

**Council on Education for Public Health
Adopted on October 7, 2016**

REVIEW FOR ACCREDITATION
OF THE
PUBLIC HEALTH PROGRAM
AT
BRIGHAM YOUNG UNIVERSITY

COUNCIL ON EDUCATION FOR PUBLIC HEALTH

SITE VISIT DATES:

March 7-8, 2016

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Introduction

This report presents the findings of the Council on Education for Public Health (CEPH) regarding the Public Health Program at Brigham Young University (BYU). The report assesses the program's compliance with the *Accreditation Criteria for Public Health Programs, amended June 2011*. This accreditation review included the conduct of a self-study process by program constituents, the preparation of a document describing the program and its features in relation to the criteria for accreditation and a visit in March 2016 by a team of external peer reviewers. During the visit, the team had an opportunity to interview program and university officials, administrators, teaching faculty, students, alumni and community representatives and to verify information in the self-study document by reviewing materials provided in a resource file. The team was afforded full cooperation in its efforts to assess the program and verify the self-study document.

BYU was established in 1875 and currently has a student body of nearly 30,000 students from all 50 states, the District of Columbia and 110 countries. Over 6% of the student body is from outside the United States. The faculty includes approximately 1,500 full-time individuals, 90% of whom are tenured or on the tenure track. The university is private, sponsored by the Church of Jesus Christ of Latter Day Saints (LDS). The majority of students and academic programs are at the undergraduate level, though the university does offer graduate-level education in a number of fields, including public health.

The public health program is housed in the Department of Health Science (DHS), which is led by a chair. DHS is one of seven departments in the College of Life Sciences (CLS). Other CLS departments include those in biology; physiology and developmental biology; microbiology and molecular biology; nutrition, dietetics and food science; plant and wildlife science; and exercise sciences. The BS in public health and MPH are the only degree programs offered by the DHS, although DHS faculty contribute teaching to health-related courses for students enrolled in other majors, and the department supports undergraduate minors in gerontology and health education.

The program includes a large BS in public health program with four emphasis areas: epidemiology, environmental/occupational health, health promotion and health sciences. The health sciences emphasis is largely intended as a pre-professional degree for students intending to pursue medical or dental school or other graduate studies in health professions. The BS typically enrolls 600-700 students at any given time across the four emphasis areas. The program's MPH in health promotion is deliberately small, typically enrolling no more than 25-30 students at a time.

The program has been accredited by CEPH since 2005. The most recent accreditation review, in 2009, did not require any interim reporting. The program's accreditation to date has only included the MPH degree. This is the first accreditation review that includes both the BS and MPH degrees.

Characteristics of a Public Health Program

To be considered eligible for accreditation review by CEPH, a public health program shall demonstrate the following characteristics:

- a. The program shall be a part of an institution of higher education that is accredited by a regional accrediting body recognized by the US Department of Education or its equivalent in other countries.
- b. The program and its faculty and students shall have the same rights, privileges and status as other professional preparation programs that are components of its parent institution.
- c. The program shall function as a collaboration of disciplines, addressing the health of populations and the community through instruction, research and service. Using an ecological perspective, the public health program should provide a special learning environment that supports interdisciplinary communication, promotes a broad intellectual framework for problem solving and fosters the development of professional public health values.
- d. The public health program shall maintain an organizational culture that embraces the vision, goals and values common to public health. The program shall maintain this organizational culture through leadership, institutional rewards and dedication of resources in order to infuse public health values and goals into all aspects of the program's activities.
- e. The program shall have faculty and other human, physical, financial and learning resources to provide both breadth and depth of educational opportunity in the areas of knowledge basic to public health. At a minimum, the program shall offer the Master of Public Health (MPH) degree, or an equivalent professional degree.
- f. The program shall plan, develop and evaluate its instructional, research and service activities in ways that assure sensitivity to the perceptions and needs of its students and that combines educational excellence with applicability to the world of public health practice.

These characteristics are evident in the BYU public health program. BYU holds regional accreditation, and the program and its faculty and students have appropriate rights, privileges and status within the institution. The program's 17 primary faculty members, along with adjunct faculty members, are trained in a variety of disciplines relevant to public health and the program fosters interdisciplinary work and problem solving. The program has strong connections to local and regional public health practice communities, most notably through the program's Academic Public Health Department affiliation with the Utah County Health Department. This affiliation provides frequent collaborative opportunities for faculty and students with health department staff and links students and faculty to public health values and goals. The program has appropriate resources, though the large undergraduate student body does require ongoing attention to ensure continuing resource adequacy. The program has established a robust evaluation and planning process that ensures that it is attentive to resource concerns, as well as to its ongoing instructional, research and service efforts.

1.0 THE PUBLIC HEALTH PROGRAM.

1.1 Mission.

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

This criterion is met. The program has a clear and concise mission statement that aligns with the university's mission. The current program mission statement, goals and objectives were first approved in 2007. Faculty review the mission and values statements during self-study cycles and during university unit reviews, which are conducted every five years. The program is currently in the process of vetting updates to its mission statement with students and other stakeholders.

The program's mission is as follows: The mission of the BYU MPH program is to promote community and family-centered health by training future public health professionals to strategically plan, implement, and evaluate health promotion solutions that improve health and well-being. Emphasis is placed on reducing preventable diseases, injuries and health disparities among underserved or at-risk populations in both domestic and international settings.

Faculty have approved value statements, which support the mission statement and guide the public health program. These values reflect that the program is population-based; prevention oriented; interdisciplinary minded; student-centered; and integrity committed. The program is committed to integrating these core values into classroom and faculty-student interactions.

The program has identified five goals with 22 corresponding measurable objectives. The goals relate to student preparation for entry into the workforce; enrollment of a high quality and diverse student body; demonstration of faculty expertise and service; advancement and dissemination of public health knowledge; and the maintenance of a quality curriculum. Targets for each of these objectives measure achievement of the program's standards for research, instruction and service.

The program publicizes its mission, values, goals and objectives through the Department of Health Science website, program recruitment materials and the student handbook. The Accreditation Committee reviews the mission, values, goals and objectives during each self-study process, and faculty review and endorse the statements during faculty meetings.

The program has set up an Advisory Committee that meets annually to incorporate input of additional stakeholders in the development and ongoing evaluation and revision of the mission, values, goals and objectives. The Advisory Committee includes representation from program alumni as well as employers and preceptors associated with organizations such as the Utah Public Health Association, Salt Lake Valley Health Department, Utah Department of Health, Utah County Health Department, University of

Utah, Intermountain Healthcare, Avalon Healthcare and private industry. Students also provide input through the MPH Student Council. During the site visit, members of the Advisory Committee and students reported that program administrators are very receptive to input, and that the goals and objectives have been modified based on their feedback.

1.2 Evaluation and Planning.

The program shall have an explicit process for monitoring and evaluating its overall efforts against its mission, goals and objectives; for assessing the program'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 program must conduct an analytical self-study that analyzes performance against the accreditation criteria.

This criterion is met. The program has an explicit process for monitoring and evaluating its efforts, assessing the program's effectiveness and using evaluation results in ongoing planning and decision making. The self-study provides a descriptive explanation of the roles of various responsible parties in collecting data and evaluating progress toward objectives. The parties include the following: the department chair, MPH program director, faculty (during department and committee meetings), students and the MPH Student Council, alumni, employers and the 12-member Department of Health Science Advisory Committee. The department annually rotates faculty membership on the MPH Admissions Committee, the MPH Curriculum and Learning Committee and the Merit Pay Review Committee. Student Council representatives serving on the admissions and curriculum committees also rotate each year. The Advisory Committee serves an independent review function and meets at least once every three years. The Advisory Committee met once during academic year 2014-2015 and again during 2015-2016.

Other assessments at the university level contribute data and findings to the program's evaluation process. The university conducts academic unit reviews of departments every seven years, requiring preparation of a department self-study document and an on-site review by two external reviewers and other internal reviewers. The most recent review of the department occurred in academic year 2012-2013. Secondly, the university strongly emphasizes monitoring program learning outcomes for students and requires that departments and programs identify student learning outcomes, collect data on learning outcomes using both direct and indirect measures, draw evidence-based conclusions and report improvement actions taken and planned. The university archives the information on the BYU Learning Outcomes website to assemble evidence of continuous quality improvement. A third university mechanism useful for assembling individual faculty data is the faculty profile system (FPS) that enables faculty members to document annual accomplishments. Department chairs use the FPS reports for conducting an annual stewardship interview with each faculty member, and the Merit Pay Review Committee uses the reports for determining merit-based salary increases.

Finally, data collection and analysis are facilitated through the university's Office of Institutional Assessment, which manages electronic surveys of alumni and employers every three years. The program

develops questions for the employer survey. The university's Office of Instructional Assessment and Analysis conducts electronic exit surveys of BS and MPH students prior to graduation. For both alumni and exit surveys, the program tailors questions to secure information useful for academic public health evaluation and planning purposes.

The department head is responsible for oversight of all program evaluation processes, with the assistance of the faculty and the committees named above and discussed in Criterion 1.5. The department head refers matters to relevant faculty committees when appropriate. Ultimately, the full-time faculty, who meet twice per month, consider the data, review all proposed plans for corrective action and approve by majority vote proposed program changes that may be identified through the evaluation process. The department identified several examples of resulting programmatic changes, such as modifying specific BS and MPH courses, implementing the Global Health Certificate, dropping the graduate project and adding the Certified in Public Health exam as a culminating experience, modifying standards for the written field experience report, adding a required course to the MPH curriculum in support of the diversity, culture and politics in geopolitical systems learning outcome and other changes.

The program identifies 70 measurable targets supporting 22 objectives and indicates that the targets are subject to revision as a result of evaluative activities. The self-study shows that nearly all targets are being met or are trending in a positive direction. The program reports current non-compliance with only two measures: 25% of BS students taking the CHES exam in their final academic year and funding two GRE preparation course scholarships each year. Three of the targets calling for the inclusion of diversity criteria in faculty position announcements and the assessment of BS and MPH program learning outcomes are procedural measures that contribute only limited information about the program's progress.

An ad hoc six-person Accreditation Committee, composed of two tenured professors, one tenured associate professor and three tenure-track assistant professors, coordinated the self-study process. The department head chaired the committee and an associate dean of the college served as vice-chair. The committee met twice per month and consulted with faculty, students, administrators, alumni, representatives of the public health community and the Advisory Committee to secure input, data and review of items. Using a two-person team for each criterion, one Accreditation Committee member took the lead in compiling data and drafting a statement responsive to the CEPH documentation; and a second committee member served as a partner to provide input on the criterion and feedback on the drafted statement. The Accreditation Committee held program-level discussions with the total faculty during regularly scheduled faculty meetings and special faculty retreats. Members of the Advisory Committee who met with the site visitors stated that there were opportunities to provide input during the self-study process.

Students (other than those who serve on the MPH Curriculum and Learning Committee) and community representatives, including internship preceptors, shared that they had little awareness of the self-study process and none had reviewed the self-study document. The program acknowledges that solicitation of student and community input has occurred primarily on an episodic basis and that more systematic and consistent efforts to ensure review of accreditation documents would have been beneficial.

1.3 Institutional Environment.

The program shall be an integral part of an accredited institution of higher education.

This criterion is met. BYU was established in 1875 and currently has a student body of nearly 30,000 students from all 50 states, the District of Columbia and 110 countries. Over 6% of the student body is from outside the United States. The faculty includes approximately 1,500 full-time individuals, 90% of whom are tenured or on the tenure track. The university is private, sponsored by the LDS church. The majority of students and academic programs are at the undergraduate level, though the university does offer graduate-level education in a number of fields. BYU has been accredited by the Commission on Colleges and Universities of the Northwest Association of Schools and Colleges since 1923. The university responds to a number of professional and specialized accrediting agencies in fields including journalism, marriage and family therapy, engineering, law, business, social work and clinical laboratory sciences.

