967,297	$968,190
Annual donor gifts to School in dollars	Increase each year	$837*	$2,260*	$1,692*	$2,185*
Number of School alumni who are members of UM Alumni Association	Increase each year	1,361	1,382	1,247	1,400

Goal II: Advance the School's leadership in public health research and discovery *(includes Objectives 5-6).* *Footnotes appear at bottom of final table.*

Objective 5: Support opportunities for scientific discovery					
Indicators	**Target**	**2010–2011**	**2011–2012**	**2012–2013**	**2013–2014**
Amount of sponsored-grant dollars per full-time faculty member	$400,000/ FTE		$678,413	$686,082	$714,581
Number of annual sponsored-grants/contracts awarded	Increase each year	244	272	237	Available Nov. 2014
Total research expenditures in dollars	Increase each year	$81,850*	$85,073*	$86,069*	$92,181*
Percentage of assistant professors who receive external funding within two years of hire	80%		45%	37%	52%
Number of students holding research positions within the School[14]	Increase each year	284	292	282	295

Objective 6: Disseminate and communicate research findings and evidence-informed practice to scientific communities, policy- and decision-makers, and public health professionals					
Indicators	**Target**	**2010–2011**	**2011–2012**	**2012–2013**	**2013–2014**
Number of peer-reviewed publications per faculty member per year	Mean of 4	not available	not available	not available	6.4
Number of students participating in Research Day	Increase each year	not available	48	63	70

Goal III: Advance population health by engaging with communities worldwide *(includes Objectives 7-8).* *Footnotes appear at bottom of final table.*

Objective 7: Foster collaborative leadership through local, national, and global partnerships				
Indicators	**Target**	**2011–2012**	**2012–2013**	**2013–2014**
Percentage of faculty engaged in international research, education, and service collaborations	50%	not available	32%	27%
Percentage of faculty members serving in leadership roles in professional associations	25%	29%	33%	34%

Objective 8: Promote faculty and student participation in programs of service to public health practice					
Indicators	**Target**	**2010–2011**	**2011–2012**	**2012–2013**	**2013–2014**
Percentage of faculty serving as members of professional associations, community based organizations, community advisory boards, etc.	90%	not available	73%	72%	76%
Number of students with Community Engagement contracts, a database that records student volunteer activity in the community	Increase each year	6[10]	28	40	42
Percentage of faculty providing testimony, advice or technical support to administrative, legislative, community, and judicial bodies	25%	not available	29%	27%	32%

Notes for all Outcome Indicators and Target tables above:

** Numbers in thousands*

[1]These students began in their degree program in 2008 or later.

[2]These students began in their degree program in 2009 or later.

[3]These students began in their degree program in 2010 or later.

[4]*In our diversity plan, these targets are for the 2017-18 academic year.*

[5]*In 2012, 65% of MHA, 80% of MPH, and 50% of PhD matriculates completed the survey.*

[6]*In 2013, 36% of MHA, 80% of MPH, and 45% of PhD matriculates completed the survey.*

[7]*These students began in their degree program in 2006 or later.*

[8]*These students began in their degree program in 2007 or later.*

[9]*These students began in their degree program in 2008 or later.*

[10]*The Community Engagement Database was begun in mid-year. 2010-11 was the pilot-testing period.*

[11]*Compensation includes salary only, not the value of fringe benefits.*

[12]*Iin 2014, 32% of MHA, 73% of MPH, and 55% of PhD matriculates completed the survey.*

[13]*Peer institutions include: University of California Berkeley School of Public Health, University of California Los Angeles Fielding School of Public Health, University of Michigan School of Public Health, University of North Carolina Gillings School of Public Health, and University of Washington School of Public Health*

[14] *Some students hold <u>both</u> Research Assistantships and Teaching Assistantships at the same time.*

[15] *Due to technology failures, a significant portion of registrations for online continuing education courses were not captured in 2013-14, this makes it difficult to compare to this data to prior years. The technology issues has subsequently been addressed.*

1.2.d. Description of the manner in which the self-study document was developed, including effective opportunities for input by important School constituents, including institutional officers, administrative staff, faculty, students, alumni, and representatives of the public health community.

In September 2012, Dean John Finnegan appointed several teams to participate in the development of the Self-Study document:

- The Executive Steering Committee, composed of the project lead, the Dean, the Senior Associate Dean for Academic and Student Affairs, and the Assistant Dean for Education Operations, met at least monthly to review progress, provide guidance, approve milestones, and help align faculty, staff members, and resources.

Members of the Executive Steering Committee were:

- John Finnegan, Jr., Dean
- Mary Story, Senior Associate Dean for Academic and Student Affairs
- Mary Ellen Nerney, Assistant Dean for Education Operations and Lead on Accreditation

In fall 2013, Professor Kristin Anderson replaced Mary Story and accepted the position of Associate Dean for Learning Systems and Student Affairs.

The Faculty Advisory Committee, composed of the project lead and five faculty members, provided feedback on document drafts, and served as liaison with the faculty, staff, and students. Members included:

- Saonli Basu, Associate Professor, representing Biostatistics
- James Begun, Professor, representing the Division of Health Policy and Management
- Craig Hedberg, Professor, representing the Division of Environmental Health Sciences
- James Pankow, Professor, representing the Division of Epidemiology & Community Health
- Katherine Waters, Assistant Professor, representing Public Health Practice
- Elizabeth Wattenberg, Associate Professor and Chair, Education Policy Committee

The Self-Study Staff Team, composed of the project leads and staff members in finance, data collection, student services, recruitment, information technology, and communications managed the project, provided data, coordinated Self-Study activities, and produced the Self-Study report. The team included:

- Mary Ellen Nerney, Assistant Dean for Education Operations and Lead on Accreditation
- Gail Brinkmeier, CEPH Self-Study Project Manager
- Maggie Aftahi, Director of Admissions and Student Leadership
- Richard Archer, Student Data Coordinator

- Dixie Berg, Self-Study Report Editor
- Sherlonda Clarke, Director for Diversity and Inclusion
- Ann Dyellig, Self-Study Report Designer
- Barb Laporte, Director of Career Services
- Guy Piotrowski, Coordinator for Applications & Admissions
- Joe Weisenburger, Chief Information and Financial Officer

The Constituent Engagement Team, composed of the Self-Study Staff Team, joined by members of the School's Communications team, communicated with faculty members and other stakeholders about the Self-Study and processes by which relevant information would be gathered, analyzed, and reviewed.

Following the appointment of these teams, the Self-Study was developed in four phases:

PHASE ONE

September 2012 – 2013: Data gathering and CEPH training

Team members took responsibility for gathering information to address specific accreditation criteria. Meetings throughout this phase were generally one-on-one or in small groups. The Executive Steering Team met as needed and utilized portions of regularly scheduled Dean's meetings to discuss the Self-Study.

Throughout this period members of the Executive Steering Committee conducted group and individual meetings with faculty teaching the MPH core, and with Program Directors and Coordinators to discuss the reaccreditation timeline and processes and the competency maps for the MPH core and individual programs.

PHASE TWO

September 2013 – March 2014: Critical review of the School and the draft Self-Study document

Goals, objectives, indicators, and targets were created, reviewed, and shared with members of the Education Policy Committee. Professor Karen Kuntz provided invaluable expertise in developing the indicators and targets.

Review meetings were held with the Executive Steering Committee, the Faculty Advisory Committee, the Division Heads, the Program Directors, and Coordinators to discuss content changes and to review the School's strengths, weaknesses, and action steps for improvement. Suggested changes were incorporated in the document and in School processes.

May – September 2014: Wide audience review and stakeholder discussions

- Faculty, staff, students, alumni, and the larger public health community were invited to review and comment on the Self-Study document. Drafts were available on the School's website and print versions were provided for those who requested a copy. Comments were solicited and inserted into the final document.
- School reviews included the following:

- The Education Policy Committee (which includes all Program Directors, a representative from the Student Senate, and a representative from the staff), reviewed educational components as the document was developed and they contributed to portions of the report relevant to their respective curricula.
- The Dean, the Senior Associate Dean, and the Associate Deans reviewed sections of the final draft for accuracy and policy.

Additional information on third-party comment is located in the Electronic Resource File.

PHASE THREE

February – April 2014: Refinement of the preliminary Self-Study and collection and development of materials for the Electronic Resource File.

Mollie Mulvanity of CEPH conducted an on-site consultation visit and provided structured feedback on the Self-Study process and plans. The School used the feedback to improve the draft Self-Study report and the resource file.

PHASE FOUR

May – July 2014: Preliminary Self-Study under review by CEPH

July 2014 – September 2014: Refinement of the final Self-Study document, final approval by the Dean and Executive Team

Print and web-based resources were finalized; request for comments were launched via an online invitation and sent to an email-list of faculty, staff, students, community partners, and alumni.

The Dean and the project lead provided updates and solicited advice on key topics from the public health community. Student input was collected through discussions with leaders of the Student Senate and through the student representative to the Educational Policy Committee.

1.2.e. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans related to this criterion.

The criterion is met.

Strengths

- The School is actively and continuously involved in evaluation, planning, and continuous improvement.
- Every seven years, the School conducts an in-depth Self-Study as part of the accreditation process.
- The School implemented changes to its data collection systems based on recommendations made during the School's 2007 CEPH review. These changes have made a significant improvement in the School's ability to compile the Self-Study report.

Weaknesses

- Quantitative metrics don't capture the whole picture.

- The School will continue to put pressure on the University to develop enterprise-level learning management and constituent management systems to enable better tracking and data collection.

Plans

- Pilot an annual meeting, at the program level, with key employers to gather feedback on the preparation and performance of graduates and the needs of the public health community. This will enable the School to capture more qualitative information to enhance the quality of our education programs and our workforce outreach.
- To get more accurate information on student volunteer activities, the student services staff need to promote the use of the Community Engagement Contract.

1.3. Institutional Environment

The School shall be an integral part of an accredited institution of higher education and shall have the same level of independence and status accorded to professional schools in that institution.

1.3.a. A brief description of the institution in which the School is located, and the names of accrediting bodies to which the institution responds.

The University of Minnesota, founded in 1851, is a comprehensive public university. It is both the state land-grant university, with a strong tradition of education and public service, and the state's primary research university, with faculty of national and international reputation. Through world-class research, scholarship, and public engagement, the University aims to solve challenges facing the state, nation, and world and provide broad access to programs and resources.

The Twin Cities campus is the flagship campus of the University and home to 18 colleges and schools, including the School of Public Health. The University has one of the most comprehensive academic portfolios in the world and its enrollment is the nation's second largest among campus-based educational institutions. The University also includes three coordinate campuses (Crookston, Duluth, and Morris), UMN Rochester campus, a statewide Extension Service and research and outreach centers.

Within the University, the Academic Health Center (AHC) is home to six schools and colleges related to medicine and science (for additional information please see the Electronic Resource File). In addition to the School of Public Health, the AHC comprises the Schools of Medicine, Nursing, Dentistry, Pharmacy, and Veterinary Medicine, as well as allied health programs. The School's faculty and staff are actively involved in AHC committees and advisory boards. Several AHC-wide administrative units provide support to the School, including Financial Affairs, Legal Affairs, Human Resources, Facilities Management, Communications, and Legislative Relations.

A number of UMN research and education centers help facilitate interdisciplinary projects and collaboration. The School of Public Health is actively engaged in the work of a number of the research centers, including the Masonic Cancer Center; Obesity Prevention Center; Center for Infectious Disease Research and Policy; Genomics Center; Computational Genetics Laboratory, a program of the Minnesota Supercomputing Institute; the National Center for Food Protection and Defense; the Clinical Translational Sciences Institute, and the Center for Spirituality and Healing.

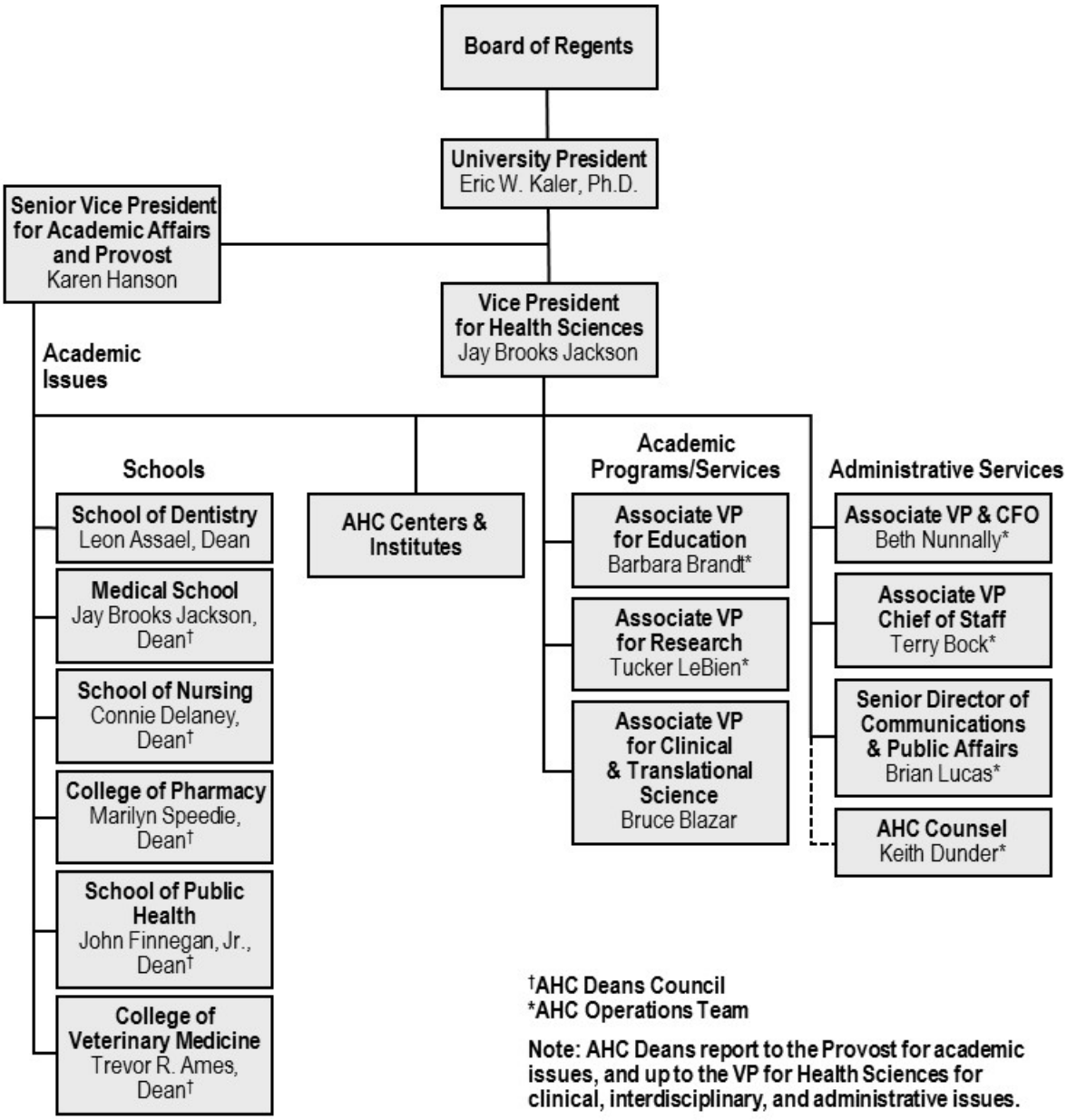
The University, the schools of the AHC, and programs within the School of Public Health respond to the following accrediting bodies:

- The Higher Learning Commission of the North Central Association of Colleges and Schools accredits the University. Last review completed 2005. Next review: 2015.
- The Association for the Accreditation of Human Research Protection Programs accredited the University in 2010.

- AHC schools and colleges are fully accredited and up to date through their individual accrediting organizations.
- The School of Public Health's Master in Healthcare Administration Program was accredited by the Commission on Accreditation in Healthcare Management Education in April 2014, for seven years.
- In fall 2013 the Industrial Hygiene Program, part of the School's Environmental Health Sciences division, hosted a site visit from the Accrediting Board for Engineering and Technology.
- In October 2010 the Coordinated Master's Program in Public Health Nutrition received its 10-year accreditation from the Accreditation Council for Education in Nutrition and Dietetics (ACEND).

1.3.b. Organizational charts: The School's relationship to the other components of the institution, including reporting lines.

Abbreviated University Organizational Chart



1.3.c. Description of the School's involvement and role in budget and resource allocation, personnel recruitment, selection, and advancement, including faculty and staff, academic standards, and policies, including establishment and oversight of curricula.

Budgetary Authority

The School is responsible and accountable for managing its own budget. Its annual budgeting and resource requests are made through the "Compact Process," the University's resource allocation mechanism. Under this process, the School's requests are submitted to the Provost and reviewed along with all other University requests for strategic investments. See Section 1.6. for details on the budget process. Once decisions are made, the Dean and Executive Committee administer the School's budget.

Accountability and Access

The School appreciates access —and is accountable— to the highest decision-makers within the University, as well as the senior leaders of the University's principal health and science unit, the Academic Health Center (AHC).

The Dean reports to the Senior Vice President for Academic Affairs/Provost (Karen Hanson) for academic issues with a dotted line reporting relationship to the Vice President of Health Sciences (Jay Brooks Jackson), who heads the AHC, for clinical, interdisciplinary and administrative issues. Both the Senior Vice President/Provost and the Vice President for Health Sciences report to the University President (Eric Kaler). The President is accountable to the University Board of Regents.

All AHC Deans and Directors meet twice monthly with the Vice President for Health Sciences to discuss administrative, funding, and policy issues. The Dean and AHC Vice-President meet monthly to discuss School-related opportunities and concerns.

The Dean is a member of the Twin Cities Deans' Council, which meets monthly with the President and other University officers on the Twin Cities campus to address issues of concern. In addition, the School's Associate Deans participate on several AHC and University-wide committees, providing leadership and operations oversight for inter-professional education and research.

Seven faculty members and one academic professional represent the School on the University's Faculty Senate. Numerous Senate committees deal with resource allocation, academic standards, tenure, and other issues.

The School collaborates with and receives support from the University's Graduate School. However, following a change in policy implemented in Fall 2011, individual schools and colleges, not the Graduate School, have assumed primary responsibility for the quality and delivery of graduate degree programs.

Faculty Recruitment, Selection, and Advancement

The School is responsible for recruiting, selecting, and promoting its faculty and staff. Division Heads, with assistance from the Director of Human Resources, conduct faculty recruitment and make initial hiring recommendations, with final approval by the Dean. To post job opportunities, they use a centralized online system sponsored by the University's Office of Human Resources.

Academic Standards and Policies

The School, working under broad policy guidelines defined by the University and AHC, develops policies and procedures and establishes and oversees curricula. The University sets minimum standards, which the School and other units may build upon to meet their educational goals and requirements.

1.3.d. Identification of any of the above processes that are different for the School of Public Health than for other professional schools, with an explanation.

None of the above processes are different for the School than other professional schools.

1.3.e. If a collaborative program, descriptions of all participating institutions and delineation of their relationships to the program.

Not applicable.

1.3.f. If a collaborative program, a copy of the formal written agreement.

Not applicable.

1.3.g. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- The School has organizational status equal to that of other schools and colleges in the University.
- The School has the institutional support and financial oversight needed to deliver on its mission.

Weaknesses

- None

Plans

- None

1.4 Organization and Administration

The School shall provide an organizational setting conducive to public health learning, research, and service. The organizational setting shall facilitate interdisciplinary communication, cooperation, and collaboration that contribute to achieving the School's public health mission. The organizational structure shall effectively support the work of the program's constituents.

The School provides a culture, environment, and organizational structure that facilitate the communication, collaboration, and cooperation that are vital to excellence in public health education, research, and service.

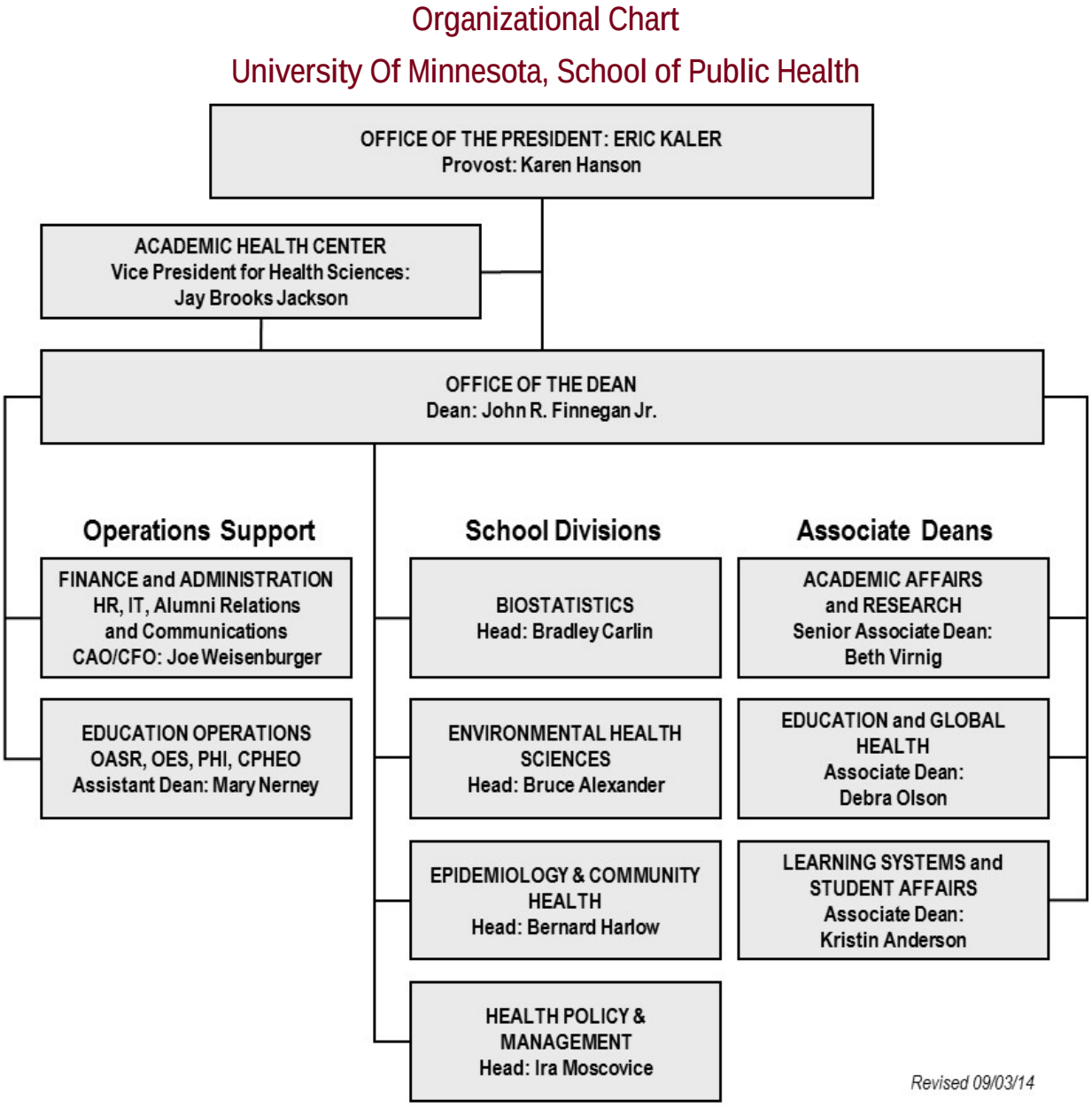
The Dean and other School leaders nurture a culture of openness and inclusiveness, promote an atmosphere in which the ideas and contributions of faculty, staff, and students are welcomed and valued and strive to create an environment in which all can feel a sense of purpose and belonging.

The School's organizational structure reflects the multi-dimensional nature of public health. Its divisions include:

- Biostatistics
- Environmental Health Sciences
- Epidemiology & Community Health
- Health Policy and Management

Interdisciplinary collaboration is a key attribute of the School's culture, in part because it is actively encouraged, but also because the complexity of public health issues encourages natural collaborations across the divisions and partnerships with other collegiate units. The School continually looks to increase collaboration, communication, effectiveness, and efficiency.

1.4.a. Organizational chart showing the School's structure.



1.4.b. Roles and responsibilities of major units in the organizational chart.

Office of the Dean: The Dean's Office has overall responsibility for School instructional, research, and service programs; public health practice and workforce development, student support services, and administration, which includes communications, alumni affairs, and development.

Administrative Support

Finance and Administration: Provides financial management, payroll accounting compliance, and resource allocation and coordinates annual budgeting and planning.

Human Resources and Equal Opportunity: Provides human resource management, recruitment services, and EEOC compliance.

Information Technology: Supports the School's information technology needs.

Alumni and Constituent Relations: Serves students and alumni, as well as other, external constituencies through communications, programming, and relationship development.

Communications: |Leads, positions and amplifies the School's public impact and works to build and strengthen relationships domestically and globally among all of varied stakeholders. Advances the School's research, education, and community engagement missions through public and media relations, electronic and print communications, national and local recognition of faculty contributions to the field, and school-sponsored seminars and events.

Education Operations: Implements policies and processes across the School. Serves as the link connecting the Office for Admissions and Student Resources (OASR), the Office for E-Learning Services (OES), the Public Health Institute (PHI), the Centers for Public Health Outreach and Education (CPHEO), Recruitment and Diversity Services, the Education Policy Committee, the Student Senate, and the coordinators in each of the program areas. These linkages enable the School to coordinate efforts and work more effectively.

Office of Admissions and Student Resources (OASR): Centralized office for student support across all degree programs and certificates. Coordinates application processing, orientation, course scheduling, student diversity initiatives, student tracking, scholarships, degree clearance, and career services. Acts as liaison for all University and AHC student functions.

Office of E-Learning Services (OES): Works with faculty to develop individual online courses and entirely online programs. Guides and supports faculty through the process of designing and developing online academic courses. Assists the Associate Dean for Learning Systems and Student Affairs in coordinating training in online teaching. Also supports students with specific, course-related issues on all online, blended, and supplemental Moodle sites.

Public Health Institute (PHI): A summer program offering public health courses for students and professionals in public health and related fields. Allows participants to build or expand their professional expertise, learn best practices, broaden career options, network with other professionals, and explore new areas of interest. Courses are intensive, highly interactive, and applications-based with opportunities for field trips, case studies, hands-on labs, and simulations.

Centers for Public Health Education and Outreach (CPHEO): The School's centralized platform for continuing professional education and outreach. Offers continuing education opportunities in face-to-face and online formats.

School Divisions

Biostatistics, Environmental Health Sciences, Epidemiology & Community Health, and Health Policy and Management: The School carries out its mission and achieves its goals through these four divisions. Division Heads report to the Dean and are charged with setting direction and assuring unit financial stability. Degree programs within each Division and the Public Health Practice programs within the Office of the Dean prepare students in specific competencies credentialed through two professional degrees, Master of Health Administration (MHA) and Master of Public Health (MPH), and two academic degrees, Master of Science (MS) and doctoral (PhD). Each area of study is overseen by a Program Director with support from faculty members who have expertise in the area. The School currently has 16 MPH degree programs, three MHA degree program, five MS degree programs, five doctoral degree programs, and 19 joint-degree programs. Program Directors report to the Division Heads.

Associate Deans

Academic Affairs and Research: Responsibilities include faculty affairs and development, and oversight of research, including approval of all grant proposals. Serves as liaison with research administration within the Academic Health Center and the University Office n of the Vice President for Research.

Global Health: Responsible for global strategies in development, leadership, and management, especially in the areas of learning and international engagement. Works to extend and integrate this relationship across the Academic Health Center and coordinate with the University's Global Programs and Strategy (GPS) Alliance.

Learning Systems and Student Affairs: Provides oversight for education policy implementation, operations, innovations in learning, curricular design and teaching, and strategic decisions regarding learning systems and programs. Student affairs, including student governance, and academic achievement and conduct, are also among the responsibilities of this associate dean.

1.4.c. Manner in which interdisciplinary coordination, cooperation, and collaboration are supported.

The School supports collaborative efforts across the AHC and the University—from architecture to veterinary medicine. It facilitates collaboration among faculty, students, and departments on research, community outreach, teaching, and training. Notably, School faculty members are recognized across the University as productive researchers who also have excellent quantitative expertise and represent a range of interests. As a result, faculty from other units seek them out as collaborators. In some cases, faculty collaborations with other University departments are formalized through adjunct (joint) faculty appointments.

Dual-Degree Programs

The School's dual-degree programs afford many opportunities for collaboration among faculty and students across disciplines. The School has formal degree arrangements with eight University units and grants 19 dual degrees.

In recent years the School's program in Public Health Practice (PHP) has reached out to other professional schools to create dual degrees. PHP's reliance on summer programming and flexible online courses has made it particularly suited to students and practicing professionals seeking dual degrees. Those acquiring dual degrees through PHP are equipped to approach their professional practice with a heightened awareness of public health issues and implications.

Regional Presence

The School's strong regional collaboration provides many opportunities for cooperation in educating medical, veterinary, and other professionals in public health disciplines. As the only accredited school of public health in Minnesota, North Dakota, and South Dakota, the School promotes regional collaborations through formal and informal exchanges. For example, the Mayo Medical School in Rochester, Minnesota, and the University of North Dakota in Grand Forks actively partner with the School to offer the Public Health Medicine (PHM) MD/MPH, with faculty from each institution serving on the PHM admissions committee and holding reciprocal adjunct appointments.

The School's Veterinary Public Health degree program, which enables students of the College of Veterinary Medicine to combine their degrees with an MPH, also fosters collaboration, not just within the University but also with 16 other colleges of veterinary medicine which send students to the School's program to earn an M.P.H. as a distance-education program coordinated with Doctor of Veterinary Medicine curricula. Formal memoranda of agreement with Cornell University, Purdue University, Ross University, and Western University of Health Sciences are currently being updated.

In 2006 the Vice Provost of the University and the Vice Chancellor of the Minnesota State Colleges and University (MnSCU) system sought the collaboration of the School in developing an online course called Alcohol and College Life. This course is now offered on three university campuses, and more than 2,500 students have taken the course since its inception. Building on the success of Alcohol and College Life, the School's Rothenberger Institute now offers online health and lifestyle education courses to six other regional educational institutions.

Adjunct Faculty Appointments

The School supports faculty collaborations—and, in turn, faculty members serve as ambassadors of collaboration and inter-professional education for the School. Many of the School's faculty members serve as adjunct faculty in other units within the AHC, across the University, and at other institutions. These adjunct roles provide critical cross-disciplinary perspective and lead to opportunities to collaborate on research. The School welcomes adjunct faculty from outside the School. There are currently 303 adjunct faculty at the School in the 2013-14 academic year.

The Center for Health Inter-professional Programs (CHIP) (for additional information please see the Electronic Resource File)

A center for inter-professional initiatives created by students for students at the AHC level, CHIP promotes collaboration by bringing students together in social, learning, service, and leadership development opportunities. Several CHIP committees address areas of cross-disciplinary interest. For example, the International Health Committee brings a global perspective to students through seminars and events fostering global

health awareness. In addition, CHIP sponsors the Clarion Interdisciplinary Case Competition and the Global Interdisciplinary Case Competition, which provide students with co-curricular, inter-professional experiences across health and science disciplines.

School Governance Design

The School governance structure described in Section 1.5 creates multiple opportunities for coordination, cooperation, and collaboration within the School. For example, the Executive Team includes representatives of all School Divisions and the Education Policy Committee represents all degree programs as well as the undergraduate minor.

Finally, communication through biweekly newsletters encourages participation in seminars and events across disciplines.

1.4.d. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- The School of Public Health operates within an Academic Health Center (AHC) recognized for its accomplishments in inter-professional education. The tone set by the AHC encourages creative partnering in research, education, and outreach.
- Roles and accountabilities are clearly defined.
- Interdisciplinary collaboration is strongly encouraged and supported through:
  - A School structure that allows for both focus and depth in key disciplines and collaborations across divisions and University units
  - An active role in initiatives at the University level
  - Interdisciplinary Centers within the AHC
  - Dual-degree programs
  - The engagement of adjunct faculty
  - Service to the region as the only School of Public Health

Weaknesses

- The University's tuition structure and professional credentialing structures make the design and delivery of inter-professional education challenging.

Plans

- Continue to work with the AHC Office of Education as it seeks to break down barriers to inter-professional education.
- Actively participate in University-wide discussions and planning sessions to address tuition barriers and the impact on inter-professional education.

1.5 Governance

The School administration and faculty shall have clearly defined rights and responsibilities concerning program governance and academic policies. Students shall, where appropriate, have participatory roles in the conduct of program evaluation procedures, policy setting, and decision-making.

1.5.a. A list of School standing committees and important ad hoc committees with a statement of charge, composition and current membership.

School governance is well supported by its committee structure, with ad hoc committees and officers appointed by the Dean or elected by faculty, as appropriate. Committee membership includes faculty, students, staff, and alumni, as appropriate. All committee appointments are made with consideration for diversity of membership, including gender, expertise, disciplinary background, and other factors. Committee members are charged with communicating with their Division and degree program colleagues and they are encouraged to bring questions and concerns to committee meetings for discussion and consideration by representatives from across the School.

In addition to School committees, each Division has its own committee structure. For example within the Division of Health Policy and Management (HPM) the following groups meet regularly:

- Division faculty
- Individual degree program faculty
- Administrative staff
- Admissions committee
- Advisory or alumni board
- HPM Education Committee
- Student services staff
- Student groups

Standing committees are described below:

The Academic Appointment, Promotion, and Tenure Committee (APT) reviews and makes recommendations to faculty eligible to vote on appointments, promotions/tenure, and continuation of probationary tenure-track appointments. It also screens faculty development leaves and conducts post-tenure reviews of faculty. The committee reviews all documents regarding faculty continuations, promotions, and tenure decisions and its recommendations are communicated to the faculty and the Dean. Membership consists of two faculty members from each Division, at least one of whom is a full professor elected by the eligible members of the respective Division. Division Heads are not eligible for membership. Members are elected for two-year terms and may be elected a maximum of two consecutive terms. The APT Committee meets at least four times each year.

