Arnold School of Public Health

Self-Study Report for Accreditation

Prepared for the Council on Education for Public Health
2017

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List of Abbreviations

AAR..... Admissions Action Recommendation

AD..... Associate Dean

ADRD ..... Alzheimer's Disease or Related Disorders

ALDP ..... Academic Leadership Development Program

APHA ..... American Public Health Association

ASHA..... American Speech-Language-Hearing Association (accrediting body for the MCD and MSP programs)

ASPIRE ..... Advanced Support for Innovative Research Excellence

ASPPH..... Association of Schools & Programs of Public Health

ATEP ..... Athletic Training Education Program (course acronym; programs in the Department of Exercise Science)

AY ..... Academic Year

BA ..... Bachelor of Arts

BBIP ..... Behavioral-Biomedical Interface Program

BIOS..... Biostatistics (course acronym and division of the Department of Epidemiology & Biostatistics)

BS ..... Bachelor of Science

C&GA..... Office of Contract and Grant Accounting

CAATE..... Commission on Accreditation of Athletic Training Education (accrediting body for athletic training)

CAHME ..... Commission on Accreditation of Healthcare Management Education (accrediting body for the Master of Health Administration program)

CAPTE ..... Commission on Accreditation in Physical Therapy Education (accrediting body for the Doctor of Physical Therapy program)

CARE ..... Core for Applied Research and Evaluation

CDC..... Center for Disease Control and Prevention

CENR..... Center for Environmental Nanoscience and Risk

CEPH..... Council on Education for Public Health

CEU..... Continuing Education Unit

CHE..... SC Commission on Higher Education

COMD..... Communication Sciences and Disorders (course acronym and academic department)

CPCP ..... Cancer Prevention and Control Program

CSDCAS..... Communication Sciences and Disorders Centralized Application Service

CTE ..... Center for Teaching Excellence

DLQR ..... Distributed Learning Quality Review

DPT..... Doctor of Physical Therapy

DSAC..... Dean’s Student Advisory Committee

e-IRB..... Electronic Institutional Review Board

ENHS..... Environmental Health Sciences (course acronym and academic department)

EPA ..... Environmental Protection Agency
EPID ..... Epidemiology (course acronym and division of the Department of Epidemiology & Biostatistics)
ERF ..... Electronic Resource File
EXSC ..... Exercise science (course acronym and academic department)
FTE..... Full Time Equivalent
FY..... Fiscal Year
GHS..... Greenville Health System
GLD..... Graduation with Leadership Distinction
GMAT ..... Graduate Management Admission Test
GPA..... Grade point average
GRANT..... Gamecock Research Administrators Network Training
GRE..... Graduate Record Exam
HBCU ..... Historically Black College/University
HPEB..... Health Promotion, Education, and Behavior (course acronym and academic department)
HRSA..... US Health Resources and Services Administration
HSPM..... Health Services Policy and Management (course acronym and academic department)
HSSC ..... Health Sciences South Carolina
IDC..... Indirect cost recovery
IELTS..... International English Language Testing System
IT ..... Information Technology
JOUR..... Journalism and Mass Communications (course acronym)
LEED ..... Leadership in Energy and Environmental Design
LGBT ..... Lesbian, Gay, Bisexual, and Transgender
LGBTQ ..... Lesbian/Gay, Bisexual, Transgender, Queer
MCAT..... Medical College Admission Test
MCD ..... Master of Communication Disorders in Speech-Language Pathology
MHA ..... Master of Health Administration
MPH ..... Master of Public Health
MSP ..... Master of Speech Pathology
MSW..... Master of Social Work
MTTG..... Maximum Time to Graduation
MUSC..... Medical University of South Carolina
NCFDD..... National Center for Faculty Development and Diversity
OAA ..... Office of Academic Affairs
OGSS..... Office of Graduate Student Services
OIRAA..... Office of Institutional Research, Assessment, and Analytics
OSA..... Office for the Study of Aging
PAL ..... Pipeline for Academy Leaders

PAPH..... Physical Activity and Public Health (MPH program)

PE ..... Physical Education

PharmD ..... Doctor of Pharmacy

PHGrad ..... Public Health Graduate Application (Arnold School's graduate application and admissions database)

PHRC..... Public Health Resource Center

PHYT ..... Physical Therapy (course acronym; in the Department of Exercise Science)

Provost ..... Executive Vice President for Academic Affairs and Provost

PTCAS ..... Physical Therapist Centralized Application Service

PUBH ..... Public Health (course acronym for general public health courses; used as an acronym with the BA/BS and the MPH in general public health)