The program is housed in the Department of Health Science (DHS), which is led by a chair. DHS is one of seven departments in the College of Life Sciences (CLS). Other CLS departments include those in biology; physiology and developmental biology; microbiology and molecular biology; nutrition, dietetics and food science; plant and wildlife science; and exercise sciences.

In terms of reporting lines, the department chair reports to the college dean, and the college dean reports to the academic vice president, who reports to the president. The Board of Trustees includes the president of the LDS church, his two counselors and seven prominent church members. The Board of Trustees is the university's governing body but entrusts general administration to the university president.

The department has discretion to establish its own internal committee and other structures, and the department chair represents the program and its needs in annual budgeting processes, which proceed from the college dean to the vice president to the president and finally to the President's Council. Once funds are allocated, the department chair has authority to use funds as needed.

In hiring faculty, candidates undergo interviews with faculty, the department chair, the college dean, university administrators and ecclesiastical leaders. The chair and faculty committees provide initial levels

of review for advancement in rank and for tenure. The department takes primary responsibility for hiring staff.

Academic standards and policies originate with the program but must comply with broader institutional policies. Institution-level policies on academic standards are developed and reviewed by the Dean's Council (which reports to the academic vice president and president) and the BYU Faculty Advisory Council.

1.4 Organization and Administration.

The program 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 program's public health mission. The organizational structure shall effectively support the work of the program's constituents.

This criterion is met. The program's internal structure is identical to the department's structure. The department chair is responsible for full-time, part-time and adjunct faculty, as well as the undergraduate academic advisor and undergraduate internship coordinator.

The self-study provides numerous examples of interdisciplinary instruction, research and service. Faculty are trained in a variety of fields and bring unique perspectives to the ongoing evaluation and design of the curriculum. Faculty collaborate with other academic departments on initiatives such as international fieldwork experiences and cross-disciplinary research. The self-study documents a number of recent research publications that document faculty members' work with colleagues across campus. Students who met with site visitors noted that they benefit from the ability to take elective courses in other departments such as sociology and business.

The program and its faculty also have strong relationships with a number of governmental and non-profit agencies, with whom faculty collaborate in instruction, research and service. Representatives from the Utah County Health Department met with site visitors and described the depth and range of activities through which they collaborate with the program.

1.5 Governance.

The program 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.

This criterion is met. The program has a clear and defined governance structure with committees that ensure regular, active participation in the program's ongoing operations. The departmental faculty meets twice monthly as a committee of the whole, and the full faculty (or graduate faculty, as applicable) votes and discusses matters of policy and curricular changes, referring matters to additional levels of review in

the college or university, when applicable. The MPH director and department chair are often the first steps in policy changes or personnel decisions, but most decisions are reviewed and/or approved by one of the committees listed below and/or by the full departmental faculty (or graduate faculty).

The MPH Curriculum and Learning Committee and the Undergraduate Curriculum and Learning Committee are extremely active committees, responsible for the program's functioning in most of the areas addressed by this accreditation review. The curriculum committees review evaluation data and track the department's student assessment plan. This means that each semester, the committee reviews data on the designated assessment opportunities for each programmatic competency and discusses the quality and functioning of the relevant classes.

The curriculum committees consider feedback that comes from students through a variety of methods, including the student associations, the program director's brown bag lunches with MPH students and individual student concerns raised with faculty members. Both students and faculty were able to provide examples of instances in which student feedback was considered by a curriculum committee and changes were implemented. Students noted that changes are often implemented very quickly. The MPH committee includes the department chair, a variable number of MPH faculty and an MPH student representative. The undergraduate committee includes full-time faculty appointed by the department chair, as well as the staff-level undergraduate advisor, who also serves as an advisor to the undergraduate student association and is responsible for voicing that group's concerns.

Other relevant program committees include those for rank and status (equivalent to promotion and tenure on many campuses), merit pay, awards and MPH admissions. The program used an Accreditation Committee to lead the self-study process. The program has had an ad hoc International Placement Committee to make recommendations to ensure consistent quality for students who pursue international internships (undergraduate) or field placements (MPH).

The Professional and Alumni Connections Committee has been increasingly active in recent years. This group, appointed by the chair, currently includes six faculty members and has focused on connecting current students with alumni for networking, mentoring and encouraging students to consider additional graduate training. This group recommends and serves as guest lecturers for classes and extracurricular events and attempts to assist the program in maintaining contact with alumni.

The program has a Public Health Student Association for undergraduate students. Leaders and members of the organization met with site visitors. They described an impressive array of networking events and community service activities. The group took leadership for a campus-wide flu awareness campaign, designing and implementing the campaign and partnering with the student health center to give flu shots.

Students collected data during the project and some students have now worked with faculty to analyze data and present it in professional settings. They have also organized “speed-dating”-style events to introduce students to faculty and alumni. One student remarked that that event resulted in her finding her perfect internship. The undergraduate advisor, a staff role, serves as an advisor for this group and represents their concerns at the Undergraduate Curriculum and Learning Committee. This staff representation appears to largely be a function of efficiency, and the committee has brought in student leaders and met with them individually as needed when they have felt the need for more direct representation.

The MPH Student Council generally meets monthly to discuss important issues and to plan social, community service and networking events. Student Council leaders serve on the MPH Curriculum and Learning Committee and on the MPH Admissions Committee. A member serves as the faculty liaison to ensure student involvement in policy and other discussions that occur during faculty meetings.

1.6 Fiscal Resources.

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

This criterion is met. The faculty assess the department’s financial resources as adequate and report that all faculty and staff salaries are funded with recurring dollars. The majority of the program’s funding is appropriated from the university’s sponsor, the LDS church. Revenue provided by the church includes student tuition revenue, which is collected and retained by the sponsoring entity, and tithing by church members. In addition, the university receives gift and endowment funding. The program reports that external funding is limited and not essential for ongoing operations.

The university’s strategic resource planning process, initiated in March each year, guides budget development and allocation of funding. In March, deans distribute resource-planning documents to department chairs requesting review of program performance in the previous year, modification of the department’s three-year strategic plan (if needed) and preparation of an estimation of resource requirements and a budget proposal. By the end of May, the college dean submits a college budget to the academic vice president and to the university’s Budget Office. Following meetings by the vice presidents with the deans, the vice presidents by the end of June submit a final document to the Budget Office. The Budget Office prepares a budget summary by the end of July for review by the President’s Council.

After the President’s Council has met with the deans and determined institutional strategies and funding priorities, it approves a final list of priorities and a budget. The Board of Trustees and the Church Education System provide final approval of the budget. Each year the university’s sponsor, the LDS church, makes university-wide adjustments based on market conditions and inflationary factors that may

result in level funding or increases or decreases in funding. Based on these adjustments, the Office of the Academic Vice President may distribute allocations directly to each college or, prior to establishing each college's budget, may make internal adjustments that consider student enrollment in the college, program additions or reductions, salary surveys and other factors. The college dean makes budget allocations to departments based on similar criteria as those used by the academic vice president, and the dean considers the department's historical spending, the number of faculty FTEs, the number of students graduated and the number of currently enrolled students by major in each department.

The program receives graduate student support from the BYU Office of Graduate Studies based on a formula that draws from tuition dollars and other sources. Grant-related indirect costs are not returned to departments or to grant-generating faculty members but are recovered by the Office of Research and Creative Activities. Ultimately, a portion of the indirect cost funding is redistributed to two designated funds, an equipment allocation fund and the dean's special fund. The dean's special fund is used to supplement new faculty start-up funds and to encourage faculty to develop and submit research proposals.

Given that both the MPH and BS programs are under review as the unit of accreditation, the self-study presents budget information for the department. The university uses the calendar year, January through December, as its fiscal year (FY). The department chair oversees the department budget, with a base funding level of over \$3.8 million in FY 2015. The department chair is responsible for faculty salaries and benefits, adjunct faculty and administrative/secretarial salaries and computer access/equipment funding, which are part of the overall budget allocated to the department. The allocation supports all full-time and part-time faculty and staff through recurring dollars.

The MPH program director is responsible for the graduate program budget, which is estimated to be nearly \$1.3 million in FY 2015. The MPH program budget estimate is based on a calculated 33% proportion of faculty FTEs dedicated to the MPH program, plus funding received from the Office of Graduate Studies and funds held in separate MPH account codes. The director has direct responsibility for the graduate student support account of over \$96,000 in FY 2015 that supports graduate student scholarships, travel and scholar awards. Scholar awards of up to \$1,500 per student may be given to support students in field practice and to provide students with funding for graduate projects, conference participation and travel assistance. Jointly, the program director and the department chair oversee endowment holdings.

Table 1 shows the department's sources of funds and expenditures for the past five years, with revenue covering expenses in each of these years. With the exception of FY 2015, university funds have increased each year, representing about 89% of total income for FY 2015, with the other four years

ranging from a low of 76% in FY 2014 to 90% in FY 2011. Other sources of total revenues for FY 2015, the most recently completed budget year, include about 2.5% of funding from graduate student funding, 2.8% from gifts, 3.8% from internal grants, 1.5% from external grants and contracts and less than 1% from endowments. In addition to funding listed in the table, individual faculty members manage two accounts: Fund 20 accounts, derived from internally-funded research, and research (R) accounts derived from externally-funded research.

	2011	2012	2013	2014	2015
Sources of Funds					
Tuition ² & Fees	N/A	N/A	N/A	N/A	N/A
University Funds	\$2,754,082	\$2,933,626	\$3,290,769	\$3,530,873	\$3,415,440
Grants/Contracts ³	\$15,840	\$23,336	\$84,348	\$17,480	\$55,938
Indirect Cost Recovery ⁴	N/A	N/A	N/A	N/A	N/A
Endowment	\$9,571	\$13,721	\$24,265	\$20,511	\$19,597
Gifts	\$124,792	\$134,332	\$102,573	\$86,256	\$108,390
Other (Internal Grants)	\$62,480	\$135,917	\$114,075	\$21,945	\$146,855
Other (Grad Student Funding) ²	\$67,900	\$68,400	\$70,810	\$68,319	\$96,223
Total Initial Income^{7,8}	\$3,070,270	\$3,356,872	\$3,736,520	\$4,666,553	\$3,842,443
Expenditures					
Faculty Salaries & Benefits	\$1,981,034	\$1,921,282	\$2,279,270	\$2,462,919	\$2,352,307
Staff Salaries & Benefits	\$155,185	\$213,240	\$243,426	\$243,522	\$229,813
Operations	\$106,727	\$76,146	\$87,196	\$112,292	\$114,656
Travel	\$38,904	\$46,044	\$45,829	\$46,270	\$49,197
Student Support ⁵	\$157,569	\$240,658	\$281,342	\$299,939	\$268,954
University Tax ⁶	N/A	N/A	N/A	N/A	N/A
Other (Part-time Faculty)	\$72,448	\$109,039	\$40,980	\$36,906	\$29,359
Other (Equipment) ⁷	\$19,938	\$49,356	\$52,647	\$45,619	\$291,201
Other (Access Equipment) ⁸	\$7,158	\$15,269	\$6,830	\$14,959	\$7,521
Total Expenditures⁹	\$2,538,963	\$2,671,030	\$3,037,521	\$3,262,426	\$3,343,008

1. Dollar amounts represent end of year budgets to reflect adjusted salary increases in September, benefits which transfer to the budget on a monthly basis, or other transfers. Dollar amounts related to capital equipment and access equipment carry over from year to year and account for wide ranges in dollar amounts across budget years.
2. The department does not capture a percentage of tuition/fees based on per student credit hour production. However, the MPH program receives graduate student support through BYU Graduate Studies based on a formula that draws from tuition recovery and other sources.
3. External grants/contracts only.
4. Indirect costs are recovered by the Office of Research and Creative Activities within the university and are not redistributed to the department or individual faculty members. Indirect cost go back to the sponsoring organization (The Church of Jesus Christ of Latter-day Saints) which are redistributed back to the university through two special funds: (1) the equipment allocation, and (2) the dean's special fund. The dean's special fund is used to encourage faculty to write research proposals for funding and supplement start-up funds for new faculty.
5. These expenditures include graduate and undergraduate student pay (teaching and research assistantships), graduate student scholarships, and the MPH Scholar Award (funding to assist with student research, fieldwork, and travel).