2013 Appointment, Promotion, and Tenure Committee (APT)	
Saonli Basu, Biostatistics: Year 1	**Lisa Peterson, Environmental Health Sciences: Year 1**
James Begun, Health Policy and Management: Year 1	**Peter Raynor, Environmental Health Sciences: Year 2**
Richard MacLehose, Epidemiology & Community Health: Year 1	**Pamela Schreiner, Epidemiology & Community Health: Year 1**
Donna McAlpine, Health Policy and Management: Year 1	**Stefannie Thompson, staff**
Wei Pan, Biostatistics: Year 2	**Beth Virnig, Senior Associate Dean, Academic Affairs, ex officio**

The Executive Team consults with and advises the Dean regarding policies governing the School, including the mission, vision, and goals, programming priorities, strategic planning, organizational structure, and strategies for funding and resource allocation. Chaired by the Dean, the Executive Team includes Division Heads, the Associate Deans, the Assistant Dean for Education Operations, and the Chief Financial Officer. This team meets at least once each month.

2014 Executive Team	
John Finnegan, Dean	**Bradley Carlin, Division Head, Biostatistics**
Beth Virnig, Senior Associate Dean, Academic Affairs	**Bruce Alexander, Interim Division Head, Environmental Health Sciences**
Kristin Anderson, Associate Dean for Learning Systems & Student Affairs	**Bernard Harlow, Division Head, Epidemiology & Community Health**
Debra Olson, Associate Dean, Global Health	**Ira Moscovice, Division Head, Health Policy and Management**
Mary Ellen Nerney, Assistant Dean, Education Operations	**Joe Weisenburger, Chief Financial Officer**

The Educational Policy Committee (EPC) reviews and makes recommendations on academic and educational policies, existing and proposed new courses, core area educational requirements, and issues regarding course requirements. The EPC is made up of all Program Directors and a faculty member who represents the School's undergraduate minor. Non-voting members, including the President of the Student Senate, a representative for the Program Coordinators, the Associate Dean for Learning Systems, the Assistant Dean for Education Operations, and staff from the Office of Admissions and Student Resources provide consultation. The EPC meets once each month between September and July.

2013–2014 Educational Policy Committee (EPC)	
Kristin Anderson, Associate Dean for Learning Systems & Student Affairs	**Mary Ellen Nerney, Assistant Dean**
Saonli Basu, Biostatistics MS and PhD	**Ruby Nguyen, Public Health minor**
Carol Francis, Academic and Student Services	**Charles Oberg, Maternal and Child Health MPH**
Craig Hedberg, Public Health Practice MPH	**Mark Pereira, Public Health Nutrition MPH**
Katy Korchik, Program Coordinator	**Cavan Reilly, Biostatistics MPH**
Karen Kuntz, Health Services Research, Policy and Administration MS and PHD	**Pamela Schreiner, Epidemiology MPH**
Kamakshi Lakshiminarayan, Clinical Research MS	**Matt Simcik, Environmental Health Sciences MPH**
Harry Lando, Community Health Promotion MPH	**Elizabeth Wattenberg, Chair, Environmental Health Sciences MS and PHD**
DeAnn Lazovich, Epidemiology PHD	**Douglas Wholey, Public Health Informatics MPH**
Donna McAlpine, Public Health Administration and Policy MPH	**Daniel Zismer, Master's Healthcare Administration**
Christopher Kim, Student Senate	

The Faculty Consultative Committee (FCC) is responsible for studying and making recommendations to the Dean regarding matters of concern to the faculty. Membership consists of a faculty member from each Division and faculty at large elected to a three-year term. The FCC meets once each month.

2013–2014 Faculty Consultative Committee (FCC)	
Jean Abraham, Health Policy and Management Representative: Year 2	**George Maldonado, Member at Large: Year 2**
Timothy Church, Member at Large: Year 3	**Charles Oberg, Epidemiology & Community Health Representative: Year 2**
Chap Le, Biostatistics Representative: Year 1	**Peter Raynor, Environmental Health Sciences Representative: Year 3**
Russell Luepker, Member at Large: Year 3	

Global Coordinating Committee, created in September 2013 in recognition of the School's expanding global outreach, acts as the hub for coordinating and communicating global activities, initiatives, and opportunities in research, education, and engagement. It also sponsors and showcases opportunities and activities for global involvement and provides insights and guidance on global health programs, investments, and affiliations. This committee meets each month.

2013–2014 Global Coordinating Committee	
Bruce Alexander, Environmental Health Sciences	**Mary Ellen Nerney, Education Operations**
Kumar Belani, Anesthesiology	**Kola Okuyemi, Family Medicine/ Community Health**
Zobeida Bonilla, Epidemiology	**Debra Olson, Chair**
John Connett, Biostatistics	**Katey Pelican, Veterinary Public Health**
Remi Douah, Caribbean Public Health	**Molly Portz, Global Programs and Strategic Alliances**
Carolyn Garcia, Nursing	**Tricia Todd, Health Careers Center**
Andrea Hickle, Office for Global Health and Social Responsibility	**Beth Virnig, Dean's Office**
Victor Massaglia, Career Services	**Joe Weisenburger, Finance and Administration**
Alan Lifson, Co-chair	**Daniel Zismer, Healthcare Administration Program Master's**
Angie Lillehei, Alumni Association	

The Recognition, Awards, and Honors (RAH) Committee recognizes the contributions of faculty, students, alumni, staff, and public health professionals. It coordinates a program of nominations for School and University awards. Committee membership consists of one faculty member from each division, one student, one civil service/bargaining unit staff, one academic professional and administrative staff, and a representative of the Alumni Society. Three-year appointments are made by the Dean upon recommendation of the respective Division Heads and President/Chair of the Student Senate, Staff Association, Professional and Administrative Senate, and Alumni Society. The RAH Committee meets twice a year to organize the awards, review nominations, and select award recipients.

2013–2014 Recognition, Awards, and Honors (RAH) Committee	
Ezra Goldstein, Health Policy Management: Year 1	**Stefannie Thompson, Staff**
James Hodges, Biostatistics: Year 1	**Melissa Wuori, Central Offices**
Jamie Stang, Epidemiology & Community Health: Year 3	**TBD, Alumni Rep: Year 1—currently vacant position**
Irina Stepanov, Environmental Health Sciences: Year 1	**TBD, Student Senate Representative: Year 1—currently vacant position**
Susan Telke, current Leonard M. Schuman Teaching Award Recipient	**TBD, P&A Senate Representative: Year 1—currently vacant position**

Academic Professional and Administrative (P&A) Senate: The P&A Senate represents School employees in professional positions requiring either academic or administrative expertise. The P&A Senate provides a forum for staff concerns, events and recognition. The P&A Senate meets twice a year.

2013–2014 P & A Senate	
Diane Kampa, Environmental Health Sciences: Year 1	**Donna Spencer, Health Policy Management: Year 1**
Nathan Mitchell, Epidemiology & Community Health: Year 2	**TBD, Central Offices: Year 1—currently vacant position**
Shweta Sharma, Biostatistics: Year 1	

Staff Association: The Staff Association, made up of the School's civil service and bargaining unit employees, addresses issues pertinent to its members. It conducts staff development seminars and develops recommendations or responses to employment issues. Members are elected by eligible staff and serve two-year terms. The Staff Association meets six times between February and May.

2013–14 Staff Association	
Bridget Brennan, Environmental Health Sciences: Year 2	**Kelly Rosemark, Epidemiology & Community Health: Year 1**
Crystal Esparza, Central Offices: Year 1	**Jennifer Schulz, Health Policy Management: Year 1, Chair**
Sharanya Johnson, Epidemiology & Community Health: Year 1	**Chris Western, Central Offices: Year 1**
Siu-Fun Quan, Biostatistics: Year 1	**Melissa Wuori, Central Offices**
Susan Rafferty, Central Offices: Year 1	**Hua Yu, Biostatistics: Year 2**

Student Senate: The Student Senate, which includes a student representative of each degree program, addresses student interests within the School, the AHC, and the University. It elects its own president and selects student representatives to serve on other School committees. The Student Senate meets at least once each month.

2014–15 Student Senate	
Christopher Kim, President	**Brian Ambuel, Vice President, Operations**
Elizabeth (Bette) Dougherty, Vice President, Communications	**Elizabeth (Liz) Fristad , Vice President, Student Advancement**
Elizabeth (Ellie) Madison, Vice President, Finance	

The following individuals have unique responsibilities for the School's compliance regarding safety, privacy and equal opportunity.

School of Public Health Officers	
Jill DeBoer, Safety Officer	**Stefannie Thompson, Privacy Officer**
Susan Rafferty, Director of Human Resources and Equal Opportunity Officer	

1.5.b. Identification of how the following functions are addressed within the School's organizational and committee structure: general program policy development, planning and evaluation, budget and resource allocation, student recruitment, admissions and graduation, faculty recruitment, retention, promotion and tenure, academic standards and policies, research and service expectations and policies.

Responsibility for the creation, review, and approval of policies, is shared by the Dean and several bodies, including the Executive Team, faculty committees, and in some cases staff and students. Ultimately, the Dean is responsible for the School, its policies, and direction.

School of Public Health Leadership and Governance

Dean	
Executive Team	***Standing Committees***
Division Heads (4 positions)	**Appointments, Promotion, and Tenure (8 members)**
Associate Deans (3 positions)	**Educational Policy (EPC) (16 members)**
Chief Financial Officer (1 position)	**Research Committee (6 members)**
Assistant Dean, Education Operations (1 position)	**Faculty Consultative Committee (7 members)**
Communications Manager (1 position)	**Recognition, Awards, and Honors (9 members)**

Policy Development

Policy development is an interactive process involving School leadership and faculty. Following consultation with members of the Executive Team, the Faculty Consultative Committee or the Educational Policy Committee, the Dean offers draft policies or priorities to the faculty for discussion. The Dean and Executive Team weigh any feedback received and may incorporate it into the draft. Draft policy recommendations are reviewed and approved by the Dean.

Planning and Evaluation

Planning and evaluation are generally highly interactive and inclusive, involving all relevant School committees and appropriate members of the community. Faculty retreats provide a forum for brainstorming and planning new initiatives. Small task forces and work groups provide follow up, including developing action plans and reporting back to the faculty as a whole. In addition, the Executive Team provides significant, ongoing direction on strategic planning and programmatic structure.

Budget and Resource Allocation

The budget is developed by the Dean and CFO and is discussed extensively with the Executive Team before being presented to the faculty for review. The School's budgeting process is discussed in Section 1.6.

Student Recruitment, Admission, and Award of Degrees as well as Academic Standards and Policies

Student recruitment, admission to programs, and awarding of degrees are managed by the Office of the Associate Dean for Learning Systems and Student Affairs with help from the Assistant Dean for Education Operations, the Office of Admissions and Student Resources, Program Directors, and Program Coordinators. The School aims to recruit intellectually vibrant candidates who are racially, ethnically, and geographically diverse, by working with student services, academic programs, and alumni. Student recruitment and admissions are discussed in Chapter 4.4.

Academic standards and policies are overseen by the Dean, who looks to the Educational Policy Committee (EPC) for informed recommendations regarding modification of, or additions to, the School's educational standards and policies and other educational issues of School-wide importance, including core area education requirements, proposed courses, degree programs, course requirements, and the status of existing programs and courses.

The EPC is composed of program chairs, a faculty representative for the undergraduate Public Health minor, and non-voting members, including a student representative, a program coordinator, and staff from the Office of Admissions and Student Resources. It meets monthly to discuss and review recruitment, retention, graduation issues, advising, and educational policy and plans.

Faculty Recruitment, Retention, Promotion, and Tenure

Research and service expectations are critical to achieving the School's mission, goals, and objectives. Fulfillment of these expectations is rewarded through the University's system of merit, promotion, and tenure.

Recruitment Criteria and Priorities

The Dean and the Vice President for Health Sciences set the foundation for faculty recruitment in an agreement that spells out parameters for newly tenured/tenure-track hires and is signed jointly. Criteria for contract faculty (non-tenure track) are based on academic priority and agreed to by the Dean and Division Heads.

Division Heads determine faculty recruitment priorities based on discussions with their respective faculties and submit them to the Dean. The Executive Team also advises the Dean on School-wide hiring directions and priorities. The "2014-15 School of Public Health Directions Report" (available in the Electronic Resource File), which reviews strategic investment and priorities for the hire of new faculty, is a good example of how strategy informs faculty recruitment.

Faculty Recruitment

Faculty recruitment is initiated at the Division level. The Division Head, with the approval of the Dean, appoints a search committee. The Division Head and search committee members prepare the job description and recruitment/advertisement plan, which is submitted for approval to the School's Equal Opportunity Officer and the Dean. Tenured and tenure-track positions must be publicized nationally. Once applications are received, the search committee prepares a summary of the applicant pool that highlights protected classes. Approval of the pool is required prior to candidate selection.

The School's Academic Appointment, Promotion, and Tenure Committee (APT) reviews the recommended candidate's credentials for appropriateness to the proposed rank and forwards the documentation to School faculty who are eligible to vote. After the candidate receives a positive vote by faculty and is determined to be in compliance with affirmative action guidelines, the Dean may extend an offer of employment.

Retention

Retention decisions for tenured or tenure-track faculty are initiated at the Division level and include discussions between the Division Head and relevant faculty. Recommendations are forwarded to the Dean. If the Dean agrees with a retention recommendation, appropriate information, including the external letter of offer, is forwarded for action to the Vice President for Health Sciences. Retention of highly productive faculty is facilitated by funds available from a pool established by the Provost for "preventive retention."

Promotion and Tenure

The School bases its promotion and tenure policy on the University's Academic Appointment, Promotion, and Tenure Policy (available in the Electronic Resource File). It includes information on types of appointments, terms of employment, personnel decisions regarding probationary faculty, and appeal procedures. The School's APT Committee is responsible for implementing the policy.

Probationary faculty are reviewed annually—first at the Division level, then by the APT Committee, which formulates a recommendation to School-wide faculty eligible to vote. The choices are to continue the faculty member on probationary status, promote with tenure or terminate the appointment after the next academic year. The Dean forwards the faculty vote, along with his own recommendation regarding continuation, promotion, or tenure to the Vice President for Health Sciences.

Contract faculty have the same opportunity for promotion as tenured and tenure-track faculty, although they are not eligible for tenure. They may compete along with other candidates for available tenured/tenure-track positions.

Academic Standards and Policies Including Curriculum Development

Academic standards and policies are set and enforced by:

- The Associate Dean for Learning Systems and Student Affairs and staff members in the Office of Admissions and Student Resources, who monitor implementation, adherence to, and maintenance of all education policies.
- The Educational Policy Committee, which advises the Dean on the means of satisfying and completing programs, courses and core area requirements and reviews and approves all education-related policies.
- Faculty in the various programs who develop and review all standards and policies, such as course content and curricular requirements used to ensure integrity and alignment with competencies.

Research and Service Expectations and Policies

All faculty members are required to participate directly in research activities that relate to the generation or interpretation of knowledge and its application through service that enhances public well-being. The School's Academic Appointment, Promotion, and Tenure policy (available for review in the Electronic Resource File) describes the expectations for scholarly activity and service.

1.5.c. A copy of the School's bylaws or other policy documents that determine the rights and obligations of administrators, faculty, and students in governance of the School.

Please see the Electronic Resource File.

1.5.d. Identification of School faculty who hold membership on University committees, through which faculty contribute to the activities of the University.

Faculty members, staff, and students serve on several official University committees, including committees of the Academic Health Center. Currently, seven School faculty members serve on the University-wide Faculty Senate, and four faculty, students, or staff members are on other University committees.

In addition, faculty members serve on many University internal advisory boards, interdisciplinary committees, and ad hoc task forces.

University Committee Membership

University of Minnesota Finance and Planning Committee
Russell Luepker, Chair (2007–2015)

University of Minnesota Faculty Senate
Russell Luepker, Vice Chair

University Senate Representatives	
Jean Abraham, Faculty 2013–2016	**John Connett, Faculty 2011–2014**
Dipankar Bandyopadhyay, Faculty 2012–2014	**George Maldonado, Faculty 2013–2014**
Sonya Brady, Faculty 2012–2015	**Traci Toomey, Faculty 2012–2015**
Timothy Church, Faculty 2011–2014	

University Committees—Public Health Representatives

Committee	Name	Type of Service
Council of Academic Professionals and Administrators	**Hardi Wangsabesari**	**Representative, Academic Professional**
Council of Academic Professionals and Administrators	**Joel Dickinson**	**Representative, Alternate**
Strategic Planning Work Group	**Meghan Mason**	**Student representative**

1.5.e. Description of the student roles in governance, including any formal student organizations.

Students are involved in governance at several levels. At the Program or Division level students serve on search committees, training committees, program curriculum committees and they organize student events. In some programs the students have created a highly organized governance structure that includes class officers, committees, and annual community service activities. At the School level students serve on the Education Policy Committee. Students also serve on many School-wide task forces and are actively engage in the Student Senate.

The Student Senate (more information available in the Electronic Resource File), composed of graduate students, is an official organization of the University and the School. It provides representatives to serve on several University and School committees. The Director of Admissions and Student Leadership and Director of Diversity and Inclusion serve as advisors to the Student Senate. The School supports the organization with a budget for events, travel awards, conference attendance, leadership retreats, etc.

The Undergraduate Student Public Health Association is aligned with the Student Senate. This officially sanctioned University organization provides a forum where undergraduates can explore public health issues, undertake community projects, and foster their interests in public health. This group is advised by the Director of Admissions and Student Leadership and the Assistant Program Director in the AHC Health Careers Office.

1.5.f. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- The University and School have a long tradition of shared governance. This tradition allows the School administration, faculty, staff, students, and community partners sufficient flexibility to ensure integrity of its mission with a participatory voice in campus governance.
- School governance is structured for effective, timely decision-making.
- Governance and other processes—student recruitment and admission, faculty recruitment, retention, promotion and tenure, academic standards, etc.—are established, and roles and responsibilities are clearly delineated.
- Faculty members and students are well represented on governance committees at the Program, Division and School levels.

Weaknesses

- The School Constitution, drafted in the 1990s, gives committees oversight for administrative functions that go beyond current University guidelines.

Plans

- Rewrite School Constitution for alignment with University guidelines on administrative oversight. Provost Karen Hanson's staff is developing templates to help schools and colleges with this task.

1.6 Fiscal Resources

The School shall have financial resources adequate to fulfill its stated mission and goals and its instructional, research, and service objectives.

1.6.a. Description of the budgetary and allocation processes, including all sources of funding supportive of the instruction, research, and service activities.

The University's annual "Compact Process" is central to the School's budget and resource allocation process. The process begins in the School with an assessment of priorities. In consultation with the Executive Team and the Chief Financial Officer, the Dean identifies budget priorities and requests additional funds to support new initiatives in a School Compact. The Compact also includes a complete budget analysis, a brief statement of achievements during the past year, goals and objectives for the coming year, performance measures, and related budget requests.

Once the Compact is submitted to the Provost, the Dean, the Vice President for Health Sciences, the Provost and other central administrators discuss the Compact, the level of new funding that may be forthcoming, financial reports, and other deliverables to be provided to the Provost in the coming year. The final "Compact" is an agreement between the Dean and the Provost.

The University operates under a responsibility-centered management system. The School's financial resources are drawn mainly from tuition income that the School earns; indirect cost recovery funds (ICR) generated by sponsored projects; and, a diminishing amount from state funds (including State of Minnesota special appropriations). The School has responded to the declining state and federal funding by vigorously pursuing and securing grant funding and research contracts, and by diversifying and growing its educational offerings.

From the total funds, in fiscal year 2014, the Dean allocates to each Division 57.4 percent of the tuition it generates and 60 percent of the School's ICR funds. State funds are kept at the School level to pay for a portion of central University assessments. State special funds are allocated according to the legislative appropriation. Unallocated funds are retained by the Dean to support targeted initiatives, new faculty hires, and the Dean's Office, the Office of Admissions and Student Resources, the Communications Team, the Office for E-Learning Services, and other central functions, as well as to fund a reserve for fluctuations in sponsored and tuition revenue.

1.6.b. A clearly formulated School budget statement.

Template 1.6.1 School of Public Health Revenue and Expenditures

*Note: All numbers in table below are in thousands**

	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Sources of Funds*							
Tuition & Fees	11,471	12,235	13,905	16,816	17,913	18,773	18,574
State Appropriation	12,531	15,825	13,639	11,383	7,650	7,504	7,580
University Funds	3,956	2,773	2,468	2,324	1,910	2,730	2,663
Grants/ Contracts	96,519	74,286	65,073	81,850	85,073	86,069	92,181
Indirect Cost Recovery	13,596	13,130	13,363	16,642	16,253	14,989	14,032
Endowment	785	454	369	533	465	345	264
Gifts	1,924	3,399	2,919	1,942	1,795	2,001	1,505
Net Transfers	1,316	2,219	(493)	3,602	2,575	2,700	2,301
Total Revenue	**142,098**	**124,322**	**111,242**	**135,093**	**133,634**	**135,113**	**139,101**
Expenditures*							
Faculty Salaries & Benefits	21,100	23,009	23,246	23,299	22,194	22,423	22,930
Staff Salaries & Benefits	31,494	31,312	31,778	35,548	34,778	33,804	31,535
Operations	65,190	41,686	32,740	44,424	50,818	54,355	62,617
Travel	1,496	1,918	1,552	1,937	1,900	1,713	1,907
Student Support	6,379	7,173	7,487	8,031	7,888	8,244	8,556
University Tax	15,660	17,112	17,749	16,053	14,515	13,984	14,264
Total Expenditures	**141,319**	**122,210**	**114,552**	**129,292**	**132,093**	**134,524**	**141,809**

1.6.c. If the School is a collaborative one sponsored by two or more universities, the budget statement must make clear the financial contributions of each sponsoring university to the overall school budget.

Not applicable.

1.6.d. Identification of measurable objectives by which the School assesses the adequacy of its fiscal resources, along with data regarding performance against those measures for each of the last three years.

Objective	Target	2010–2011	2011–2012	2012–2013	2013–2014
Compensation of professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $176,106 2012-13: $183,804 2013-14: $188,189		$184,681	$197,162	$202,555
Compensation of associate professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $120,319 2012-13: $126,404 2013-14: $128,486		$115,778	$121,877	$123,918
Compensation of assistant professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $100,252 2012-13: $106,043 2013-14: $107,810		$92,301	$99,436	$100,282
Institutional expenditures per full-time equivalent student	Increase each year	$157,066	$150,567	$153,706	$151,505
Annual amount of scholarships and other subsidies awarded by the School	Increase each year	$532,726	$833,659	$967,297	$968,190
Annual donor gifts to the School in dollars	Increase each year	$837*	$2,260*	$1,692*	$2,185*
Amount of sponsored grant dollars per full-time faculty member	$400,000/FTE		$678,413	$686,082	$714,581

Objective	Target	2010–2011	2011–2012	2012–2013	2013–2014
Number of annual sponsored-grants/contracts awarded	Increase each year	244	272	237	Available Nov. 2014
Total research expenditures in dollars	Increase each year	$81,850*	$85,073*	$86,069*	$92,181*
Annual tuition revenue in dollars	TBD-Pending implementation of enrollment management system	$16,816*	$17,913*	$18,773*	$18,574*

*Notes: *numbers in table above are in thousands*

[11]Compensation includes salary only, not the value of fringe benefits.

[13]Peer institutions include: University of California Berkeley School of Public Health, University of California Los Angeles Fielding School of Public Health, University of Michigan School of Public Health, University of North Carolina Gillings School of Public Health, and University of Washington School of Public Health

Faculty Compensation Relative to Peer Institution[1] Averages

Tenure/Tenure-Track Faculty	UMN SPH	Peer SPH Schools
Professor		
2011–2012	$ 184,681	$ 176,106
2012–2013	$ 197,162	$ 183,804
2013–2014	$ 202,555	$ 188,189
Associate Professor		
2011–2012	$ 115,778	$ 120,319
2012–2013	$ 121, 877	$ 126,404
2013–2014	$ 123,918	$ 128,486
Assistant Professor		
2011–2012	$ 92,301	$ 100,252
2012–2013	$ 99,436	$ 106,043
2013–2014	$ 100,282	$ 107,810

1.6.e. Assessment of the extent to which this criterion is met and an analysis of the School's strengths and weaknesses, and plans relating to the criterion.

The criterion is met.

Strengths

- The School is in sound financial health.
- The School has been very successful in adjusting to the changing funding climate.
- Faculty salaries exceed those of peer institutions.
- Innovative programs, such as the Executive MHA, have brought new revenue and resources to the School.

Weaknesses

- The changes in external funding and the decline in state funding present a significant challenge. Tuition revenue is playing a more important role in the School's financial picture and at the same time the cost of public health education is beginning to be prohibitive for some students. This tension needs to be resolved through reform at the federal and state levels.
- Although the School has increased the amount of scholarship funds awarded, it doesn't come close to what students need. As a result, some very good applicants are lost to other more affluent institutions.
- Gifts and endowments to support MPH students are inadequate. Only 10 percent of the alumni contribute to the School's annual fund-raising campaign.

Plans

- Under the leadership of the new Director for Alumni and Constituent Relations, the School is embarking on a campaign to improve alumni engagement and financial support.
- The School is exploring new programming such as the four plus one programs to enable students to pursue a public health education while ensuring the financial integrity of the School.

1.7 Faculty and Other Resources

The School shall have personnel and other resources adequate to its stated mission and goals, and its instructional, research, and service objectives.

1.7.a. A concise chart defining the number of primary faculty in each of the five core public health knowledge areas employed by the School for each of the last three years.

Faculty Headcount (Tenured, Tenure-Track, and Contract)

Table 1.7.1

	2011–2012	2012–2013	2013–2014
Biostatistics	25	25	24
Environmental Health Sciences	22	21	20
Epidemiology and Community Health	50	49	53
Health Policy and Management	31	32	31
Other (e.g., Public Health Practice*)	1	1	1
TOTAL	129	128	129

* *Public Health Practice engages the School faculty as a whole across all Divisions as academic and project advisers.*

1.7.b. Faculty, students, and student/faculty ratios, organized by division.

Table 1.7.2 Faculty, Students and Student/Faculty Ratios by Department or Specialty Area, 2013–2014

2013–2014	HC Primary Faculty	FTE Primary Faculty[a]	HC Other Faculty[b]	FTE Other Faculty[c]	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Biostatistics	24	23.25	14	2.23	38	25.48	75	73.2	3.15	2.87
Environmental Health Sciences	20	18.45	69	2.75	89	21.20	124	108.1	5.86	5.10
Epidemiology & Community Health	53	52.25	114	7.68	167	59.93	302	274.7	5.26	4.58
Health Policy & Management	31	31	59	7.44	90	38.44	356	339.9	10.96	8.84
Public Health Practice & Other*	1	1	47	3.06	48	4.06	175	140.1	140.10	34.47
TOTAL	129	125.95	303	23.17	432	149.12	1032	936	7.43	6.28

**Public Health Practice engages faculty across all Divisions as academic and project advisors. Degree-seeking students, not certificate students, are included in student counts.*

[a]All Tenure-Track or Full-Time Contract faculty are considered 100% (1 FTE). FTE is as of May 2014; Summer teaching assignments may have changed.

[b]Head count of secondary faculty includes those who taught for credit during the academic year in question (begins in Fall Term), as well as those who had a current adjunct appoint in the School of Public Health.

[c]Adjunct and Part-Time faculty are counted as 5% time (.05 FTE) per credit taught (determined by Student Credit Hours divided by Total Students), except for advising of independent study courses at the Master's degree level, which is considered 1% time (.01 FTE) per credit taught.

Data Source: University Data Warehouse. Student data are calculated for Fall each year as a snapshot in time. Thus the table may reflect a smaller number of students than total registrants for the calendar year, especially taking into account distance students concentrated in the PHP major. PT FTE is calculated by dividing PT student credits by 6.

Table 1.7.2 Faculty, Students and Student/Faculty Ratios by Department or Specialty Area, 2012–2013

2012–2013	HC Primary Faculty	FTE Primary Faculty[a]	HC Other Faculty[b]	FTE Other Faculty[c]	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Biostatistics	25	24.25	11	1.20	36	25.45	67	64.6	2.66	2.54
Environmental Health Sciences	21	20.2	66	0.95	87	21.15	133	117	5.79	5.53
Epidemiology & Community Health	49	47.8	114	7.42	163	55.22	321	285.9	5.98	5.18
Health Policy & Management	32	32	29	8.24	61	40.24	330	309.8	9.68	7.70
Public Health Practice & Other*	1	1.2	61	3.71	62	4.91	148	97.9	81.58	19.94
TOTAL	128	125.45	281	21.52	409	146.97	999	875.2	6.98	5.96

**Public Health Practice engages faculty across all Divisions as academic and project advisors. Degree-seeking students, not certificate students, are included in student counts.*
[a]All Tenure-Track orFull-Time Contract faculty are considered 100% (1 FTE).
[b]Head count of secondary faculty includes those who taught for credit during the academic year in question (begins in Fall Term), as well as those who had a current adjunct appoint in the School of Public Health.
[c]Adjunct and Part-Time faculty are counted as 5% time (.05 FTE) per credit taught (determined by Student Credit Hours divided by Total Students), except for advising of independent study courses at the Master's degree level, which is considered 1% time (.01 FTE) per credit taught.
Data Source: University Data Warehouse. Student data are calculated for Fall each year as a snapshot in time. Thus the table may reflect a smaller number of students than total registrants for the calendar year, especially taking into account distance students concentrated in the PHP major. PT FTE is calculated by dividing PT student credits by 9.

Table 1.7.2 Faculty, Students and Student/Faculty Ratios by Department or Specialty Area, 2011–2012

2011–2012	HC Primary Faculty	FTE Primary Faculty[a]	HC Other Faculty[b]	FTE Other Faculty[c]	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Biostatistics	25	23.75	11	2.25	36	26.00	56	52.7	2.22	2.03
Environmental Health Sciences	22	20.4	56	0.80	78	21.20	147	123.5	6.05	5.83
Epidemiology & Community Health	50	49.05	112	6.27	162	55.32	345	306.3	6.24	5.54
Health Policy & Management	31	31	24	7.32	55	38.32	341	306.1	9.87	7.99
Public Health Practice & Other*	1	1	77	3.49	78	4.49	137	88.7	88.70	19.77
TOTAL	129	125.2	280	20.13	409	145.33	1026	877.3	7.01	6.04

**Public Health Practice engages faculty across all Divisions as academic and project advisors. Degree-seeking students, not certificate students, are included in student counts.*

[a]*All Tenure-Track or Full-Time Contract faculty are considered 100% (1 FTE).*

[b]*Head count of secondary faculty includes those who taught for credit during the academic year in question (begins in Fall Term), as well as those who had a current adjunct appoint in the School of Public Health.*

[c]*Adjunct and Part-Time faculty are counted as 5% time (.05 FTE) per credit taught (determined by Student Credit Hours divided by Total Students), except for advising of independent study courses at the Master's degree level, which is considered 1% time (.01 FTE) per credit taught.*

Data Source: University Data Warehouse. Student data are calculated for Fall each year as a snapshot in time. Thus the table may reflect a smaller number of students than total registrants for the calendar year, especially taking into account distance students concentrated in the PHP major. PT FTE is calculated by dividing PT student credits by 9.

1.7.c. A concise statement or chart defining the headcount and FTE of non-faculty, non-student administrative staff.

Support Staff for Each Division or Office

	Academic Professional & Admin. Staff	Civil Service Bargaining & Hourly Unit Staff	Temp/ Casual Staff	Hourly Students	Graduate Assistants (RA, TA, Admin. Fellow)
Biostatistics	23	26	4	0	73
Environmental Health Sciences	18	30	20	0	23
Epidemiology & Community Health	66	140	95	27	101
Health Policy & Management	65	33	9	0	94
Dean's Office, OASR, CPHEO, PHP, etc.	36	34	6	0	4
Total Staff Per Category	**208**	**263**	**134**	**27**	**295**

1.7.d. Description of the space available to the School for purposes (offices, class rooms, common space for student use, etc.) by location.

The School's administration is centralized in the Mayo Memorial Building on the University's Minneapolis East Bank Campus. Its Divisions and programs are, however, dispersed across nine locations on and off campus in University-owned and rental property that totals 207,000 square feet.

The table below details the space arrangements for the School. Included are 13,243 square feet of space for students, of which 7,400 square feet are devoted to a student commons (this space is named the SPHere) with a computer lab and other amenities. Also included are four classrooms used almost exclusively by the School as student learning and study spaces and space for computing resources. In addition, the School has access to all of the 4,400 square feet of classroom space available within the Academic Health Center, and students make frequent use of the 1,226 square feet of space in the CHIP (Center for Interdisciplinary Health Professions) student lounge area.

Space by Program and Purpose (in square feet)

Unit	Instruction	Research	Academic Support	Clinical Research	Other	Total
Biostatistics	1,476	23,156	4,879	0	1,109	30,620
Environmental Health Sciences	364	23,403	4,667	0	715	29,149
Epidemiology & Community Health	544	41,582	7,490	19,482	5,672	74,768
Health Policy & Management	1,141	14,121	9,190	0	2,501	26,952
Dean's Office/Admin & Programs	3,996	0	17,502	0	1,129	22,627
TOTALS	**7,520**	**102,261**	**43,728**	**19,482**	**11,125**	**184,116**

Space by Building and Purpose (in square feet)

Building Name	Instruction	Research	Academic Support	Clinical Research	Other	Total
Affinity Plus Federal Credit Union	0	0	1,641	0	0	1,641
Boynton Health Service	126	3,600	0	0	0	3726
Mayo Building & Additions	3,399	21,416	26,937	0	2,906	54,657
McNamara Alumni Center (Leased)	3,185	3,869	0	0	715	7,769
Minnesota Tech Center	0	3,475	1,935	19,482	5,475	30,366
Malcolm Moos Health Sciences Tower	254	952	596	0	410	2,212
Phillips-Wangensteen Building	208	1672	1,039	0	0	2,919
University Office Plaza	59	26,655	4,782	0	1,620	33,116

Building Name	Instruction	Research	Academic Support	Clinical Research	Other	Total
West Bank Office Building	290	40,622	6,798	0	0	47,710
TOTALS	**7,520**	**102,261**	**43,728**	**19,482**	**11,125**	**184,116**

1.7.e. Laboratory space (kind, quality, and special features or special equipment).