RAC..... Research Advisory Council

SACS ..... Southern Association of Colleges and Schools (accrediting body for the University of South Carolina)

SAS ..... Statistical Analysis Software

SAT ..... Scholastic Aptitude Test

SBP ..... Standalone Baccalaureate Program

SC ..... South Carolina

SC DHEC..... SC Department of Health and Environmental Control

SC DHHS .... SC Department of Health and Human Services

SCCP ..... South Carolina College of Pharmacy (also course acronym)

SFR..... Student Faculty Ratio

SLIS ..... School of Library and Information Science (also course acronym)

SOPHAS ..... Schools of Public Health Application Service

SOWK ..... Social Work (course acronym)

SPARC..... Support to Promote Advancement of Research and Creativity

SSSC..... Self-Study Steering Committee

TOEFL ..... Test of English as a Foreign Language

UNIV ..... University (course acronym)

USC..... University of South Carolina

USC PRC..... USC Prevention Research Center

USCeRA ..... USC Electronic Research Administration System

USDA ..... US Department of Agriculture

WES ..... World Education Services - International Academic Credential Evaluation

Contents of Electronic Resource File (ERF)

The Electronic Resource File (ERF) contains a copy of the self-study document and supporting materials. The supporting materials are organized into 15 directories, many of which have sub-directories. In the following contents of the ERF, directory and sub-directory names in **bold** font. Descriptive text appears in italics. Directories and files are listed in the order in which they would appear in a standard, alphabetical directory listing.

1 Strategic plans

- *Blueprint for Academic Excellence* (2014-15, 2015-16, & 2015-16)
- Draft diversity plan, 2015
- Transfer of athletic training into Arnold School
- University strategic plan – Focus Carolina

Strategic planning committees and minutes → see section 2

2 Committees & org charts

- **Standing committees** *(sub-directories with minutes/notes for each committee)*
    - Committee descriptions
    - Committee membership 2016-17
- **Strategic planning workgroups & minutes** *(sub-directories with meeting notes from strategic planning retreat, Self-Study Steering Committee (SSSC), & strategic planning workgroups)*
    - Workgroup descriptions & membership
- **Undergraduate petitions reports**
- Org chart – USC Provost
- Org chart – USC Summary

3 Policies (incl. faculty manual)

- **School policies – faculty**
    - *Policies related to faculty (annual reviews, tenure & promotion, peer review, etc.)*
- **School policies – other**
    - *Other school policies (curriculum development, fellowship guidelines, student grievance policy, student travel, etc.)*
- **University policies**
    - University policy index
    - Faculty manual
    - *University policies referenced in self-study (faculty recruitment, continuing education, student grievances, etc.)*
- Links to university and school policies

4 CVs (**sub-directories** of faculty CVs by discipline, primary and secondary (e.g., **BIOS primary**, **BIOS secondary**)

- List of primary faculty fall 2016
- List of secondary faculty fall 2016

5 Course offerings & syllabi (incl. dual degree course sharing)

- **Course schedules** (schedules with instructor names (fall 2013 – fall 2016)
- **Course sharing for dual degrees**
- **Course syllabi** (separate sub-directories by course acronym)
- List of course titles by discipline (doctoral courses noted)

6 Academic program assessment reports & plans

- **Sample reports & plans**
- Arnold School assessment executive summaries (2014, 2015, 2016)
- Assessment plan rubric used to evaluate reports and plans

7 Practicum guides, forms, & surveys

- **Practicum forms & info sheets**
    - Practicum checklist
    - Practicum final report & oral presentation guidelines
    - Practicum proposal – entry form
    - Practicum proposal – guide sheet
    - Practicum site MOA
    - Preceptor waiver form
- **Practicum surveys & reports**
    - Practicum evaluation reports (fall 2015, spring 2016)
    - Practicum surveys of faculty advisor, preceptor, student
- Practicum guide

8 Preventive medicine rotations

- *Documentation of preventive medicine rotations used to satisfy MPH practicum requirements AY2014-15 (2 students)*

9 Student handbooks

- Links to program pages in academic bulletin
- *Individual student handbooks (there are no student handbooks for the PUBH BA/BS or the EXSC BS programs)*

10 Student advising (incl. orientation, career advising)

- **Advising forms - graduate** *(see also student handbooks in section 9)*
- **Advising forms - undergraduate**
- **Advising survey & reports - undergraduate**
- **Career advising & prof. dev.**
- **Orientation materials**
- List of graduate directors and staff
- List of undergraduate advisors