6. Neither the department nor the MPH program receives taxable resources (e.g. direct tuition income or other items from which tax is paid). Therefore, university tax is not applicable.
7. The \$300,000 for FY 2015 represents expenditures for new equipment in the environmental health lab.
8. Access equipment represents computers for faculty and staff. University funds available to purchase access computers for faculty, staff and student labs are as follows: 2011 = \$32,531, 2012 = \$38,463, 2013 = \$31,102, 2014 = \$36,165, 2015 = \$31,577. These amounts are included in the University Funds line in the Sources of Funds category.
9. In addition to budget amounts listed in Table 1.6.1, individual faculty members manage two additional accounts (not reflected in the template because they are managed by individual faculty): Fund 20 accounts (internally funded research), and research (R) accounts (externally funded research). The five-year annual department average (2011-2015) for these accounts is as follows: Fund 20: 2011 = \$350,234, 2012 = \$426,337, 2013 = \$493,841, 2014 = \$505,548, 2015 = \$509,817; R accounts: 2011 = \$744, 2012 = \$50,349, 2013 = \$40,437, 2014 = \$26,406, 2015 = \$20,969

Of overall FY 2015 expenditures, faculty salaries and benefits constitute over 70% and staff salaries and benefits nearly 7%. Operations account for nearly 3.5% of total expenditures and equipment for nearly 9%, due to the purchase of new equipment for the environmental health lab. The university permits funding related to capital and computer access equipment to carry over from year to year. Student support expenditures for graduate and undergraduate student pay, graduate student scholarships and MPH Scholar Awards represents 8% of total expenditures. Faculty travel accounted for less than 2% of total expenditures in FY 2015.

The program identifies four fiscal resource objectives with specified targets for measuring capability related to 1) obtaining gifts to support student scholarships, 2) maintaining funding support of graduate students by the Office of Graduate Studies, 3) expenditures for teaching and research assistantships and 4) maintaining an operating budget of \$3,500 or more per student annually. The program is meeting its established targets, except for Office of Graduate Studies funding, which in the second reported year fell about 2.5% below the desired funding of \$70,000. Although the program has met the annual gift target for each year, the data for annual gifts to support student scholarships show a steady decline over the three years from \$103,000 to just over \$75,000 for the last reported year, a nearly 27% shortfall.

1.7 Faculty and Other Resources.

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

This criterion is met with commentary. For academic year 2015-2016, the program reports the full-time equivalent (FTE) workload of the 17 primary faculty is 4.84 for the MPH and 11.44 for the BS degree programs. All 17 faculty have responsibilities in both the MPH and BS programs for a total FTE of 16.3; one faculty member has a 0.36 FTE administrative assignment as associate dean of the college and one has a 0.24 FTE administrative assignment as department head. Each of the 17 faculty members contributes at least 0.20 FTE to the MPH program and at least .50 FTE to the master's and bachelor's degrees, combined. Generally, each faculty member is expected to devote 60% time to teaching, 30% to research and scholarship and 10% to service. The standard teaching load is two courses each in fall and winter semesters and one course in either spring or summer term (2:2:1). Site visitors reviewed a detailed set of faculty FTE calculations that appear to be a fair and systematic representation of effort. One faculty

member was newly appointed in fall 2015, and the department is currently recruiting one additional faculty member.

Using the primary faculty FTE, the program reports the 2015-2016 student-faculty ratio (SFR) is 4.8:1 for 23 FTE MPH students and 55:1 for 629 FTE BS students. The BS program is not a unified generalist public health degree program. Rather, the program promotes each emphasis area like a major for recruitment purposes; and beginning in fall 2012, the emphasis area is identified on the student's diploma and transcript. The distinction among emphasis areas also shows up in the program's separate tracking and reporting of evaluation data by emphasis area in Criterion 1.2. Accordingly, site visitors concur that an assessment of SFR adequacy for each emphasis area is necessary and that the emphasis area SFRs should be evaluated individually. The SFRs for the four BS emphasis areas vary as follows: 25.9:1 for environmental/occupational health, 35.5:1 for epidemiology, 64.9:1 for health promotion and 89.2:1 for health science.

Despite these high numbers, baccalaureate students in all concentrations who met with site visitors emphasized their satisfaction with faculty availability. A number of students offered examples of ways in which faculty make themselves accessible, know all students' names and endeavor to respond to individual students' needs. Student satisfaction data presents similarly positive results, with few to no indications of challenges associated with the size of the student body relative to the size of the faculty complement.

The program has two part-time staff, with one 0.75 FTE staff member coordinating internships and career placements and a second half-time staff member providing undergraduate advising. The College of Life Sciences Advising Center also provides routine advising services for undergraduates, such as assisting undergraduate students with schedule building. Program leaders indicated that having department-level staff members for advising undergraduate students is unusual on campus. Nearly all BYU undergraduates are advised primarily by staff in college-level units. Undergraduate students who met with the site visitors expressed strong satisfaction with the advising assistance and internship coordination they receive from the department staff.

The commentary relates to the high SFRs for the BS in health promotion and especially for the BS in health science emphasis areas. These two concentrations, together, account for 77% of BS students in 2015-2016. The overall 55:1 SFR for all four emphasis areas is higher than the program's stated target of 45:1 and has been higher for each of the last four years. The program may examine the potential of limiting enrollments, which are 332 and 208, respectively, for health promotion and health science. University leaders stated that the department has considered the possibility of the BS degree program being designated as a limited enrollment program, but decided against that approach at this time. They

indicated during the site visit that should enrollment growth continue, action will be needed to address the overall SFR. In fact, subsequent to the site visit, one additional health promotion faculty member joined the department on July 11, 2016 bringing the total number of faculty to 19, and a search for a second faculty member in Health Systems and Policy will commence in Fall 2016. One of the college leaders indicated that growth has occurred with the formation of tracks, now identified as emphasis areas, which have broadened the appeal to students seeking a major area of study. Program leaders indicated that faculty discussions are underway regarding the potential benefits that may result if health science is combined with environmental and occupational health.

The program has one full-time administrative assistant/secretary; one full-time budget analyst with an administrative title of assistant department chair, who also serves as the department's learning outcomes assessment coordinator; and three half-time student secretaries handling administrative and office responsibilities. Two student secretaries work in the main department office, and the third is assigned to work about 18 hours per week for the MPH program. Other than student assistantships, the program does not have research staff.

The Life Sciences Building, completed in June 2014, offers 265,000 square feet of space that houses five of the seven departments in the college. The space includes 16 teaching and research laboratories, three auditoriums, four conference rooms and 70 academic offices. The program schedules classrooms in other nearby campus buildings to gain access to smaller rooms with more flexible seating suitable for public health instructional activities.

The program has 1,000 square feet of laboratory space to support teaching and research activities, focused at the present time mostly on measuring and analyzing environmental exposures. The laboratory includes an open research area plus two adjacent rooms, one of which is temperature and humidity controlled. The department is committed to expanding the equipment beyond a microbalance, computer workstation, freezer, chemical ventilation hood and a hazardous materials storage cabinet and other items to create a state-of-the-art research laboratory. Site visitors toured this lab and found it to be impressive in design and capability. In addition, the department has a 750 square-foot Health Research and Technology Lab designed for separation into two rooms by a room divider. The space has work stations for student research assistants, a 75 square-foot observation room and a large observation window plus specialized equipment for conducting focus group observation and research. The lab is considered multipurpose by also serving as a location for research meetings, research presentations and workshops, oral exams, proposal meetings and faculty meetings.

Computer facilities and resources are excellent, with college and university IT staff maintaining and updating the computer labs. Open-access computer labs include four across campus, one in the Life

Sciences building and seven computer labs in the library. The Life Sciences Building also has two computational classrooms, each holding 22 computers, that are scheduled only for course instruction and testing. Graduate research assistants have access to nine computers in the Health Research and Technology Lab and each MPH cohort has access to two dedicated MPH computer labs. Classrooms support wireless services and include podiums that control multimedia and computer projection. The program provides faculty and staff members with personal computers that are replaced every four years and with software.

The Harold B. Lee Library, containing over eight million items, provides students and faculty ready access to library and information resources through the physical facilities or online. The library serves as a depository for United States and Canadian government documents and regularly receives state and local government publications. Campus librarians are available to help students and faculty access databases and electronic holdings and to provide instruction on searching, research and information management as needed. Three professional staff members are assigned specifically to support needs within the college.

The program has established six outcome measures to assess the adequacy of its faculty and other resources. These include two SFR measures, two satisfaction measures obtained via the exit surveys of BS and MPH students and two related to faculty-mentored student research, which is a high priority for the university. The data indicate that the program has met all targets, but the SFR for the BS program exceeds the target of 45:1 for all three years, based on the primary faculty FTE.

1.8 Diversity.

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

This criterion is met with commentary. BYU believes that a diverse student body fosters an enriched educational environment, which supports the university's overall mission to provide "a period of intensive learning in a stimulating setting where a commitment to excellence is expected and the full realization of human potential is pursued." In alignment with the teachings of the LDS church, the university's Fostering an Enriched Environment Policy further discusses its mission to provide "educational and academically enlightening opportunities for a mix of students and faculty who share values based on the gospel of Jesus Christ and come from a variety of backgrounds and experiences..." The program defines underrepresented populations to include nonwhite races/ethnicities, in accordance with the classifications set by the US Department of Education. The program also considers Caucasian students from international settings to be underrepresented. The program's response to the site visit team's report indicates that the program has established a scholarship program for diverse students from international settings courtesy of two generous donors. Since 2014, nine international MPH students have received

scholarship support beyond the usual graduate student support, and the program hopes that such support will continue to provide additional encouragement for diverse applicants to apply.

The program has developed written plans and policies to incorporate diversity and cultural competency throughout its campus life, its hiring and admissions processes, its curriculum, and its service learning opportunities. The university's Nondiscrimination and Equal Opportunity Policy prohibits harassment and discrimination, and is supported through the efforts of a Title IX Coordinator with five deputy coordinators responsible for specific groups. The program's Valuing Diversity policy expands the definition of diversity beyond race and ethnicity to encompass age, gender, national origin, religion, disability status, health status/disparities, community affiliation, and socioeconomic background. The university's formal structures to support diversity include an Office of Multicultural Student Services and an Office of Disability Services.

Although BYU is an equal opportunity employer, the strong preference given to active LDS Church members has limited diversity among staff and faculty. The program has undertaken concrete steps to expand faculty diversity by including at least one underrepresented faculty member on search committees and by recruiting applicants with prior experience or interest in working with diverse or minority populations. The program has made a deliberate effort to focus on recruitment of female faculty members and reports that all three final candidates for a current faculty vacancy in the program are female.

The program describes its efforts to promote a more diverse graduate student body; however, it does not address undergraduate diversity issues, as recruitment and admissions of undergraduates are managed at the university level. Actions at the MPH level include the following: recruitment of graduate students from BYU's Hawaii and Idaho campuses, which have much larger pools of international undergraduates; structuring admissions criteria to award points for nonwhite or international students; setting a target to admit at least 25% of its students from ethnically-diverse or international backgrounds; and improving retention of multicultural students through the GRE Scholarship program and the provision of tutors. These efforts have demonstrated success, as the public health program currently has twice the proportion of diverse students compared with BYU as a whole. Department faculty report that of the 14 offers of admission to the MPH program made in 2016, 36% of admitted students are from racial/ethnic minorities or are international students.

As an institution with a religious sponsor, most of BYU's students are affiliated with LDS. As a result, a very high proportion of students have performed mission work in international settings, and almost 75% of BYU students speak a second language with fluency and have developed cultural competency skills in a real world setting. BYU has developed language certificate programs that allow students across all university programs to obtain credentials that support them as they enter post-university life. In addition,

the university's Kennedy Center for International Studies provides students with skills needed to work in international settings and which enhance their ability to assess and respond to the needs of diverse groups in local settings as well.