The School has 10,908 square feet of space dedicated to teaching and research laboratories. That space is supplemented by support areas located adjacent to the labs. In addition, a partnership with the Minnesota Department of Health, Minnesota Department of Agriculture and the Academic Health Center provides BSL-3 (enhanced) laboratory space for researchers, including School faculty.

Environmental Health Sciences Labs

The Environmental Health Sciences (EHS) Environmental Chemistry Lab, with more than 600 square feet of space, is located in the Mayo Building. It is equipped with extraction and processing equipment for trace analysis of environmental samples. The space includes three GC/MS, one LC/MS, a GC/ECD and a scintillation counter.

The EHS Industrial Hygiene Lab occupies 1,500 square feet in the Boynton Health Services Building. It is equipped with instrumentation for measurement of gases, vapors, and particulate matter. The laboratory has 10 Dust-Trak nephelometers, 15 gravimetric PM2.5 indoor and personal samplers, Condensation Particle Counters, portable-sized distribution measuring devices, microbalances, and a gas chromatograph with a flame ionization detector. Major test apparatuses include a filter tester, a wind tunnel, a calm air chamber, three laboratory hoods, and two biosafety cabinets. It also has equipment for calibration of the sampling instrumentation (such as the Gilian calibrators) and a wide range of pumps for use with the various sampling devices.

The Environmental Health Sciences Toxicology Lab has 1,200 square feet and is located on the 11th floor of the Mayo Building. It is equipped with: tissue culture facilities; a high-speed centrifuge; rotors; microfuges; speed vac; environmental shaker; visible and UV spectrophotometer; fluorimeter; luminometer polymerase chain reaction (PCR); liquid scintillation counter; dark room; electrophoresis and electroblotting equipment for protein and nucleic acid purification; a Bio-Rad Econo System; and a chromatography cabinet for doing work at four degrees Centigrade.

Epidemiology & Community Health Labs

The Epidemiology Clinical Research Center (ECRC) has 500 square feet of lab space designated for clinical research studies. The lab functions primarily as a phlebotomy site and processing lab where study participants' blood and urine are collected and prepared for shipping to outside accredited clinical diagnostic labs, contracted clinical trial labs, or research labs. The Lab has the following equipment: refrigerated centrifuges; refrigerators; ultra-low freezers; and pre-packaged test kits.

1.7.f. Computer facilities and resources for students, faculty, administration, and staff.

An extensive array of state-of-the-art facilities and equipment is available through the University and School. The University's Office of Information Technology manages the centrally provided computer, network, phone, and other technology systems. It also provides a comprehensive range of support to students, faculty, staff, and departments through its service units:

- Academic & Distributed Computing Services (ADCS) provides leadership for the use of information technology in academic areas (teaching and learning, research, discovery, and some aspects of outreach and service) and supports students, faculty, and staff in anticipating information technology needs and responding to them with appropriate infrastructure, applications, and services. Services include technology training short courses, technology helplines, and a rent-a-guru program.
- Academic Technology Support Services promotes the innovative use of learning technologies and supports faculty in developing multimedia learning projects.

The School provides students, faculty, and staff with extensive computer facilities and support staff. Because the School is geographically dispersed, the Office of the Dean and each Division separately maintain regularly upgraded computing systems. Students are provided with computing access through a main student computer room and student computing labs in each Division and technical support within resource constraints. The School and AHC provide several fully wired classrooms of instructional computing resources. Students have wired and wireless access to computing resources and software through the University.

In 2012, using alumni-donated funds, the School transformed a traditional classroom into the Mercy Learning Lab, a redesigned and re-equipped facility that includes larger tables to promote discussion and teamwork as well as a high-tech hub that controls, among other things, a wireless large-screen HD projector and an ITV for global videoconferencing.

The School's Office of E-Learning Services provides instructional design and course management support; maintenance and hosting; live video webcasting; video storage; video and audio editing; workshops; and database management.

At times, the logistical requirements of an event may require additional service. On these occasions, the School turns to the extensive array of state-of-the-art facilities and equipment available through the University. Classrooms and other state-of-the-art facilities are used to host on-campus functions. Each of these venues is supported by a full-service technology support team.

School Computing Resources

Unit	Desktops & Laptops	Servers	Student Computer Room	Other & Notes
Biostatistics	50	10 Sun workstation servers 10 Linux servers	2 rooms: 12 computer stations	Over 100 x-terminals
Environmental Health Sciences	80	Windows NT Windows 2003 Linux	2 computers	
Epidemiology & Community Health	300	10 servers	4 computers with technical software	
Health Policy & Management	215	17 servers	4 computers	45 computer interviewer workstations
Dean's Office/Admin & Programs	47	Served by AHC – IT services CPHEO: 6 servers	9 computers	

1.7.g. Library/information resources.

Faculty, staff, and students have access to extensive library and information resources. (for additional information please see the Electronic Resource File)

The University of Minnesota Libraries, ranked as the 16th largest research library in North America, comprise more than 6 million print volumes, 37,000 current serial subscriptions and significant online resources, including more than 22,000 electronic journals, nearly 200,000 electronic books (including government documents) and many locally created digital image, sound and text files. The Libraries' online network provides computerized access to its collections and serves as a gateway to local, national, and global information sources. The Libraries employ 312 staff, 100 of whom are librarians.

The Health Sciences Libraries (HSL) consists of the Bio-Medical Library, the Wangensteen Historical Library of Biology and Medicine, and the Veterinary Medical Library. The Bio-Medical collection contains over 490,000 volumes, 1,600 current print journal subscriptions, 1,500 electronic journal subscriptions, 2,300 curriculum-related and self-instructional media, and computer programs, as well as a variety of full-text and bibliographic electronic databases. An assigned librarian acts as a "liaison" between HSL and the School to deliver specialized instruction to faculty, staff, and students, perform literature reviews, and collect materials in public health for the library's collection.

The HSL's public health collection is particularly strong in epidemiology, bioinformatics, and public health administration. The Veterinary Medical Library holds a strong collection in emerging infections, animal disease vectors, and pandemics.

1.7.h. A concise statement of any other resources not mentioned above, if applicable.

The School maintains relationships with a number of external groups and entities on the local, national, and global levels. Collaboration with these entities includes research, student placements, and expert consultation, as well as continuing and professional education and community service.

In these activities, the School leads in partnership with departments of health in the Upper Midwest, especially the Minnesota Department of Health, local and federal health agencies, and non-governmental organizations. For example, each year, students work in paid and unpaid internships at the Minnesota Department of Health (MDH), most notably as members of "Team D" participating in surveillance of infectious diarrheal disease in Minnesota. In addition, students work with the MDH in the surveillance of infectious, communicable, chronic diseases, and conditions such as autism, cancer, heart disease, and Lyme disease.

The School also has entered into a memorandum of understanding for collaborative programming on global initiatives with the Manipal Academy of Higher Education (India), One World and St. Johns Academy (Bangalore, India), Tata Institute of Social Sciences (Mumbai, India), Sri Devrag Urs University (Kolar, India), King Fahad Medical City in Saudi Arabia, Chiang Mai University (Chiang Mai, Thailand), and University of the West Indies (Kingston, Jamaica). In addition, the School will offer two MPH degree programs to students living in the Phoenix area. This groundbreaking arrangement is being hosted on the Arizona State University campus. These new partnerships are expected to broaden the scope of resources and opportunities available to the School.

1.7.i. Identification of measurable objectives by which the School assesses the adequacy of its resources, along with data regarding performance against those measures for each of the last three years.

Resource Indicators

Objective	Target	2010–2011	2011–2012	2012–2013	2013–2014
Ratio of degree-seeking students to core faculty (FTE)	10 to 1		7.0 to 1	6.8 to 1	7.4 to 1
Compensation of professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $176,106 2012-13: $183,804 2013-14: $188,189		$184,681	$197,162	$202,555

Objective	Target	2010–2011	2011–2012	2012–2013	2013–2014
Compensation of associate professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $120,319 2012-13: $126,404 2013-14: $128,486		$115,778	$121,877	$123,918
Compensation of assistant professors compared with averages at other peer schools of public health[11,13]	Competitive Peer Institution average 2011-12: $100,252 2012-13: $106,043 2013-14: $107,810		$92,301	$99,436	$100,282
Institutional expenditures per full-time equivalent student	Increase each year	$157,066	$150,567	$153,706	$151,505
Student satisfaction with the academic experience as measured in yearly survey	75% very satisfied		55%	58%	52%
Student satisfaction with coordinators as reflected in the yearly survey	65% very satisfied		64%	63%	50%

[11]*Compensation includes salary only, not the value of fringe benefits.*

[13]*Peer institutions include: University of California Berkeley School of Public Health, University of California Los Angeles Fielding School of Public Health, University of Michigan School of Public Health, University of North Carolina Gillings School of Public Health, and University of Washington School of Public Health*

1.7.j. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

This criterion is met.

Strengths

- The School has the faculty and resources adequate to fulfill its mission, goals and objectives and achieve its outcome indicators in education, research, and service.
- The School employs a well-qualified an diverse full-time professional, administrative, and civil service/bargaining unit support staff.
- The School has adequate laboratory space, an extensive array of computer facilities and equipment, and outstanding library and information resources.
- The School enjoys highly productive local, state, national, and global educational and research partnerships.

Weaknesses

- The School is dispersed among nine locations on the University campus.

Plans

- The School will continue to make a strong case to the University for facilities large enough to house its operations under a single roof.

1.8 Diversity

The School shall demonstrate a commitment to diversity and shall evidence an ongoing practice of cultural competence in learning, research, and service practices.

1.8.a. A written plan demonstrating systematic incorporation of diversity within the School.

The School is committed to continually developing cultural competency, ensuring diversity at all levels, and promoting diversity and inclusion in a number of ways. Further, it is dedicated to achieving a student body, workforce (faculty and staff), curriculum, and research that reflect the communities we serve.

Underscoring its commitment to these ideals, the School hired a Coordinator of Diversity Initiatives and Programs in October 2011. A member of the Office of Admissions and Student Resources (OASR), the Coordinator served as a point of contact, along with the OASR in general, for diversity issues or concerns.

In spring 2013 the Coordinator of Diversity Initiatives and Programs was promoted to a new position as Director of Diversity and Inclusion to recognize her contributions and expand her responsibilities. The Director works with faculty, staff, and students to achieve a climate where all are welcomed and valued.

1.8.a.i The School's underrepresented populations include students who identify as:

A. African American
B. Native American
C. Hispanic
D. Pacific Islander
E. Male

These groups have been identified as underrepresented based on data from student applications to the School. Groups A-D are considered underrepresented because of historical barriers to attending the University and because the percentage of matriculates falls below the percentage of the population represented within the State. Because 74 percent of School students identify as female, males are considered an underrepresented group as well.

1.8.a.ii The School's goals for achieving diversity and cultural competence are taken directly from the University's Office of Equity and Diversity (OED). Reflecting the values of the University, the School has identified seven diversity priorities:

- Improve the campus climate for diverse students, faculty, staff, and visitors
- Develop and support pre-graduate school programs for promising undergraduates and community outreach efforts to attract students to them
- Engage internal and external communities in reimagining programs that support the recruitment, retention, and success of diverse faculty, staff, and students

- Engage internal and external communities in reimagining curriculum, pedagogy, and research to insure inclusivity and accessibility throughout the academic enterprise
- Support institutional assessment, accountability, and collaboration through the use of innovative metrics, technologies, and communication tools
- Engage School alumni, donors, and other community partners and stakeholders in achieving equity and diversity goals

1.8.a.iii. The School's student guidebooks includes policies that support an environment free of harassment and discrimination. The School's policies are based on those of the University's Office of Equal Opportunity and Affirmative Action (EOAA) and include the following categories:

- Age
- Bias Incidents
- Disability
- Gender
- Marital Status
- National Origin
- Public Assistance Status
- Race and Color
- Religion and Creed
- Retaliation
- Sexual Harassment
- Sexual Orientation and Gender Identity
- Veteran Status

1.8.a.iv. Policies that support a climate for working and learning in a diverse setting are outlined on the Office of Equal Opportunity and Affirmative Action Policies and Directives website (for additional information please see the Electronic Resource File).

1.8.a.v. The School has an ongoing commitment to develop, review, and maintain curricula and provide opportunities that build competency in diversity and cultural consideration. Examples that illustrate this commitment include:

Global Health Concentration: The Global Health Interdisciplinary Concentration (GHIC) provides MPH students with an understanding of how to define the constitution, cause, and consequences of health problems worldwide. The program offers a unique opportunity to explore the relationships between health, environment, politics, culture, and economic pressures in developed and developing nations.

Health Disparities Minor: The Health Disparities Interdisciplinary minor addresses the unequal burden of health risks, morbidity, and mortality experienced by minority cultural and social groups in the U.S., as well as unequal quality of and access to healthcare.

Health Disparities Work Group: The Health Disparities Work Group works to create greater visibility for health disparities research at the School and nationally. It also develops collaborations with faculty and community partners and helps ensure students are well prepared to work in a diverse society. Please see the Electronic Resource file for additional information

Field Experience: All MPH students must complete a field experience as part of their degree programs. The field experience provides an opportunity to use the theories and concepts students learn in the classroom in real-world settings where populations are diverse in cultural, ethnic, age, and economic background.

Student Senate: The Student Senate, made up of public health students from various School programs, has a Diversity Committee whose purpose is to promote diversity and inclusion within the School.

Director for Diversity and Inclusion. Hired explicitly to promote diversity and inclusion, the School's Director for Diversity and Inclusion works closely with students, executive leadership, faculty, staff, and University partners to promote a welcoming climate and to recruit, matriculate, and graduate students from underrepresented groups. The Director also serves as a resource for cultural competence, plans programs that address issues of diversity, and is the point of contact for any diversity related issues within the School.

1.8.a.vi. and 1.8.a.vii. In addition to these programs and initiatives, the School applies policies and procedures adopted by the University to ensure access, equality, and inclusion among a diverse population of students, faculty, and staff. The University's Office of Human Resources provides a 'manager's toolkit' that outlines guidelines and procedures for recruiting and hiring. In addition, the Office for Equity and Diversity has developed a guide for recruiting underrepresented faculty.

1.8.a.viii. The global, population-based nature of public health demands that the School seek and train students of all racial, ethnic, economic, and educational backgrounds. The School recognizes that such diversity enriches the learning experience for all students and helps build excellence in public health leadership. Currently, more than 18 percent of the School's students are students of color, while about 13 percent are international students. The majority of students are women and the average age of students is 29. The following outlines the School's plan to recruit, admit, retain, and graduate a diverse student body:

Recruitment: The Office and Admission and Student Resources (OASR) has a comprehensive plan to recruit a diverse student body. The plan includes:

- Actively participating in SOPHAS Virtual Fairs, which allow potential students to interact with School representatives in a live virtual setting—and the School to communicate with and make personal contacts with students around the globe.
- Hosting two on-campus Preview Days during the fall semester, during which prospective students may travel to campus, meet with the program coordinators, and hear from current students, alumni, and OASR staff. Also hosting a virtual Preview Day by which prospective students visit a website to learn more and log into chat rooms to get specific questions answered.
- Hosting an hour-long introduction to the School every other week during the fall and monthly during the spring and summer terms These sessions are held on campus and are open to the public.
- Sponsoring the School's "Why Minnesota?" event each spring for admitted students to provide them an opportunity to meet fellow students, faculty, and staff and learn about opportunities and services available. A similar virtual event is held online a week later.

Outreach at the University's Twin Cities campus. Research shows that half of the School's students of color attended the University's Twin Cities campus as undergraduates. Therefore, the School has developed relationships with a variety of

colleges and offices across campus in order to reach out to prospective students. They include: the Office for Diversity in Graduate Education; the Multicultural Center for Academic Excellence; the Martin Luther King, Jr., Center; the Women's Center; the Office of Disability Services; the Office for Equity and Diversity; and the GLBTQA Center. The School also reaches out to the following academic departments: the College of Liberal Arts (houses the Public Health minor), the College of Biological Sciences, the College of Food, Agriculture and Natural Resource Sciences, and the Health Careers Center.

Outreach throughout Minnesota. The School attends graduate fairs at colleges and universities across the State and presents to prospective students in presentations in public health classes at colleges across the state.

Outreach nationally. The School also targets graduate fairs in locations likely to attract diverse attendees. It has visited Spellman College in Atlanta, Tulane University in New Orleans, Idealist Fairs targeting students interested in public health, public affairs and social work in Chicago, Minneapolis, Los Angeles, and San Francisco and the Gates Millennium Scholars West Coast Conference.

Student Ambassadors. Coordinated by the OASR, Student Ambassadors offer tours of campus to prospective students. The ambassadors are also available throughout the year to answer prospective student's questions via phone, email, or on Facebook. They participate in preview days, 'Why MN?' admitted student event, information sessions, orientation, and at recruitment events.

Admissions. The School works closely with its admissions committees to assist in admitting a diverse student body. Activities include: connecting prospective students with program coordinators, faculty, and students; meeting with prospective students to discuss their academic records and how to present themselves as candidates for admission, alerting admissions committees to outstanding potential applicants like Gates Millennium Scholars and McNair Scholars, and creating a pool of scholarship funds specifically for underrepresented students.

Student application, admission, and matriculation rates are evaluated on an annual basis. Students are surveyed annually about the climate at the School. This information is used to formulate plans for the following academic year and is shared by admissions staff at admissions committee meetings to evaluate our progress and to address concerns.

The School's newly established partnership with Arizona State University has the potential to greatly improve the racial diversity of the student population since ASU has one of the largest and most diverse student populations in the country.

Retention and Graduation. Once matriculated, students are encouraged to attend orientation where they are informed about School resources available to them. The Director of Diversity and Inclusion makes a special effort to engage students from underrepresented populations in the events, programming, and leadership opportunities available in the School and the University. In addition, the Director of Diversity and Inclusion serving as a resource to students, program directors, and coordinators, locates services to help students adjust to their new environment and academic and social challenges.

1.8.a.ix. Regular evaluation of the effectiveness of the above listed measures.

The effectiveness of the measures listed above is evaluated annually. The Director for Diversity and Inclusion presents the results to the Executive Team and the School's Dean.

1.8.b. Evidence that shows that the plans and policies are being implemented.

Each year the School devotes resources and time to collecting and reviewing data regarding diversity that informs its decisions and processes. For example, at the annual launch of each of the 14 admissions committee meetings, staff from the Office of Admissions and Student Resources and admissions committee members discuss the previous year's data with an emphasis on recruiting students from diverse communities. The data provides evidence that our efforts are beginning to have an impact.

In addition, the Yearly Student Survey provides quantitative and qualitative feedback on how students feel about the School's climate for diversity and inclusion. These data are presented to each Program Director and Coordinator to be shared at individual program faculty meetings to inform our planning and help set priorities.

1.8.c. A description of how the diversity plans were developed, including a description of the constituent groups involved.

The Director of Diversity and Inclusion consulted with University experts, attended meetings, and talked with faculty, staff, and students to gather ideas to inform the diversity plan. Small group meetings were held with two Associate Vice Presidents from the Office for Equity and Diversity who provided guidance in mapping key goals. The Director also conducted three focus groups with students within the School—conversations that provided critical information to guide plan development. The Director, the Director of Recruitment and Admissions, the Assistant Dean for Education Operations, and the Dean met to review a draft proposal. Once the document was revised, it was presented to the School's Executive Team, which received the plan with enthusiastic support. See the Electronic Resource File for recent diversity plans and reports.

1.8.d. Description of how the plan is monitored, how the plan is used by the School, and how often the plan is reviewed.

The Director of Diversity and Inclusion meets at least once a year with the Executive Team to review and report on the School's efforts regarding diversity and access. The plan is used to guide recruitment and admission strategies so it is shared with Program Directors, admissions committee members and coordinators, the Office of Admissions and Student Resources, the Student Ambassadors, and the Student Senate.

The plan is reviewed and updated each summer to include new initiatives and goals.

1.8.e. Identification of measurable objectives by which the School may evaluate its success in achieving a diverse complement of faculty, staff, and students along with data regarding the performance of the program against those measures for each of the last three years.

Table 1.8.1 Diversity Outcomes

Indicators	Method of collection/ data source	Target[4]	2011–2012	2012–2013	2013–2014
Percentage of students from underrepresented groups-MPH	Active Student Report	25%[4]	15.8%	17%	20.1%
Percentage of students from underrepresented groups-MS	Active Student Report	25%[4]	22.4%	9.1%	13.5%
Percentage of students from underrepresented groups-MHA	Active Student Report	25%[4]	16.4%	9.7%	17.4%
Percentage of students from underrepresented groups-PhD	Active Student Report	25%[4]	15%	18.5%	16.1%
Percentage male matriculates pursuing an MPH	Active Student Report	30%[4]	22%	18.9%	23.8%
Percentage of staff from under-represented groups	Data Warehouse	30%	13%	14%	16%
Percentage of faculty from underrepresented groups	Data Warehouse	23%	16%	16%	15%

[4] *In our diversity plan, targets are for the 2017-18 academic year. Targets for students are based on the population of the State of Minnesota, the target for staff is based on the population of the seven-county Twin Cities Metropolitan Area, and the target for faculty is based on all of the faculty at the University of Minnesota.*

1.8.f. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met with commentary.

Strengths

- The School's leadership has demonstrated a commitment to increasing diversity through the allocation of financial resources, time, and attention.
- The School has hired a talented Director for Diversity and Inclusion who is establishing herself as a leader within the University and School.
- Student diversity is increasing.

Weaknesses

- We are still far from meeting our targets.
- Our geographic location and limited financial resources are challenges in recruiting diverse students and faculty.

Plans

- Under the leadership of the Director of Diversity and Inclusion we have made significant progress. Our plan for 2014-2015 is to:

  a. Increase student, staff, and faculty awareness of our commitment to diversity and inclusion. Initiatives include:

  - Introducing a new session during orientation for international and out-of-state students. Titled "Minnesota 101: Coats, Culture, and Classes," this interactive session features School students who will share tips for success.
  - Bringing back a successful orientation session, "Framing Health Disparities"
  - Making diversity and inclusion the focused topic for the "Coffee with the Dean" series

  b. Create a Diversity and Equity Action Leadership Team (D.E.A.L.T.), which will include students, staff, and faculty. D.E.A.L.T. will:

  - Serve as an advisory "Think Tank"
  - Create and execute a plan to cultivate diverse applicant pools for faculty and staff positions
  - Create initiatives that will promote an inclusion climate within the School

  c. Review curriculum to look for opportunities to add diversity and cultural competence dimensions (this project has been initiated through the School's Health Disparities Work Group)

  d. Continue outreach to underrepresented students through strategic recruitment efforts. Initiatives include:

  - Partnering with colleges and universities in Minnesota to host a 'personalized' Preview Day. (Preview Day is held twice in the fall and gives perspective students an opportunity to learn more about the School and meet with program coordinators and current students)

- Travel to Chicago, Atlanta, Washington D.C., and Los Angeles for graduate fairs.
- Outreach to underrepresented student groups and professional organizations.
- Revamping the School's Diversity and Inclusion webpage

2.0 Instructional Programs

The School's educational programs reflect a strong commitment to the scholarship of discovery, inter-professional and lifelong learning, and preparing future public health professionals for service and leadership. The programs, encompassing the five areas of knowledge basic to public health and more, include:

- Master of Public Health (MPH) professional degree in 16 degree programs, a Master of Healthcare Administration (MHA) with options for full-time or executive study, and 11 certificate programs. In total, these programs enroll 75 percent of the School's nearly 1,200 students; and
- Master of Science or doctoral training in five academic degree programs, enrolling the remaining 25 percent of students.

In addition, the School offers an undergraduate public health minor in partnership with the College of Liberal Arts; 212 undergraduate students are currently pursuing the minor. First available in 2012, the minor has provided a new avenue for extending public health education to a wider cohort of students and has served as a platform for increased educational contribution. To further connect with, and meet the needs of University undergraduates interested in public health education, the School is developing a four-plus-one joint program that would lead to the master's degree.

This outreach to undergraduates is part of the School's longstanding objective to broaden its outreach to diverse student groups and to offer coursework and degree programs that meet the evolving needs of public health professionals. In 2012-2013 the School made significant strides toward this objective:

- It received University Regents' approval to begin several major educational initiatives, including Master of Public Health (MPH) partnerships with Arizona State University in Phoenix and Chiang Mai University in Thailand.
- The Regents also approved a certificate and MPH degree program in Public Health Informatics, a field of increasing importance as public health—along with other health disciplines—apply insights from "big data" capture and analysis.

The School's expanding menu of dual-degree programs provides another avenue for extending public health perspectives and principles to students across a wide range of disciplines. Public health dual-degree programs are now available to University of Minnesota graduate students in dentistry, law, medicine, pharmacy, public policy, social work, urban and regional planning, and veterinary medicine.

Through its growing offering of online and executive degree programs, the School has extended quality public health instruction to working adult professionals across the globe. And, the School's Center for Public Health Education and Outreach (CPHEO) provides high-quality continuing education courses for working professionals. CPHEO brings together internal and external partners to bridge the academic and public health practice communities.

2.1 Degree Offerings

The School shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) in at least five areas of knowledge basic to public health. It may offer other degrees, professional and academic, and other areas of specialization, if consistent with its mission and resources.

2.1.a. An instructional matrix presenting all of the School's degree programs and areas of specialization.

Template 2.1.1. Instructional Matrix—Degrees & Specializations

KEY:
Hybrid: Utilizes a blend of on campus and e-learning technologies for classes.
On-campus: The vast majority of classes are taught on campus using the traditional classroom format.
Online: Delivered through online technologies. Students are never required to be on campus.

Specialization/Concentration/Focus Area	Format	Academic	Professional
Masters Degrees			
Biostatistics	On-campus	MS	MPH
Clinical Research	On-campus	MS	
Community Health Promotion	On-campus		MPH
Environmental Health	On-campus	MS	MPH
Environmental Health - Industrial Hygiene	On-campus	MS	MPH
Epidemiology	On-campus		MPH
Health Services Research, Policy and Administration	On-campus	MS	
Healthcare Administration - Executive program	Hybrid		MHA
Healthcare Administration - Full-time Program	On-campus		MHA
Healthcare Administration - Saudi Arabia program	Hybrid		MHA
Maternal and Child Health	On-campus		MPH
Maternal and Child Health - Online program	Online		MPH
Public Health Administration and Policy	On-campus		MPH
Public Health Administration and Policy - Arizona State University Hosted program	Hybrid		MPH

Specialization/Concentration/Focus Area	Format	Academic	Professional
Public Health Administration and Policy - Executive PHAP program	Hybrid		MPH
Public Health Informatics	On-campus		MPH
Public Health Nutrition	On-campus		MPH
Public Health Nutrition - Arizona State University Hosted program	Hybrid		MPH
Public Health Nutrition - Coordinated Master's program	On-campus		MPH
Public Health Practice - Executive program	Hybrid		MPH
Public Health Practice - Global One Health-Chiang Mai University (CMU) (Thailand)	Hybrid		MPH
Doctoral Degrees			
Biostatistics	On-campus	PhD	
Environmental Health	On-campus	PhD	
Environmental Health - Industrial Hygiene	On-campus	PhD	
Epidemiology	On-campus	PhD	
Health Services Research, Policy and Administration	On-campus	PhD	
Joint Degrees			
Business Administration/Healthcare Administration - Full-time program	On-campus		MBA/MHA
Dentistry/Public Health Practice - Public Health Dentistry	Hybrid		DDS/MPH
Law/Community Health Promotion	On-campus		JD/MPH
Law/Environmental Health	On-campus	JD/MS, JD/PhD	JD/MPH
Law/Epidemiology	On-campus		JD/MPH
Law/Health Services Research, Policy and Administration	On-campus	JD/MS, JD/PhD	
Law/Healthcare Administration - Full-time program	On-campus		JD/MHA
Law/Maternal and Child Health	On-campus		JD/MPH

Specialization/Concentration/Focus Area	Format	Academic	Professional
Law/Public Health Administration and Policy	On-campus		JD/MPH
Law/Public Health Practice - Public Health Law	Hybrid		JD/MPH
Medicine/Epidemiology	On-campus	MD/PhD	
Medicine/Health Services Research, Policy and Administration	On-campus	MD/PhD	
Medicine/Public Health Practice - Public Health Medicine	Hybrid		MD/MPH
Pharmacy/Public Health Practice - Public Health Pharmacy	Hybrid		PharmD/MPH
Public Policy/Public Health Practice - Public Health Public Policy	Hybrid		MPP/MPH
Social Work/Community Health Promotion	On-campus		MSW/MPH
Social Work/Maternal and Child Health	On-campus		MSW/MPH
Urban and Regional Planning/Public Health Practice - Public Health Urban and Regional Planning	Hybrid		MURP/MPH
Veterinary Medicine/Public Health Practice - Veterinary Public Health	Hybrid		VPH/MPH

All the above listed degrees and specializations have been approved by the Regents of the University of Minnesota.

2.1.b. The School bulletin which describes all degree programs identified in the above matrix, including a list of required courses and the course descriptions.

In accordance with University guidance, the School no longer produces a paper copy of a bulletin but instead relies on electronic publication. A comprehensive University maintained database feeds into an electronic catalog that contains all the requirements to complete each degree program and ensures that students have access to degree and course information that is updated each academic year.

In addition, the School's website provides detailed information on all degree options. Each degree program has a web page that describes the curriculum. A copy of each program curriculum is included in the Electronic Resource File and a printed copy will be available to the site visit team.

2.1.c. Assessment of the extent to which this criterion is met.

The criterion is met.

Strengths

- The School offers an MPH in all five areas of knowledge basic to public health, including biostatistics, epidemiology, environmental health, administration, and the social and behavioral sciences.
- The School continues to address the strong student interest in public health by developing innovative undergraduate and graduate options.
- The School's website provides searchable information on all degree and certificate programs and their requirements.

Weaknesses

- None

Plans

- The School is exploring the feasibility of more options for undergraduate public health education through 4/1 joint degree programs.

2.2. Program Length

An MPH degree program must be at least 42 semester credits.

2.2.a. Definition of a credit with regard to classroom/contact hours.

To carry one semester credit, a course must meet for 50 minutes per week for 15 weeks, per University of Minnesota policy.

2.2.b. Information about the minimum degree requirements for all professional public health master's degree curricula shown in the matrix.

All MPH degrees require students to complete at least 42 semester credits.

MPH Programs	Credits Required to Graduate
Biostatistics	42
Community Health Promotion	48
Environmental Health	42
Environmental Health – Industrial Hygiene	51
Epidemiology	42
Maternal and Child Health	48
Maternal and Child Health – Online program	42
Public Health Administration and Policy (on-campus and ASU hosted)	44
Public Health Administration and Policy-Executive program	42
Public Health Informatics	48
Public Health Nutrition – Coordinated Master's program	64
Public Health Nutrition (on-campus and ASU hosted)	44
Public Health Practice – Executive program	42
Public Health Practice – Global One Health - Chiang Mai (Thailand) program	42

2.2.c. Information about the number of professional public health master's degrees awarded for fewer than 42 semester credits over each of the last three years.

	MPH Degree Program	Reason for Exception
2011–2012	1	Due to change in PUBH 6752 credits*
2012–2013	0	NA
2013–2014	0	NA

**PUBH 6752, Public Health Management (3 credits) was part of the MPH core. In 2009 the course was dropped. A student who had been studying under the old requirements came back to complete her degree and was one credit short due to the change in requirements.*

2.2.d. Assessment of the extent to which this criterion is met.

The criterion is met.

Strengths

- The School offers programs that support its mission and lead to the Master of Public Health (MPH) degree in all five areas of knowledge. All professional public health master's degrees, including the Master of Healthcare Administration, require at least 42 semester credits.

Weaknesses

- None

Plans

- None

2.3 Public Health Core Knowledge

All graduate professional degree public health students must complete sufficient coursework to attain depth and breadth in the five core areas of public health knowledge.

2.3.a. Identification of the means by which the School assures that all professional degree graduates have fundamental competence in the areas of knowledge basic to public health.

The School requires all MPH students to complete coursework in the five core areas of public health and demonstrate competence with a grade of at least B-. In addition, the School has determined that ethics is a core competence that all professional and academic degrees should address. The School requires that all students complete either:

- PUBH 6741, Ethics in Public Health Practice and Policy (1 credit) or
- PUBH 6742, Ethics in Public Health Research and Policy (1 credit)

These requirements are communicated via degree program literature and student guidebooks. Students who wish to waive a core course must file a petition and provide detailed documentation (syllabus and official transcript) that they have had prior exposure to the content and that they have mastered the competencies. The petition is reviewed by faculty with expertise in the core area. Some students who have had related coursework may take an equivalency exam to meet the requirements. A careful review to ascertain that each individual student has satisfactorily completed the core occurs as part of degree clearance prior to granting the degree.

To assure that instruction in the core courses is of high quality, the Education Policy Committee (EPC) reviews student course evaluations each semester. If evaluations are below the established minimum, the EPC chairperson alerts leadership so that issues may be addressed. In many instances, faculty members teaching in the core receive letters of commendation for the high quality of their teaching.

Template 2.3.1. Core Public Health Knowlege

Core Knowledge Area	Course Number & Title	Credits
Biostatistics	PUBH 6414 Biostatistical Methods I (renamed and revised in fall 2014 to Biostatistical Literacy) PUBH 6450 Biostatistics I PUBH 6451 Biostatistics II	3 credits 4 credits 4 credits
Epidemiology	PUBH 6320 Fundamentals of Epidemiology PUBH 6341 Epidemiologic Methods I	3 credits 3 credits
Environmental Health	PUBH 6101 Environmental Health PUBH 6102 Issues in Environmental and Occupational Health PUBH 6103 Exposure to Environmental Hazards [EH students only]	2 credits 2 credits 2 credits

Core Knowledge Area	Course Number & Title	Credits
Ethics	PUBH 6741 Ethics in Public Health: Professional Practice and Policy PUBH 6742 Ethics in Public Health: Research and Policy	1 credit 1 credit
Social & Behavioral Sciences	PUBH 6020 Fundamentals of Social and Behavioral Science PUBH 6050 Community Health Theory and Practice I [CHP students only] PUBH 6914 Community Nutrition Intervention [PUBH Nutr students only]	3 credits 3 credits 3 credits
Administration	PUBH 6751 Principles of Management in Health Services Organizations	2 credits

2.3.b. Assessment of the extent to which this criterion is met.

The criterion is met.

Strengths

- All MPH students are required to complete coursework and demonstrate competencies in the five core areas of knowledge in public health in order to graduate.
- Equivalency exams are offered for all required core courses and documented on the official transcript if the student passes the exam.
- A petition process is in place for students seeking a waiver from a core course.

Weaknesses

- None

Plans

- None

2.4 Practical Skills

All graduate professional public health students must develop skills in basic public health concepts and demonstrate the application of these concepts through a practice experience that is relevant to their areas of specialization.

2.4.a. Description of the School's policies and procedures regarding practice experience.

All MPH students are required to complete a formal, supervised practice experience, referred to as a field experience. The field experience must fall within the broad practice of public health, be relevant to the student's field of study, and consist of at least 90 hours of work.

Each degree program has established fieldwork criteria that include:

- Type of experience, site selection, and preceptor
- Process by which students initiate and arrange the fieldwork
- Role of faculty supervisor
- Method of evaluation
- Credits required

If permission from the University's Human Subjects Committee is needed for the field experience, the student secures permission before beginning. The field experience advisor serves as a resource for students who may need Institutional Review Board (IRB) approval for their field experience.

The School has longstanding partnerships with many public health-related local, regional, and national organizations where students have served as field experience interns. In addition, students are encouraged to utilize their own contacts and connections to find a site that meets their professional goals and objectives. To support students in planning for their field experience, the School's Career Services Office offers information sessions on domestic and international field experience opportunities and advises individual students as they prepare for their field experience. The School helps students locate and arrange for appropriate and educationally meaningful field experiences by maintaining the following electronic resources:

- A field experience listserv through which students who voluntarily sign up can receive a weekly email that identifies sites and organizations that have field experience opportunities.
- Posting of opportunities on the School's job posting site.
- An online field experience module, which contains:
  - A Field Experience Assessment Tool (FEAT) to help identify individual student strengths and weaknesses as related to the core competencies
  - The field experience database – a list of all the sites where previous students conducted their field experiences

- The learning agreement, which includes preceptor information, student learning objectives, and links to help ensure student safety, particularly for international experiences

All field experiences are initiated, reviewed, and approved through a web-based learning agreement that specifies the objectives, activities, timeline, and expected outcomes. The learning agreement is initiated by the student. For international experiences, the agreement is submitted to the Global Health Programs Coordinator, who meets individually with each student to ensure compliance with University policies for insurance and international travel, before submission to the preceptor. For domestic experiences the learning agreement is submitted to a community preceptor for review and approval. Once the field experience site preceptor has approved the agreement, it is reviewed by the student's field experience faculty advisor (not necessarily his or her academic faculty advisor) and the student's program coordinator. If students are pursuing an international experience, they must register for their field experiences during the semester in which they are conducting the experience.

Community preceptors contribute to the supervision and evaluation of students during their field experiences. The School approves field experience preceptors based on educational preparation, professional experience, and expertise. Many are longstanding partners with a track record for successfully guiding students through the field experience. Preceptors are encouraged to contact faculty advisors if they have any questions or concerns about the student or his or her field experience. The community preceptor provides feedback on student performance that is used by the field experience faculty advisor in assigning a pass or no credit for the field experience. Feedback from the community preceptor and student are collected through the School's field experience secured website. Student feedback on the field experience is shared with future students via the School's Field Experience Module/Database.

2.4.b. Identification of agencies and preceptors used for practice experience for students, by program area, for the last two years.

Please see Table 2.4.b. in the Electronic Resource File for a list of agencies and preceptors by program area for the last two years.

2.4.c. Data on the number of students receiving a waiver of the practice experience for each of the last three years.

	MPH Degree Program	Reason for Exception
2011–2012	0	NA
2012–2013	1	Petition was approved based on prior work experience
2013–2014	0	NA

2.4.d. Data on the number of preventive medicine, occupational medicine, aerospace medicine, and general preventive medicine and public health residents completing the program for each of the last three years along with information on their practicum rotations.

	2011–2012	2012–2013	2013–2014
Aerospace	1	0	0
Occupational medicine	3	2	3
Preventive medicine	1	1	1
Raptor resident	0	1	0
Veterinary public health	0	0	5

Residents in the occupational medicine program completed practicum experiences at numerous sites within the HealthPartners System, a Minnesota based not-for-profit health maintenance organization.

2.4.e. Assessment of the extent to which this criterion is met.

The criterion is met with commentary.

Strengths

- The School has an extensive network of community partners and locations where students can complete a field experience.
- The School has well established and consistently implemented processes and policies for the field experience
- The School has developed many resources to help students secure a meaningful field experience.

Weaknesses

- There is no systematic orientation for field experience preceptors.
- Students would benefit from more international field experience opportunities.

Plans

- The School will develop an online module to orient field experience preceptors.
- The School has hired a coordinator to build international partnerships at select sites where students can secure safe and meaningful international field experiences.

2.5 Culminating Experience

All graduate professional degree programs, both professional public health and other professional degree programs, shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.

All students must complete a culminating experience that requires them to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a context that reflects an aspect of professional practice.

Through the culminating experience, faculty assess whether the student has mastered the body of knowledge and can demonstrate proficiency in the required competencies through written and oral presentation. The written and oral demonstrations can be conducted for an individual student or a group of students.

A committee composed of at least three examiners – two of whom are School of Public Health faculty members—evaluate the candidate's written and oral demonstrations. Students consult with their faculty advisors and program coordinators as they select committee members. (Make-up of the committee does not need to be the same for both the written and oral portions.) Each degree program determines the qualifications of the third examiner. He or she may be a faculty member from inside or outside the program or a qualified health professional in practice. At minimum, the examiner must have a master's or higher degree. In rare instances, the program may select a committee member who has extensive relevant experience but does not meet the minimum educational requirements.

The course-accountable faculty member assigns the final grade (pass or no pass).

Requirements for culminating experiences

The School asks the faculty in each of its professional degree programs to determine—from among the six options below—the types of culminating experiences their students may choose. The culminating experience options were developed using recommendations presented by the Association of Schools and Programs in Public Health (ASPPH).

1) Systematic review of the literature
2) Primary collection of data or secondary analysis of data
3) Analysis of a policy or professional practice issue
4) Inter-disciplinary practicum (Community Participatory Practicum)
5) Comprehensive examination/CPH exam
6) A comprehensive knowledge and skill-based portfolio

The programs determine whether to make one or more of the options available to their students.

Description of culminating experience options

The School provides guidance on how the written and oral components of the various culminating experience options may be completed. While guidelines regarding the length of the written portion are provided, the focus is on the quality of the writing and synthesis of concepts and ideas.

- **Systematic review of the literature:** Students synthesize published information on a research question or a public health problem. A final written report of approximately 15–25 double-spaced pages is required.
- **Primary collection of data or secondary analysis of data**: Students learn about the research process and are possibly involved in primary research. A final written report of approximately 15–25 double-spaced pages is required.
- **Analysis of a policy or professional practice issue:** This option may take several forms, including a case study, policy analysis, or historical or ethical inquiry. It calls for review and synthesis of literature relevant to a public health topic and application of the gained knowledge to a practical solution or a recommendation for, support of, or a change in, practice and/or policy. It requires a final written report of approximately 15–25 double-spaced pages.
- **Inter-disciplinary practicum:** This option may take several forms and might be better labeled Community Participatory Practicum. For purposes of this report we will use the terminology provided by ASPPH in its original recommendations. The Inter-disciplinary practicum can build on the field experience with focus on a specific topic area to inform the practice community. It can also be an individual or team project with a defined community organization and/or research group in which the student or team negotiates a set of "deliverables" based on the real-world needs of the community or research partners. Deliverables may include literature reviews, a consultative report, a community assessment report, a community forum, a program-planning document, a grant proposal, policy briefs, intervention materials, campaigns, programs, curricula, or an evaluation report. A group or individually written report is a mandated deliverable and requires an interdisciplinary approach to a solution.
- **Comprehensive examination:** This option evaluates a student's comprehension, application, and synthesis of principles and theory from the core competencies of public health. Students can use a passing score on the Certified Public Health Exam offered by the National Board of Public Health Examiners (NBPHE) for the written component. The oral portion can be an individual presentation to a small or large group or a poster presentation synthesizing or applying public health knowledge on a topic related to the student's field experience. The audience for the oral presentation typically includes faculty members, community members, and fellow students. The exam can also be used in conjunction with a capstone course in which students synthesize and integrate knowledge acquired in coursework.
- **Portfolio development:** This option requires a synthesis/analysis of a student's individual program of study, skills, and knowledge by developing a portfolio of his or her graduate work including papers, presentations, conference participation, etc. Students can use the field experience goals and report, coursework, research, and internship experiences to provide evidence that they have mastered the competencies they outline in the required reflective summary paper.

2.5.a. Options for the culminating experience.

Program	Degree	Options for Culminating Experience
Biostatistics	MPH	Research project
Community Health Promotion	MPH	Research project Inter-disciplinary practicum
Environmental Health	MPH	Research project
Environmental Health- Industrial Hygiene	MPH	Research project
Epidemiology	MPH	Research project Literature review Grant proposal to NIH
Healthcare Administration	Full-time, Executive and Saudi Arabia program	New product development Consultative report
Maternal and Child Health (on-campus and online program)	MPH	Research project Inter-disciplinary practicum Critical literature review
Public Health Administration and Policy (including Executive and Arizona State University programs)	MPH	Research project Inter-disciplinary practicum
Public Health Informatics	MPH	Group consultative report
Public Health Nutrition (including Arizona State University program)	MPH	Research project Inter-disciplinary practicum Comprehensive examination
Public Health Nutrition-Coordinated Master's program	MPH	Research project Inter-disciplinary practicum
Public Health Practice-Executive	MPH	Research project Literature review CPH exam Grant application Consultative report
Public Health Practice- Global One Health-CMU	MPH	Research project Literature review CPH exam Grant application Consultative report

Program	Degree	Options for Culminating Experience
Business Administration/ Healthcare Administration	MBA/MHA	New product development Consultative report
Dentistry/Public Health Practice	DDS/MPH	Research project Literature review CPH exam Grant application Consultative report
Law/Community Health Promotion	JD/MPH	Research project Inter-disciplinary practicum
Law/Environmental Health	JD/MPH	Research project
Law/Epidemiology	JD/MPH	Research project
Law/Healthcare Administration	JD/MHA	New product development Consultative report
Law/ Maternal and Child Health	JD/MPH	Research project Inter-disciplinary practicum
Law/Public Health Administration and Policy	JD/MPH	Research project
Law/Public Health Practice- Public Health Law	JD/MPH	Research project Literature review CPH exam Grant application Consultative report
Medicine/Public Health Practice- Public Health Medicine	MD/MPH	Research project Literature review CPH exam
Pharmacy/Public Health Practice- Public Health Pharmacy	PharmD/MPH	Research project Literature review CPH exam Grant application Consultative report
Public Policy/Public Health Practice- Public Health Public Policy	MPP/MPH	Research project Literature review CPH exam Grant application Consultative report
Social Work/Community Health Promotion	MSW/MPH	Research project Inter-disciplinary practicum
Social Work/Maternal and Child Health	MSW/MPH	Research project Inter-disciplinary practicum

Program	Degree	Options for Culminating Experience
Urban and Regional Planning/Public Health Practice- Public Health Urban and Regional Planning	MURP/MPH	Research project Literature review CPH exam Grant application Consultative report
Veterinary Public Health/Public Health Practice- Veterinary Public Health	DVM/MPH	Research project Literature review CPH exam Grant application Consultative report

2.5.b. Assessment of the extent to which this criterion is met.

The criterion is met.

Strengths

- All MPH and MHA degree programs require a culminating experience.
- Each degree program may select from a range of options for completion of the culminating experience for its students.
- The options provide adequate flexibility to meet the specific requirements of each discipline.
- The School has a valid and meaningful process for providing a culminating experience and evaluating student knowledge and competence.

Weaknesses

- None

Plans

- For students who complete the Certified Public Health exam as part of the culminating experience, documentation will be placed on their official transcript stating that they passed the exam. This is an important way for the School to demonstrate support for the CPH exam and the profession's efforts at developing national standards.

2.6 Required Competencies

For each degree program and area of specialization within each degree program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of degree programs. The School must identify competencies for graduate professional public health, other professional, and academic degree programs and specializations at all levels.

2.6.a. Identification of a set of competencies that all graduate professional public health degree students must attain.

The School uses the core competency model developed by the Association of Schools and Programs of Public Health (ASPPH) in 2006 as the standard that all graduate professional public health students must attain.

Template 2.6.1. Courses and activities through which competencies are met

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
Domain: Biostatistics										
1 Describe the roles biostatistics serves in the discipline of public health.	R	R				P	P			
2. Describe basic concepts of probability, random variation, and commonly used statistical probability distributions.		P				P	P			

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
3. Describe preferred methodological alternatives to commonly used statistical methods when assumptions are not met.						P	P			
4. Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.						P	P			
5. Apply descriptive techniques commonly used to summarize public health data.	R	P				P	P	R	R	
6. Apply common statistical methods for inference.	R					P	P	R	R	
7. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.	P	P				P	P	P		

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
8. Apply basic informatics techniques with vital statistics and public health records in the description of public health characteristics and in public health research and evaluation.		P				P	P	P		
9. Interpret results of statistical analyses found in public health studies.	P	P				P	P	P		
10. Develop written and oral presentations based on statistical analyses for both public health professionals and educated lay audiences.						P	P	R		

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
Domain: Environmental Health Sciences										
1. Describe the direct and indirect human, ecological, and safety effects of major environmental and occupational agents.					R			P	P	
2. Describe genetic, physiologic, and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.								P	P	
3. Describe federal and state regulatory programs, guidelines, and authorities that control environmental health issues.								P	P	
4. Specify current environmental risk assessment methods.								P	P	
5. Specify approaches for assessing, preventing, and controlling environmental hazards that pose risks to human health and safety.					R			P	P	

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
6. Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.								P	P	
7. Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.					R			P	P	
8. Develop a testable model of environmental insult.								P	P	
Domain: Epidemiology										
1. Identify key sources of data for epidemiologic purposes.	P	P						P	R	
2. Identify the principles and limitations of public health screening programs.	P	P								
3. Describe a public health problem in terms of magnitude, person, time, and place.	P	P			R			P	R	

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
4. Explain the importance of epidemiology for informing scientific, ethical, economic, and political discussion of health issues.	P	P						R	R	
5. Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use, and dissemination of epidemiologic data.	P	P	P	P						
6. Apply the basic terminology and definitions of epidemiology.	P	P						R	R	
7. Calculate basic epidemiology measures.	P	P								
8. Communicate epidemiologic information to lay and professional audiences.	P	P								
9. Draw appropriate inferences from epidemiologic data.	P	P						R	R	
10. Evaluate the strengths and limitations of epidemiologic reports.	P	P						R	R	

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
Domain: Health Policy and Management										
1. Identify the main components and issues of the organization, financing, and delivery of health services and public health systems in the U.S.										P
2. Describe the legal and ethical bases for public health and health services.			P	P	R			R	R	R
3. Explain methods of ensuring community health safety and preparedness.					R			P	P	
4. Discuss the policy process for improving the health status of populations.					R			P	P	
5. Apply the principles of program planning, development, budgeting, management, and evaluation in organizational and community initiatives.										P
6. Apply principles of strategic planning and marketing to public health.										P

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
7. Apply quality and performance improvement concepts to address organizational performance issues.										P
8. Apply "systems thinking" for resolving organizational problems.										P
9. Communicate health policy and management issues using appropriate channels and technologies.										P
10. Demonstrate leadership skills for building partnerships.										P
Domain: Social and Behavioral Sciences										
1. Identify basic theories, concepts, and models from a range of social and behavioral disciplines that are used in public health research and practice.					P					R
2. Identify the causes of social and behavioral factors that affect health of individuals and populations.					P			P	P	

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
3. Identify individual, organizational, and community concerns, assets, resources, and deficits for social and behavioral science interventions.					P			P	P	R
4. Identify critical stakeholders for the planning, implementation, and evaluation of public health programs, policies, and interventions.			P		R					P
5. Describe steps and procedures for the planning, implementation, and evaluation of public health programs, policies, and interventions.			R		R					P
6. Describe the role of social and community factors in both the onset and solution of public health problems.					P			P	P	
7. Describe the merits of social and behavioral science interventions and policies.					P					

Key: (P) = Primarily gained through the specific course • (R) = Reinforced through the specific course

ASPPH Competency Statement	Epidemiology		Ethics		Social/ Behavioral Sciences	Biostatistics		Environmental Health		Management
	6320	6341	6741	6742	6020	6414	6450	6101	6102	6751
8. Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.					P					R
9. Apply ethical principles to public health program planning, implementation, and evaluation.			P	R	R					R
10. Specify multiple targets and levels of intervention for social and behavioral science programs and/or policies.					P					

2.6.b. Identification of a set of competencies for each degree program identified in the instructional matrix, including professional public health degrees, other professional degrees (MHA) and graduate academic degrees (MS and PhD).

Each degree program has identified a set of competencies that each student must attain.

MPH/MHA Programs

MPH — Biostatistics

- Use a general understanding of public health research, practice, and ethics to inform biostatistical practice.
- Collaborate in the design of research studies of human health and disease.
- Implement tabular and graphical displays of quantitative information in ways that are clear to non-statistical scientists.
- Draw inferences from quantitative data and communicate those inferences and their interpretation to non-statistical scientists.
- Write programs in two or more statistical packages.
- Address a public health or research question with statistical analysis and/or simulation study.

MPH — Community Health Promotion

- Comprehend the foundations of scientific inquiry and limitations of conceptual framework as they relate to the MCH population.
- Comprehend and apply appropriate qualitative and quantitative methods.
- Synthesize organization and management theories and practices and their administration in public and private agencies.
- Understand the philosophy, values, and social justice concepts associated with MCH.
- Understand the concepts presented in the core courses (which follow ASPPH guidelines).

MPH — Environmental Health Sciences (including Environmental Health Industrial Hygiene)

- Describe the direct and indirect human, ecological, and safety effects of major environmental and occupational agents.
- Describe genetic, physiologic, and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.
- Describe federal and state regulatory programs, guidelines, and authorities that control environmental health issues.
- Specify current environmental risk assessment methods.
- Specify approaches for assessing, preventing, and controlling environmental hazards that pose risks to human health and safety.

- Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.
- Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equality.
- Describe the general approaches to assessing human exposures to physical, chemical, and biological agents in the environment through various media and routes.

MPH — Epidemiology

- Calculate measures of prevalence, incidence, morbidity, and mortality.
- Understand absolute and relative risk measures.
- Describe outcomes in terms of person, place, and time, including strengths and limitations of basic measures.
- Locate sources of data from existing national and international sources.
- Describe patho-physiology of major diseases.
- Understand the roles of modifiable and non-modifiable risk factors in chronic and infectious diseases.
- Describe models of disease etiology and control.
- Describe the general history of epidemiology and the major studies of select diseases.
- Identify the chronic and infectious diseases leading to major causes of death.
- Understand how epidemiology informs scientific, ethical, economic, and political discussions of health.
- Define and describe population screening, including validity and reliability of screening, and approaches for disease surveillance.
- Recognize types of bias that affect screening evaluation validity.
- Describe study designs used to evaluate screening effectiveness.
- Search, review, and synthesize scientific literature.
- Critically evaluate literature, including when to make causal inferences.
- Describe standard study designs and when to use each type for a specific research question.
- Understand the advantages and limitations of each design, including identifying and minimizing sources of bias.
- Describe the direction and magnitude of bias for the measures of association with each design.
- Calculate sample size.
- Identify instruments appropriate for the research question.

- Effectively monitor data collection.
- Design quality assurance and control measures and assess for error.
- Understand the appropriate analytic approach for a specific study design.
- Examine data for confounding and effect modification in multivariable models.
- Use statistical analysis packages to calculate descriptive statistics.
- Analyze categorical and continuous data as both exposures and outcomes.
- Analyze prospective data using cumulative incidence or incidence density methods.
- Interpret research results.
- Make appropriate inferences based on study design and results.
- Communicate research results orally and in writing to scientists and lay audiences.
- Organize data into tabular and figure formats for presentation.
- Create a scientific presentation suitable for poster or oral format.
- Understand concepts of human subject protection, confidentiality, and HIPAA.
- Prepare an application to an Institutional Review Board, incorporating study design and conduct.

MPH — Maternal Child Health (MCH)

- Comprehend the foundations of scientific inquiry and limitations of conceptual framework as they relate to the MCH population.
- Comprehend and apply appropriate qualitative and quantitative methods.
- Comprehend organization and management theories and practices and their administration in public and private agencies.
- Understand the philosophy, values, and social justice concepts associated with MCH.
- Understand concepts presented in the core courses (which follow ASPPH guidelines).

MPH — Public Health Administration and Policy

- Acquire the theoretical and practical knowledge of history and principles of delivery systems relevant to public health policy and administration.
- Identify, develop, and utilize management and leadership skills in public health care organizations or systems.
- Understand, conceptualize, and design research of high quality and scientific integrity.
- Understand the policy process, including context, advocacy, and policy analysis.
- Utilize communication skills to explain policy issues to diverse audiences.

MPH — Public Health Informatics

- Conceive, design, develop, implement, and use information technology by applying informatics skills in the public health domain.
- Possess key technical and leadership skills necessary to manage information systems within an organization, or organizational networks such as a community.
- Develop public health informatics research skills.
- Lead creation of strategic direction for public health informatics.
- Lead knowledge management for the enterprise.
- Ensure use of informatics standards.
- Ensure that knowledge, information, and data needs of users and stakeholders are met.
- Ensure that information systems development, procurement, and implementation meet public health program needs.
- Ensure IT operations are managed effectively to support public health programs (for public health agencies with internal IT operations).
- Ensure adequacy of IT operations managed by external organizations.
- Communicate with elected officials, policy makers, agency staff, and the public.
- Ensure evaluation of information systems and applications.
- Conduct applied public health informatics research for new insights and innovative solutions to health problems.
- Ensure that public health information systems are interoperable with other relevant information systems.
- Use informatics to integrate clinical health, environmental risk, and population health.
- Develop solutions that ensure confidentiality, security, and integrity while maximizing availability of information for public health.
- Contribute to progress in the field of public health informatics.

MPH — Nutrition (including Arizona State University and Coordinated Master's programs)

- Understand and utilize theoretical and skill-based knowledge of nutrition science needed for public health nutrition practice.
- Identify, describe, and use the methodological and analytic skills necessary to acquire, analyze, interpret, and apply data to conduct the core public health functions of assessment, assurance, and policy development, and be able to evaluate nutrition programs and services for populations.
- Acquire and utilize the organizational management and leadership skills needed to develop, implement, and sustain systems of care, programs, and interventions

(including preventive and treatment) for improving the nutritional health of individuals and populations.

- Understand, analyze, and apply policy and advocacy skills to promote the nutritional health of populations in policies, laws (e.g., Title V), and regulations in public and private sectors.
- Understand, assess, identify, and demonstrate cultural competency skills to develop programs and services that are responsive to the cultural, social, linguistic, and ethnic diversity of the community.
- Identify and demonstrate insight into leadership styles and an awareness of personally authentic strategies for affecting a vision of change and capacity to improve the nutritional health of populations.
- Describe, understand, and develop personal sense of ethics and professionalism.
- Demonstrate written and verbal communication skills and the ability to apply information systems to core public health functions.
- Develop and demonstrate critical thinking skills.

MPH — Public Health Practice (Executive and Dual Degree Programs, and Global One Health - CMU)

- Apply a population perspective for health promotion and disease/injury prevention.
- Describe the principles and practices of health promotion and disease/injury prevention and protection of human populations from environmental hazards.
- Integrate public health principles into the practice of health and human services.
- Address the social, cultural, and environmental factors that affect community health.
- Describe public health as a social system.
- Identify the ethical issues in disease/injury prevention and health systems policy.
- Analyze a current public health issue or program.
- Apply public health tools to the evaluation and control of a specific health issue.
- Apply collaborative leadership skills in a community practice setting.
- Advocate community action for health improvement.

MHA Competencies (including dual degree programs)

A very detailed mapping of the MHA competencies is included in the Electronic Resource File.

- Achievement Orientation
- Analytical Thinking
- Community Orientation
- Financial Skills
- Information Seeking
- Innovative Thinking
- Strategic Orientation
- Accountability
- Change Leadership
- Collaboration
- Communication Skills
- Impact and Influence
- Initiative
- Information Technology Management
- Organizational Awareness
- Performance Measurement
- Process Management & Organizational Design
- Project Management
- Human Resources Management
- Interpersonal Understanding
- Professionalism
- Relationship Building
- Self Confidence
- Self Development
- Talent Development
- Team Leadership

MS Programs

MS — Biostatistics

- Use a general understanding of public health research, practice, and ethics to inform biostatistical practice.
- Collaborate in the design of research studies of human health and disease.
- Implement tabular and graphical displays of quantitative information in ways that are clear to non-statistical scientists.
- Draw inferences from quantitative data and communicate those inferences and their interpretation to non-statistical scientists.
- Write programs in two or more statistical packages.
- Address a public health or research question with statistical analysis and/or simulation study.

MS — Clinical Research

- Conceptualize and design clinical research of high quality and scientific integrity.
- Plan and manage clinical research studies.

- Perform data collection, management, analysis, and interpretation of clinical research findings and report them at professional meetings and in peer-reviewed literature.
- Thoroughly understand human subjects' protection and the responsible conduct of research.
- Write competitive research grants and obtain research funding for projects.
- Work with multidisciplinary teams to accomplish clinical research projects.

MS — Environmental Health Sciences (including Environmental Health Industrial Hygiene)

- Integrate reading of scientific literature and preliminary data to develop a hypothesis-driven approach to an environmental health research question.
- Ethically conduct independent environmental health research.
- Communicate environmental health research through written and oral presentations.
- Critically analyze and review scientific literature.
- Write journal articles and research proposals.
- Describe the general approaches to assessing human exposures to physical, chemical, and biological agents in the environment through various media and through various routes.

MS — Health Services Research, Administration, and Policy

- Understand the clinical, business, or policy context of client questions well enough to be able to work with them effectively in conducting analyses.
- Understand concepts, measures, research designs, and analytic methods from the field of epidemiology.
- Understand and apply statistical theory and research methods and design in health intelligence and analytics.
- Design research projects, including those involving both primary and secondary data collection and analysis.
- Analyze health services research problems from a sociological perspective.
- Understand the institutions that organize, finance, and deliver health care and public health services in the U.S.
- Analyze health services research problems from an economic perspective.
- Describe legal and ethical basis for policies and health services research.
- Apply the principles of program planning, development, budgeting, management, and evaluation in organization and community initiatives.
- Understand the concepts and measures of health care quality and outcomes that are used in quality improvement initiatives.

PhD Programs

PhD — Biostatistics

- Work independently as a practicing biostatistician on an equal basis as a collaborator with public health and medical researchers in designing, carrying out, and analyzing clinical trials, case control studies, and other experimental and observational studies.
- Conduct and publish original research, solely or collaboratively, on the theory and methodology of biostatistics.
- Develop a biological and public health perspective in research.

PhD — Environmental Health Sciences (including Environmental Health Industrial Hygiene)

- Master the MPH competencies for Environmental Health Sciences.
- Integrate reading of scientific literature and preliminary data to develop a hypothesis-driven approach to an environmental health research question.
- Ethically conduct independent environmental health research.
- Communicate environmental health research through written and oral presentations.
- Critically analyze and review scientific literature.
- Write journal articles and research proposals.

PhD — Epidemiology

- Acquire knowledge of basic epidemiologic and statistical principles.
- Apply advanced research skills in epidemiology and behavioral science.
- Create basic or applied knowledge through original research that advances the field.
- Formulate fundamental questions that challenge existing thinking.
- Master a content area.
- Demonstrate advanced written and oral communication skills.
- Teach in a formal education setting.
- Communicate effectively to the public.
- Develop integrative skills for collaboration and problem solving.
- Apply intercultural knowledge in research and teaching activities.
- Conduct research in ethical and responsible manner.
- Achieve long-term goals with minimum supervision.

PhD — Health Services Research, Administration, and Policy (HSR)

- Foundational knowledge: Acquire knowledge of the context of health and health care systems, institutions, actors, and environment.
- Theoretical knowledge: Apply or develop theoretical and conceptual models relevant to health services research.
- Pose relevant and important HSR questions: Pose important research questions informed by structured evidence assessment, stakeholder positions, and pertinent theoretical and conceptual models and formulate solutions to health problems, practice, and policy.
- Conceptual models: Use or develop a conceptual model to specify study constructs for a health services research question and develop variables that reliably and validly measure these constructs.
- Study designs: Recognize the strengths and weaknesses of study designs to appropriately address specific health services research.
- Data collection and management methods: Sample and collect primary health and health care data and/or assemble and manage existing data from public and private sources.
- Research conduct management: Execute and document procedures that ensure the reproducibility of the science, the responsible use of resources, and the ethical treatment of research subjects.
- Data analysis: Demonstrate proficiency in the appropriate application of analytical techniques to evaluate HSR questions.
- Professional development: Work collaboratively in teams within disciplines, across disciplines, and/or with stakeholders.
- Communication: Effectively communicate with stakeholders the process, findings, and implications of health services research through multiple modalities.
- Knowledge transfer: Effectively translate knowledge to policy and practice.

2.6.c. A matrix that identifies the learning experiences by which the competencies defined in Criteria 2.6.a and 2.6.b are met.

Please see the Electronic Resource File for matrices 2.6.c.

2.6.d. An analysis of the completed matrix included in Criterion 2.6.c. If changes have been made in the curricula as a result of the observations and analysis, such changes should be described.

The instructors who teach in the MPH core met in spring 2013 to create a draft of the core competency matrix. In fall 2014 a draft was shared with the full core faculty group and this prompted many discussions about specific competencies and which areas had primary responsibility for covering the content. As part of the analysis, the School discovered a gap in coverage within the biostatistics domain that has since been addressed. In May 2014 the matrix was finalized and shared with all faculty members

who contributed to its creation. This exercise provided a good check of how content changes as faculty revise courses or change teaching assignments. In the process of creating the matrix, faculty indicated 1) an interest in more collaborative teaching approaches, 2) an interest in including more content on the impact of social disparities and 3) that they are prepared to begin discussions on the ASPPH cross-cutting competencies.

The School's Self-Study team worked with the program directors and coordinators to create the degree program competency matrices. Updates were provided through the monthly Education Policy Committee meetings. The Self-Study team scheduled individual meetings with program directors to go over expectations and to answer program-specific questions. At the School's February 2014 CEPH consultation meeting with Mollie Mulvanity, she reviewed the draft matrices and expressed concern that the drafts were moving from stating competencies to stating learning objectives. In March and April 2014 program directors reviewed and revised the matrices with Ms. Mulvanity' s feedback in mind.

Each individual program went through an examination of required content, course content, and the competencies that guide teaching. In some instances program directors, with help from the program coordinator, drafted a matrix to share with their faculty. The faculty provided comment that was incorporated into the final matrix. Other program directors worked with a small group of faculty colleagues to review competencies, map competencies to courses, and create the matrix. Faculty reported that the mapping exercise provided an opportunity to take a careful look at the curriculum, share ideas and updates, and make adjustments.

2.6.e. Description of the manner in which competencies were developed, used, and made available to students.

The competencies were developed by reviewing norms at peer institutions, through research into standards developed by professional associations, and through structured discussions among program faculty members and professional colleagues in the field.

The competencies are made available to students in the annually updated Student Guidebooks that are posted on the School's website.

2.6.f. Description of the manner in which the School periodically assesses changing practice or research needs and uses this information to establish the competencies for its educational programs.

The School uses multiple strategies to assess changing practice or research needs. These include:

- Active participation of the School's leadership team in the Association of Schools and Programs of Public Health (ASPPH) governance, annual conferences, and special task forces that provide opportunities to discuss the changing needs of the field and exchange best practices.
- Gathering information through national competency sets, informed by expertise within the major area.

- Student field experiences that provide opportunities for faculty and practitioners to discuss the changing needs of public health practice and design learning activities that meet emerging needs.
- Annual meetings with public health leaders that inform programming for the Summer Public Health Institute as well as the coursework offered in the fall and spring semesters.
- Needs assessment surveys of continuing education for practice professionals by the Midwest Center for Occupational Health and Safety in 2013 and the Midwest Center for Lifelong Learning in Public Health in 2012.

2.6.g. Assessment of the extent to which this criterion is met.

The criterion is met.

Strengths

- The ASPPH core competencies are covered through the required MPH core courses.
- The MPH core competencies are reinforced across the required core courses to demonstrate the linkages across the public health fields.
- Each degree program has identified competencies that all graduates must attain.
- The School consults with community partners and public health professionals to assure that the competencies taught match the needs of the field.

Weaknesses

- None

Plans

- The faculty members who teach in core classes are reviewing the School's approach to meeting the ASPPH core competencies to see if there may be more opportunities for interdisciplinary teaching and to address a subset of the ASPPH cross-cutting competencies.

2.7. Assessment Procedures

There shall be procedures for assessing and documenting the extent to which each professional public health, other professional, and academic degree student has demonstrated achievement of the competencies defined for his or her degree program.

2.7.a. Description of the procedures used for monitoring and evaluating student progress in achieving the expected competencies, including procedures for identifying competency attainment in practice or research, as applicable, and in culminating experiences.

All students must complete a specific sequence of coursework to earn a degree. These requirements are articulated in the program guidebooks and the curriculum sheets (available in the Electronic Resource File). All MPH students must earn at least a B- in the public health core courses to advance toward degree completion and maintain a 3.0 GPA to remain in good standing. Each course includes assessment components, such as assignments, presentations, papers, and exams that are communicated to students in course syllabi.

Toward the end of their first year of study, students are encouraged to self-assess progress toward competencies through the use of the Field Experience Assessment Tool (FEAT). The FEAT helps students reflect on strengths and weaknesses and create learning objectives for their field experiences that will strengthen their professional development and mastery of competencies.