The program has several structures in place to support international students. In addition to the Office of Multicultural Services, the program's tutoring opportunities and the GRE Preparation Scholarship program are important tools to promote success. Efforts to enroll a diverse student body are also supported by targeted recruitment efforts by faculty with international research or study-abroad relationships, and by dedicated financial aid. This past admissions cycle, the program paid the application fee for an international applicant. Seven international students matriculated over the last three enrollment cycles, and this year's accepted student cohort includes two more.

The program has established learning outcomes at both the undergraduate and graduate levels that support diversity and cultural competency and has developed specific required courses at both levels that provide students with skills for working with underserved and at-risk populations. Cultural competency is interwoven throughout the curriculum as well, as many professors have experience in working in or with underserved populations and bring these experiences into their classrooms through case studies. In addition, students are required to discuss how their field experiences contributed to their understanding of serving at-risk populations. Students who study abroad or who study within the Global Health Internship Program receive additional training in cultural competency prior to participation.

The program has pointed to its low tuition costs for LDS members, as well as MPH scholar awards of \$1,500 per student, to address issues of socioeconomic diversity. Information about this financial support is widely available in program recruitment materials; however, the program could consider more active targeted outreach to potential applicants from underrepresented groups who may not realize that a graduate education is affordable.

Measurable objectives demonstrate the program's success with ensuring that MPH students incorporate service to at-risk or underserved populations in their fieldwork (100%) and with foreign-born or minority MPH applicants and BS enrollees (25% of MPH applicants; 34% of BS students).

Commentary pertains to opportunities to expand outreach to diverse populations, particularly in terms of ensuring that socioeconomically underrepresented individuals are aware of and are well-positioned to take advantage of the program's potential sources of support. During the site visit, university leaders affirmed their commitment to ensuring the admission and academic success of underrepresented groups. However, given the academic strength of BYU's student body at both the graduate and undergraduate levels, leaders believe that the admissions criteria need to promote diversity while ensuring that only

students who are positioned well for academic success are admitted. Efforts to enroll and support the success of students from economically-challenged backgrounds could be bolstered through community partnerships that enhance the pre-college preparation of underrepresented groups. Efforts have been put in place subsequent to the site visit to expand outreach to diverse populations, particularly to socioeconomically underrepresented individuals, through exploration of partnerships with SOAR (Summer of Academic Refinement) and Pathways at BYU-Provo and Pathways at BYU-Idaho. SOAR provides one-week summer camps for multicultural high school students with the aim of helping them become strong applicants to BYU, and Pathways is a “low-cost educational opportunity that combines online courses with local gatherings and is designed to “give students the confidence and skills needed to succeed in college.”

2.0 INSTRUCTIONAL PROGRAMS.

2.1 Degree Offerings.

The program shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional master’s degree. The program may offer a generalist MPH degree and/or an MPH with areas of specialization. The program, depending on how it defines the unit of accreditation, may offer other degrees, if consistent with its mission and resources.

This criterion is met. Table 2 presents the program’s degree offerings. The program offers the MPH with an emphasis in health promotion and offers four public health majors at the baccalaureate level: epidemiology, environmental and occupational health, health promotion and health science. The latter track is generally structured as a pre-professional track and includes substantial chemistry, biology and other life sciences content that would prepare a student for advanced study in medicine, dentistry, nursing, etc.

Table 2. Degrees Offered		
	Academic	Professional
Bachelor’s Degrees		
Health Promotion		BS
Health Science		BS
Environmental & Occupational Health		BS
Epidemiology		BS
Master’s Degrees		
Health Promotion		MPH

Site visitors reviewed the required curricula, and all majors and the MPH are structured to provide a public health core as well as specialized knowledge in a field of study. In addition to courses addressing core public health knowledge, required coursework for the MPH covers program planning and evaluation, survey and research methods, infectious and chronic disease prevention and control and health promotion interventions for populations and small groups. Three additional required courses provide students with skills for working with diverse cultures, and faculty report that concepts of cultural competency are integrated throughout the curriculum.

2.2 Program Length.

An MPH degree program or equivalent professional public health master's degree must be at least 42 semester-credit units in length.

This criterion is met. The MPH degree requires completion of 48 semester-credits. The university defines a credit as one hour of classroom time and two hours of out-of-class work over a 15-week semester. No students have completed the degree for fewer than 48 credits.

2.3 Public Health Core Knowledge.

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

This criterion is met. The program requires all MPH students to complete coursework in the five core areas of public health knowledge. Table 3 presents the required core coursework. Students demonstrate their proficiency in practical application of these core concepts through the required Field Experience (HLTH 688R).

Core Knowledge Area	Course Number & Title	Credits
Biostatistics	Principles of Biostatistics (HLTH 604)	3
Epidemiology	Principles of Epidemiology (HLTH 602)	3
Environmental Health Sciences	Environmental Health Sciences (HLTH 606)	3
Social & Behavioral Sciences	Determinants of Health Behavior (HLTH 608)	3
Health Services Administration	Public Health Administration (HLTH 607)	3

Site visitors reviewed the syllabi of required coursework and verified that the coursework appropriately addresses all core public health knowledge areas.

Although the core knowledge areas are well-met, students, alumni and preceptors identified areas where the MPH curriculum could be strengthened to provide more real world skills. They identified the following topics and skill sets for possible inclusion in the curriculum: grant writing and grants management; social marketing; social media training; website development; use of both specialized software (SAS, SPSS) as well as general business software (Excel); systems thinking; and group dynamics.

2.4 Practical Skills.

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

This criterion is met. All MPH students are required to complete a six-credit, 300-hour field practicum between the first and second years of the program. The purpose of the field experience is to provide an opportunity for the student to apply the knowledge and skills acquired in the classroom to a real-world setting.

The MPH Student Handbook contains checklists and other tools to guide students through options for the field experience. The experience must be prevention-oriented and population-based, with a focus on underserved and at-risk populations. The program keeps summaries of practicum sites and projects from prior years to aid current students in the selection process. Sites have included federal, state, regional and local public health departments; federal and state environmental agencies; international public health and relief agencies; and non-governmental agencies engaged in research, advocacy and service delivery.

The process for both site selection and preceptor selection is flexible and allows students to find a placement that works with respect to both logistics (location, hours) and personal interests (program content and skill set development). An online tool has been developed to assist in matching project ideas submitted by potential preceptors with student interests. Students identify organizations with missions in alignment with MPH program goals and with the capacity to provide an appropriate preceptor and exposure to an at-risk population. The preceptor must commit to spending adequate time with the student and must have sufficient professional preparation to ensure a meaningful experience.

Once a potential project is identified, the student prepares a six- to nine-page field experience proposal that covers the following topics: agency background; program focus and population served; literature review; goals, learning objectives and activities; anticipated outcomes and learning products; and alignment with MPH learning outcomes. Following review and approval by the student's graduate committee, a formal Internship Master Agreement is signed by the student, the university and the field practicum supervisor.

During the field experience, the graduate committee chair provides supervision and guidance to the student at regular intervals (after every 50 hours of field work) to review the field experience log and to ensure that learning objectives are being met. Other members of the student's graduate committee may also contribute to this process.

Upon completion of the field experience, the student submits a written report to the graduate committee chair. This report expands upon the areas covered in the initial project proposal and also includes the student's self-assessment of professional growth. The report comprises 85% of the student's field

experience final grade, with communication with the graduate committee chair, student self-assessment and preceptor assessment accounting for the remainder.

MPH policy allows the program to waive up to 100 hours (two credits) of the field experience for students with significant applied public health experience. No waivers have been granted in the past four years.

In 2013, the program established the Global Health Internship Program to assist students desiring a field experience in an international setting. Between 2009 and 2015, 58 MPH students have completed field experiences, and 12 of these have involved international placements.

Although there is no formal orientation for preceptors, both students and former preceptors stated that the field experience approval process ensures that organizations and preceptors are oriented to the mission of the program and to the learning objectives and professional development objectives of the student. Preceptors also report that frequent email communication with the student's faculty advisor ensures that both the student's and the agency's needs are being met. Preceptors communicate with students and faculty for a midpoint and an endpoint evaluation and expressed clarity with respect to how to assess the student's performance. At the end of the field experience, both the student and the preceptor complete a survey that helps determine whether the student and agency outcomes matched expectations and resulted in achievement of learning objectives. These evaluations are reviewed by the MPH Curriculum and Learning Committee, which can make appropriate changes. No significant changes or restrictions on agencies have been required over the past several years.

2.5 Culminating Experience.

All graduate professional degree programs identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.

This criterion is met. All MPH students engage in required culminating experiences that draw on the 300-hour field experience and require written and oral comprehensive exams. The field experience, scheduled between the MPH student's first and second years, is described in more detail in Criterion 2.4. Guidelines for completing the culminating experiences are contained in the student handbooks and online.

The first of the two comprehensive exams, scheduled in October for students who have completed all first-year MPH courses, uses the 200-item Certified in Public Health (CPH) exam prepared by the National Board of Public Health Examiners. The majority of the CPH exam questions cover the five core areas of public health. Other questions address the seven cross-cutting competencies of public health: communication and informatics, diversity and culture, leadership, public health biology, professionalism, program planning and systems thinking. The program requires that all MPH students pass the exam, and

the College of Life Sciences pays for the first sitting of the exam for each student. If additional attempts are needed to pass the exam, the student must pay the exam fee.

Replacing a graduate project, the second comprehensive exam is oral and became a requirement during academic year 2014-2015. The exam is scheduled typically in November of the second year of MPH degree pursuit. Three voting committee members conduct the exam, which consists of the student's 30-minute formal presentation plus follow-up questions by the committee members, for which a database has been created. The stated purpose of the oral exam is to provide opportunity for students to synthesize knowledge obtained in their field experience and coursework by addressing each of the program's eight competencies.

The program provides specific preparatory guidance to the student regarding questions for each learning outcome that should be addressed in the presentation. For example, under the research learning outcome, the student should indicate if experience was gained with a qualitative research study design, explain the design and describe how it was used. If such a design was not used, the student must identify a research design that could be used to address a qualitative question of interest to the student. Following the probing follow-up questions, the committee, with the candidate excused, deliberates a final decision based on a detailed scoring rubric form with defined ratings of "unsatisfactory," "satisfactory" or "exceptional" for each of the learning outcomes plus three open-ended assessments regarding overall student performance, quality of the written field report and oral presentation and quality and adequacy of responses to the committee's questions. Decision options are "pass" for those who have received a satisfactory or exceptional rating on all eight learning outcomes, "pass with qualifications," which requires the student to submit a written response to one to three learning outcomes judged as unsatisfactory, "recess" which requires a rescheduling of the oral exam due to unsatisfactory ratings on more than three learning outcomes and "do not pass" which leads to dismissal of the student from the program after the third oral exam attempt produces unsatisfactory ratings on more than three of the eight learning outcomes.

Faculty who met with the site visitors expressed mixed views regarding the usefulness of the oral exam compared with evaluating more tangible products produced by students. Some faculty indicated that the questions may vary too widely depending on the faculty members conducting the exam and that the oral exam scoring may be too subjective. The program acknowledges that experience with the oral exam is limited due to its recent implementation and that the MPH Curriculum and Learning Committee continues to assess and refine processes, procedures and the database of questions.

2.6 Required Competencies.

For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of

degree programs. The program must identify competencies for graduate professional, academic and baccalaureate public health degree programs. Additionally, the program must identify competencies for specializations within the degree program at all levels (bachelor's, master's and doctoral).