The faculty, field experience preceptors, advisors, culminating experience advisors, and individual course instructors evaluate students at all stages of their educational experience—from matriculation through culminating experience—in both professional and academic degree programs.

The MPH field experience and culminating experience and the MHA summer residency and master's project provide valuable opportunities for students to practice and assess their mastery of professional competencies. These experiences also provide an opportunity for preceptors and faculty advisors to observe, assess, and provide students with feedback on knowledge and skills that are needed to be successful in the field of practice.

Students pursuing academic public health degrees must meet prescribed milestones within defined time periods. At each milestone, MS or doctoral students receive feedback on their understanding, ability to apply knowledge, and mastery of the competencies expected by each area within their fields.

In addition, the School reviews the GPAs of all enrolled professional and academic degree students each semester to be certain that they are making appropriate progress and to address any academic issues flagged by the Registrar and the Associate Dean for Learning Systems and Student Affairs.

2.7.b. Identification of outcomes that serve as measures by which the School will evaluate student achievement in each program and presentation of data assessing the School's performance against those measures for each of the last three years.

Please see the Electronic Resource File for Template 2.7.1 Degree Completion.

Table 2.7. Graduation Rates by Degree Awarded

Target	2011–2012	2012–2013	2013–2014
MPH 80% within five years of initial enrollment	62.9%	62.9%	60.6%
MHA 90% within three years of initial enrollment	88.8%	86.1%	99%
MS 90% within five years of initial enrollment	68.4%	59.6%	76.3%
PhD 80% within seven years of initial enrollment	62.9%	65%	68.6%

Template 2.7.2 Graduate Employment by Degree Awarded

	2011–2012	2012–2013	2013–2014
MPH graduates*	131 graduates 119 respondents 70 (59%) reported full-time employment	156 graduates 138 respondents 104 (75%) reported full-time employment	198 graduates 145 respondents 123 (85%) reported full-time employment
MHA graduates*	59 graduates 21 respondents 16 reported full-time employment	45 graduates 23 respondents 23 reported full-time positions	94 graduates 30 respondents 26 reported full-time employment
MS graduates	18 graduates 5 respondents 2 reported full-time employment	20 graduates 5 respondents 1 reported full-time employment	29 graduates 15 respondents 14 reported full-time employment

	2011–2012	2012–2013	2013–2014
PhD graduates	14 graduates 7 respondents 5 reported full-time employment 71% of the respondents reported full-time employment	12 graduates 5 respondents 5 reported full-time employment 100% of the respondents reported full-time employment	26 graduates 8 respondents 7 reported full-time employment 87.5% of the respondents reported full-time employment

* *Excludes executive degree programs. Students in the executive programs are, for the most part, employed. Typically, they are pursuing the MPH or MHA degree to enhance their professional practice and advance their careers.*

2.7.c. An explanation of the methods used to collect job placement data and of graduates' response rates to these data collection efforts. The School must list the number of graduates from each degree program and the number of respondents to the graduate survey or other means of collecting employment data.

The School's Career Services Center maintains an online Career Survey that graduates use to report their placement information. The online tool is available year round and data are collected in annual cycles dating from July 1 to June 30th. Although completion of the survey is voluntary, program coordinators, who include a notice of the survey as part of their graduation checklist, have achieved a good response rate. For the traditional MPH programs, the average rate of response to the 2012-2013 Career Survey was 88 percent. Results of the Career Survey for the Self-Study years are included in the Electronic Resource File.

Individual degree programs have also established processes to track their graduates. For example, the Division of Biostatistics conducts exit interviews and the MHA Program closely tracks the placement of its graduates through an annual exit survey. An example of the MHA exit survey is included in the Electronic Resource File.

University-wide changes to graduate education in fall 2010 placed responsibility for collecting job placement data for MS and PhD graduates at the School level. The School is adapting its data systems and collection tools to include these academic degree programs.

2.7.d. In fields for which there is certification of professional competence and data are available from the certifying agency, data on the performance of the School's graduates on these national examinations for each of the last three years.

National Exams

	2011–2012	2012–2013	2013–2014
Certified in Public Health Exam (CPH)	Took exam: 3 Passed exam:3	Took exam:2 Passed exam:2	Took exam:3 Passed exam:3
Nutrition	Took exam: 8 Passed exam: 7	Took exam: 6 Passed exam: 6	Took exam: 6 Passed exam: 6

2.7.e. Data and analysis regarding the ability of the School's graduates to perform competencies in an employment setting, including information from periodic assessments of alumni, employers, and other relevant stakeholders.

The School tracks the competencies of its graduates through a number of channels, including:

- Its active alumni base, which provides feedback on the performance of graduates in the workplace.
- Events organized around its Mentor Program, the largest such program in a school of public health that provides informal opportunities to discuss the performance of graduates.
- Annual alumni panels during which the needs of the profession and the performance of graduates employed in settings such as health systems, health departments, and community agencies are discussed.
- Close ties between the individual degree programs and employers that enable discussion of graduates' competencies during annual meetings, retreats, and professional conferences.

In summer 2011, the Career Services Center surveyed approximately 30 employers of MPH graduates. Despite numerous reminders, only six responses were received. The low response rate made the data insignificant and sharing the data raised the risk of violating the privacy of some graduates.

2.7.f. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans.

The criterion is met with commentary.

Strengths

- Through established formal assessments, such as exams, papers, and projects, students demonstrate their mastery of the core and degree program competencies.
- Evaluation is multi-dimensional and includes faculty advisors, field experience advisors and preceptors, capstone advisors, and self-assessment.

Weaknesses

- Programs do not have consistent systems in place to gather feedback on the performance and preparation of their graduates.
- Data on the placement of MS and PhD students was not collected through the usual School surveys in 2011-12. Beginning in 2012-13 the School assumed responsibility for collecting MS and PhD placement data.

Plans

- To strengthen connections with alumni and employers and to gather input on the preparation of graduates, the School is organizing student visits to employer work sites, beginning in fall 2014. The visits will include a question-and-answer session and provide information on organizational culture, the competencies employers want in new graduates, and their hiring needs. Along with students, faculty and student services staff will be invited to attend.
- The School plans to help the degree programs create tools, methods, and processes with which to gather feedback from employers of their graduates while ensuring privacy and confidentiality. As a first step, student services staff are being trained in leading focus groups.

2.8 Other Graduate Professional Degrees

If the School offers curricula for graduate professional degrees other than the MPH, students pursuing them must be grounded in basic public health knowledge.

2.8.a. Identification of professional degree curricula offered by the School and a description of the requirements for each.

The School's full-time Master of Healthcare Administration (MHA) program emphasizes mastery of leadership and management skills as practiced in healthcare organizations. Designed for students with limited healthcare management experience, it requires 60 credits and a 3.0 GPA to graduate. The required credits include a summer residency and a capstone project. The MHA program uses the competencies articulated by the National Center for Healthcare Leadership (NCHL) as a basis for curriculum development and assessment and is accredited by the Commission on Accreditation Healthcare Management Education **(**CAHME).

The 42-credit Executive MHA program emphasizes mastery of leadership and management skills as practiced in healthcare organizations with an emphasis on the management of complex, integrated health systems. It includes a focus on the expanded role of providers, managers, and leaders in those systems and throughout healthcare. In 2012 the executive MHA program partnered with King Fahad Medical City in Riyadh, Saudi Arabia, to provide a curriculum that mirrors the Executive MHA Program offered on the Twin Cities Campus.

Detailed curriculum sheets for the MHA degree program are provided in the Electronic Resource File

2.8.b. Manner in which the curriculum assures that students acquire a public health orientation.

To assure that full-time and executive MHA students acquire a public health orientation, they are required to take the following public health practice-focused courses:

- PUBH 6560 Operations Research Quality in Health Care

or

- PUBH 6835 Principles of Health Policy

or

- PUBH 6555 Topics in Health Economics
- PUBH 6556 Health and Health Systems
- PUBH 6541 Statistics for Health Management Decision Making
- PUBH 6553 Healthcare Management Ethics

The epidemiological implications on healthcare delivery and management are woven into multiple courses.

2.8.c. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans.

The criterion is met.

Strengths

- The MHA program's curriculum includes courses that provide grounding in public health.

Weaknesses

- None

Plans

- None

2.9. Bachelor's Degree in Public Health

The School does not offer any bachelor's degrees. Not applicable.

2.10 Other Bachelor's Degrees

Not applicable.

2.11 Academic Degrees

If the School also offers curricula for graduate academic degrees, students pursuing them shall obtain a broad introduction to public health, as well as an understanding about how their discipline-based specialization contributes to achieving the goals of public health.

2.11.a. Identification of all academic degree programs, by degree and area of specialization.

All Academic Degree Programs, by Degree and Area of Specialization

KEY:
Hybrid: Utilizes a blend of on campus and e-learning technologies for classes.
On-campus: The vast majority of classes are taught on campus using the traditional classroom format.
Online: Delivered through online technologies. Students are never required to be on campus.

Specialization/Concentration/Focus Area	Format	Academic
Master's Degrees		
Biostatistics	On-campus	MS
Clinical Research	On-campus	MS
Environmental Health	On-campus	MS
Environmental Health – Industrial Hygiene	On-campus	MS
Health Services Research, Policy, and Administration	On-campus	MS
Doctoral Degrees		
Biostatistics	On-campus	PhD
Environmental Health	On-campus	PhD
Environmental Health – Industrial Hygiene	On-campus	PhD
Epidemiology	On-campus	PhD
Health Services Research, Policy, and Administration	On-campus	PhD
Joint Degrees		
Law/Environmental Health	On-campus	JD/MS, JD/PhD
Law/Health Services Research, Policy, and Administration	On-campus	JD/MS, JD/PhD
Medicine/Epidemiology	On-campus	MD/PhD
Medicine/Health Services Research, Policy, and Administration	On-campus	MD/PhD

2.11.b. Identification of the means by which the School assures that students in academic curricula acquire a public health orientation.

Biostatistics

Master of Science (MS) students are required to take four credits of public health electives. The recommended courses are PUBH 6341, Epidemiologic Methods or PUBH 6320 Fundamentals of Epidemiology, and PUBH 6742 Ethics in Public Health: Research and Policy. In addition, students gain exposure to public health in nearly all biostatistics methods courses, where data analysis techniques are applied to public health research questions. In particular, two courses—clinical trials and survival data analysis—are unique to public health and medicine and are required for the both the MS and the PhD in biostatistics.

Clinical Research

Students in the MS program in clinical research are required to take two courses in epidemiology, two courses in biostatistics, and PUBH 6742 Ethics in Public Health Research.

Environmental Health

MS and PhD students are required to take either PUBH 6341 Epidemiologic Methods or PUBH 6320 Fundamentals of Epidemiology. In addition they are required to take PUBH 6742 Ethics in Public Health: Research and Policy or PUBH 6741 Ethics in Public Health: Practice and Policy.

Epidemiology

Doctoral students in epidemiology are required to take Advanced Epidemiologic Methods: Concepts (PUBH 8341) and Advanced Epidemiologic Methods: Application (PUBH 8342), Ethics in Public Health Research and Policy (PUBH 6742), and at least one course that explores epidemiology in a specific content area, such as Public Health Aspects of Cardiovascular Disease (PUBH 6386) or Control of Infectious Diseases (PUBH 6385).

Health Services Research, Policy and Administration

MS and PhD students are required to take Seminar: Research Studies in Healthcare (PUBH 8810) and Research Studies in Healthcare (PUBH 8811), courses which integrate the methods of epidemiology and health services research. Students are also required to take at least one epidemiology course: (PUBH 6341) Epidemiology Methods, or (PUBH 8341) Advanced Epidemiological Methods. Students also take a year-long sequence of biostatistics courses, which apply biostatistical reasoning to a broad range of public health problems and approaches. In addition, students are required to take Ethics in Public Health Research and Policy (PUBH 6742).

2.11.c. Identification of the culminating experience required for each academic degree program.

MS Degree Culminating Experience

Students may complete the MS degree in one of two ways: Plan A with thesis or Plan B with Project(s).

- **Plan A: Master's Degree with Thesis**
  Master's Thesis
  Students must demonstrate familiarity with the tools of research or scholarship in their major field and the ability to work independently and present the results of their findings effectively by completing a thesis.

  Final Examinations
  Plan A master's degree students must pass a final oral examination, a defense of their thesis. A final written examination may also be required at the discretion of the faculty. The final examinations cover the major field and the minor or related fields and may include any work fundamental to the fields. The final oral exam is public.

- **Plan B: Master's Degree with Project(s)**
  Plan B Project(s)
  Students must demonstrate familiarity with the tools of research or scholarship in their major field and the ability to work independently and to present the results of their findings effectively by completing at least one Plan B project.

  The Plan B project involves a combined total of approximately 120 hours of work. The faculty in each major field specifies both the nature and extent of the options available to satisfy this requirement and whether the requirement is to be satisfied in conjunction with the courses in the student's program.

  Final Examinations
  At the discretion of the faculty in the major field, the student may be required to complete a written exam, oral exam, or both. The final oral exam is closed and is attended only by the student and the examining committee.

Doctoral Degree Culminating Experience

Preliminary Written and Oral Examinations

All doctoral students are required to pass a written examination in the major field. Doctoral students also take a preliminary oral examination after completing a substantial part of the coursework and passing the written preliminary examination. These examinations are completed before writing the dissertation.

PhD Thesis

The thesis must demonstrate the student's originality and ability to engage in independent investigation. Results of the research must constitute a contribution to knowledge.

Final Oral Examination
All doctoral students are required to successfully defend their thesis in a final oral examination. To be eligible for the oral examination, a student must have completed all work on the official degree program and passed both the written and oral preliminary examinations.

2.11.d. Assessment of the extent to which this criterion is met.

The criterion is met.

Strengths

- Students in all academic degree programs acquire a public health orientation.
- Academic degree students complete culminating experiences that are appropriate to the degree requirements and their career goals.

Weaknesses

- None

Plans

- None

2.12. Doctoral Degrees

The School shall offer at least three doctoral degree programs that are relevant to three of the five areas of basic public health knowledge.

2.12.a. Identification of all doctoral programs offered by the School.

KEY:
Hybrid: Utilizes a blend of on-campus and e-learning technologies for classes.
On-campus: The vast majority of classes are taught on campus using the traditional classroom format.
Online: Delivered through online technologies. Students are never required to be on campus.

Doctoral Degrees	Format	Academic
Biostatistics	On-campus	PhD
Environmental Health	On-campus	PhD
Environmental Health – Industrial Hygiene	On-campus	PhD
Epidemiology	On-campus	PhD
Health Services Research, Policy, and Administration	On-campus	PhD

2.12.b. Description of specific support and resources available to doctoral students, including traineeships, mentorship opportunities, etc.

With the decline in federal support for grants, the School has found it difficult to support doctoral students at the same level as in the past. Doctoral students have access to the following opportunities for financial support:

Graduate assistantships

- *Research assistantships:* Students work with/for faculty on research projects.
- *Teaching assistantships:* Students provide teaching and administrative support to faculty members.
- *General graduate assistantships:* Students provide administrative support to University departments.

Assistantships provide many benefits:

- Tuition subsidy based on hours worked per week and the student's tuition rate.
- A waiver that covers the non-resident portion of tuition for non-Minnesota resident students.
- Health insurance coverage of at least 47.5 percent.
- Valuable experience and the opportunity to work on campus and with faculty.

Travel funds

Students have access to funds for travel to conferences at which they will give a presentation, present a poster, or to attend certain training sessions.

Traineeships, Fellowships, and Dissertation Grants

Doctoral students may receive traineeship funding. For example:

- Doctoral students in the Division of Health Policy and Management receive traineeship support through the Agency for Healthcare Research and Quality, and
- Students in the Division of Environmental Health Sciences receive funding from the National Institute for Occupational Safety and Health.

Most traineeships subsidize tuition and pay a stipend. Dissertation grants provide funding during the writing of the dissertation and are usually one to two years in length.

University-wide grants funded by research organizations also are available to support doctoral students. Students in the School have competed successfully for these grants.

2.12.c. Data on student progression through each of the School's doctoral programs.

Template 2.10.1. Doctoral Student Data for Academic Year 2012–2013

	Biostatistics	Environmental Health Sciences	Epidemiology	Health Services Research, Policy, and Administration
# newly admitted in 2013	9	5	8	8
# currently enrolled (total)	33	28	48	58
# completing coursework during 2013	8	11	5	7
# completed oral preliminary in 2013	6	5	5	7
# graduated in 2013	3	8	12	5

Template 2.10.1. Doctoral Student Data for Academic Year 2013–2014

	Biostatistics	Environmental Health Sciences	Epidemiology	Health Services Research, Policy, and Administration
# newly admitted in 2014	9	6	7	7
# currently enrolled (total)	32	27	42	47
# completed coursework during 2014	9	0	6	6
# advanced completed oral preliminary in 2014	5	0	5	10
# graduated in 2014	2	9	7	9

2.12.d. Identification of specific coursework, for each degree, that is aimed at doctoral-level education.

Information on specific coursework for each doctoral degree is included in the Electronic Resource File. All doctoral students are required to complete Ethics in Public Health Research and Policy (PUBH 6742).

2.12.e. Assessment of the extent to which the criterion is met and analysis of the School's strengths, weaknesses, and plans.

The criterion is met.

Strengths

- The School offers doctoral programs in biostatistics, epidemiology, environmental health, and health services research policy and administration.

Weaknesses

- The funding mechanisms for doctoral education have been greatly affected by cuts in federal research and training grants. This has had a negative impact on how the School supports doctoral students.

Plans

- The School will offer a PhD program in Molecular and Systems Toxicology. Students will enroll beginning fall 2015.
- The January 2014 Faculty Retreat focused on strategies to address the changing research climate. The School is reviewing the recommendations from the retreat to develop an approach that will help both faculty and doctoral students secure more funding.

2.13. Joint Degrees

If the School offers joint degree programs, the required curriculum for the professional public health degree shall be equivalent to that required for a separate public health degree.

2.13.a. Identification of joint degree programs offered by the School.

KEY:
Hybrid: Utilizes a blend of on-campus and e-learning technologies for classes.
On-campus: The vast majority of classes are taught on campus using the traditional classroom format.
Online: Delivered through online technologies. Students are never required to be on campus.

Joint Degrees	Format	Academic	Professional
Business Administration/Healthcare Administration	On-campus		MBA/MHA
Dentistry/Public Health Practice – Public Health Dentistry	Hybrid		DDS/MPH
Law/Community Health Promotion	On-campus		JD/MPH
Law/Environmental Health	On-campus	JD/MS, JD/PhD	JD/MPH
Law/Epidemiology	On-campus		JD/MPH
Law/Health Services Research, Policy, and Administration	On-campus	JD/MS, JD/PhD	
Law/Healthcare Administration	On-campus		JD/MHA
Law/Maternal and Child Health	On-Campus		JD/MPH
Law/Public Health Administration and Policy	On-campus		JD/MPH
Law/Public Health Practice – Public Health Law	Hybrid		JD/MPH
Medicine/Epidemiology	On-campus	MD/PhD	
Medicine/Health Services Research, Policy, and Administration	On-campus	MD/PhD	
Medicine/Public Health Practice – Public Health Medicine	Hybrid		MD/MPH
Pharmacy/Public Health Practice – Public Health Pharmacy	Hybrid		PharmD/MPH
Public Policy/Public Health Practice – Public Health Policy	Hybrid		MPP/MPH
Social Work/Community Health Promotion	On-campus		MSW/MPH
Social Work/Maternal and Child Health	On-campus		MSW/MPH

Joint Degrees	Format	Academic	Professional
Urban and Regional Planning/Public Health Practice – Public Health Urban and Regional Planning	Hybrid		MURP/MPH
Veterinary Public Health/Public Health Practice – Veterinary Public Health	Hybrid		VPH/MPH

2.13.b. A list of how each joint degree differs from the standard degree program. The School must explain the rationale for any credit sharing or substitution as well as the process for validating that the joint degree curriculum is equivalent.

Students in the joint (dual) degree programs must complete the same required courses and milestones as students in the standard MPH, MHA, MS or PhD degree programs. Thus, there are no differences. The joint degree agreements do allow students to double count credits, thereby shortening the time to degree by one to two semesters. The School conducts a detailed review of each student's joint degree study plan prior to recommending that the student be granted the MPH, MHA, MS, or PhD degree. The review requires documentation showing that the student has completed all requirements for the degree which they are seeking.

2.13.c. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to the criterion.

The criterion is met.

Strengths

- The School offers a wide range of joint (dual) degrees
- The joint (dual) degree requirements mirror the standard degree requirements.
- The School has a rigorous review process to assure compliance with core and required courses and their related competencies.

Challenges

- These programs are very complicated to administer. Program coordinators must be aware of many distinct requirements to guide students through joint degree enrollment and completion.

Plans

- The School would welcome the opportunity to collaborate with other fields of study and is receptive to developing more joint degree programs.

2.14 Distance Education or Executive Degree Programs

If the School offers degree programs using formats or methods other than students attending regular on-site course sessions spread over a standard term, these programs must a) be consistent with the mission of the School; b) be guided by clearly articulated learning outcomes; c) be subject to the same quality control processes; and, d) provide planned and evaluated learning experiences.

2.14.a. Identification of all degree programs that are offered in a format other than regular, on-site course sessions spread over a standard term, including those offered in full or part through distance education.

Table 2.14.a. Distance and Executive Programs

KEY:
Hybrid: Utilizes a blend of on-campus and e-learning technologies for classes.
On-campus: The vast majority of classes are taught on campus using the traditional classroom format.
Online: Delivered through online technologies. Students are never required to be on campus.

Specialization/Concentration/Focus Area	Format	Academic	Professional
Masters Degrees			
Healthcare Administration – Executive program	Hybrid		MHA
Healthcare Administration – Saudi Arabia	Hybrid		MHA
Maternal and Child Health – Online program	Online		MPH
Public Health Administration and Policy – hosted at Arizona State University	Hybrid		MPH
Public Health Administration and Policy – Executive program	Hybrid		MPH
Public Health Nutrition-hosted at Arizona State University	Hybrid		MPH
Public Health Practice – Executive program	Hybrid		MPH
Public Health Practice- Global One Health-CMU- Chiang Mai (Thailand) program	Hybrid		MPH
Joint Degrees			
Dentistry/Public Health Practice – Public Health Dentistry	Hybrid		DDS/MPH
Law/Public Health Practice – Public Health Law	Hybrid		JD/MPH
Medicine/Public Health Practice – Public Health Medicine	Hybrid		MD/MPH
Pharmacy/Public Health Practice – Public	Hybrid		PharmD/MPH

Specialization/Concentration/Focus Area	Format	Academic	Professional
Health Pharmacy			
Public Policy/Public Health Practice – Public Health Policy	Hybrid		MPP/MPH
Urban and Regional Planning/Public Health Practice – Public Health Urban and Regional Policy	Hybrid		MURP/MPH
Veterinary Public Health/Public Health Practice – Veterinary Public Health	Hybrid		VPH/MPH

2.14.b. Description of the distance or executive degree programs, including an explanation of the model or methods used, the School's rationale for offering these programs, the manner in which it provides administrative and student support services, the manner in which it monitors academic rigor, and the manner in which it evaluates the educational outcomes.

The School is a leader in delivering distance and executive degree programs, certificates, and courses to learners who, due to geography, lifestyle, or work commitments, cannot attend classes in a traditional on-campus setting. Through its online outreach, the School serves the public health education needs of a wide geographic area, including all of Minnesota, North Dakota and South Dakota, which do not have schools of public health at their universities, and areas around the globe. The University of Minnesota has adopted Moodle as the platform for all online course offerings.

As technology has become more accessible, distance learning has enabled the School to provide high-quality coursework to public health practitioners far and wide. Using the standards and processes recommended by Quality Matters, an international organization that promotes a shared understanding of online course quality, has provided invaluable guidance in course design and review. The University of Minnesota has adopted the Quality Matters system to guide its online educational development.

The School supports a professionally trained instructional design team within the Office of E-Learning Services. This team, composed of six professional staff and five students, helps faculty with online course design and development and monitors adherence to the Quality Matters standards.

Model or methods used

Masters in Public Health degrees and the Public Health Core Concepts certificate, offered through the School's Public Health Practice and Maternal and Child Health programs, combine online learning with short, intensive courses offered during the three-week Public Health Institute held each May on the Twin Cities campus.

The Executive Master of Healthcare Administration (EMHA) Program uses a blend of online courses and three short intensive periods on campus. The EMHA Program starts a new cohort each January. Students complete the degree over three years. The newly launched Executive Program in Public Health Administration and Policy will follow the same format.

Rationale for offering the programs

The programs are designed for working professionals and advanced students who aspire to leadership roles in public health or to enhance their professional practice through a better understanding of public health practices. They're also designed for individuals who already have or are pursuing an advanced degree, who have significant work experience in the areas of health and human services, or have completed the certificate in Public Health Core Concepts.

The intensive, on-campus courses focus on critical issues in the field. The online coursework is intended to develop skills used in public health practice settings. Each online course is subject to a thorough review using the standards required by Quality Matters. The Quality Matters Program includes:

- Continuous improvement models for assuring the quality of online courses through trained peer reviewers within the faculty and staff
- Professional development workshops and certification courses for instructors and online learning professionals
- Rubrics used by instructional design staff to apply quality standards to course design

Administrative and student support

Administrative and student support for the distance and executive degree programs is similar to that of on-campus degree programs. Each has a program coordinator and a faculty member who serves as the program director. Students use the same student support services as on-campus students, provided by staff in the Office of Admissions and Student Resources.

Monitoring for academic rigor

Distance and executive degree programs are monitored for academic rigor using the same standards and procedures as those used in other School programs. All programs are thoroughly vetted through the Divisions' and School's Education Policy Committees, by the Academic Health Center Education Office, the University's Provost's Office, and its Regents.

Evaluation of the programs

Both distance and on-campus formats use the following tools for evaluation:

- Courses and teaching evaluations use an online system called CoursEval, which measures student satisfaction with courses and teaching
- Faculty are assessed through the annual performance review process
- Student performance is assessed on projects, presentations, papers, and exams
- Programs are assessed through the Yearly Student Survey

2.14.c. Description of the processes that the School uses to verify that the student who registers in a distance education course or degree is the same student who participates and completes the course or degree and receives academic credit.

To access online course sites, students must use their secure logins and pass-codes. Instructional designers, who help faculty with course development, provide suggestions for course activities and assessment methods that promote opportunities in which students receive credit for their own work. The School is actively investigating the best means for online proctoring.

The University also subscribes to Turnitin, an online technology that searches student work for instances of potential plagiarism using pattern recognition as a search tool.

2.14.d. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans.

The criterion is met.

Strengths

- The School has high-quality distance and executive degree programs that meet the needs of working professionals and those who live at a distance.
- The distance and executive programs are carefully reviewed and monitored.
- The use of Quality Matters provides a consistent framework by which to design high-quality online courses.
- The School uses Turnitin to aid in the detection of plagiarism.

Weaknesses

- None

Plans

- The School will continue to explore methods for online proctoring and to provide more certainty that the student did the work submitted.

3.0 Creation, Application, and Advancement of Knowledge

3.1 Research

The School shall pursue an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.

3.1.a. Description of the School's research activities, including policies, procedures, and practices that support research and scholarly activities.

The University of Minnesota is one of the nation's top seven public research universities and its School of Public Health ranks as a premier U.S. public health research institution, based on a number of criteria:

Research grants and contracts received. The School is a leader in research grants and contracts received among schools of public health across the country *and* among the schools that make up the University of Minnesota. Over each of the past three years, the School has been among an elite group of four schools of public health garnering more than $40 million in National Institutes of Health (NIH) funding. In addition, the School receives funding from a diverse mix of other federal agencies, such as the Centers for Medicare & Medicaid Services (CMS), Agency for Healthcare Research and Quality (AHRQ), Health Resources and Services Administration (HRSA), United States Department of Defense (DOD), United States Agency for International Development (USAID), the Centers for Disease Control and Prevention (CDC). It also receives support from industry and non-profit organizations such as the Robert Wood Johnson Foundation (RWJF).

Across 19 schools which make up the University of Minnesota, the School is first in per capita faculty productivity in grants and contracts – and it ranks third in total sponsored funding. Given the School's small size relative to the other schools, it stands as the most productive grant-receiving unit within the University.

Breadth of research conducted. Faculty, staff, and students are engaged in research that complements the School's educational programs and advances the knowledge and expertise needed to address pressing public health needs. Their research interests are diverse and far-ranging, spanning topics from the biomarkers and health effects of nanotechnology to the comparative effectiveness of different strategies for treating disease and the impact of policy on public health.

The School has earned distinction for research in many areas, including: adolescent health behavior; nutritional epidemiology and obesity prevention; health services research; chronic disease epidemiology, including the genetics of cardiovascular diseases; disparities in health and healthcare among minority and ethnic populations; smoking and alcohol prevention and cessation; the structure and financing of health care systems; the conduct and analysis of clinical trials; treatment of HIV/AIDS; occupational health and safety; women's health policy, risk assessment, and biomarkers; and the use of "big data" in research and public health planning.

The breadth of the School's research is further extended through interdisciplinary collaboration. The School has embraced University-wide strategic planning initiatives, which call for, among other things, an overall emphasis on collaboration. Research efforts include collaboration within the School and across the University's comprehensive Academic Health Center (AHC), comprising six schools focusing on health: Public Health, Medicine, Nursing, Pharmacy, Dentistry, and Veterinary Medicine. The School also works with schools across the University, including the School of Architecture, the Law School, the School of Public Affairs, and the College of Science and Engineering.

Further broadening the School's research footprint is the participation of its faculty in more than half of the 15 interdisciplinary centers within the AHC. This includes work with the:

- National Cancer Institute-funded Masonic Comprehensive Cancer Center, where 40 School faculty serve as leaders in the areas of cancer epidemiology and cancer outcomes and survivorship.
- The Center for Infectious Disease Research and Policy (CIDRAP), which connects scientific research to real-world action through communications and public policy recommendations on such issues as pandemic influenza and bioterrorism.
- The NIH-funded Clinical and Translational Science Institute (CTSI), which is working to build research infrastructure and capacity that are financially sustainable, flexible, operationally efficient, and focused on the ultimate goal of better health. The CTSI's Populations and Community Engagement Core is led by School Professor Bernard L. Harlow. Numerous other faculty work as mentors and serve on the leadership team.
- The Population Research Center (PopCenter) which houses the Minnesota Census Research Data Center and focuses on interdisciplinary analysis of cross-disciplinary research with a focus on demographic behavior across time and space. The PopCenter draws upon talent from across the University, including the School's faculty and students.

The School itself hosts 27 interdisciplinary centers, which are recognized nationally and internationally for high-caliber research, outreach, and training. These centers facilitate creativity and collaboration among faculty and students within the School and beyond. They include the HRSA-funded Rural Health Research Center, the Obesity Prevention Center, the Midwest Center for Occupational Health and Safety (continuously funded for 35 years) and the AHRQ-funded Minnesota Evidence-Based Practice Center.

A high-caliber research faculty. Many members of the School's faculty are leaders in their disciplines, recognized for the quality of their research, their publication in peer-reviewed journals, the number of citations referencing their research, and requests for podium and panel presentations. As noted earlier, many are also recognized as productive researchers with a high success rate in receiving extra-mural support. In addition, faculty members are often sought by other units as collaborative partners based on their quantitative expertise and range of interests. Template 3.2.1 in the Electronic Resource File lists the service activity of the faculty, including involvement on editorial boards, in

study sections, and in other activities that support public health as discipline and practice—all testament to faculty excellence.

The high caliber of the faculty is underscored by the honors received. Examples of recent honors include:

- Lynn Eberly, named a 2014 Fellow by the American Statistical Association
- David Jabobs, Jr., inducted into the AHC Academy for Excellence in Health Research in 2014
- Charles Oberg, presented the 2014 Paul and Shelia Wellston Public Health Achievement Award by the Minnesota Public Health Association
- Michael Osterholm, given the 2013 UMN Award for Outstanding Contributions to Post-baccalaureate, Graduate, and Professional Education
- Lynn Blewett, appointed in 2013 by U.S. Health and Human Services Secretary Kathleen Sibelius to serve a four-year term on the National Committee for Vital Statistics
- Richard MacLehose, 2013, named one of the Top Six Reviewers by the Journal of Epidemiology
- Aaron Folsom, awarded the 2012 Population Research Prize by the American Heart Association
- Traci Toomey, given the 2012 UMN Award for Outstanding Contributions to Post-baccalaureate, Graduate, and Professional Education
- Russell Luepker, presented the 2012 Carole Bland Outstanding Faculty Mentor Award
- Mark Pereira, given the 2012 Outstanding Faculty Award by the Council of Graduate Students
- Jean Abraham, served on the President's Council of Economic Advisors in 2008 - 2009
- Mary Story et al, given the 2012Weight of the Nation Award by the CDC and elected to the Institute of Medicine.

Part of a University that values and promotes research. The School's stature in public health research can be attributed in large measure to its institutional home. As noted earlier, the University has consistently ranked as one of the top seven public research universities in the nation – and it has now set its sights on becoming one of the nation's top three public research universities.

The University is one of only a few in the nation with the full complement of the six health science disciplines. Ready access to the depth and breadth of health sciences scholarship within the University creates rich opportunities for the multi-disciplinary collaboration that complex public health issues require.

A number of University efforts encourage collaboration with other campus schools. Among them is the MnDRIVE (Minnesota's Discovery, Research and InnoVation Economy) program, a partnership between the University and the State, which is

coordinated by the Office of the Vice President for Research. MnDRIVE seeks to align University strengths with state opportunity and need – and to foster innovation, cultivate strategic business collaborations, and enhance the University's ability to produce breakthrough research that addresses state and societal needs. In 2013, in support of MnDRIVE's efforts, the Minnesota Legislature authorized an $18 million annual investment in four research areas in which the University's distinctive strengths can be applied in key and emerging industries, including:

- Robotics, sensors, and advanced manufacturing
- Securing the global food supply
- Advancing industry, conserving our environment
- Discoveries and treatments for brain conditions

Through MNDrive, the University makes financial support available to encourage a multi-disciplinary approach to research. The University, through the AHC, offers one- or two-year seed grants to foster collaboration in developing new academic and research centers of excellence that leverage the faculty's diverse skills and experience. Many of the ongoing pilot and seed grants received by the School have provided opportunities for junior faculty to promote the development of multi-disciplinary research.

School faculty member Ellen Demerath is the principal investigator of a University-wide effort to bring research to the population of Minnesota through the *Driven to Discover* building at the Minnesota State Fair. The effort, financially supported by the School of Public Health, the Office of the Vice President for Research, the College of Food, Agriculture and Natural Resource Sciences, the Clinical and Translational Science Institute, and the Medical School, is a creative way to encourage collaboration and to make the University's research more accessible and transparent.

Another advantage of being part of a research-focused university is the ability to efficiently and effectively communicate research findings to local, national, and global audiences. In collaboration with the AHC Office of Communications, the School has reported via the media the results of faculty research efforts, such as the Minnesota Taconite Workers Health Study and the 2012 CIDRAP Comprehensive Influenza Vaccine Initiative. Since 2012, the School's partnership with the AHC Communications office has produced more than 600 stories in the media, 15 videos and 185 features on *Health Talk* (the University's health news blog). One outcome: The School is a 'go-to' source for media seeking the perspectives of experts, particularly as they cover the Affordable Care Act.

Examples of School research

The following examples suggest the types and range of research conducted at the School:

- The Department of Veteran's Affairs Northstar New Generation Study, which surveyed nearly 1,000 veterans of the Iraq and Afghanistan wars on health behaviors. The study shed light on the vast array of health services needed to assist returning soldiers in re-acclimating to civilian life in the Upper Midwest region.
- Long-standing cohort studies designed to better understand disease incidence and the relationships between disease and risk factors, such as genetics, exposures, and

behaviors. These studies include the Atherosclerosis Risk in Communities Study (ARIC), the Multi-Ethnic Study of Atherosclerosis (MESA), the Coronary Artery Risk Development in Young Adults Study (CARDIA), the Study of Osteoporotic Fractures (SOF), and Design and Baseline Characteristics of the Osteoporotic Fractures in Men study (MrOS).

- The Integrated Health Interview Series, funded by the NIH with the goal of harmonizing 30 years of data from the National Health Interview Survey (NHIS). This effort provides data documentation and makes data accessible online through a collaboration with the University's Population Center. The data are being used for a variety of purposes, including evaluating the impact of the Affordable Care Act.
- Research to develop a method for in situ remediation of groundwater contaminated by perfluoroalkyl substances, environmental pollutants with bioaccumulation potential, funded by the Environmental Protection Agency (EPA) and Department of Defense (DOD).
- The genetics of infant growth and later obesity, and the relationship of childhood body mass index (BMI) growth patterns to later obesity and chronic disease risk, funded by the NIH.
- Bayesian statistical methods for more efficient, effective, and ethical adaptive clinical trials, funded by the National Cancer Institute. The approach allows clinical trials to run more quickly, saving time and money and requiring fewer patients. It also aims to make trials more ethical since a reduced sample size means fewer patients are exposed to whatever turns out to be the inferior treatment.

Research Policies and Procedures

The University and the School are committed to research of the highest integrity, conducted according to the highest ethical standards. This commitment is reflected in the words of University President Kaler:

"The mission of the University of Minnesota is deeply connected to the conduct of research. It is of critical importance to the reputation and future of this institution that we remain committed to the highest standards of research integrity in all work conducted in our institution."

Within the School, the Academic Appointment, Promotion, and Tenure code (available in the Electronic Resource File) describes the expectations for research/scholarly activity at various faculty ranks. All tenured and tenure-track faculty are expected to teach, do research, and perform service within and outside the University community.

School-level research oversight

The School ensures that all faculty, staff, and students undergo the rigorous training offered at the University level in the proper conduct of research. This includes training in the Responsible Conduct of Research (RCR) as well as in research policy, procedures, and human subject protection offered by the University's Research, Education, and Oversight (REO) program. In addition, the School ensures that all faculty, staff, and students meet the strict training requirements of federal funding agencies with respect to the safe, responsible, and ethical conduct of research. Principal investigators also are required to receive special training related to research management and oversight.

To further safeguard the integrity of research, prior to submission, all grant proposals that involve a School faculty member must be reviewed and approved at each of three levels: the Division head, the School's Senior Associate Dean for Academic Affairs and Research, and the University-wide Sponsored Grants Administration (SPA) office, which is authorized to submit all research proposals and receive awards from external sources on behalf of the Board of Regents. Within the School, faculty members, Division Heads, and the Senior Associate Dean for Academic Affairs and Research are responsible for:

- The School's compliance with all federal rules and regulations;
- Accurately calculating facilities and administrative cost recovery; and
- Ensuring that any cost-sharing or special resource needs conform to School policies.

When a grant or contract is awarded, the principal investigator is responsible for carrying out the work as proposed, monitoring the progress of the research, submitting interim and final reports as required, and completing the work within budget. SPA and the School's grants management professionals provide important oversight about deadlines and compliance with grant and contract terms and conditions.

Research practices

The School's research practices embrace the key characteristics of practice-based research (ASPH Special Publication/January-February 2006). These practices aim to focus rigorous scientific research on real-world problems and the development of practical applications and interventions linked to the core principles and essential services of public health. Also central to the School's practice-based research principles is a commitment to partnership – with practitioners, members of communities and their leaders, policymakers, and other academic researchers across disciplines and geographies. The School views rigorous scholarship as essential to the development of successful public health interventions – and effective partnerships as vital to the successful application of effective interventions.

For faculty who need to spend time at other institutions to further their research or scholarly activity, the School participates in the University's program for single semester and sabbatical leaves, which provides 50 percent salary support for two semesters and 100 percent salary support for one semester. Faculty may apply for a sabbatical every six years and for semester leave every four years. Leave is awarded by the University on a competitive basis.

University-level research oversight

The University's sophisticated grants and project management oversight system applies to all of its units, including the School. The system clearly identifies the roles and responsibilities of various members of the University for elements of the grants application and management process and protection of human subjects and research data. It establishes lines of authority within the University related to all transactions on sponsored projects.

A fundamental aspect of the University's oversight approach is the decentralization of many responsibilities to the principal investigator level, with oversight and monitoring provided by department heads and deans. Beth Virnig, the School's Senior Associate Dean for Academic Affairs and Research, serves on multiple University-level committees

and policy review groups including the Council of Research Associate Deans (see below) and acts as the primary liaison between University and School-level administration.

The Office of the Vice President for Research (OVPR) is the umbrella office responsible of overseeing research at the University's five campuses. It includes seven administrative programs or units that focus on various aspects of the research management and oversight:

Sponsored Projects Administration (SPA) has the authority to deal directly with both federal and non-federal funding agencies relating to any aspect of externally funded activity at the University. SPA signs all applications for funding and accepts all awards on behalf of the University. It also houses the Electronic Grants Management System (EGMS), a centralized grant preparation and tracking system.

The **Reporting, Education, and Oversight** (REO) program provides independent oversight and compliance monitoring of research activities. In the process, REO works to reinforce and enhance the research activities of faculty, staff, and students. Specific functions of REO include: educating employees in policies and procedures related to research compliance; facilitating the development and enforcement of research policies; coordinating university-wide research integrity and compliance functions; and maintaining a program that aligns with the strategic vision of university leadership.

The Human Research Protection Program, also known as the Institutional Review Board (IRB), reviews and monitors use of human subjects in research, ensuring oversight of risk, consent, and justified-use issues. All grants and contracts that include research with human subjects must be reviewed and approved by this office. The School is well represented on the IRB. Associate Professor J. Michael Oakes is vice-chair of the IRB system and chair of the Social Science review panel and the student research panel, which he founded 10 years ago to help ensure ethical conduct of student research. Two other faculty members also serve on the IRB.

The Office of Animal Welfare manages the review process for Animal Care and Use Protocol (ACUP) submissions, the ACUP database, Institutional Animal Care and Use Committee (IACUC) meetings and serves as a general information resource for investigators regarding the IACUC. There is relatively little interaction between this office and the School, which rarely conducts research that involves animals.

The Health Information Privacy and Security Office is responsible for ensuring that individually identifiable health information is handled appropriately. Federal laws, such as the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as well as Minnesota laws, require the University to manage this information in certain ways. The office provides direction and support to ensure compliance with these requirements through the development of guidelines and policies and through training and awareness.

Additional University programs which facilitate and/or advocate research activities include:

The **Council of Research Associate Deans** (CRAD), made up of Associate Deans for Research for all units, which reviews and provides guidance on research-related policies and initiatives and serves as a forum for the University's research colleges to exchange information. The School's Senior Associate Dean for Academic Affairs and Research is a member of this council.

The **Office of Research Advancement** advances disciplinary and interdisciplinary initiatives, guides research infrastructure planning, directs research policy, and reviews issues. It provides funding through internal grant programs, maintains a directory of infrastructure, coordinates limited nominations, and hosts searchable databases of internal and external funding opportunities.

Technology Commercialization and Business Development seeks proprietary protection for University technology and negotiates its transfer to the private sector through licensing or by participating in starting new companies.

The **Office of University Economic Development** serves as the public face for economic development at the University, helping external partners connect with the resources, services, and expertise at the University and its system campuses. It collaborates with groups across the University to promote access to economic development efforts system-wide and to connect businesses, entrepreneurs, and community agencies to the University resources they need.

University policies governing research

A number of University policies, set by the Board of Regents, the University Senate, and other administrative bodies, govern research.

3.1.b. Description of current research undertaken in collaboration with local, state, national or international health agencies and community-based organizations. Formal research agreements with such agencies should be identified.

The School's deep commitment to practice-based research has inspired significant growth in its community-based research activities and the development of an impressive body of knowledge that addresses a broad range of practical public health issues. Appendix 3.1.c. Template E lists all current research activities and indicates those that are community-based at the local, state, national, and international level.

The School defines community-based research activities as those that include engagement through partnerships with community-based organizations and inclusion of community members in research planning and implementation – the latter a key distinction in the School's definition of community. "Community" is defined broadly as spanning the metropolitan Minneapolis-St. Paul area, the state of Minnesota, the United States as a nation and the worldwide global community.

Locally, the School has strong ties with governmental public health agencies, such as the Minnesota State Departments of Health and Human Services. It also has strong relationships with community organizations, such The Phillips Neighborhood Clinic, which provides accessible, culturally appropriate medical care to underserved individuals living in Minneapolis; the Emily Program, which provides treatment for eating disorders; and local health care organizations, such as Medica, Allina, Health Partners and United Health Care.

Highlights of several key areas of community-based inquiry led by School faculty follow:

Local and State

Eliminating health disparities in Minnesota and beyond

Minnesota has long been rated one of the nation's healthiest states. But many communities in the state experience poorer health than Minnesotans in general. In fact, some of the state's health disparities rank among the most severe in the nation. School researchers have partnered with community leaders and citizens in the Latino, African-American, Somali, Hmong, and American Indian, and rural communities to learn more about the factors behind these disparities – and to explore interventions that may successfully address them. Among the many research efforts conducted by the School to help close the health disparity gap are the following:

- The Minnesota Taconite Workers Health Study is a comprehensive, $4.9 million research initiative funded by the State, which investigates the cause(s) of excess cases of mesothelioma among taconite workers and the extent to which employment in the taconite industry and exposure to dust from the industry affect the health of workers. Specific emphasis is on respiratory diseases and diseases associated with silica and asbestos exposure. The study represents important health disparities research because many of the taconite industry workers live in rural or non-metropolitan areas.
- The Tribal Tobacco Use Project (TTUP) seeks to fill data gaps by engaging tribes and American Indian communities in the surveillance and monitoring of attitudes, behaviors, and beliefs related to tobacco use among American Indians in Minnesota. This information will help inform the development of tobacco prevention and control programs and policies within the Native American communities where high rates of tobacco use contribute to health disparities. The information will also substantiate the need for continued access to tobacco control resources. The study will also measure rates of commercial tobacco use versus use according to tribal traditions.
- Rates of autism among the Somali immigrant population in Minnesota are higher than among the majority population. The Qualitative Study of Families of Children with Autism in the Somali Community: Comparing the Experiences of Immigrant Groups was designed to understand cultural and resourced-based aspects of autism spectrum disorders that are unique to the Somali, Hmong, and Latino communities. The study used community-based, participatory research to involve members of the community in all aspects of the research, from specifying research questions through implementation of the research, formulating recommendations, and dissemination.

Global public health

- An interdisciplinary research project to study informal systems of street vending and health among migrant and immigrant laborers in the Riviera Maya, a tourism corridor along the coast of the Mexican state of Quintana Ro, this project seeks to understand informal vending labor systems vis-à-vis local-state regulation and enforcement of street vending and the creation of health and illness in this context.
- A prospective study of aging women in the Philippines is examining the prevalence of disability and the mental health burden of caregiving demands.

3.1.c A list of current research activity of all primary faculty identified in Criterion 4.1.a.

Template 3.1.1. Research Activity of Faculty for the last Three Years

Please see the Electronic Resource File.

3.1.d. Identification of measures by which the School may evaluate the success of its research activities, along with data regarding the School's performance against those measures for each of the last three years.

Indicators	Target	2010–2011	2011–2012	2012–2013	2013–2014
Amount of sponsored-grant dollars per full-time faculty member	$400,000/ FTE		$678,413	$686,082	$714,581
Number of annual sponsored-grants/ contracts awarded	Increase each year	244	272	237	available Nov. 2014
Total research expenditures in dollars	Increase each year	$81,850*	$85,073*	$86,069*	$92,181*
% of assistant professors who receive external funding within 2 years of hire	80%		45%	37%	52%
Number of students holding research positions within the School[14]	Increase each year	284	292	282	295
Number of peer-reviewed publications per faculty member per year	Mean of 4		not available	not available	6.4
Number of students participating in Research Day	At least 60		48	63	70
Percentage of faculty engaged in international research, education, and service collaborations	50%		not available	32%	27%

** = $ in thousands*

[14] *Some students hold <u>both</u> Research Assistantships and Teaching Assistantships at the same time.*

3.1.e. Description of student involvement in research.

The School is committed to involving and supporting its students in research.

All master's degree students are required to complete a project or formal thesis, and doctoral candidates are required to present and defend a formal dissertation in the format of a thesis or a three-paper exam. The nature of student research projects is determined in consultation with their academic advisor and other faculty on their committees.

Students have numerous opportunities to be involved in many aspects of faculty research. Often student research builds on the research efforts of faculty advisors, especially in the academic programs. Students benefit from opportunities to work with faculty, many of whom are nationally and internationally renowned in their respective fields. Conversely, faculty benefit from the diverse knowledge, life experiences, and enthusiasm of the students.

Several School funding sources are available to support student research, including the:

- Fogarty International Center research grants for international scientists
- National Research Service Awards that provide financial support for student research and specifically train students as future researchers
- CMS (Centers for Medicare and Medicaid Services) Dissertation Awards in Health Care Policy and Finance, and
- Traineeships, Fellowships, and Graduate Assistantships

However, rapidly rising costs, tied particularly to increasing fringe benefit rates and healthcare costs, are putting pressure on the School's ability to fund student research and graduate assistantships (295 provided in 2013-2014). Funding pressures are driving the School to seek alternative forms of support, such as scholarships, paid internships, and practice arrangements that support research activities. One example has been the School's success in placing more than 50 students in research positions with the Minnesota Department of Health each year as part of such activities as "Team Diarrhea," an infectious disease surveillance initiative.

In addition to providing financial support for student research, the School promotes student involvement in research in the following ways:

- Each year, the School invites students to present posters at its annual Research Day. Students submit structured abstracts a month before the event (the School covers the cost of printing the posters). Faculty and community members are invited to judge the submissions and a variety of awards are given, including: first place for both Master's and PhD students; an alumni recognition award; and an award based on votes from attendees. The most recent Research Day was held April 9, 2014. Seventy research projects were submitted by 80 total students; 28 PhD students and 52 master's students, some of the posters were group submissions. Twenty-one faculty and alumni participated in formal judging of the abstracts and more than 300 people attended.

- Faculty members act as advisors on student research endeavors, providing practical advice and training, reinforcing principles of ethical research, and challenging students' intellectual rigor.
- Faculty are encouraged to support and assist students in publishing their work and to include students as their co-authors. Whether or not a faculty member has included student authors is a standard part of his or her annual review and an important component in evaluating research and teaching impact during considerations of faculty tenure or promotion.
- In addition to conducting research to meet degree requirements, students have additional opportunities as paid or unpaid research assistants to faculty. These opportunities provide important experience in data collection and analysis as well as learning that comes with close interaction with faculty and research staff.

3.1.f. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- All tenured and tenure-track faculty are involved in research.
- Faculty members are highly productive competitors for research funding. The average amount of sponsored grant dollars per full-time faculty is $714,581 (2013-14), one of the highest amounts among public university schools of public health in the nation.
- Faculty members conduct research across a broad range of important public health issues, helping to translate discovery into public health impact.
- Faculty members are building a significant body of knowledge based on community-based, participatory protocols. In addition, the faculty is involved in research collaborations within the School and across the University, state, nation, and world.
- Faculty research is respected and frequently cited in peer-reviewed journals and other public health contexts.
- Faculty are involved in a growing number of international research efforts.
- Students are involved in faculty research as part of faculty grants, research assistantships, and master's projects.

Weaknesses

- More students could benefit from increased research assistantships.
- The grants portfolio could be more diverse and less reliant on NIH sources.
- Many associate professors continue to perform appropriately for their rank but fail to progress in a timely fashion to promotion to full professor.

Plans

- Continue to seek new sources of support for student research assistantships.
- Continue to develop sources of pilot funds and research mentoring to help assistant professors develop a grant portfolio.
- Seek out alternate sources of funding, including contracts from non-NIH federal and state sources and industry partnerships.
- Continue to mentor and support the academic development of associate professors with the goal of having clear expectations and a developed career plan leading to promotion to full professor.

3.2 Service

3.2.a. Description of the School's service activities, including policies, procedures, and practices that support service. If the School has formal contracts or agreements with external agencies, these should be noted.

Service is integral to the School's mission. Service activities are guided by the School's commitment to advance population health by engaging with communities worldwide. Through service, scientific discoveries are translated to impact, faculty share their professional knowledge and know-how with communities and learn from them, and students are afforded opportunities to apply lessons from the classroom, gaining invaluable experience and real-world understanding.

The success and impact of the School's service activities depend on many factors. Perhaps chief among them are partnerships with practicing public health professionals who are active in service, policymaking, or education. The best of these partnerships are built on shared commitment and focus, whether the need is to educate public health professionals, conduct research, or share findings with community partners through professional and community organizations and initiatives.

The School is proud that its service initiatives are making a difference locally, nationally, and globally. Highlights include:

- The Minnesota Technical Assistance Program (MnTAP), an outreach and assistance effort, is helping Minnesota businesses develop and implement solutions to prevent pollution at the source, maximize efficient use of resources, and reduce energy use and costs to improve public health and benefit the environment. This unique partnership between The Minnesota Pollution Control Agency and the School's Division of Environmental Health Sciences has served the state since 1984.
- Researchers in the Division of Health Policy & Management have helped inform the national debate on implementation of the Affordable Care Act (ACA) and health care costs. School alumna April Todd-Malmlov led the establishment of Minnesota's health insurance exchange, a key part of the ACA, which enrolled over 200,000 Minnesotans by the March 31, 2014 enrollment deadline.
- Project EAT (Eating Among Teens) in the Division of Epidemiology & Community Health examines the causes behind the prevalence of an increase in the number of overweight adolescents, in particular minority youth and youth from low socio-economic backgrounds. Results show that patterns developed during adolescence may contribute to obesity and eating disorders and may increase risk for several important chronic diseases later in life. Information garnered through this study will help serve families and communities as they design environments and practices that lead to healthy eating
- The Center for Infectious Disease Research and Policy (CIDRAP) plays a key role in researching and disseminating information about global public health threats. The center is led by Michael Osterholm, professor in the Division of Environmental Health Sciences and an international thought leader on influenza pandemic preparedness and threats of biological weapons to civilian populations. Osterholm is

frequently quoted in mainstream media and cited in scholarly articles. CIDRAP staff members partner with policy makers, business leaders, medical and public health professionals, and the media to accomplish its goal of preventing illness and death from targeted infectious disease threats.

- State Health Access Data Assistance Center (SHADAC) is a health policy research center within the School whose faculty and staff are recognized as national experts on the collection and use of health policy data. SHADAC specializes in issues related to health insurance access, use, cost, and quality with a particular focus on state implementation of health reform. Work includes providing technical assistance to many agencies and individuals across the country at both the federal and state government levels.

3.2.b. Description of the emphasis given to community and professional service activities in the promotion and tenure process.

Service is an important criterion in the promotion and tenure process for both academic and contract faculty. Faculty members are required to demonstrate professionally related community service that has an impact in their field. Service aimed at improving public health is particularly valued. A review of promotion and tenure documents from 2011-2014 indicated that all faculty members who were granted promotion and tenure devoted time and talent to professional and community service. The professional service activities included editorial and peer reviews for professional journals, grant reviews, serving as conference speakers, moderators, or panelists, and leading professional organizations. The same group of faculty also shared their public health expertise with the community in a variety of roles and settings, such as:

- Member of the Institute of Medicine Committee on the Gulf War and Health
- Speaker to state and local community groups on nutrition and cancer
- Serving on the President's Council of Economic Advisors in Washington, D.C.
- Working with a local Cultural Awareness Center that provides care to disadvantaged populations
- Volunteer work with the Minnesota Black Psychologists Association to study the juvenile justice system and disadvantaged youths
- Speaker to cancer survivors and their families
- Advisory group member on race and ethnicity for the Minnesota Department of Health

3.2.c. A list of the School's current service activities, including identification of the community, organization, agency, or body for which the service was provided and the nature of the activity, over the last three years.

Template 3.2.1. Service Activity of Faculty for the last Three Years

Please see the Electronic Resource File.

3.2.d. Identification of the measures by which the School may evaluate the success of its service efforts, along with data regarding the School's performance against those measures for each of the last three years.

Indicators	Target	2010–2011	2011–2012	2012–2013	2013–2014
Percentage of faculty members serving in leadership roles in professional associations	25%		29%	33%	34%
Percentage of faculty serving as members of professional associations, community-based organizations, community advisory boards, etc.	90%		73%	72%	76%
Number of students with Community Engagement contracts in the database that records student volunteer activity in the community	Increase each year	6[10]	28	40	42

[10]*The Community Engagement Database was begun in mid-year. 2010-11 was the pilot-testing period.*

3.2.e. Description of student involvement in service, outside of those activities associated with the required practice experience previously described in Criterion 2.4.

Students are actively involved in service activities within the University, communities, and professional organizations. The School supports student service learning in the following ways:

- The School helps students locate service activities by posting opportunities on the Jobs website.
- In response to student demand, the School created PUBH 0020 – Community Engagement, a course that carries no credit, no grade, and no tuition to ensure that students have liability coverage as they engage in community service activities. It also provides a record of the student's service activity on his or her official University transcript.
- The School provides international travel scholarships for students involved in service activities in India and Uganda.

- The Student Senate organizes service days in which students work in food kitchens, deliver holiday meals, help elderly in their homes, and participate in fund-raising for the American Cancer Society and other nonprofit organizations.

The School's partnership with the Phillips Neighborhood Clinic provides a unique example of student service because of its inter-professional focus. Operating two evenings each week, the Phillips Neighborhood Clinic provides accessible, culturally appropriate medical care to underserved individuals living in Minneapolis. Students in public health, medicine, pharmacy, dentistry, and nursing are supervised by licensed clinicians to provide care and services, such as blood pressure checks, nutrition, well-child visits, help with filing for medical assistance, and family planning.

Service awards also provide recognition and incentive for student service in the community. Each year the Minnesota Public Health Association recognizes two students for outstanding community service. Students are nominated by other students and faculty members and selected by a panel composed of MPHA members.

The President's Student Leadership and Service Awards also recognize student service. Students in the School are regularly selected for this very prestigious University-wide award. In 2014, one student from the School was selected and, in 2013, four students were selected.

3.2.f. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

This criterion is met.

Strengths

- Service is a key component of the School's activity and it is reflected in its promotion and tenure expectations and policies.
- Faculty members consistently perform a high level of service activity.
- The School facilitates student engagement in community service through organized activities, postings, and development of PUBH 0020.

Weaknesses

- Since the University does not have a good tracking system for service activities, we believe that faculty members engage in many more service activities than they report.

Plans

- The School is participating in a University effort to design a better tracking system for academic and service activities. The system will launch in spring 2015.

3.3 Workforce Development

The School shall engage in activities other than offering degree programs that support the professional development of the public health workforce.

The School has long accepted its responsibility for the ongoing development of the public health workforce.

- In 2000, it established the Centers for Public Health Education and Outreach (CPHEO). CPHEO includes six research and grant-funded training centers, including the Midwest Center for Occupational Health & Safety and the Midwest Center for Lifelong Learning in Public Health. All of the centers provide continuing education for public health professionals through in-person and online courses.
- The School's Leadership, Education, and Training (LET) program in Maternal & Child Nutrition sponsors several local and state continuing education seminars each year.
- The School's Center for Aging offers online modules and an annual Aging Summer Institute for professional development for practitioners who serve older adults.
- The Midwest Consortium for Hazardous Waste Worker Training, administered by the School's Environmental Health Sciences division, offers OSHA-compliant worker training in hazardous material handling, remediation and emergency response

3.3.a. Description of the ways in which the School periodically assesses the continuing education needs of the community or communities it intends to serve. The assessment may include primary or secondary data collection or data sources.

The School continuously examines workforce needs both within specific and across broad public health communities. In general, it identifies continuing education and training needs through:

- Focus groups, course evaluations, and feedback at the end of its programs and coursework
- Interaction and inquiry during conferences to identify attendee training needs
- Conversations at the state level about needs for new courses
- Ongoing, informal surveys of grant partners and staff to learn of emerging needs, and
- Advisory board input and key informant interviews

Among the many assessments are those conducted by the School's centers and programs:

Midwest Center for Occupational Health & Safety (MCOHS) In order to provide relevant training for occupational and environmental health nurses and doctors, safety engineers, industrial hygienists, and other occupational health and safety professionals, the MCOHS conducts an online needs assessment every two years, most recently in 2013. (A copy of the needs assessment, reflecting comments from the 213 respondents from 2013, is available in the Electronic Resource File.) These assessments are conducted in conjunction with two other regional National Institute for Occupational Safety and Health (NIOSH)-funded education research centers.

The Center also assesses professional training needs through surveys of course participants after each training. It holds two meetings annually with its board of advisors, made up of leading professionals from the occupational health and safety field, to gauge the success of its courses in fulfilling professional training needs of the region's occupational health and safety professionals

University of Minnesota: Simulations, Exercises, and Effective Education Preparedness and Emergency Response Learning Center (U-SEEE PERL) works with departments of health in Minnesota, North Dakota and Wisconsin to address training needs. Needs and ideas are solicited from health department representatives from each of the states with representation on PERL's Advisory Board, as well as other board members, including representatives of the Federal Bureau of Investigation, the Federal Emergency Management Agency, the Department of Homeland Security, and county health departments.

The **Midwest Center for Lifelong Learning in Public Health (MCLPH**) monitors public health training needs through annual online surveys. Over the past two years, it has surveyed more than 100 public health professionals, including 60 from Minnesota in 2012 and 47 from North Dakota in 2013. The goal is to gain insight into training needs, satisfaction with current training, and other areas of need or possible collaboration.

In addition, MCLPH solicits input on future training needs from its advisory board, which includes representatives from state health departments in Minnesota and North Dakota, local public health agencies, and other health-focused organizations. Also, in 2013-2014, MCLPH worked with the Minnesota Community Health Worker (CHW) Alliance to survey currently practicing CHWs. Questions probed their continuing education needs and preferences for delivery.

Midwest Consortium for Hazardous Waste Worker Training (HWWT) conducts participant evaluations after every course. Needs assessments are administered and developed by the University of Cincinnati Evaluation Service Center and conducted annually by HWWT program participants. Program metrics are measured for compared against all 14 training centers within the Midwest Consortium. The HWWT training program conducts an ongoing internal needs assessment of participants and instructors as well as an annual program self-audit as a requirement of funding. Self-audit responses are shared among all training centers within the Consortium. An advisory board meeting of professionals in emergency response, industrial hygiene, and occupational safety meets annually to review course needs and emerging trends in worker safety and health training.

The **Public Health Institute (PHI),** which offers short, intensive, applications-based courses for students and practice professionals in public health and related fields, has a rigorous process to determine course offerings needed to meet emerging and future training needs. The PHI team solicits input from the advisory boards of the MCLPH and PERL (referenced above), whose grants partially fund PHI activities. The PHI director convenes a series of meetings of faculty, research, and practice professionals, to consider curriculum needs for the degree and certificate programs, emerging public health issues and trends, global and cultural perspectives, and "fit" with the PHI mission.

In addition:

- Course evaluations submitted by PHI participants are reviewed carefully with an eye for unmet needs, fresh ideas, potential instructors, and opportunities for collaboration.
- Course proposals are solicited from faculty at the University and other academic institutions and from professionals in government and non-profit organizations, practice professionals, subject-matter consultants, industry, and international collaborations.

3.3.b. A list of the continuing education programs, other than certificate programs, offered by the School, including number of participants served, for each of the last three years.

A list of continuing education programs with number of participants served is in the Electronic Resource File in Table 3.3.b.

Description of the School's continuing education programs:

Summer Public Health Institute (PHI)

Now in its 13th year, PHI offers more than 40 courses for students and practice professionals in public health and related fields. Participants can build or expand their professional expertise, learn best practices, broaden career options, network with other professionals, or explore a new area of interest. Courses are intensive, highly interactive and applications-based, providing opportunities for field trips, case studies, hands-on labs and simulations. Designed to meet the needs of busy professionals, PHI courses are modular, so students can take as few as 1.5 days or as many as three weeks of study. Students may earn continuing education credits or up to 6.5 graduate credits over a three-week session. PHI courses are taken for graduate credit by students in public health, medicine, veterinary medicine, nursing, dentistry, public affairs, law, social work, pharmacy, public policy, global health, and agricultural, food and environmental sciences. Continuing education credits are sought by practice professionals in public health and other health and human service organizations, city, county, state, and federal government agencies, and businesses and industry.

Midwest Center for Lifelong Learning in Public Health (MCLPH)

MCLPH works to strengthen the technical, scientific, managerial, and leadership competence of the public health workforce. Funded by the Human Resources and Services Administration (HRSA), MCLPH partners with health departments in Minnesota and North Dakota to assess core public health competency gaps in the public health workforce as a basis for program development and evaluation. It offers 54 online modules and an average of 20 classes per year designed to address these gaps. Creating the future public health workforce is a critical aspect of the MCLPH mission, and through collaborative work with state and academic partners, the center has created public health education for K-12 students, including *Epidemic!,* an online simulation game about public health careers, and *Outbreak at Watersedge*, an online game.

University of Minnesota: Simulations, Exercises and Effective Education Preparedness and Emergency Response Learning Center (U-SEEE PERL)

Established in 2010, U-SEEE PERL, one of 14 Centers for Disease Control and Prevention (CDC)-funded Preparedness and Emergency Response Learning Centers (PERLC). The center aims to develop, deliver, and evaluate core competency-based training for the public health workforce, and to work with state, local, and tribal partners to meet the identified training needs in Minnesota, North Dakota, and Wisconsin. Through these efforts, U-SEEE PERL supports achievement of the National Health Security Strategy to enhance community resilience by building essential public health security capabilities.

U-SEEE PERL provides 48 online modules and tools and an average of 15 face-to-face courses per year. It works with U-SEEE PERRC (Preparedness and Emergency Response Research Center), which serves as a resource for translating research to education and training. Two mobile phone apps – *Psychological First Aid* (PFA) and *Responder Self Care* – are examples of its efforts.

University of Minnesota: Simulations and Exercises for Educational Effectiveness Preparedness and Emergency Response Research Center (U-SEEE PERRC)

Started in 2008, U-SEEE PERRC conducts extramural research to investigate the structure, capabilities, and performance of public health systems for preparedness and emergency response in accordance with the Pandemic and All-Hazards Preparedness Act of 2006. Of the nine PERRCs funded nationally by the CDC, U-SEEE is the only PERRC to address the priority area "Enhance the Usefulness of Training." A key component of the U-SEEE PERRC project involves translation and dissemination of research findings to the scientific and practice communities. All PERRC-developed trainings are listed under U-SEEE PERL in Table 3.3.b.

Midwest Center for Occupational Health & Safety (MCOHS)

One of 18 Centers for Occupational Health & Safety nationwide, the School's MCOHS was created in response to a mandate of the National Institute for Occupational Safety and Health (NIOSH) to provide an adequate supply of qualified personnel to carry out the purposes of the Occupational Health and Safety Act and reduce the national burden of work-related injury and illness. The MCOHS serves Minnesota, Wisconsin, and North and South Dakota. It provides graduate academic and research training programs, continuing education and outreach (including research to practice), and serves as a regional resource for industry, labor, federal, state, and local government agencies, agriculture, and other interested parties. MCOHS provides 20 online learning modules and 75 face-to-face courses per year.

Upper Midwest Agricultural Safety and Health Center (UMASH)

UMASH is one of nine Centers of Excellence in Agricultural Disease and Injury Research, Education, and Prevention, funded by the National Institute for Occupational Safety and Health (NIOSH). A collaboration of the University of Minnesota School of Public Health, College of Veterinary Medicine, the National Farm Medicine Center of the Marshfield Clinic, WI, and the Minnesota Department of Health, the center addresses existing and emerging occupational health and safety issues in agriculture. Launched in 2012, UMASH projects are in the early stages. Dissemination and plans for research-to-

practice translation are in process. For example, the Seguridad en Las Lecherias: Immigrant Dairy Worker Health and Safety study is working to create and test culturally and linguistically appropriate education in agricultural health and safety. The project will apply evidence-based research findings as well as culturally appropriate popular education approaches to address the health and safety of immigrant workers in the dairy industry. The project will pilot a bilingual safety curriculum for Hispanic workers and utilize promotores de salud or lay health workers to employ a 'train-the-trainer' approach to educate workers. This recently created center does not yet have any participation trainings to report in Table 3.3.b.