This criterion is met. The program has defined concise competency sets for the MPH and bachelor's degrees' core curricula. The program has also defined competencies for each BS concentration and competencies associated with the MPH program's focus on health promotion. Though each competency set has some variation in the level of knowledge and skills expected, competencies are generally written at levels appropriate to each degree: many MPH competencies require students to *apply* theories and skills, while many BS competencies require students to *describe* processes or methods. The concentration competencies generally define higher levels of knowledge and skills than the core competencies: MPH students must *design* and *plan*, and BS students must *assess* and *select*.

The self-study presents curricular maps that document the curricular elements (mostly coursework) through which the competencies are covered. Site visitors discussed the process of developing and maintaining the curricular maps, and faculty described an iterative process conducted at faculty retreats and curriculum committee meetings.

The program used a number of sources, including the National Commission for Health Education Credentialing Areas of Responsibility and the ASPPH competencies but winnowed the lists through a series of faculty retreats. The Advisory Board had input into the development process in 2007 and has reviewed competencies and assessment methods at more recent meetings. Advisory Board members who met with site visitors indicated that faculty were very eager for their feedback.

Competencies are listed on the program's website. Syllabi list course-level learning outcomes that faculty used to map the competencies to courses. Students who met with site visitors said that they were very aware of competencies when it was time to do their internship (undergraduates) or fieldwork (graduates). The rest of the time, they felt very comfortable that they knew specific course expectations and tended to focus on the course-specific knowledge and skills.

The program's curriculum committees conduct a formal review of the competencies every four years.

2.7 Assessment Procedures.

There shall be procedures for assessing and documenting the extent to which each student has demonstrated achievement of the competencies defined for his or her degree program and area of concentration.

This criterion is met with commentary. The program uses a university-wide online tracking system to monitor students' attainment of each defined competency. The system requires identification of specific

assessment activities for each competency (eg, a project in a required course) and requires annual input and review of data across all students. For MPH students, the program uses the fieldwork and culminating experiences as opportunities for competency assessment. As validated by site visitors' review of recent projects, all fieldwork reports do address the linkage between the individual student's project and the program's competencies, though the connections could be more direct in some cases. The oral exam evaluation rubric used by faculty explicitly requires assessment of students' competency attainment.

Graduation rates and post-graduation placement rates for MPH students surpass this criterion's expectations. The program graduates eight to 15 MPH students per year, and 75%-100% are employed within one year of graduation, with all remaining graduates enrolled in additional education.

The program identifies additional measures by which it tracks MPH students' success: these relate to GPA, passing the oral exam on the first attempt, performance in fieldwork, performance in research-methods-based classes, participation in mentored research with faculty and employer assessments of graduates' competence. On all measures except the latter, the program has met or exceeded its targets. The program targets 90% of employers rating students as above average or superior, and the actual data show 89% satisfaction, one percentage point below target.

Beginning with students who entered in 2014, all MPH graduates are required to take the CPH exam prior to graduating. To date, all 20 students have passed the CPH exam on the first attempt.

The self-study also reports graduation rates and post-graduation outcomes for its baccalaureate students. For reporting graduation rates, the program tracks majors once they have completed 96 credits. Within three years of that benchmark, 80%-92% of students in each of the program's baccalaureate majors have graduated. Of the 304 BS graduates in 2015, only six individuals (2%) who wished to be employed were still seeking employment within one year of graduation. The majority were employed (54%) or enrolled in additional education (30%).

The program also presents data on pass rates for the CHES exam for bachelor's degree in health promotion graduates, which is encouraged but not required. Over the last six years, 92% of 37 students have passed the exam.

The program conducts its own surveys of MPH alumni and of employers of BS and MPH students, asking them to assess (or self-assess) graduates' competency attainment and preparation for the workforce. MPH graduates report feeling adequately or well-prepared on eight of the program's nine competencies. The one exception was the competency relating to application of biostatistics and epidemiologic methods.

The program has reviewed and made changes to its biostatistics course since receiving the survey results. Employer response rates were very low, but the 42 employers of MPH or BS graduates generally rated students as very prepared. They provided some suggestions, in response to open-ended questions, on curricular areas that could be strengthened, and the program has responded to these suggestions. Alumni, employers and preceptors who met with site visitors praised the program's curriculum, particularly in its emphasis on building strong written and oral communication skills. They suggested some potential areas of improvement or growth, based on current workforce needs: use of technology applications, particularly those related to web-based communications and social media; social marketing; and business and management skills.

The commentary relates to the potential for the program to collect better, more accurate student outcome data on its baccalaureate graduates. The program relies on university-level systems for a number of aspects of its data reporting on these alumni, and the 2013 university-level survey returned only 55 responses from the program's baccalaureate graduates. The program typically graduates 150 or more students per year. The program has begun to implement more detailed and sensitive indicators to measure student success at the baccalaureate level, but this assessment process is not as well-developed as it is for the program's graduate students. Reviewers understand that collecting and tracking data on the much larger population of undergraduate students presents challenges, but since baccalaureate students constitute a large percentage of the program's output and efforts, it is important to continue to improve measures of these students' success. The program's response to the site visit team's report notes that actions will continue to be taken on an annual basis on conclusions and archived in the university learning outcomes system. Further, there are now plans for faculty to evaluate outcome measures during the Fall 2016 faculty retreat to determine what measures can be modified to strengthen outcome data.

2.8 Bachelor's Degrees in Public Health.

If the program offers baccalaureate public health degrees, they shall include the following elements:

Required Coursework in Public Health Core Knowledge: students must complete courses that provide a basic understanding of the five core public health knowledge areas defined in Criterion 2.1, including one course that focuses on epidemiology. Collectively, this coursework should be at least the equivalent of 12 semester-credit hours.

Elective Public Health Coursework: in addition to the required public health core knowledge courses, students must complete additional public health-related courses. Public health-related courses may include those addressing social, economic, quantitative, geographic, educational and other issues that impact the health of populations and health disparities within and across populations.

Capstone Experience: students must complete an experience that provides opportunities to apply public health principles outside of a typical classroom setting and builds on public health coursework. This experience should be at least equivalent to three semester-credit hours or sufficient to satisfy the typical capstone requirement for a bachelor's degree at the parent

university. The experience may be tailored to students' expected post-baccalaureate goals (eg, graduate and/or professional school, entry-level employment), and a variety of experiences that meet university requirements may be appropriate. Acceptable capstone experiences might include one or more of the following: internship, service-learning project, senior seminar, portfolio project, research paper or honors thesis.

The required public health core coursework and capstone experience must be taught (in the case of coursework) and supervised (in the case of capstone experiences) by faculty documented in Criteria 4.1.a and 4.1.b.

This criterion is partially met. The program's four undergraduate majors all require a common set of coursework. The required core includes an introduction to public health and courses in health promotion, environmental health, epidemiology, chronic disease and infectious disease. Each major defines a well-specified set of courses unique to the major, with some courses shared among all departmental public health students, some unique to each public health major and others in departments such as biology, chemistry and mathematics.

The first concern relates to the program's lack of coverage of the core knowledge area of health services administration. Faculty explained that they are aware of this omission and are currently working through a set of curricular changes that will address the issue. They noted that students are exposed to this core area through one guest lecture in the introduction to public health course and the required readings and materials for that session. While no substantive coverage beyond this initial exposure had been provided at the time of the site visit, faculty had already been working on significant curricular revisions for the BS in public health. These revisions include an overhaul of the core to include six three-credit courses that are more integrated. The Health Systems and Policy course was approved by the faculty in June 2016. Because this course is part of the revised core, it will be submitted for university approval along with other new core courses during Fall semester 2017; and upon approval will be required for all public health majors starting Fall semester 2018.

For the other public health core knowledge areas, the program has a required course for each, except for biostatistics. Majors in epidemiology and health science complete a departmental course in biostatistics, and all four majors address biostatistics content in the required epidemiology class.

Majors in health science and health promotion complete a required internship as the capstone experience. The internship is optional for environmental and occupational health and epidemiology majors. The program has a structured set of guidelines and forms and a part-time staff position dedicated to the internship. Site visitors spoke with the internship coordinator, students, alumni and preceptors for the baccalaureate internship. They were unanimous in their praise. Students spoke of the invaluable opportunity that the internship provided for them to apply their skills and the care with which the experience was planned, to ensure that it was likely to be a high-quality experience that related to individual goals and future aspirations. Preceptors all spoke highly of the caliber of students that they

received. Several health department and local non-profit and other organizational representatives said that they host multiple BYU baccalaureate interns every academic term. They indicated that they depend on the interns to extend the capacity of their organizations in times of lean budgets and that they use the interns to plan, implement and evaluate programs. They said that the program's interns come prepared to "hit the ground running," particularly in terms of strong oral and written communication skills and in terms of comfort working in groups. Students, alumni and preceptors had high praise for the program's internship coordinator. Preceptors, particularly, appreciated the guidance that they received and her immediate availability for questions or to take full responsibility of handling challenges or problems as they arose. Several employers had hired interns into part-time or full-time positions after graduation, and others had worked with students to present project findings at conferences and public meetings.

The program recently implemented a course for EOH majors titled Sampling and Exposure Assessment Lab. This course requires students to travel, as a group, to multiple worksites and domestic sites, collect samples, analyze the samples and present their findings. One student said that it was his favorite class in the curriculum because it allowed him to apply all of the theory that he had learned in his major-specific courses. The course instructor described a class that is designed to challenge students to move from classroom to real-world applications. An alumna from the major who had not taken the course but knew of it said that the sampling course is a major improvement, as the major had previously been more theoretical, with few opportunities to apply classroom learning.

For epidemiology majors, the self-study indicates that the final project in the Computer Applications in Epidemiology class functions as the capstone experience.

The second concern relates to the capstone experiences for majors in epidemiology and environmental and occupational health. While both lab courses do require application of skills learned in previous classes, and the EOH course appears to be particularly well designed to expose students to a variety of settings, neither is currently structured to fully meet this criterion's expectations that a capstone be 1) broad enough to build on a substantial body of the student's public health coursework and 2) structured to require application of skills outside of a typical classroom setting. Without prompting, several EOH and epidemiology alumni who met with site visitors initiated a discussion about how an internship, structured like the ones that they heard being discussed by alumni of the health promotion program and by preceptors, would have been valuable. Both individuals had found ways to do internships or mentored research that had been fulfilling, but their discussion, with no direction from site visitors, concluded with both agreeing that they think that a structured experience like the internship would be a valuable addition for future students.

Faculty who met with site visitors were candid in their description of ongoing discussions of potentially major curricular revisions for all of the undergraduate majors. Faculty were already aware of and working on both of the concerns cited above. The program's response to the site visit team's report indicates that faculty approved the public health core for the BS in Public Health program in June 2016. Additional work to strengthen the capstone experience for epidemiology and environmental and occupational health is now underway because the core is newly revised. Capstone experiences for epidemiology and environmental and occupational health will be completed during Fall semester 2016. All curricular changes (core, capstone, and others) will be submitted to curricular committees during Fall semester 2017 with all coursework in full effect by Fall 2018.

There may be concerns about expanding the internship program further, due to many students' needs to stay local and possible market saturation, but faculty felt confident that a number of strategies currently being considered could be effective in addressing the deficiencies identified in this report. They want to be thoughtful and focus on quality.

2.9 Academic Degrees.

If the program 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.

This criterion is not applicable.

2.10 Doctoral Degrees.

The program may offer doctoral degree programs, if consistent with its mission and resources.

This criterion is not applicable.

2.11 Joint Degrees.

If the program 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.

This criterion is not applicable.

2.12 Distance Education or Executive Degree Programs.

If the program offers degree programs using formats or methods other than students attending regular on-site course sessions spread over a standard term, these degree programs must a) be consistent with the mission of the program and within the program's established areas of expertise; b) be guided by clearly articulated student learning outcomes that are rigorously evaluated; c) be subject to the same quality control processes that other degree programs in the university are; and d) provide planned and evaluated learning experiences that take into consideration and are responsive to the characteristics and needs of adult learners. If the program offers distance education or executive degree programs, it must provide needed support for these programs, including administrative, travel, communication and student services. The program must have an ongoing program to evaluate the academic effectiveness of the format, to assess learning methods and to systematically use this information to stimulate program improvements. The program must have processes in place through which it establishes that the

student who registers in a distance education or correspondence education course or degree is the same student who participates in and completes the course and degree and receives academic credit.

This criterion is not applicable.

3.0 CREATION, APPLICATION AND ADVANCEMENT OF KNOWLEDGE.

3.1 Research.

The program 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.

This criterion is met. Although BYU is not a Carnegie-designated research university and is not actively seeking to build a reputation based on the procurement of external research funds, the self-study and site visit confirmed that faculty and students are engaged in funded research activities, with the majority of the projects funded internally. The program has a clear research mission with policies and procedures to support the expectation that faculty contribute to knowledge generation; and one of the five program goals addresses research and the dissemination of public health knowledge. Through annual performance interviews, the department chair encourages faculty to engage in scholarly activities and continuing development, and the annual review also is used to track progress. The university expectation is that faculty produce one to two peer-reviewed products per year, including publications, scholarly presentations and grants for research or creative work. The program's Merit Pay Committee bases 23% of merit pay decisions on compliance with research expectations. Faculty are assigned fewer committee and administrative responsibilities in their initial years at BYU in order to emphasize a more balanced workload of teaching and scholarship.

According to a 2005 BYU accreditation document, the university does not intend to become dependent on external research funding and places highest priority on faculty-mentored student research supported by both internal and external funds. The largest expenditure of internal and external research dollars is directed to involving students in the research process. As a result, faculty research productivity is also enhanced due to their active role in mentoring students. Internal support includes university Mentoring Environment Grants (MEG) that provide up to \$20,000 for research projects that include intensive faculty mentoring of undergraduate and graduate students. Donor-funded endowments that support faculty-mentored research by students include the Marin Poole Meyer Endowed Fund, the Childs Caring Endowment and the Douglas C. Heiner Endowed Public Health Scholarship Fund.

In addition to the MEG funding described above, support at the university level includes funding by the David M. Kennedy Center for International Studies that provides faculty with funding for research and conference travel. Professional development leaves for eligible faculty are funded at full salary for one semester or half salary for two semesters. The university permits course buy-out options during the spring

or summer terms for faculty securing external funding but does not encourage salary supplements for faculty success with grants. The university-wide Center for Statistical Consultation and Collaborative Research provides support for statistical analysis. For research with human subjects, faculty secure guidance and approval of research activities through the university's Institutional Review Board.

College-level support includes \$20,000 start-up funding to assist new faculty in launching their research agenda based on a written proposal. By demonstrating progress, the faculty member may renew the start-up funding for an additional two years. The Health Research and Technology Lab, briefly described in Criterion 1.7, is available to faculty and students in the college.

The department chair approves \$1,500 per year for travel support to a professional meeting and covers conference registration fees for each full-time faculty member. If presenting scholarly work at the meeting, additional resources may be available, especially for tenure-track faculty. Five department faculty participate in the Computational Health Science Research Group, a cross-disciplinary collaboration of public health, sociology, computer science and psychology faculty, who have conducted research projects leading to publications and presentations.

Faculty who met with site visitors stated that the university committed resources to promote their research productivity and success, including start-up funding for initiating a research agenda. In addition, new faculty have a 1:1 teaching load in the first year and a 2:2 teaching load in the second. After the first two years, the teaching workload for faculty is 2:2:1.

Faculty are engaged in a variety of collaborative research projects with the community in Utah, North Carolina and Peru. The self-study provides 17 examples of the wide range of research activities undertaken by the program, with 11 functioning under a formal agreement and two more that are in the process of formalizing an agreement. For example, the program partners with the Utah County Health Department to promote health outcomes of the family and the community, to examine county residents' radon testing behaviors and to improve the knowledge base of Hispanics in Utah County at risk for tuberculosis. Other projects include research related to the following: prenatal nutrition in resettled Bhutanese refugees in Utah, occupational health risks to workers in brick kilns in the Kathmandu Valley and medication use and misuse during pregnancy by Hispanics in Utah County. Examples of organizations that are partnering with the program include the Iowa Cancer Consortium, the Iowa Environmental Health Association, the Liahona Children's Foundation, the Mountainlands Community Health Center, the Utah Valley Regional Medical Center and others.

Site visitors reviewed the most recent faculty publication record for calendar years 2012 to 2015. Thirteen of the 16 primary faculty employed during the four-year time period listed at least four or more peer-

reviewed publications each. However, scholarly collaborations and co-authorships among the faculty may result in the same article being cited by more than one faculty member. University and college leaders who met with the site visitors described the faculty publication record as extraordinary.

Research funding generated by program faculty as principal investigator (PI) or co-PI shows close to \$303,000 in 2012-2013, \$171,000 in 2013-2014 and \$130,000 in 2014-2015, averaging over \$201,000 per year for the 42 listed projects. Project funding totals ranged from a low of \$1,475 to the highest award of \$67,194. Fourteen (88%) of the 16 primary faculty employed during the three year period report serving as principal investigator for one or more funded research projects, eight (19%) of which were community-based. In addition to five projects funded by the university, the college internally funded 23 (55%) of the 42 listed research projects, including start-up dollars and teaching enhancement grants. Four of the five faculty receiving at least two years of start-up funding from the college have each generated external grants ranging from \$10,000 to \$67,000, indicating that the mechanism is effective in leading to other funded projects.

The self-study document shows a significant decline in the program's research funding over the last three years, especially considering that two-thirds of the projects relied on internal funding. Only 10 (24%) of the 42 projects received funding in academic year 2014-2015, and five of the 10 were internally funded. Site visitors recognize that faculty-mentored student research is a high priority at BYU and that faculty should not be unduly diverted from the university's student-centered mission by spending significant time on developing grant proposals. University and college leaders shared that faculty involvement in external grant acquisitions is welcomed and not discouraged, with \$0.25 to \$0.30 of each external research dollar used to support students.

Site visitors agree that faculty are demonstrating success with research and scholarly endeavors by consistently meeting program targets for faculty engaging both undergraduate and graduate students in mentored research, by their strong peer-reviewed publication record and by generating research funding internally and, to a lesser extent, externally. However, faculty who wish to engage in more complex, larger scale research studies will need to develop and submit higher value external grant proposals. Securing additional external research funding also will help support public health students since faculty salaries are fully covered by BYU.

Faculty who met with site visitors expressed their commitment to mentoring students in research and indicate that most public health faculty can engage in meaningful, high quality community-based and survey research using internal funding. They indicated that if expectations increase for faculty pursuing extramural grants, then more creative instructional approaches in offering courses, more flexible teaching workloads and other fundamental changes will be needed. The program appears to be making progress

in identifying and strengthening partnerships with public health-related agencies and organizations that may lead to future external funding. However, a number of faculty expressed reservations about establishing a research identity that depends on external funding and is measured by total funding, suggesting that a grant should be viewed only as a means to an end. Site visitors encourage the program to schedule a faculty retreat in the near future that will enable a full discussion regarding the merits and limitations of more extensive participation in securing external funding, especially given the location of the department in a research-intensive college.

The program evaluates the success of its research activities using three outcome measures that set targets for the percent of faculty annually publishing journal articles in peer-reviewed journals, providing research presentations and securing research funding. A fourth outcome measure sets a target that 35% of the peer-reviewed faculty publications and presentations have student co-authors. A fifth target sets 35 as the overall minimum number of peer-reviewed publications by program faculty annually. All outcome measures have been met, with the exception of presentations with student co-authors that show a decline in participation by students over the three years, falling slightly below the target of 35% participation for 2014-2015.

The self-study additionally presents calendar year data regarding peer-reviewed publications using an activity index and a productivity index. The activity index is calculated by dividing the number of faculty expected to have at least one peer-reviewed publication by the number of faculty expected to engage in scholarship. The productivity index is calculated by dividing the total number of peer-reviewed publications by faculty in the department with an expectation for scholarship by the same denominator as for the activity index. Both indexes have declined over calendar years 2012 to 2014; the program indicates that the decline is due to adding three new faculty members during this time period.

Students have opportunities for involvement in faculty-led research projects as research assistants. Each student admitted to the MPH program is offered a research assistantship during his/her first semester requiring 10-20 hours per week of work with faculty. For admissions between 2013-2014 and 2015-2016, 10 students (67%), eight students (89%) and seven students (54%), respectively, accepted the assistantships. Other students frequently seek part-time employment off campus. Undergraduate students also may serve as research assistants on an hourly pay basis. The self-study reports that 31 (76%) of the 42 funded research projects included student participation during the self-study period. Students are involved in a variety of research roles such as conducting literature searches, data collection, data cleaning, data analysis, drafting sections of the scientific reports and in some cases participating in conceptualization of research studies with faculty and other students.

The program indicates that target expectations of involving 50% of graduate students and 25% of undergraduate students in mentored research have been achieved over the past three years. Students may earn course credit for involvement in faculty-supervised research projects or volunteer due to interest in developing research skills. The faculty view student involvement in mentored research as an appropriate indicator for demonstrating student research competency and exposure to research methods. In addition to applied research assignments in required MPH coursework, some field practice sites engage the students in research activities. Students in a meeting with the site visitors stated that they have many opportunities to pursue faculty-mentored research and that the faculty are very supportive.

3.2 Service.

The program shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.

This criterion is met. BYU's mission statement discusses "service to mankind," and this goal is operationalized in the Department of Health Sciences through various policies. In particular, the Expectations of a Faculty Appointment Policy requires service-related activities as a function of university citizenship. The university defines public health service to mean organizational, administrative or other non-research-based professional service, which may include volunteer work, service on boards, translation of research to public health practice and other activities.

The department conducts annual performance reviews of each faculty member. In addition to assessing a faculty member's teaching and scholarly productivity, the department chair assesses fulfillment of service objectives during these reviews. These performance reviews are significant in decisions around faculty tenure, promotion and merit pay.

The program differentiates between service to the university and service to the community and to the public health profession. Performance measures related to service outside of the university include activities such as the following: participating in community public health boards or other decision-making bodies; participating in community-based projects requiring active and sustained participation; providing continuing education programs to practitioners; offering technical or consulting services to practitioners; participating in professional associations; providing community education, such as through speaking engagements and public forums; and editing journals and newsletters.

The program has established measurable objectives to evaluate fulfillment of its faculty service objectives. The target is that 70% of full-time faculty will contribute to public health service at the local, state, national or international levels; the program has exceeded that goal in each of the last three years, with over 83% of faculty meeting the target. Fifteen faculty reported service activities between 2012 and

2015, with the majority of activities comprising review of professional journal articles and membership in boards/committees of state and local health agencies.

During the site visit, community representatives offered numerous examples of faculty service. For example, faculty have served as board members for local health care providers and as advisors to the policy and needs assessment subcommittees of the Utah County Health Department (UCHD)'s drug and alcohol program. The most significant service activities are through the program's Academic Health Department relationship with the UCHD. In that capacity, professors have designed class projects that analyze data and provide solutions to challenges faced by the UCHD; several of these projects have been used for program planning and to support grant applications.

Students are also encouraged to engage in service-related activities. For students, the majority of activities reported are in service to the university or as part of coursework. However, students detailed working with the Student Health Center to implement a flu vaccination campaign this past fall, and approximately 60 students participate in the annual household hazardous waste collection day. Measurable targets for service activities performed by students may be considered for tracking the program's service activities.

During the site visit, university leaders affirmed the commitment of the broader institution to service activities. The university tracks student service hours for all programs and reports that students logged 60,000-70,000 service hours last year. In addition, as almost all students are members of the sponsoring church, they also perform service activities as part of their congregational membership, and these activities are not tracked by BYU.

University leaders also emphasized the university's commitment to ensuring that service learning and experiential learning are integrated throughout the curriculum. The university president provides departments with earmarked funding to be used to support student experiential learning. Such funds have been used to support student supplies and travel to service sites as well as to support community programs such as the Anatomy Academy where BYU students go into the local school systems to teach science to fifth and sixth grade students. These prioritized funds are distributed at the discretion of department chairs and may not be used to support faculty activities.