Midwest Emerging Technologies Public Health and Safety Training Program (METPHAST)

Avoiding potential health and safety issues associated with emerging technologies calls for anticipating exposure to risks and acting to mitigate them before they occur. Aiming to ensure that risks are anticipated and addressed so that emerging industries may grow without harm to workers or the public, the University of Minnesota, University of Iowa, and Dakota County Technical College (MN) formed the Midwest Emerging Technologies Public Health and Safety Training (METPHAST) Program in 2013. The immediate objective is to develop an array of web-based modules useful to instructors in tailoring education and training on the health and safety of nanotechnology to the needs of different learners. METPHAST plans to offer around 20 online modules, each providing continuing education contact hours. This recently created center does not yet have any participation trainings to report in Table 3.3.b.

Midwest Consortium for Hazardous Waste Worker Training (MHWWT)

The MHWWT, funded since 1987 by the National Institute of Environmental Health Sciences (NIEHS), develops, presents, and evaluates model worker training programs to help employers comply with OSHA 29 CFR 1910.120. Over 20,000 participants have completed face-to-face hazardous materials training at the University of Minnesota since its inception. The consortium offers an array of hazardous material response, awareness, remediation, and emergency preparedness courses to community and business partners in the Upper Midwest. Over 40 courses in three languages (English, Spanish, Somali) are offered to approximately 400 participants annually.

Center on Aging (COA)

The Center on Aging (COA) facilitates the University's response to the many issues of the aging population by supporting basic and applied research, as well as the education of students and professionals as they explicate the aging process and inform public policy. In addition, the COA offers continuing education opportunities, including 17 geriatric education online modules containing up-to-date information on many topics relevant to professionals who serve older adults, as well as educators and students. The COA offers a certificate in aging. The courses come from those offered under the more traditional gerontology minor. The Center also conducts an annual one-day Summer Institute on a relevant topic for a broad community audience and sponsors periodic Distinguished Lectures given by national and international experts. Past topics include Alzheimer's disease, ethics, and aging, and the Affordable Care Act. A series of online lectures is available to address a variety of geriatric topics.

National Maternal Nutrition Intensive Course (NMNIC)

NMNIC is sponsored by the School's Leadership Education Training Center (LET) in the Maternal & Child Health program and the Department of Epidemiology and Community Health. It offers continuing education programs that focus on the improvement of maternal and infant health through the delivery of nutrition services. Each year, the approximately 1,500 dieticians, nutritionists, midwives, nurses, physicians, and public health practitioners who participate in the program are queried about the value of the course. Sample evaluation comments have included:

- *I am teaching a senior (undergrad) capstone course, Biology in the Community, in the fall. We will be doing some prenatal health education (working with a community partner) for immigrant and refugee women. We will be building on previous work, looking at treatment for Vit D deficiency among pregnant and breastfeeding refugee women. This course will (has) provided me with background and support information.*
- *I appreciated the strategies for counseling and treating low-income populations. As an RD, I cannot use the same behavioral strategies with low-income patients that I use with insured, or middle/upper income, patients.*
- *Dr. Wallinga took a complex issue all the way from the Barker Hypothesis, through the food environment and then was able to distill it into a way to take action at a local level. Difficult to do. But well done.*

Public Health Roundtable

The Public Health Roundtable, planned by a committee of School faculty and public health professionals, is a half-day forum held two to three times a year. The goal is to inform public discourse on key issues. Participation data is listed in Table 3.3.b. under MCLPH, the sponsoring grant. Topics have included:

- Improving Access to Mental Health Services, 2014
- The Affordable Care Act, 2014
- Engaging Communities in Public Health Research, Practice & Policy, 2013
- Framing the Future: The Second Hundred Years of Public Health Education, 2012
- The Economy and Health: What is the Role of Public Health? 2012
- One Health Leadership in a Global Setting, 2011
- Accelerating the Future: The Changing Face of Health in America, 2011

Health Disparities Roundtable

The Roundtable on Health Disparities is offered with primary support from the Health Disparities Workgroup and the Midwest Center for Lifelong Learning in Public Health (MCLPH). It brings in national leaders in health disparities research to share their work on practices and policies to reduce the gap. More than 200 individuals attend this event annually. Participants include a broad cross section of the public health community, including students, faculty, and staff from various health organizations. Participation data is listed in Table 3.3.b. under MCLPH, the sponsoring grant. Previous roundtable topics have included:

- Interdisciplinary Approaches to Reducing Health Disparities

- Health Care Reform and Health Equity
- Mobilizing Communities of Color to Promote Healthy Eating and Living, and
- The Intersection of Health and Immigration Reform

3.3.c. Description of certificate programs or other non-degree offerings of the School, including enrollment data for each of the last three years.

Certificate Programs

The School's public health certificate and licensure programs address the practice community's need for flexible training, which enables busy professionals to stay current on the best practices for safeguarding the health of communities. Through certificate programs, practicing professionals are able to obtain a public health credential more quickly and flexibly than a Master of Public Health degree.

The School offers 10 University of Minnesota Regents' Certificates and one licensure program for working health and human services professionals who wish training in an area of public health or healthcare administration. All credits are approved as graduate course credits and are eligible for transfer to applicable programs, subject to program approval. Certificate courses are available through distance-learning or summer-intensive programs.

Following is a description of the School's public health certificate and licensure programs:

Certificate programs housed in the Division of Health Management and Policy

Advanced Management Training for Clinician Leaders

This program prepares clinicians to become successful leaders within healthcare organizations. Its curriculum, taught by faculty who are actively involved in applied research with health systems, focuses on strategic decision-making and advanced leadership within complex systems. Student cohorts start the certificate together and progress through the same curriculum, providing opportunities for learning and working together. The program is designed to minimize interference with work and family: Most coursework is online and asynchronous, and students spend only seven days on campus over 12 months.

Management Fundamentals in Healthcare Organizations

This eight-month certificate program provides the fundamentals of healthcare management. It includes coursework in the design of healthcare delivery systems, health economics and finance, cost accounting in healthcare, teamwork, and introductory management principles. The curriculum parallels the first portion of the Executive Master of Health Administration curriculum. Student cohorts start the program together and progress through the same curriculum, providing opportunities for learning and working together. Students in the certificate who decide to pursue the Executive MHA may complete the degree by finishing the Executive MHA curriculum. The certificate program is designed to minimize interference with work and family since most of the coursework is online and asynchronous. Students spend only eight days on campus over eight months.

Aging Studies Certificate

This 12-credit graduate certificate provides an interdisciplinary approach to gerontology for students who hold at least a bachelor's degree. It provides the knowledge and confidence needed by professionals who work with the aging population. The program supplements professional training with online and in-person courses offered through the Center on Aging/Minnesota Area Geriatric Education Center (MAGEC).

Long-Term Care Administration Licensure

This program is designed for professionals from a variety of backgrounds, such as management, nursing, and social work, who seek to become licensed as a nursing home administrator or are seeking a career as a long-term care manager. The practicum helps students apply classroom concepts to practice under the guidance of a preceptor selected to match the student's needs. Most courses combine on-campus seminars and online study.

Public Health Certificate in Informatics

The Certificate in Public Health Informatics (Cert-PHI) provides learners with informatics competencies over a 12-month period. The program covers key technical and leadership skills for managing information systems within an organization or across networks, such as community health information networks and health information exchanges. The Cert-PHI aligns with the School's Applied Public Health Informatics Curriculum (APHIC) and is offered in person and online.

Certificate programs housed in the Division of Biostatistics

Applied Biostatistics Certificate

Designed for biostatisticians who are not formally trained and want to improve their technical and math skills, this program focuses on key aspects of study design, implementation, and analysis for observational and clinical studies. It also covers biostatistical methods and their application in medicine, public health, and environmetrics. Courses are taught by the School's experienced biostatisticians, many of whom conduct methodological and/or applied research within the Academic Health Center, through the Mayo Clinic, and with local medical device firms. Thirteen of the program's 15 credits are offered online throughout the year. The remaining two credits are offered over one week during the May session of the Public Health Institute.

Certificate programs housed within Public Health Practice

Clinical Research Certificate

The Clinical Research Certificate is designed for clinicians and other health professionals who have at least five years of relevant experience and want to learn how to design, implement, and interpret clinical research studies. The School offers the 15-credit certificate online, or students may attend courses on campus. For distance students, 13 of the 15 required credits are offered entirely online; two credits are offered as a hybrid, with much of the didactic portions online and student presentations delivered either during an eight-week on-campus period or via live video.

Public Health Certificate in Core Concepts

Featuring content from the School's Master of Public Health program, this certificate for working health or human service professionals provides preparation for responding to emerging public health issues. Students may be eligible to take the Public Health Certificate Exam (CPH Exam) after they have completed the Public Health Core Concept Certificate and if they meet either of two additional eligibility criteria: Minimum of five years of public health experience or possession of a relevant graduate degree. The program may be completed without traveling to campus.

Public Health Certificate in Food Protection

This certificate is designed for professionals working in health or human services who are seeking training in how to respond to incidents of bioterrorism, infectious disease outbreak, and other public health issues. This 14-credit certificate may be completed by attending at least two sessions of the Public Health Institute.

Public Health Certificate in Performance Improvement

For upper- or mid-level managers seeking knowledge and skills in quality improvement, this 12-credit certificate program focuses on how to successfully lead and implement effective quality improvement programs. Coursework is offered online, in the classroom, or at the Public Health Institute. Although designed to be completed in two years, the curriculum may be completed in up to four years. Certificate courses may be applied to requirements for a Master of Public Health degree, or MPH graduates may augment their degree with the certificate. Due to a change in faculty, this certificate is not currently being offered in 2014-15.

Public Health Certificate in Preparedness, Response, and Recovery

This 12-credit program helps prepare public health workers and others in how to respond to incidents of bioterrorism, infectious disease outbreak, and other public health issues. The curriculum also includes elective courses in health informatics for interested students. Most students complete the curriculum by attending at least two sessions of the Public Health Institute.

Table 3.3.c Total Enrollment Data: Students Enrolled in Each Certificate Program for Each of the Last 3 Years 2011–2014

Post-baccalaureate Certificates	2011–2012		2012–2013		2013–2014		
	HC	FTE	HC	FTE	HC	FTE[16] (Old)	FTE[16] (New)
Advanced Management Training for Clinican Leaders	0	0	0	0	0	0	0
Aging Studies	1	0.2	3	1.6	1	0.8	1.0
Applied Biostatistics (new program 2012-13)	NA	NA	11	3.9	19	8.0	12.0
Clinical Research	3	0.6	6	3.3	8	3.8	5.2
Management Fundamentals in Healthcare Organizations	1	0.4	0	0.0	1	1.0	1.0
Performance Improvement	23	10.0	20	17.0	12	6.0	7.5
Public Health Core Concepts	66	34.1	72	42.8	62	35.2	45.7
Public Health Food Protection	1	0.3	0	0.0	0	0.0	0.0
Public Health Informatics (new program 2012-13)	NA	NA	7	4.6	8	4.7	6.0
Public Health Preparedness, Response, and Recovery	12	6.3	7	3.9	4	2.6	2.8
Long-Term Care Administration Licensure[17]	40		22		30		

HC= Headcount
FTE=Full Time Equivalent

[16] Prior to 2013-14 a MPH, MHA and certificate students were considered as full-time with 9 or more credits (Old). Beginning 2013-14, these students are considered as full-time with 6 credits (New). Note: MS and PhD students have always been full-time at 6 credits.

[17] Number of Licensures granted to students of the program by the Minnesota State Licensure Board

3.3.d. Description of the School's practices, policies, procedures, and evaluation that support continuing education and workforce development strategies.

The School's policies and practices support faculty engagement in continuing education and workforce development, particularly through its centers and programming. Evaluation of the School's workforce development efforts varies by program.

Faculty are encouraged to teach in the **Public Health Institute** because it contributes to workforce development and provides insights into the needs of the practice community. In summer 2014, 13 faculty members and approximately 35 community experts taught in the PHI. At the conclusion of each course, program, and event, participants provide

written feedback that is used by program leadership and staff to evaluate the content and teaching, and to inform future offereings.

The **Midwest Consortium for Hazardous Waste Worker Training** (HWWT) uses a rigorous participant evaluation framework developed by the National Institute of Environmental Health Sciences and administered through the University of Cincinnati Evaluation Service Center. Knowledge, skills, and relevancy of training at the workplace are assessed during and at the end of every training program. Through this evaluation model, the HWWT is able to gather relevant information to assess program performance and measure and collect data critical to expanding training programs in the Upper Midwest.

All participants are required to complete registration and evaluation forms to gather demographic and work information. Per minimum criteria, curricula of 24 hours or longer duration include pre-test and post-test assessments. All forms are shown at the University of Cincinnati evaluation website. Trainees are required to provide feedback to evaluate instructors, courses, abilities in course specific core competencies, and relevance to work activities. General impact and community impact evaluation forms are collected in shorter (four hour or fewer) program offerings. Each course evaluation is reviewed by the principal investigator at the University of Cincinnati with feedback provided to the Program Director.

Program evaluation conducted by the **Centers for Public Health Education and Outreach** (CPHEO) seeks to answer key stakeholder questions including:

1. Are training activities contributing to the development of competencies that will enhance the ability of participants to provide essential public health services?
2. Which specific competencies are being developed and to what extent?
3. How many persons are developing competencies, and where do they practice?
4. Are the selected training methods applied in ways that enhance the ability of practitioners to apply knowledge, skill, and attitudes acquired to practice?
5. How does training provided through CPHEO programs impact the ability of state and local public health professionals to provide the 10 essential public health services in their communities, especially to the most vulnerable populations?
6. Is the training responsive to the emerging needs of rural, underrepresented, and underserved communities?

CPHEO uses the evaluation framework developed by Kirkpatrick (1996), differentiating 1) reaction (satisfaction); 2) learning (demonstration of understanding of the content); 3) behavior change (transfer of knowledge to practice); and 4) results (outcomes). While reaction is important as a measure of learner satisfaction, CPHEO's focus is on the latter three levels of evaluation, which provide a sound basis for determining actual learning and competency development.

In assessing the effectiveness of its programs, the **Midwest Center for Lifelong Learning in Public Health** uses a mixed model, gathering self-assessment data when appropriate to the particular learning activity and applying criterion-based, quantitative measures whenever possible. Through this integrated evaluation model, program administrators are able to gather relevant information required to assess progress toward

performance measures as well as data critical to refining and expanding training programs.

3.3.e. A list of other educational institutions or public health practice organizations, if any, with which the School collaborates to offer continuing education.

Highlights follow: A complete list is available in the Electronic Resource File.

- Minnesota Department of Health (MDH)
- Minnesota Department of Agriculture
- Ramsey County Department of Health
- Hennepin County Human Services
- City of Minneapolis Health Department
- North Dakota State Department of Health
- Wisconsin Division of Public Health
- 3M
- Ecolab
- Mayo Clinic
- Health Partners
- Minnesota Safety Council
- Dow Chemical Company
- Essentia Health
- Wisconsin State Association of Occupational Health Nurses
- University of Iowa
- National Farm Medicine Center, Marshfield Clinic, Wisconsin.
- American Society of Safety Engineers, Northwest Chapter
- American Industrial Hygiene Association Upper, Midwest Section
- Minnesota Association of Occupational Health Nurses
- Migrant Clinicians Network
- Federal Emergency Management Agency, Region 5
- Minnesota Division of Homeland Security and Emergency Management
- U.S. Department of Agriculture Animal and Plant Health Inspection Service
- United Nations Food and Agriculture Organization
- RESPOND Project - U.S. Agency for International Development
- Rockefeller Foundation
- Center for Advancement of Distance Education, University of Illinois - Chicago
- Eagle Clan Productions
- Fond du Lac Band of Lake Superior Chippewa
- Grand Portage Band of Chippewa
- Great Lakes Indian Fish & Wildlife Commission
- Great Lakes Inter Tribal Council
- Ho-Chunk Nation
- Indigenous Educational Design
- International Mass Fatalities Center
- Mille Lacs Band of Ojibwe
- Minnesota Medical Reserve Corp
- National Association of County and City Health Officials (NACCHO)
- Native American Alliance for Emergency Preparedness
- North Dakota Indian Affairs Commission
- North Dakota Office for the Elimination of Health Disparities
- Oneida Tribe of Indians of Wisconsin
- Public Health Emergency Preparedness & Response Section of San Francisco Bay Area; Advanced Practice Center in the San Francisco Department of Public Health
- St. Croix Chippewa Indians of Wisconsin/St. Croix Health Clinic
- White Earth Nation

3.3.f. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- The Public Health Institute provides a convenient and timely resource in support of workforce development.
- The staff at the National Board of Public Health Examiners (which offers the Certified in Public Health exam) regularly refer public health professionals to the free online public health courses and learning modules offered by the Centers for Public Health Education and Outreach.
- National and global reach through all course modalities: The School serves workforce professionals in 48 states and 68 countries.
- The School periodically assesses the continuing education needs of the community or communities it intends to serve and incorporates that feedback into its educational programming.

Weaknesses

- An ongoing challenge is to serve the continuing education needs of professionals in rural areas with face-to-face courses.
- Lack of high-speed Internet in some areas (especially rural) affects online course delivery.
- A lack of awareness of offerings and few resources to support marketing to internal and external audiences limits enrollment.
- The scope and breadth of the public health workforce in national, state, and local government, private industry, and non-profits make providing meaningful programs to all segments difficult.
- Relying on grant-funded education centers within the School to support continuing education could place the long-term sustainability of the centers at risk.
- The cost of courses may be a barrier to continuing education students, particularly as employers reduce training budgets.

Plans

- The School is planning to hire a staff person to assist with marketing and thereby strengthen outreach.

4.0 Faculty, Staff, and Students

4.1. Faculty Qualifications

The School shall have a clearly defined faculty, which, by virtue of its distribution, multidisciplinary nature, educational preparation, practice experience, and research and instructional competence, is able to fully support the School's mission, goals, and objectives.

The School has 129 primary faculty members whose teaching, research, and service help fulfill its mission and achieve its goals. In addition, 303 contract and adjunct faculty bring knowledge and insights from the field to students and academic peers. From 2007 to 2013, the number of primary faculty members increased nine percent to accommodate increasing student enrollments and newly emerging public health education and research areas.

Numbers, however, don't tell the whole story. The School's faculty is also widely noted for its academic excellence. It has gained national recognition for teaching and research – and the School has consistently ranked among the nation's most successful schools of public health in securing financial support to advance public health education and research. Individual faculty members also have received recognition, earning some of the University's highest awards for teaching, advising, and research. For example, the School's faculty have been recognized through the following University-wide awards:

- 2012 Outstanding Faculty Award from the Graduate and Professional Student Association was awarded to Mark Pereira, Associate Professor
- 2013 Outstanding Advisor Award from the Graduate and Professional Student Association was awarded to Kathleen Call, Professor
- 2014-2016 McKnight Land Grant Professorships were awarded to Assistant Professors Sarah Gollust and Pamela Lutsey. This award recognizes young faculty members who show promise of becoming exceptional researchers

4.1.a. A table showing primary faculty who support degree offerings of the school or program.

Template 4.1.1 Primary Faculty who Support Degree Offerings of the School or Program

Please see the Electronic Resource File.

4.1.b. A table showing other faculty (adjunct, part-time, secondary appointments, etc.) and summary data on their qualifications.

Template 4.1.2. Other Faculty Supporting Teaching Programs (adjunct, part-time, secondary appointments, etc.)

Please see the Electronic Resource File.

4.1.c. Description of the manner in which the faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if used by the School. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

The following table illustrates the ways the School and faculty integrate perspectives from the field of practice.

Through teaching and advising	
Tenured and tenure-track faculty	Faculty with professional and research experiences in public health practice infuse their teaching with a practice orientation.
Contract faculty	Contract faculty members bring a rich background in public health practice to their teaching.
Adjunct faculty	Many adjunct faculty members are alumni and public health professionals whose teaching brings perspectives from the world of practice. The School's Public Health Institute benefits from alumni who are willing to teach short courses on topics relevant to the field of practice.
Guest speakers, lecturers, and panelists	Public health practitioners are frequent guest speakers, lecturers, and panelists who share their experiences and perspectives with students.
Joint appointments	Faculty members with joint appointments provide rich and diverse perspectives and help to make the interdisciplinary connections so critical to solving public health challenges.
Through programming and events	
Public Health Practice program	This degree option is geared toward professionals who want to add a public health perspective to their practice. As such, it is a conduit for bringing students from the practice community to the School.
Public Health Institute (PHI)	The School's Public Health Institute, a three-week on-campus study opportunity, provides a venue for faculty to interact with practitioners on issues important to the field. Insights gained from these interactions inform future teaching and research.
Community Partners	Partners from local, regional, and international agencies help with recruitment, employment, and professional development and serve as lecturers, project advisors, and preceptors.

Community Partners Event and Awards	Community partners and partner organizations are recognized for their contributions at the School's annual Community Partners Event. Students, faculty, and staff nominate public health professionals for Star Awards.
Student Mentoring Program	The School has one of the largest and most active mentoring programs among the nation's schools of public health. Geared to first-year students, it provides a link between theory taught in the classroom and application of theory in the field.
Through research	
Student capstone projects	The capstone experience, guided by experts in the field of public health practice and faculty advisors, provides students an opportunity to work on applied research projects. Collaboration among students, academic experts, and public health practitioners provides an opportunity to integrate multiple perspectives.
Community-based participatory research	Faculty members partner with community and local public health organizations to assess needs, develop and implement interventions, and evaluate results. Through the research process, community perspectives become integrated into the School.

4.1.d. Identification of measurable objectives by which the School assesses the qualifications of its faculty complement, along with data regarding the performance of the School against those measures for each of the last three years.

Qualifications of Faculty Indicators

Indicator	Target	2010–2011	2011–2012	2012–2013	2013–2014
Percentage of tenure-track faculty who receive promotion from associate to full professor within 8 years	50%		45%		
Percentage of tenure-track faculty who receive promotion from assistant to associate professor within 8 years (this includes clock stoppages)	80%		89%		
Percentage of faculty from underrepresented groups[4]	23%		16%	16%	15%

Indicator	Target	2010–2011	2011–2012	2012–2013	2013–2014
Percentage of PhD students from under- represented groups[4]	25%		15%	18.5%	16.1%
Compensation of professors compared with averages at other peer schools of public health[11,13]	Competitive Peer institution average 2011-12: $176,106 2012-13: $183,804 2013-14: $188,189		$184,681	$197,162	$202,555
Compensation of associate professors compared with averages at other peer schools of public health[11,13]	Competitive Peer institution average 2011-12: $120,319 2012-13: $126,404 2013-14: $128,486		$115,778	$121,877	$123,918
Compensation of assistant professors compared with averages at other peer schools of public health[11,13]	Competitive Peer institution average 2011-12: $100,252 2012-13: $106,043 2013-14: $107,810		$92,301	$99,436	$100,282
Amount of sponsored-grant dollars per full-time faculty member	$400,000/FTE		$678,413	$686,082	$714,581
Number of annual sponsored-grants/contracts awarded	Increase each year	244	272	237	available Nov. 2014
Total research expenditures in dollars	Increase each year	$81,850*	$85,073*	$86,069*	$92,181*
Percentage of assistant professors who receive external funding within 2 years of hire	80%		45%	37%	52%
Number of peer- reviewed publications per faculty member per year	Mean of 4		not available	not available	6.4
Percentage of faculty engaged in international research, education, and service collaborations	50%		not available	32%	27%

Indicator	Target	2010–2011	2011–2012	2012–2013	2013–2014
Percent of faculty members serving in leadership roles in professional associations	25%		29%	33%	34%

** Numbers in thousands*

[4]In our diversity plan, these targets are for the 2017-18 academic year.

[11]Compensation includes salary only, not the value of fringe benefits.

[13]Peer institutions include: University of California Berkeley School of Public Health, University of California Los Angeles Fielding School of Public Health, University of Michigan School of Public Health, University of North Carolina Gillings School of Public Health, and University of Washington School of Public Health

4.1.e. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- The School's faculty is highly regarded nationally and internationally for the quality and impact of its research, teaching, and service.
- Contract and adjunct faculty members strengthen the faculty and bring perspectives from the field of practice to the classroom.
- The School ensures that students benefit from many perspectives from the field of practice through its teaching, advising, programming, and research.

Weaknesses

- The racial composition of the faculty does not represent the School's student population.
- The geographic dispersion of the faculty across nine locations requires constant mindfulness about communications.

Plans

- The School has developed a long-range plan to improve diversity, including that of its faculty. The new Director of Diversity and Inclusion will play a key role in implementing the plan.
- If the University's plans are implemented, the School will occupy contiguous space within the Academic Health Center by 2018, enabling faculty to work in closer proximity and collaborate more.

4.2 Faculty Policies and Procedures

The School shall have well-defined policies and procedures to recruit, appoint, and promote qualified faculty, to evaluate competence and performance of faculty, and to support the professional development and advancement of faculty.

4.2.a. A faculty handbook or other written document that outlines faculty rules and regulations.

The following policy documents regarding faculty rules and regulations are available on the University's or School's website and in the Electronic Resource File:

- Reporting of External Professional Activities
- Request for Outside Consulting
- Responsible Conduct of Research
- Health Insurance Portability and Accounting Act Online Training
- Appointment, Promotion, and Tenure policies
- School Education Policies
- University-wide Policy Library

New faculty members are required to attend a three-day orientation sponsored by the office of the Vice Provost for Faculty and Academic Affairs that describes the policies, rules, and regulations regarding teaching, research, and service. University policies regarding tenure are reviewed at the time of hire, with regular updates provided by the Provost throughout the year to provide new faculty with opportunities to ask questions, network with other new faculty colleagues, and gain additional information. In addition, the University maintains an on-line policy library through which faculty can access all policies at any time.

At the School and Division levels, the Dean or the Associate Dean for Academic Affairs and Research and Division Heads meet with each new faculty member to orient him/her to School policies, such as:

- Academic freedom and responsibility
- Academic misconduct
- Outside consulting activities
- Tenure regulations
- Research and service opportunities

In fall 2013, staff from the Office of E-learning Services, the Office of Admissions and Student Resources, Human Resources, and the Dean's Office offered a School orientation for new and returning faculty as one way to communicate policy and organizational changes and to build awareness of resources designed to help faculty deliver on their teaching and research commitments. This orientation was well received and will be offered again in fall 2014.

New and revised policies are communicated in the *SPHere newsletter* and through announcements in the monthly Education Policy Committee meetings and the monthly Executive Team meetings.

4.2.b. Description of provisions for faculty development, including identification of support for faculty categories other than regular full-time appointments.

Ongoing professional development of the faculty is critical to the School's success. The School requires an annual review, a session in which tenure-track and contract faculty members discuss goals, direction, and needed support with their respective Division Heads, as a key checkpoint for establishing responsibility for and monitoring professional development. Recommendations for professional development are recorded as part of the annual review process.

There are many opportunities for faculty members to participate in University-sponsored faculty development, including:

The Early Career Teaching Program, which is designed to assist faculty early in their careers in developing creative, engaging teaching skills. Participants attend monthly workshops facilitated by master teachers at the University who teach a variety of effective pedagogical styles and methods.

The Mid-Career Faculty Women's Community, which brings together associate and full professors from across disciplines who are looking to incorporate new methods into their teaching.

The Faculty, Instructors, Internationals of Color Community, made up of faculty and instructors interested in how cultural identities inform their professional lives, provides opportunities for faculty and instructors of color to learn from each other and from relevant research to enhance their teaching and other aspects of their professional lives.

Workshops: The University, Academic Health Center, and School encourage all faculty members to attend workshops held by the Center for Teaching and Learning to help them add new skills as researchers, advisors, and teachers. A sampling of the workshops offered includes:

- Workshop on Advising
- Digital Teaching Workshop
- Active Learning Classrooms Program
- Grant Writing Seminar
- Demystifying the Tenure and Promotion Process

Mentoring, in which junior faculty members are matched with senior faculty mentors who support and offer guidance in making connections and identifying and accessing University resources.

Sabbatical and leave opportunities for which tenured, tenure-track and multi-year contract faculty may apply for purposes of professional development and rejuvenation.

Support for conference attendance: Generally, the School provides primary faculty with support to attend professional and scientific meetings at least once each year. In addition, most faculty members are supported through grants, which provide funding for travel to present scientific papers and participate in professional conferences.

School-sponsored lectures: Lectures and events sponsored by the School attract renowned national and international leaders in public health who offer insights and perspectives valuable in advancing the work of faculty. Regular events sponsored by the School include the:

- Carl J. Martinson Lecture on Health Promotion and Disease Prevention
- Gaylord Anderson Lecture, named for the School's founding Dean
- The Ancel Keyes Symposium on Nutrition and Health
- The National Occupational Research Agenda (NORA) Symposium
- The Health Disparities Roundtable

Start-up funds and financial support for new directions, including:

- Start-up funds from the School and Divisions to new faculty to help pay partial salary support and defray expenses for research assistants, opening a lab, purchasing computers, and other technology;
- Support for junior faculty, or for new directions for established faculty, through seed grants from the School and the Academic Health Center;
- University Regents' Scholarships, available to all faculty and staff, to underwrite 75 percent of the cost of any course or degree that may be pursued;
- "Preventive" retention funds, which may be requested by the School from the Provost in order to retain prestigious and nationally competitive faculty.

4.2.c. Description of formal procedures for evaluating faculty competence and performance.

The School has established processes and procedure manuals for regular evaluations of faculty competence and performance, including:

Annual performance reviews

- Tenured and tenure-track faculty: Division Heads conduct annual performance reviews with all tenured and tenure-track faculty to determine merit pay increases and to set goals for the coming year. Publications, grantsmanship, student evaluations, and a summary of activities and accomplishments are considered.
- Contract faculty: Division Heads conduct annual performance reviews with contract faculty as a basis for determining merit pay increases and setting goals for the coming year. Contract faculty performance is measured against specific expectations spelled out in their employment contracts.
- Adjunct faculty: The performance of adjunct faculty members, who often serve under a year-to-year contract, is evaluated more informally. Adjunct faculty members and their

respective Division Heads agree on specific assignments and expectations, which are spelled out in an employment contract. After each term, contract continuation is based on the School's need for services and feedback from students and faculty colleagues.

Promotion reviews

Before they receive tenure, primary faculty members are reviewed annually under terms of the School's Academic Appointment, Promotion, and Tenure (APT) policy. Contract faculty members – though not eligible for tenure – also are evaluated, as outlined in their employment contracts. The APT Committee makes recommendations for promotion to the Dean, who, in turn, submits documentation for consideration by the Academic Health Center and the University.

Post-tenure reviews

The University's post-tenure review process builds upon annual reviews to sustain and enhance faculty performance in teaching, research, and service. Once faculty members are tenured, the APT Committee evaluates their performance every five years. This differs from the annual reviews conducted by Division Heads, however, materials from the annual performance reviews are included in the post-tenure, five-year review.

The Division Head may, at the time of a faculty member's annual review, ask him or her to submit documentation to the APT Committee for screening for "substantial substandard performance." The documentation of faculty members who fail the APT Committee review is forwarded to the Dean, who may decide to pursue the special review process described in the University's Rules and Procedures for Annual and Special Post-Tenure Review. For additional information please see the Electronic Resource File.

Review of community service activities in the promotion and tenure process

As part of the promotion and tenure review process, faculty members are required to provide documentation of service activities, such as roles in professional associations, service to governmental agencies, presentations to community groups, and participation on University and School committees.

Service aimed at improving public health is particularly valued when promotion or tenure is being considered. For example, in the case of promotion to full professor, service is not only an important supplementary component, but a candidate should have contributed significantly to major policy formation and had a demonstrated impact on the field of public health.

4.2.d. Description of the processes used for student course evaluation and evaluation of instructional effectiveness.

Student evaluations, conducted at the conclusion of every course, provide valuable feedback on courses, student expectations, relevant learning, and teaching effectiveness and are a key consideration in the faculty promotion and tenure process. All Program Directors and Division Heads, as well as the Dean's leadership team, have access to the evaluation data collected each semester and they use the data to guide curricular and programming decisions.

Currently the School uses an electronic course evaluation system. To encourage students to submit their evaluations, the system releases course grades prior to the mandated University deadline if the student completes the evaluation early. As a result, the rate of response is high, providing the School with good information on the quality of teaching for each course.

At the end of each term, the Education Policy Committee (EPC) reviews the student evaluations of all MPH core courses. Instructors are expected to receive scores of at least 4.0 on a 6.0 scale. If scores are below this threshold, the Division Head meets with the instructor to outline a plan to improve teaching effectiveness. Fortunately, the scores are usually outstanding and, for this, faculty members receive letters of congratulations from the Dean and the Chair of EPC.

4.2.e. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- Faculty members have easy access to policies and procedures related to performance, promotion, and tenure reviews, which support their professional development.
- Tenure, tenure-track and contract faculty members benefit from the numerous professional development resources and activities available to them.
- Faculty performance review processes are well established.
- Information collected through electronic student course evaluations provides valuable insight into the quality of teaching and coursework and how they can be improved.

Weaknesses

- The School eagerly awaits the launch of a University-wide data collection system for annual faculty performance review.

Plans

- A new data-collection system was piloted in Spring 2014 that will systematically capture more detailed information from the annual faculty reviews. This new system promises to make reporting easier and provide critical information to improve decision-making.
- Tableaus, another new software tool will launch in fall 2014. This tool will assist with financial predictions and reporting.

4.3. Student Recruitment and Admissions

The School shall have student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of its various learning activities, which will enable each of them to develop competence for a career in public health.

4.3.a. Description of the School's recruitment policies and procedures. If these differ by degree, a description should be provided for each.

Recruitment policy

The School is committed to recruiting a diverse and academically prepared body of professional and graduate students to fulfill the broad public health mission of improving the health of all people and the environments in which they live. By making diversity a priority, the School aims both to enrich the learning experience of all of its students and to fulfill its commitment to educate future public health leaders who reflect the diversity of the nation's populations – leaders who can work effectively with diverse groups to address their special public health challenges.

In seeking a diverse student body, the School considers factors such as cultural and ethnic origins, social and educational background, geography, life experience, community leadership experience, and interests in public health fields. The School reviews its admissions policies on a regular basis to ensure they take into account all factors relevant to achieving diversity.