3.3 Workforce Development.

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

This criterion is met. BYU's Department of Health Science has developed structures to identify needs in the professional public health workforce and to offer programs addressing those needs. Needs

assessment activities include the following: focus groups among state public health professionals; discussions among Advisory Committee members; and feedback from participants of the program's Public Health Forums. The program has used data from these activities to identify major themes, such as policy/advocacy, technology/social media, community partnerships, grant writing and marketing.

The program has also analyzed data from the UCHD's assessment of its workforce development needs. Approximately 220 UCHD staff participated in this assessment, and this data is particularly instructive as it analyzes needs by public health program area as well as by staffing level (front line/administrative, supervisory and management levels). Program staff analyzed the data and prioritized the findings to develop a five-year professional development plan for the UCHD. As part of its academic health department agreement, the program has committed to providing at least two trainings each year to UCHD staff.

To address workforce needs, the program developed a new seminar series in 2015 entitled *BYU Public Health Forums: Addressing Professional Needs to Serve Diverse Populations*. The program has designated ongoing responsibility for this forum to its alumni committee and has established a target of providing three to four seminars per year. In addition, the program provides continuing education opportunities as part of the MPH Alumni Conference. Lastly, the program has partnered with the UCHD to meet some of the training needs identified from UCHD's needs assessment.

The program has conducted 29 seminars and presentations for practitioners over the past three years, reaching almost 1,700 participants. Topic areas included skills training on effective advocacy, health communication, use of social norming, goal setting, lesson planning, evaluation of client satisfaction and evaluation of health education efforts.

The needs of public health practitioners working outside of government or academia have not been captured through the assessments conducted to date.

During the site visit, employers identified the need for flexible learning modules. Although the program does livestream some of its offerings, a more structured approach to offering distance learning opportunities, such as through a library of webinars, would reach underserved segments of the public health workforce including front line workers who are often not offered opportunities to attend live trainings. Participants should evaluate both the course content and the efficacy of the delivery platform.

The development of certificate programs and the availability of continuing education credits would provide incentives for participation among underserved segments of the public health workforce. The program is also considering the development of on-demand workforce development programs—short, skill-based

mini-courses that an employee can access at any time. The program should consider assessing and addressing the needs of public health practitioners working outside of government or academia as its workforce development program expands.

4.0 FACULTY, STAFF AND STUDENTS.

4.1 Faculty Qualifications.

The program 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 program's mission, goals and objectives.

This criterion is met. The program's faculty complement possesses academic credentials relevant to public health, with over 70% holding a PhD degree from a school or program of public health and nearly 60% of the faculty possessing the MPH or MSPH degree. About 74% of the primary faculty members have prior full-time professional public health practice experience, and all have doctoral degrees. Nine of the 17 full-time faculty were trained in health education or a closely related discipline. Two of the faculty hold the Master Certified Health Education Specialist (MCHES) credential awarded by the National Commission for Health Education Credentialing. Primary faculty members are well-qualified by academic credentials or practice experiences to provide instruction in the five areas of knowledge basic to public health. Health services administration is the only public health core area not clearly represented by a faculty member with a graduate degree in the disciplinary area. However, the health services administration core course instructor has gained extensive administrative experience in university settings and has earned the MCHES credential. Site visitors reviewed the Health 607 Public Health Administration syllabus from fall 2015 and determined that the course provides an excellent overview of administrative concepts and principles and in-depth exposure to administrative skill building.

Of the 17 primary faculty members, seven hold professor rank, four are associate professors and six are assistant professors. The program reports that 10 primary faculty have continuing faculty status (CFS) that is equivalent to tenure and seven are CFS-track. The program is recruiting one additional faculty in 2015-2016.

Five of the seven secondary faculty members with adjunct appointments ranging from 0.10 to 0.40 FTE are employed by organizations and agencies outside the university, including two with the state health department and two with separate county health departments. Two adjunct faculty have PhD degrees in health promotion with one of them also holding an MPH degree. Of the master's-prepared faculty, one has an MPA degree, three have MPH degrees in health promotion, and one has an MPH degree in environmental and occupational health.

Among the primary faculty are two former Utah state health department program managers, four individuals with prior local/county health department positions and three with research experience with the National Cancer Institute, the Research Triangle Institute and the Thrasher Research Fund. Other primary faculty have held responsible positions in a variety of health-related organizations. Two faculty with prior work experience outside academia have earned the Certified Industrial Hygienist (CIH) credential. The program reports that three faculty have broad experience in health promotion outside the United States. Site visitors concur that this mix of previous full-time public health practice experiences by the faculty enables them to effectively integrate realistic perspectives from the field of practice in their classroom instruction, which offers students a more balanced understanding and appreciation of both academic and practice perspectives.

In meetings with site visitors, alumni and students expressed positive views of faculty engagement with the practice community. They reported that practitioners participate in course instruction and serve as frequent guest lecturers and topical speakers to share insights about the realities of work in health settings.

University leaders praised the faculty, citing their publication record, their fierce commitment to the university's mission and the strong faculty dedication to being productive and remaining with BYU as the preferred setting for their academic career. They also indicated that the department has fostered the development of several faculty who have been promoted to college and university leadership positions.

The program has established eight outcome measures supporting three objectives by which it assess the qualifications of its faculty complement. The three objectives relate to recruiting faculty with public health training and/or relevant applied work experience; to faculty providing expertise or leadership to support public health agencies; and to faculty demonstrating discipline-specific expertise through active scholarship. The program data indicate that all targets are met for the eight outcome measures. One of the target outcome measures specifying inclusion of diversity criteria in faculty position announcements is a procedural requirement that does not serve as a sound indicator for evaluating success with this criterion.

4.2 Faculty Policies and Procedures.

The program 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.

This criterion is met. The online faculty handbook specifies policies, procedures and expectations governing recruitment, appointment, evaluation and promotion of faculty. Specific policies relevant to the accreditation review include Expectation of a Faculty Appointment, Rank and Status, Faculty Hiring, Non-CFS Track Academic Appointments and Faculty Leaves.

The university's Faculty Center and the Center for Teaching and Learning provide support for faculty development. The Faculty Center sponsors a Faculty Development Series (FDS) designed to assist new faculty in establishing a strong foundation for quality teaching, scholarship and service. Over an 18-month period, the FDS includes a fall seminar open to full-time, visiting and part-time faculty; FDS mentoring; a spring seminar; assistance with creating a faculty development plan; FDS projects; and a concluding banquet. New faculty are required to complete a faculty development plan that outlines their proposed professional activities, offers a self-assessment of the faculty member's strengths and areas for development, establishes teaching, research and service goals and identifies resources needed to accomplish the goals and describes current activities and accomplishments. The Faculty Center also sponsors other programs and events including financial planning seminars, lunch-and-learns and workshops addressing a variety of development areas such as grant-writing, scholarship, life balance, time management and writing. The university's Center for Teaching and Learning focuses on improving teaching and enhancing student learning by providing supportive services such as interaction with experienced teaching consultants, assistance with assessment and evaluation and production of multimedia and online tools. The university also provides faculty development leaves funded at full salary for one semester and half salary for two semesters, if approved at the department and college levels.

The university makes available Mentoring Environment Grants up to \$20,000 for research projects that provide intensive faculty mentoring of undergraduate and graduate students. The university has awarded mentoring grants to three program faculty over the past three academic years.

The college offers start-up grants of \$20,000 to assist new faculty in launching an active research agenda in line with their research goals. With successful demonstration of progress, the grants will be repeated in years two and three for a total of \$60,000. The self-study reports that since 2011, the college has provided new program faculty with a total of \$260,000 in start-up funding, and the university has provided an additional \$65,000 for the purchase of equipment for new faculty.

The department assigns two rank and status mentors to new faculty who are pursuing tenure at BYU. The mentors provide new faculty with support and advice prior to annual stewardship interviews with the department chair and in preparation for the third-year and sixth-year probationary reviews. Full-time faculty provide guidance to part-time and adjunct faculty through a variety of interactive mechanisms such as co-teaching and joint research projects.

The university's rank and status policy, with additional expectations specified by the college and the department, governs the retention and granting of tenure known as continuing faculty status (CFS) and rank advancement of faculty. The university defines CFS as an automatically renewed appointment via

issuance of a contract for the next academic year. New faculty seeking CFS are probationary for the first six years of their appointment. The university requires two formal evaluations of CFS-track faculty, with an initial review scheduled three years after their hire date and a final review at six years. The sixth-year review requires assessments of scholarship from at least three external faculty who have achieved reputations in the relevant field. The probationary faculty member prepares a portfolio of files that include examples of scholarship, teaching and citizenship. For BYU, the term citizenship is used to describe involvement in service. In addition, classroom peer-teaching observation results and course material reviews conducted by the MPH Curriculum and Learning Committee provide information for the CFS review process. Committees at the department, college and university levels review the portfolio. The department chair, college dean and academic vice president review the files and provide written assessments. The university president receives the assessments and recommendations and has ultimate authority to determine that relevant standards have been met and to approve the granting of continuing faculty status. The same decision-making process is required for faculty seeking rank advancement. For faculty with continuing status, the rank and status policy stipulates annual procedures for further in-depth reviews of performance by those with unacceptable performance.

Annual faculty performance reviews are designed to promote career development and to support faculty renewal and quality. In accordance with an annually developed and approved performance plan, each faculty member self-reports performance and accomplishments using an online reporting system. The result is a faculty profile that offers a basis for the department chair to assess scholarly productivity, teaching and service and for the members of the Merit Pay Committee, chaired by the department chair, to determine merit pay increases. The department faculty in January 2008 approved a set of highly detailed criteria for evaluating annual performance that offers an explicit guide for assessment and decision-making. The criteria identify weights to be given to various factors within the areas of teaching, research and service. For example, student course ratings contribute 25% weight, efforts to control grade inflation 25% and meeting defined performance measures linked to the department's strategic plan for improving teaching quality adds the final 50% weight for the assessment of teaching. The college adopted a 100% merit-based approach for salary raises, effective fall 2012. For merit pay decisions overall, teaching, research and service are each weighted at 23% with the balance of 31% related to student-centeredness and performance on other department duties with the latter assessed by the department chair.

Each course concludes with a standardized electronic student evaluation. In general, the evaluation form assesses student perceptions regarding the extent of learning, grading, course structure, the instructor and satisfaction with the course and the instructor. In addition to a comparison of the course and instructor with other courses and instructors at BYU using an eight-point rating scale, the online course evaluation form requests ratings for seven items pertaining to the course and 10 items pertaining to the

instructor plus an open-ended section inviting comments or suggestions. The form also seeks information on hours spent on the course in and out of class and the percent of in-class and out-of-class time deemed valuable to the student's learning. The student evaluations are used in assessing teaching effectiveness in annual faculty performance reviews and for considering applications for promotion and CFS. A few weeks after grades are submitted, instructors may access their scores and are able to compare their ratings with average scores for the department, college and university.

The program on an annual basis obtains other measures of teaching effectiveness through peer-teaching observations, exit surveys of graduating BS and MPH students, alumni surveys, course reviews conducted by the department's MPH Curriculum and Learning Committee and recommendations by the MPH Student Council. The department chair, in consultation with the program director, considers the information and recommendations gained through these mechanisms and provides assistance and direction to faculty during their annual stewardship interviews.

4.3 Student Recruitment and Admissions.

The program shall have student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the program's various learning activities, which will enable each of them to develop competence for a career in public health.

This criterion is met. BYU has adopted a nondiscriminatory admissions policy, which admits qualified candidates who agree to abide by BYU's standards of conduct and honor code, regardless of race, color, national origin, religion, age, gender, veteran status or disability.