To attract and recruit students who have excellent academic qualifications and potential, the School follows the processes described below:

Attracting applicants

The Office of Admissions and Student Resources (OASR), under the coordination of the Director of Admissions and Student Leadership Development, oversees recruitment initiatives, strategy, and admissions policies and processes. Working in cooperation with programs across the School, the OASR provides prospective students many channels through which to learn about the School, its programs, and admissions criteria. Among the avenues provided are:

- The School's website and online chat
- Phone calls and walk-in visits
- Regular information sessions: Hour-long events held every other week during the fall and monthly in the spring
- Preview days
- Program-specific events
- Classroom visits
- The undergraduates pursuing the public health minor

- Recruitment fairs, including the SOPHAS Virtual Fairs through CareerEco, which enable contact with prospective students around the globe
- Meetings with student ambassadors: Current students willing to share their experiences with prospective students in person and online as well as in print, on panels, and at recruitment fairs
- Events for admitted students aimed at providing an introduction to students, faculty, and services as they make enrollment decisions
- Ongoing outreach on campus, throughout Minnesota, and across the nation
- The contact information of prospective students, which is recorded in the School's Student Information Database (SID) and tracked through Inquiry Central (IC), the inquiry management system that shares information with SID.

Admitting applicants

Prospective students for the MHA, MPH, MS, and PhD degrees submit their applications to the School through the Schools of Public Health Application Service (SOPHAS).

Once completed applications are received, the OASR forwards them to the degree programs. Each MPH, MHA, MS, PhD, and Regents' Certificate program has an admissions committee composed of at least three faculty (at least two of whom hold primary appointments in the School or, in the case of MS/PhD admissions committees, appointments in the Graduate School). Each program determines annual enrollment targets based on its ability to provide quality education and instruction, opportunities for practice, student support services, and accessible resources. The committees evaluate each completed application and forward their recommendations to the Dean who makes the final admissions decision.

4.3.b. Statement of admissions policies and procedures.

The admissions committees review applications holistically and consider the following:

- Evidence of interest and intent, usually appearing as a letter of application, and/or essay regarding public health interests and personal direction
- Evidence of past academic performance, including at least a U.S. baccalaureate degree (or foreign equivalent) from a regionally accredited institution of higher education, or of a post-baccalaureate graduate or professional degree from a regionally accredited institution of higher education. Admission to certain programs requires a prior advanced degree in a related area
- Evidence of academic potential, usually in the form of standardized test scores acceptable to the major program and submitted within five years of the application. Generally, Graduate Record Exam (GRE) scores are required although some majors may permit GMAT, DAT, MCAT, LSAT scores or academic performance in the Regents' Certificate in Public Health Core Concepts program (within the past three years) as evidence. The degree programs may also choose to accept an earned doctorate (e.g., MD, JD, PhD), other advanced degree (e.g., Master of Science in Nursing), or

Educational Commission for Foreign Medical Graduates (ECFMG) certificate as evidence of academic potential.

- The following GRE test scores are the preferred minimum for admission consideration to most programs (others may require higher scores).
- Pre-August 2011 test: A combined score of 1,000 on the quantitative and verbal sections and a score of 3.5 on the analytical writing assessment.
- Post-August 2011 test: A combined score of 300 on the quantitative and verbal sections and a score of 3.5 on the analytical writing assessment.
- A grade point average (GPA) of at least 3.0 is required for admission to most programs (others may have a higher preferred minimum).
- Evidence of external evaluation in the form of letters of reference, with at least one commenting on the applicant's potential as a graduate student and public health professional.
- Evidence of fluency in English (the TOFEL or IELTS) is required of applicants whose native language is not English or whose education was completed exclusively at an institution(s) whose language of instruction is not English.
- Other evidence, including information about the applicant's professional experience, potential contribution to diversity, and compatibility with faculty expertise and programs.

Admissions decisions

In reviewing an application, admissions committees may recommend:

- ***Admit.*** The decision to admit must be confirmed by the Program Director or Director of Graduate Studies and the Dean (acting through the Associate Deans for Learning Systems and Student Affairs). A letter of admission is issued by the Dean.
- ***Not admit.*** The Program Chair or Director of Graduate Studies informs the applicant not accepted of the reasons why in writing. Unsuccessful applicants are invited to address deficiencies and reapply in a succeeding cycle. The applicant's file is retained by the major for one year, then transferred to the Student Affairs office for an additional year.
- ***Admit conditionally.*** The committee may request conditional admission in rare cases in which an applicant demonstrates strong potential for public health practice or public health leadership, but raises concerns based on past academic performance or test scores. Requiring the Dean's approval, conditional admission requires the student in the first semester to complete a minimum of nine credits in program core courses, of which one must be a designated biostatistics or epidemiology course, with no less than a B- in each course and an overall GPA of 3.0. Successful completion leads to full admission. Unsuccessful completion results in withdrawal of the conditional status and non-continuation in the program. The School plans to transition out of a conditional admission to a preference to enroll strong potential students into a certificate program. If the student demonstrates success in the certificate program, he or she will be able to transfer credits from it to a degree program.

4.3.c. Examples of recruitment materials and other publications and advertising that describe, at a minimum, academic calendars, grading, and the academic offerings of the School. If a School does not have a printed bulletin/catalog, it must provide a printed web page that indicates the degree requirements as the official representation of the School. In addition, references to website addresses may be included.

Prospective and current students may easily access information about the School and its offerings through a number of avenues. Student guidebooks for each program and most School-related information are available on the School's website. While the School seeks to limit print pieces unless deemed necessary, a few examples of printed recruitment materials including its one-page curriculum sheets, Advances Magazine for alumni and other stakeholders, the Public Health Institute course offerings. Print pieces will be available to the site visit team.

The School's course catalog is available online on the University's One Stop website at under Graduate Education Catalog. To help ensure an up-to-date listing of all School programs, courses, and requirements, the School relies on the University's web-based Program and Curriculum Approval System (PCAS), a digital approval process used by all University programs to enter program and course information.

4.3.d. Quantitative information on the number of applicants, acceptances, and enrollment, by concentration, for each degree, for each of the last three years.

Template 4.3.1 Quantitative Information on Applicants, Acceptances, and Enrollments, 2011 to 2014*

Specialty area is defined as each degree and area of specialization contained in the instructional matrix (Template 2.1.1).

KEY
Applied = number of completed applications
Accepted = number to whom the School/Program offered admission in the designated year
Enrolled = number of first-time enrollees in the designated year

		2011–2012	2012–2013	2013–2014
Master's Degrees				
Biostatistics—MPH	Applied	18	13	38
	Accepted	5	1	5
	Enrolled	0	0	2
Biostatistics—MS	Applied	59	70	79
	Accepted	27	45	48
	Enrolled	10	25	12

		2011–2012	2012–2013	2013–2014
Clinical Research—MS	Applied	23	15	8
	Accepted	16	7	4
	Enrolled	15	5	3
Community Health Promotion—MPH	Applied	189	186	184
	Accepted	84	84	83
	Enrolled	30	22	20
Environmental Health—MPH	Applied	99	97	84
	Accepted	77	72	72
	Enrolled	30	24	28
Environmental Health, Industrial Hygiene—MPH	Applied	5	6	6
	Accepted	4	5	4
	Enrolled	2	1	0
Environmental Health—MS	Applied	21	19	16
	Accepted	18	13	14
	Enrolled	11	5	6
Environmental Health, Industrial Hygiene—MS	Applied	6	6	4
	Accepted	4	6	4
	Enrolled	1	4	2
Epidemiology—MPH	Applied	260	256	259
	Accepted	128	121	133
	Enrolled	32	34	36
Health Services Research, Policy and Administration—MS	Applied	30	27	29
	Accepted	25	15	21
	Enrolled	10	1	11
Healthcare Administration, Executive Program—MHA	Applied	51	55	51
	Accepted	43	43	42
	Enrolled	33	34	36

		2011–2012	2012–2013	2013–2014
Healthcare Administration, Full-time Program—MHA	Applied	175	186	205
	Accepted	59	52	63
	Enrolled	34	29	33
Healthcare Administration, Saudi Arabia Program—MHA (this program had no cohorts in 2012-2013 and 2013-2014)	Applied	26	0	0
	Accepted	25	0	0
	Enrolled	25	0	0
Maternal and Child Health—MPH	Applied	102	124	93
	Accepted	41	57	47
	Enrolled	10	16	17
Maternal and Child Health, Online Program—MPH	Applied	28	25	19
	Accepted	15	17	8
	Enrolled	5	10	5
Public Health Administration and Policy—MPH	Applied	169	158	142
	Accepted	56	97	90
	Enrolled	22	24	35
Public Health Administration and Policy, Executive PHAP Program—MPH (new program in 2013-14)	Applied	NA	NA	13
	Accepted	NA	NA	11
	Enrolled	NA	NA	10
Public Health Administration and Policy- Arizona State University-MPH (new program in 2014-2015)	Applied	NA	NA	NA
	Accepted	NA	NA	NA
	Enrolled	NA	NA	NA
Public Health Informatics—MPH (new program in 2013-14)	Applied	NA	NA	6
	Accepted	NA	NA	1
	Enrolled	NA	NA	0
Public Health Nutrition—MPH	Applied	39	47	51
	Accepted	20	17	26
	Enrolled	9	6	8

		2011–2012	2012–2013	2013–2014
Public Health Nutrition, Coordinated Master's Program—MPH	Applied	24	21	29
	Accepted	17	19	19
	Enrolled	10	7	10
Public Health Nutrition- Arizona State University- MPH (new program in 2014-2015)	Applied	NA	NA	NA
	Accepted	NA	NA	NA
	Enrolled	NA	NA	NA
Public Health Practice, Executive Program—MPH	Applied	39	45	38
	Accepted	32	38	29
	Enrolled	25	28	21
Public Health Practice—Global One Health-CMU (new program in 2014-2015)	Applied	NA	NA	NA
	Accepted	NA	NA	NA
	Enrolled	NA	NA	NA
Doctoral Degrees				
Biostatistics—PhD	Applied	86	88	104
	Accepted	22	23	23
	Enrolled	10	10	9
Environmental Health—PhD	Applied	22	23	25
	Accepted	7	3	5
	Enrolled	6	2	4
Environmental Health, Industrial Hygiene—PhD	Applied	2	0	3
	Accepted	2	0	1
	Enrolled	1	0	1
Epidemiology—PhD	Applied	74	67	64
	Accepted	15	16	11
	Enrolled	9	8	7
Health Services Research, Policy and Administration—PhD	Applied	56	91	99
	Accepted	14	22	20

		2011–2012	2012–2013	2013–2014
	Enrolled	11	6	7
Joint/Dual Degrees				
Business Administration/ Healthcare Administration—MBA/MHA	Applied	10	10	8
	Accepted	5	4	1
	Enrolled	4	4	1
Dentistry/Public Health Practice, Public Health Dentistry—DDS/MPH (new program in 2013-2014)	Applied	NA	NA	1
	Accepted	NA	NA	1
	Enrolled	NA	NA	1
Law/Community Health Promotion—JD/MPH	Applied	0	1	0
	Accepted	0	1	0
	Enrolled	0	0	0
Law/Environmental Health—JD/MPH	Applied	2	0	0
	Accepted	2	0	0
	Enrolled	1	0	0
Law/Environmental Health—JD/MS	Applied	0	1	1
	Accepted	0	0	0
	Enrolled	0	0	0
Law/Environmental Health—JD/PhD	Applied	0	0	1
	Accepted	0	0	0
	Enrolled	0	0	0
Law/Epidemiology—JD/MPH	Applied	0	1	3
	Accepted	0	0	1
	Enrolled	0	0	0
Law/Health Services Research, Policy and Administration—JD/MS	Applied	0	0	0
	Accepted	0	0	0
	Enrolled	0	0	0
Law/Health Services Research,	Applied	0	2	0

		2011–2012	2012–2013	2013–2014
Policy and Administration—JD/PhD	Accepted	0	0	0
	Enrolled	0	0	0
Law/Healthcare Administration—JD/MHA	Applied	1	0	3
	Accepted	0	0	1
	Enrolled	0	0	0
Law/Maternal and Child Health—JD/MPH	Applied	1	0	2
	Accepted	1	0	2
	Enrolled	0	0	1
Law/Public Health Administration and Policy—JD/MPH	Applied	9	4	6
	Accepted	5	4	5
	Enrolled	4	1	0
Law/Public Health Practice, Public Health Law—JD/MPH (new program in 2013-2014)	Applied	0	0	0
	Accepted	0	0	0
	Enrolled	0	0	0
Medicine/Epidemiology—MD/PhD	Applied	0	0	0
	Accepted	0	0	0
	Enrolled	0	0	0
Medicine/Health Services Research, Policy and Administration—MD/PhD	Applied	0	0	0
	Accepted	0	0	0
	Enrolled	0	0	0
Medicine/Public Health Practice, Public Health Medicine—MD/MPH	Applied	8	9	0
	Accepted	7	9	0
	Enrolled	5	7	0
Public Policy/Health Services Research, Policy and Administration—MPP/MS (this program was discontinued in 2013-2014)	Applied	1	4	NA
	Accepted	1	3	NA
	Enrolled	1	1	NA
Public Policy/Public Health	Applied	NA	NA	1

		2011–2012	2012–2013	2013–2014
Practice, Public Health Public Policy—MPP/MPH (new program in 2013-2014)	Accepted	NA	NA	1
	Enrolled	NA	NA	1
Social Work/Community Health Promotion—MSW/MPH	Applied	1	1	1
	Accepted	1	1	1
	Enrolled	0	0	1
Social Work/Maternal and Child Health—MSW/MPH	Applied	3	0	0
	Accepted	3	0	0
	Enrolled	2	0	0
Public Urban and Regional Planning/Public Health Practice, Public Health Urban and Regional Planning—MURP/MPH (new program in 2013-2014)	Applied	NA	NA	0
	Accepted	NA	NA	0
	Enrolled	NA	NA	0
Veterinary Medicine/Public Health Practice, Veterinary Public Health—DVM/MPH	Applied	32	37	37
	Accepted	23	35	32
	Enrolled	16	32	29

***** *School has calendar year application cycles. Counts include spring, summer and fall terms for a calendar year.*

4.3.e. Quantitative information on the number of students enrolled in each specialty area identified in the instructional matrix, including headcounts of full- and part-time students and a full-time equivalent conversion, by concentration, for each degree, for each of the last three years. Non-degree students, such as those enrolled in continuing education or certificate programs, should not be included. Explain any important trends or patterns, including a persistent absence of students in any degree or specialization. Data must be presented in table format.

Template 4.3.2 Total Enrollment Data: Students Enrolled in Each Area of Specialization Identified in Instructional Matrix for Each of the Last 3 Years

Degree & Specialization		2011–2012		2012–2013		2013–2014		
		HC	FTE	HC	FTE	HC	FTE[16] (Old)	FTE[16] (New)
Biostatistics	MPH	1	1.0	1	0.9	3	2.0	2.5
Biostatistics	MS	32	29.7	40	37.7	40	39.2	39.2
Clinical Research	MS	30	25.8	23	18.5	20	14.3	14.3
Community Health Promotion	MPH	70	64.6	60	56.0	54	47.9	51.0
Environmental Health	MPH	81	65.7	67	60.9	70	55.5	62.3
Environmental Health—Industrial Hygiene	MPH	5	4.6	5	2.4	1	0.7	1.0
Environmental Health	MS	17	15.3	19	17.2	14	11.7	11.7
Environmental Health—Industrial Hygiene	MS	4	2.4	7	5.7	7	7.0	7.0
Epidemiology	MPH	77	69.0	80	74.2	80	70.9	74.0
Health Services Research, Policy, and Administration	MS	29	27.5	18	16.7	22	20.7	20.7

Degree & Specialization		2011–2012		2012–2013		2013–2014		
		HC	FTE	HC	FTE	HC	FTE[16] (Old)	FTE[16] (New)
Healthcare Administration—Executive Program	MHA	91	71.2	98	94.2	109	90.6	101.2
Healthcare Administration—Full-time Program	MHA	77	73.0	74	71.8	68	68.0	68.0
Healthcare Administration—Saudi Arabia Program	MHA	24	24.0	24	21.3	24	16.0	24.0
Maternal and Child Health	MPH	42	36.6	40	34.9	40	36.1	38.0
Maternal and Child Health—Online Program	MPH	22	12.8	25	15.7	24	15.3	19.3
Public Health Administration and Policy	MPH	61	51.4	62	52.8	74	62.4	68.3
Public Health Administration and Policy- Arizona State University Hosted Program (new program in 2013-14)	MPH	NA	NA	NA	NA	12	NA	11.2
Public Health Administration and Policy—Executive PHAP Program (new program in 2014-15)	MPH	NA	NA	NA	NA	NA	NA	NA
Public Health Informatics	MPH	NA	NA	0	0.0	0	0.0	0.0
Public Health Nutrition	MPH	32	28.4	27	22.8	23	18.3	20.2
Public Health Nutrition—Arizona State University Hosted Program	MPH	18	18.0	15	15.0	16	15.1	15.2
Public Health Nutrition—Coordinated Master's Program (new program in 2014-15)	MPH	NA	NA	NA	NA	NA	NA	NA

Degree & Specialization		2011–2012		2012–2013		2013–2014		
		HC	FTE	HC	FTE	HC	FTE[16] (Old)	FTE[16] (New)
Public Health Practice—Executive Program	MPH	67	42.2	71	46.3	68	42.0	55.3
Public Health Practice—Global One Health–CMU (new program in 2013-14)	MPH	NA	NA	NA	NA	0	0.0	0.0
Biostatistics	PhD	23	22.0	26	26.0	32	31.5	31.5
Environmental Health	PhD	35	32.5	30	26.3	27	21.3	21.3
Environmental Health—Industrial Hygiene	PhD	5	3.0	4	3.5	5	4.8	4.8
Epidemiology	PhD	45	42.3	46	43.8	42	39.7	39.7
Health Services Research, Policy and Administration	PhD	52	52.0	48	47.0	47	46.5	46.5
Business Administration/Healthcare Administration—Full-time Program	MBA/MHA	6	6.0	5	5.0	0	0.0	0.0
Dentistry/Public Health Practice—Public Health Dentistry (new program in 2013-2014)	DDS/MPH	NA	NA	NA	NA	2	NA	0.9
Law/Community Health Promotion	JD/MPH	0	0.0	0	0.0	0	0.0	0.0
Law/Environmental Health	JD/MPH	0	0.0	1	1.0	0	0.0	0.0
Law/Environmental Health	JD/MS	0	0.0	0	0.0	0	0.0	0.0
Law/Environmental Health	JD/PhD	0	0.0	0	0.0	0	0.0	0.0
Law/Epidemiology	JD/MPH	0	0.0	0	0.0	0	0.0	0.0

Degree & Specialization		2011–2012		2012–2013		2013–2014		
		HC	FTE	HC	FTE	HC	FTE[16] (Old)	FTE[16] (New)
Law/Health Services Research, Policy and Administration	JD/MS	0	0.0	0	0.0	0	0.0	0.0
Law/Health Services Research, Policy and Administration	JD/PhD	0	0.0	0	0.0	0	0.0	0.0
Law/Healthcare Administration—Full-time Program	JD/MHA	0	0.0	0	0.0	0	0.0	0.0
Law/Maternal and Child Health	JD/MPH	0	0.0	0	0.0	0	0.0	0.0
Law/Public Health Administration and Policy	JD/MPH	1	1.0	1	1.0	0	0.0	0.0
Law/Public Health Practice—Public Health Law (new program in 2013-2014)	JD/MPH	NA	NA	NA	NA	0	0.0	0.0
Medicine/Epidemiology	MD/PhD	2	2.0	1	1.0	0	0.0	0.0
Medicine/Health Services Research, Policy, and Administration	MD/PhD	0	0.0	0	0.0	0	0.0	0.0
Medicine/Public Health Practice—Public Health Medicine	MD/MPH	13	11.7	13	12.1	10	7.8	8.3
Pharmacy/Public Health Practice—Public Health Pharmacy (new program in 2013-14)	PharmD/MPH	NA	NA	NA	NA	8	NA	6.5
Public Policy/Public Health Practice—Public Health Public Policy (new program in 2013-14)	MPP/MPH	NA	NA	NA	NA	3	NA	2.8
Social Work/Community Health Promotion	MSW/MPH	3	2.8	2	2.0	3	2.9	3.0

Degree & Specialization		2011–2012		2012–2013		2013–2014		
		HC	FTE	HC	FTE	HC	FTE[16] (Old)	FTE[16] (New)
Social Work/Maternal and Child Health	MSW/MPH	4	4.0	2	2.0	0	0.0	0.0
Urban and Regional Planning/Public Health Practice—Public Health Urban and Regional Planning (new program in 2013-14)	MURP/MPH	NA	NA	NA	NA	3	NA	3.0
Veterinary Medicine/Public Health Practice—Veterinary Public Health	DVM/MPH	57	34.8	64	39.5	81	49.9	63.3

[16] *Prior to 2013-14 a MPH, MHA and certificate students were considered as full-time with 9 or more credits (Old FTE). Beginning 2013-14, these students are considered as full-time with 6 credits (New FTE).*

4.3.f. Identification of measurable objectives by which the School may evaluate its success in enrolling a qualified student body, along with data regarding the performance of the School against those measures for each of the last three years.

The School considers the following factors in assessing success in enrolling a qualified student body:

- Preference for applicants with an undergraduate grade point average (GPA) of 3.0. See Table 4.3.f.b below
- Preference for applicants with a GRE score of 1000 prior to August 2011 and 300 after August 2011. See Table 4.3.f.d below

These factors, along with the applicant's rack record of leadership and experience in public health and graduation rates, suggest the academic quality of students enrolled.

Acceptance and matriculation rates

The following table shows acceptance and matriculation rates since 2011-12. Applications increased between 2010 and 2011 and remained flat in 2012. The acceptance rate decreased slightly for master's and doctoral applicants. Thus, matriculations have decreased slightly, but still reflect a qualified student population.

Table 4.3.f a. Acceptance and Matriculation

Academic Year		Applications	Admissions	% Accepted	Matriculations	% (of Accepted) Matriculated
2011–2012	Masters	1431	744	52%	347	47%
	Doctoral	240	60	25%	37	62%
2012–2013	Masters	1426	768	54%	322	42%
	Doctoral	271	64	24%	26	41%
2013–2014	Masters	1417	769	54%	329	43%
	Doctoral	297	60	20%	28	47%

Grade Point Average

Since 2012, the undergraduate GPAs of applicants have stayed relatively constant for the MHA, MPH, MS, and PhD programs. For students who matriculate, the average remains high.

Table 4.3.f.b. Mean Undergraduate GPA

Academic Year		Target Indicator	Applicants	Admissions	Matriculations
Fall 2011	MHA	3.0	3.33	3.44	3.44
	MPH	3.0	3.37	3.5	3.43
	MS	3.0	3.47	3.56	3.54
	PhD	3.0	3.4	3.56	3.57
Fall 2012	MHA	3.0	3.33	3.34	3.29
	MPH	3.0	3.37	3.51	3.47
	MS	3.0	3.42	3.56	3.57
	PhD	3.0	3.4	3.6	3.59
Fall 2013	MHA	3.0	3.38	3.49	3.47
	MPH	3.0	3.39	3.5	3.45
	MS	3.0	3.54	3.65	3.53
	PhD	3.0	3.43	3.62	3.56

Mean GRE Scores

The mean GRE scores for the MHA, MPH, MS, and PhD programs have been fairly consistent since fall 2011. The mean scores for applicants, admits, and matriculates for each degree program area are as follows:

Table 4.3.f.c. Mean GRE Scores

Academic Year			Applicants	Admissions	Matriculations
Fall 2011	MHA	Verbal	520	534	520
		Quantitative	643	641	629
		Analytical Writing	4.1	4.4	4.2
	MPH	Verbal	516	549	531
		Quantitative	623	649	621
		Analytical Writing	4.1	4.4	4.3
	MS	Verbal	501	540	534
		Quantitative	716	710	694
		Analytical Writing	3.9	4.2	4.2
	PhD	Verbal	510	572	552
		Quantitative	704	727	710
		Analytical Writing	4	4.5	4.4
Fall 2012	MHA	Verbal	498	526	524
		Quantitative	642	666	652
		Analytical Writing	4.1	4.3	4.3
	MPH	Verbal	524	560	544
		Quantitative	641	675	647
		Analytical Writing	4.1	4.3	4.3
	MS	Verbal	529	546	528
		Quantitative	715	708	672

Academic Year			Applicants	Admissions	Matriculations
		Analytical Writing	3.8	3.9	4
	PhD	Verbal	547	612	597
		Quantitative	718	752	745
		Analytical Writing	3.9	4.3	4.2
Fall 2013	MHA	Verbal	155	157	157
		Quantitative	154	156	156
		Analytical Writing	4	4.2	4.1
	MPH	Verbal	155	157	157
		Quantitative	154	155	154
		Analytical Writing	4	4.3	4.1
	MS	Verbal	154	156	155
		Quantitative	161	162	159
		Analytical Writing	3.8	3.9	3.8
	PhD	Verbal	154	162	161
		Quantitative	159	163	160
		Analytical Writing	3.8	4.4	4.3

Table 4.3.f.d Mean Combined GRE score for Admitted Students by Degree Program

Academic Year	Target Indicator	MPH	MHA	MS	PhD
2010–2011	GRE: 1000	1198	1174	1250	1298
2011–2012	GRE: 300	310	307	311	319
2012–2013	GRE: 300	313	310	316	321
2013–2014	GRE: 300	312	313	318	334

4.3.g. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans relating to this criterion.

The criterion is met.

Strengths

- Over the past three years, significant progress has been made in implementing recruitment initiatives that enable the School to continue to attract a diverse and academically prepared student body and increase its numbers. In 2013, matriculations of students from under-represented groups were up 29 percent.
- The addition of more human "touch points" has allowed for increased interaction between prospective and admitted students, providing prospects with more information about the School and its programs and creating new ways to connect through current students, faculty, and recent graduates locally, nationally, and internationally.
- The number of applicants remains consistent with no sacrifice in quality.

Weaknesses

- The School is challenged with supporting the needs of prospective students in a timely and welcoming manner. A contact management system to track prospective students would be very helpful.
- Scholarship funding, or funding in general, to help offset the cost of graduate education remains a challenge as the School strives to attract and retain applicants who will bring the greatest diversity and most talent.

Plans

- The University is investigating the purchase of a contact management system.
- The School has hired a Director for Alumni and Community Engagement to create meaningful relationships and deeper engagement with alumni and the community in order to inspire greater support for the School.

4.4 Advising and Career Counseling

There shall be available a clearly explained and accessible academic advising system for students, as well as readily available career and placement advice.

4.4.a. Description of the School's advising services for students in all degree programs, including sample materials such as student handbooks.

Each new student is assigned to a four-member advising team that includes the program coordinator, the faculty advisor, the program director, and the student. Other individuals, such as the field experience preceptor, assist in advising as the student progresses through his or her academic program.

The School provides advising in four areas:

- **Administrative:** Advising on course planning and scheduling, policies, procedures, and benchmarks of the degree program/major, School, and University. The program coordinator is the key point of contact for questions on these matters.
- **Academic:** General guidance on topics related to program/major, including program focus (including identifying appropriate course options), petitions, project selection, and career planning. Faculty advisors, coordinators, and career services staff share the responsibility for helping students with academic matters.
- **Field Experience/Internship/Practicum:** Advising for field experience, internship or practicum development, placement, and completion aims to guide a student to a field experience that will match his or her goals. It is led by the faculty advisor. Career Services staff and coordinators also help students network with other students and alumni to explore possible field experience sites and opportunities.
- **Master's Project/Thesis/Plan A&B/Dissertation:** Direction on a master's project or a PhD dissertation, including development, completion, and in some cases, publication is provided by the faculty advisor.

Examples of student handbooks are available in the Electronic Resource File**.**

4.4.b. Description of the School's career counseling services for students in all degree programs.

Primary responsibility for career counseling rests with the School's Office of Career Services. It employs two full-time career counselors and a half-time graduate assistant to help current students and alumni enhance their career management skills, maximize employment opportunities and develop and maintain professional contacts. Services and programs include:

- *A Career Services web site*, which includes: a publicly accessible job posting system available to employers, students, and alumni; tip sheets related to job search issues; links to relevant web sites; information about placement of previous graduates; profiles of student field experiences; and information for employers, mentors, and alumni.

- *One-on-one career counseling.* Resumé critique, mock interviews, and general job-search coaching are available on both a walk-in and appointment basis.
- *Social media.* Social media and electronic student and alumni newsletters provide career tips and resources, information about workshops, employer visits, and other career-related events, scholarship and/or fellowship opportunities, and potential networking contacts.
- *Online alumni networking directory*, which offers contact information to current students and alumni about School alumni around the world. Also, an alumni LinkedIn group welcomes students to join, network, and search for open positions.
- *Special programs.* Career Services sponsors campus visits by employers, alumni panels, job search workshops, and information sessions on field experience opportunities.
- *Field experience support.* Career Services also sponsors program-specific information sessions and individual assistance for students seeking domestic or international field experiences.

4.4.c. Student satisfaction with advising and career counseling services.

Student satisfaction with advising and career counseling is measured through an annual, year-end survey. Forty-four percent (462 students) of the School's students responded to the 2013-14 survey. Student satisfaction with advising and career counseling services over the past three years is reported below:

	2011–2012	2012–2013	2013–2014
Overall, how satisfied are you with the academic advising that you have received from faculty members?	41% very satisfied 37% somewhat satisfied	43% very satisfied 33% somewhat satisfied	37% very satisfied 43% somewhat satisfied
How satisfied are you with the help and guidance you receive from your program coordinator?	64% very satisfied 29% somewhat satisfied	63% very satisfied 28% somewhat satisfied	53% very satisfied 41% somewhat satisfied
How satisfied are you with the individual counseling offered by the Career Services Center?	65% very satisfied 31% somewhat satisfied	69% very satisfied 20% somewhat satisfied	62% very satisfied 35% somewhat satisfied
How satisfied are you with the interviewing resources offered by the Career Services Center?	71% very satisfied 22% somewhat satisfied	65% very satisfied 26% somewhat satisfied	62% very satisfied 34% somewhat satisfied

	2011–2012	2012–2013	2013–2014
How satisfied are you with the resume/cover letter critiques offered by the Career Services Center?	73% very satisfied 22% somewhat satisfied	70% very satisfied 24% somewhat satisfied	62% very satisfied 34% somewhat satisfied

4.4.d. Description of the procedures by which students may communicate their concerns to School officials, including information about how these procedures are publicized and about the aggregate number of complaints and/or student grievances submitted for each of the last three years.

Procedures by which students may communicate concerns

Students are encouraged to share concerns with any member of their advising team: their faculty advisor, program coordinator, or program director. They may also discuss concerns with any faculty member, the professional staff within the Office of Admissions and Student Resources, the Division Heads, the Assistant and Associate Deans, and the Dean. When students feel they need additional help with a concern or complaint, they are referred to an ombudsman in the Student Conflict Resolution Center. This service helps analyze the problem or concern, explains policies and procedures, and suggests options for reaching a resolution.

Procedures for addressing student misconduct

A process is in place for addressing alleged student academic misconduct. University policy requires instructors to report any instance of scholastic dishonesty. The instructor must submit a written report of the alleged misconduct, including a copy of any materials that demonstrate the issue to the School's Associate Dean for Learning Systems and Student Affairs.

The Associate Dean meets with the faculty member, and, if necessary, the student(s) individually. A summary report, written by the faculty member and reviewed by the Associate Dean, is submitted by the faculty member to the University-level Office for Student Conduct and Academic Integrity (OSCAI). The OSCAI is responsible for upholding the Board of Regents' Student Conduct Code and administering student discipline. Included in the faculty member's submission is a written report, attachments documenting the alleged misconduct, and a digital media summary, which provides information on the student(s) on-line activity within a course. The report and supporting documents are copied to the Associate Dean. The report also includes suggestions of possible sanctions for consideration.

The Director or Associate Director of OSCAI subsequently contacts the Associate Dean to discuss the findings and then contacts the faculty member to discuss the possible sanctions and decide on a course of action and sanction. OSCAI then summarizes the sanction in a letter to the student, with a copy to the faculty member and the Associate Dean.

If the student agrees to the conditions in the letter, she/he signs a copy. The matter is closed, with application of the sanction by the faculty member. A copy of the report and letter is maintained in OSCAI's files. If there is no finding of misconduct, OSCAI sends a letter reporting its finding to the student and to the Associate Dean. Neither OSCAI nor the School retains copies of alleged but unsubstantiated misconduct in its files.

In the past three years, there have been seven cases of alleged student misconduct. Five of them have been associated with online courses. All have been resolved in a satisfactory manner. A recent focus has been on preventing plagiarism and student misconduct by providing clear guidelines and expectations and by seeking a program of electronic proctoring for online courses. The professional staff in the School's Office for E-Learning Services advises faculty on methods for creating online exams that discourage academic dishonesty.

4.4.e. Assessment of the extent to which this criterion is met and an analysis of the School's strengths, weaknesses, and plans.

This criterion is met.

Strengths

- The School has well-qualified, highly productive faculty and the policies and resources in place to support the success of those faculty members.
- The admissions standards and processes are well organized and clearly articulated.
- The School has successfully recruited a talented student body who will become the next generation of public health professionals.
- The students are satisfied or very satisfied with the advising they receive from their program coordinators and the Career Services staff.
- There are many avenues that students can use to voice their concerns.
- The School's student diversity is improving.

Weaknesses

- The rate of student satisfaction with faculty advising is not as high as we hoped.

Plans

- Providing students with outstanding advising is a strong interest of the Associate Dean for Learning Systems. Under her leadership faculty members will be encouraged to participate in advising workshops, attend student events, and to set high standards for their work as advisors.
- The staff in the Office of Admissions and Student Resources will develop ways to help faculty become better advisors. Some examples are the fall faculty orientation,

reminders of important student events, and timely emails to Program Directors to guide them through processes such as awarding scholarships, new student orientation, and commencement.

Written by the staff and faculty of the School of Public Health.

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Printed on September 17, 2014. Electronic copies available at http://sph.umn.edu/about

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