During the site visit, university leaders emphasized BYU's primary focus to provide excellent undergraduate education. University-wide, the development of graduate programs is selective and only supported in areas where it can complement areas of undergraduate focus. As such, undergraduates comprise approximately 90% of BYU's student body. Undergraduate recruitment and admissions are managed at the university level, and the university has no additional admissions requirements for the public health program. Undergraduate recruitment is primarily through informational meetings organized by the Church Educational System of LDS. Although this approach may be effective in identifying students familiar with the university's standards of personal conduct, its impact is likely to be limiting on the diversity of the pool of applicants both for the undergraduate public health program as well as for potential MPH applicants.

Program staff and university administrators are proud of the growth of the undergraduate program. The expansion of the program from a community health education focus to a broader public health focus with discrete emphasis areas has resulted in the undergraduate program becoming one of the top 10 most popular majors in the university, having doubled in size over the past 10 years. Program administrators

have engaged in some discussions about whether the undergraduate program should become a limited enrollment program (as currently exists for certain other majors such as nursing and journalism) to ensure continued availability of mentoring opportunities and to avoid saturating the Utah area with public health graduates seeking employment. During the site visit, the academic vice president stated that any recommendations about capping enrollment would be made at the department level, rather than by university-level administrators.

At the graduate level, BYU has a clearly defined recruitment and admissions process designed to enroll students who are likely to be successful in the MPH program and in public health careers.

Graduate recruitment relies heavily on distribution of printed materials through the university website, the MPH website, LDS-affiliated websites and local and campus newspapers. Printed materials include newsletters, ads, posters and an eight-page color brochure. In addition, the MPH program director makes presentations to campus groups and at public health conferences and meetings and recruits at Utah Graduate School Fairs. Other faculty members assist in recruiting applicants through their professional associations with community-based providers. The program actively recruits students from other academic disciplines, focusing in particular on those science and social science disciplines, such as nursing, biology and political science.

Applicants submit materials including an application, an ecclesiastical endorsement, three letters of recommendation, transcripts, resume and a statement of professional interest. Additional criteria for entry include having a bachelor's degree from an accredited US or Canadian university; a 3.2 grade point average in the last 60 hours of undergraduate course work; GRE exam with minimal score expectations; and assessment of English-language proficiency for non-native speakers.

The MPH Admissions Committee comprises the program director, three faculty members and a Student Council representative. Each committee member evaluates all applications. In addition to points for GRE and GPA score, points are awarded to nonwhite applicants and international students. Reviewers also perform a subjective evaluation of the applicant's professional experience, experience with underserved populations and statement of intent with respect to goals in public health. Letters of recommendation are read to identify areas of note but are not scored.

Evaluation of application and enrollment data demonstrates the program's success in its efforts to attract and enroll a qualified student body. Enrollment in the graduate program is capped by the program at 17 new students each year, and the admission rate for the most recent year was 42%. Administrators intend to maintain a highly selective admissions process and low enrollment in order to ensure that students continue to have excellent opportunities for faculty-mentored experiences and job placements.

Targets for all outcome measures, including students maintaining minimum GPAs, passing the MPH oral exam, passing the CPH exam, completing the program on time and finding related employment or post-graduate study opportunities were completely or partially met in each of the past three years.

Opportunities for attracting working public health professionals into the program are limited by policies regarding student headcounts, which results in a preference for full-time students. This preference is partially off-set by efficient and predictable course scheduling, which does provide some measure of flexibility for working students. Socioeconomic diversity is likely to be enhanced if the program were structured to accommodate part-time students working in the public health field.

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.

This criterion is met with commentary. The program has well-defined processes for student advisement and career counseling.

Unlike most other programs on campus, the Department of Health Science has funded two specialized advisors to assist undergraduates with planning for course sequencing, areas of emphasis, internship opportunities and planning for graduate school, employment or professional certifications. One advisor is dedicated to managing undergraduate internships and meets regularly with students in addition to providing checklists and other technical support, and a second part-time health sciences advisor has recently been added to assist with academic advising, particularly for those students in an emphasis area not requiring an internship. This advisor also oversees the undergraduate Public Health Student Association. In addition, there is an advisor employed by the College of Life Sciences who devotes about half of his time to supporting public health undergraduates. Departmental advisors stay connected to students through regular emails, a weekly newsletter and social media.

For graduate students, the primary academic advisor serves as the graduate committee chair. However, other members of the graduate committee as well as the MPH program director also participate actively in student advisement activities through faculty office hours and other meetings. In addition to these informal meetings, other required meetings such as field experience planning meetings and oral exam meetings also provide forums for students to receive counseling. Graduate committees conduct biannual reviews of each MPH student to ensure that academic progress is on track. The program has developed a comprehensive MPH Student Handbook and a Frequently Asked Questions webpage to provide a resource for students to aid in their own academic planning.

Career counseling for graduate students is also the responsibility of the graduate committee, who meet individually and as a group with the student throughout the program. Career counseling is not a stand-alone activity, but is rather interwoven into student/faculty interactions around building academic schedules and identifying relevant field experience, research and service opportunities. During the site visit, several students mentioned the mentored research experience as a valuable way to receive career guidance from a faculty member. In addition, several alumni serve as adjunct faculty who provide information about career paths as part of their course instruction.

Although BYU does not have a separate career services office or career fair dedicated to public health students, it does provide a number of additional opportunities for students to be exposed to possible career paths. Among these are an MPH blog and weekly newsletter where job opportunities are posted; requirements for and assistance with developing professional profiles for posting on LinkedIn and the BYU Bridge; career webpages for each of the four undergraduate public health emphasis areas; and an Alumni Profiles webpage for students to connect with possible mentors or employers. In addition, the program recently began hosting public health networking events, bringing in working professionals from state and national governmental and nongovernmental health agencies to offer career advice and opportunities to foster connections with students. Eleven networking events were offered over the last four years.

The BYU Bridge is a web-based program that hosts student profiles and helps students identify relevant employment opportunities, as well as informs them about career fairs and on- and off-campus recruiting events. Although this is seen as a useful tool, some faculty members commented about the need to identify additional potential employment opportunities for public health students, particularly in non-traditional settings.

Many faculty routinely bring in outside guest lecturers who discuss career paths with students. For instance, the basic Health 100 introductory course for undergraduates is taught by the internship advisor, who brings in faculty from throughout BYU's public health program as well as outside practitioners to help inspire students and introduce them to potential mentors and preceptors.

Outcome measures demonstrate that students are generally satisfied with the quality of department advising, with 93% of MPH students and 80% of undergraduate students expressing satisfaction in the most recent year.

Student academic grievance policies exist at both the MPH and BS levels and are clearly outlined in the MPH Student Handbook and the Undergraduate Catalog. In the past three years, undergraduates have

submitted three formal grievances, while there have been no formal grievances to date from MPH students.

The first area of commentary relates to undergraduate students' satisfaction with advisement. Undergraduate satisfaction rates with advising are consistently lower than graduate student satisfaction rates over the past three academic years and failed to meet the target in 2013-2014. Subsequent to the site visit, the program has begun to explore areas identified in need of improvement in order that an action plan to address those concerns can be developed. As a start, the program will work with the university assessment office to add career counseling satisfaction items in addition to its ongoing annual assessment for graduating students, expected to be in full effect for 2016-2017 academic year data.

The second area of commentary relates to the need for the program to develop more specific evaluation indicators to measure satisfaction with career counseling separately from academic advising. Formalized structures (such as written approvals of schedules and fieldwork) are in place to ensure that academic advising occurs regularly, while most of the career advising happens less formally within the context of academic advising and through the provision of networking opportunities. A more formalized process for orienting faculty to their career counseling roles and for evaluating student participation in and satisfaction with these activities will be beneficial. Students may also benefit from greater participation in traditional career services offerings such as resume building and interviewing skills, which was an issue raised by employers and preceptors during the site visit.

Agenda

COUNCIL ON EDUCATION FOR PUBLIC HEALTH ACCREDITATION SITE VISIT

Brigham Young University Public Health Program

March 7-8, 2016

Monday, March 7, 2016

- 8:30 am Site Visit Team Request for Additional Documents
Dr. Carl Hanson, Chair and Professor
Dr. Gordon Lindsay, MPH Director and Professor
- 8:45 am Team Resource File Review
- 9:45 am Meeting with Department and Program Administration
Dr. Carl Hanson, Chair and Professor
Dr. Rosemary Thackeray, Associate Chair and Professor
Dr. Gordon Lindsay, MPH Director and Professor
- 10:45 am Break
- 11:00 am Meeting with Faculty Related to Curriculum and Degree Programs
Dr. Rosemary Thackeray, Undergraduate Curriculum and Learning Committee Chair
Dr. Chantel Sloan, Assistant Professor
Dr. Jim Johnston, Associate Professor
Dr. Gordon Lindsay, MPH Curriculum Committee Chair
Dr. Ben Crookston, Assistant Professor
Dr. Ray Merrill, Professor
Dr. Randy Page, Professor
Ms. Stephanie Lutz, Internship Coordinator
Ms. Beth Liechty, Academic Advisor
- 12:00 pm Break
- 12:15 pm Lunch with Students
Audrey Pister (BS Health Promotion)
Jonathan Rhoton (BS Health Science)
Natalie Dayton (BS Epidemiology)
MaryEllen Spencer (BS Enviro/Occ)
Megan Bird (BS Epidemiology)
Neal Jenne (BS Health Science)
Thuan Lynguyen (BS Health Science)
Kelly Nelson (BS Enviro/Occ)
Yvonne Allsop (MPH '17)
Helen Hilton (MPH '17)
Cassidy Hine (MPH '17)
Ajay Patha (MPH '17)
Nicole Galbraith (MPH '17)
Kylee Snuffer (MPH '17)
Jessica Wilkinson (MPH '17)
Tessa Washburn (MPH '16)
- 1:30 pm Break
- 1:45 pm Meeting with Faculty Related to Research, Service and Workforce Development
Dr. Gene Cole, Professor
Dr. Brianna Magnusson, Assistant Professor
Dr. Ali Crandall, Assistant Professor
Dr. Robbie Chaney, Assistant Professor
Dr. Evan Thacker, Assistant Professor
Dr. Josh West, Associate Professor
Dr. Steve Thygerson, Associate Professor
Dr. Len Novilla, Associate Professor

2:30 pm Break

2:45 pm Resource File Review and Executive Session

4:00 pm Meeting with Alumni, Community Representatives, Preceptors

Todd Bailey, Executive Director, Mountainlands Community Health Center, Inc.
Eric Edwards, Chief Financial Officer, Utah County Health Department
Ralph Clegg, Chief Executive Officer, Utah County Health Department
Leon Hammond, Executive Director, Utah Partnership for a Healthy Weight
Chris Smoot (MPH '07), Wasatch County Health Department
Rachel Lovejoy, Director, Community Health Connect
Kye Miner, Community Benefit Manager, Intermountain Healthcare
Stephanie Anderson, Welcome Baby Coordinator, United Way of Utah County
Ben Cannon (MPH '15), Utah County Department of Drug and Alcohol Prevention and Treatment
Pat Bird, Utah County Department of Drug and Alcohol Prevention and Treatment
Mindy Steadman (MPH '14)
Luke Chalmers (MPH '15), Utah Department of Health
Abby Cox Chalmers (BS Health Promo, '15), Health Coach, Orriant LLC
Patty Cross, EPIC Program Coordinator, Utah County Health Department
Jessica Sievers (BS Epi, '12; MPH '14), Professional Services Consultant, Qualtrics
Martina Huntington (BS Health Promo, '12), Accessibility Office, BYU

5:00 pm Adjourn

Tuesday, March 8, 2016

8:30 am Meeting with Institutional Academic Leadership

Dr. Brent Webb, Academic Vice President
Dr. Brad Neiger, Associate Academic Vice President
Dr. Jim Porter, Dean, College of Life Sciences
Dr. Michael Barnes, Associate Dean, College of Life Sciences
Dr. Rick Jellen, Associate Dean, College of Life Sciences

9:15 am Executive Session and Report Preparation

12:30 pm Exit Interview