11 Student recruitment

- **Graduate recruitment**
    - **Program specific recruitment info**
    - Graduate brochure - Arnold School (all programs)
    - Graduate fellowships & scholarships
    - SOPHAS viewbook
- **Undergraduate recruitment** (note: university does recruiting; there are few program specific undergraduate recruiting materials)
    - *List of undergraduate advisors → see section 10*

12 Student work samples (by degree)

- *Organized in degree-specific sub-directories*

13 Surveys & related reports

- **Alumni & exit surveys**
- **Course evaluations**
- **Employer & workforce surveys**
- Faculty development survey results
- Faculty development survey

Practicum surveys & reports → see section 7
Undergraduate advisement survey & reports → see section 10

14 Tables (referenced in self-study document)

- Table 1.4.c Partnerships through centers
- Table 1.5.d.2 faculty on university advisory committees
- Table 1.6.b budget (Word document)
- Table 2.7.b(AH) Graduation rates for allied health programs
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- Table 3.2.c.1 Faculty service (not funded)
- Table 4.1.a Qualifications of primary faculty
- Table 4.1.b Qualifications of other faculty

15 Third-party comment requests

- *Documentation of requests for third-party comments*

1.0 The Arnold School of Public Health

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

1.1.a A clear and concise mission statement for the school as a whole.

The mission of the Arnold School of Public Health is to improve population health and well-being by fostering innovative education and research that promotes health and healthy environments and to use that knowledge to prevent and effectively respond to disease, disability, and environmental degradation in diverse communities.

The vision is to advance discovery and innovation, develop outstanding graduates, and promote health through collaboration, dissemination, and outreach in our local and global communities.

1.1.b A statement of values that guides the school.

The Arnold Schools values:

- **Community** — The Arnold School actively engages and collaborates with community partners in its education, research, and public service.
- **Diversity and Inclusion** — The vibrant intellectual environment of the Arnold School embraces respect for diversity and inclusion of all persons.
- **Impact** — Through discovery and dissemination, the Arnold School improves community health, health systems, and the environment for populations and individuals worldwide.
- **Integrity** — The Arnold School adheres to the highest standards of honesty, fairness, stewardship, professional responsibility, and scholarly ethics.
- **Learning** — Students are the foundation of the school. With its outstanding faculty and staff, the Arnold School provides dynamic educational and experiential opportunities for learners at all levels.
- **Social Justice** — In pursuit of health equity for all populations, the Arnold School seeks to bridge the deep divisions that prevent individuals from attaining complete environmental, physical, mental, and social well-being.
- **Translation** — Through scholarship and outreach, the Arnold School supports evidence-based practices and policies and the application of scientific knowledge to improve individual, community, and societal health.

1.1.c One or more goal statements for each major function through which the school intends to attain its mission, including at a minimum, instruction, research and service.

The school has four goals:

1. To provide educational programs of excellence for public health professionals and scholars to gain recognition as one of the top ten schools of public health in public institutions of higher education.
2. To achieve and maintain research excellence as demonstrated by the creation of knowledge of high impact and importance to public health.
3. To utilize available knowledge to address health and environmental issues that face South Carolina, the nation, and the world community.
4. To provide the infrastructure and resources to meet the goals of education, research, and professional service.

1.1.d A set of measurable objectives with quantifiable indicators related to each goal statement as provided in Criterion 1.1.c. In some cases, qualitative indicators may be used as appropriate.

Table 1.1.d lists the objectives and indicators related to each of the school's goals. Progress toward the objectives is measured annually. Specific targets and relevant due dates appear in table 1.2.c. Strategic plans and action plans are included in the Electronic Resource File (ERF).

Table 1.1.d Objectives and indicators related to Arnold School goals

Goal 1: To provide educational programs of excellence for public health professionals and scholars to gain recognition as one of the top ten schools of public health in public institutions of higher education.
1.1 Promote and enhance doctoral education in the Arnold School by increasing the quality and number of doctoral students and the educational opportunities available to them. • Dollar amount and number of student travel awards made to doctoral students • Number of doctoral students supported by Arnold Fellowships • Number of doctoral students receiving graduate school or university funding • Number of graduate students participating in training sponsored by the Center for Teaching Excellence
1.2 Incorporate public health curriculum into all academic and allied health professional program curricula. • PUBH 700 added to all academic and allied health professional program curricula by fall 2015 • Epidemiology added to all academic program curricula by fall 2015
1.3 Continue to enhance academic program assessment, including linkage of learning outcomes and curriculum. • Number of technical assistance sessions provided by director of evaluation and academic assessment to program directors working with academic program assessments • Learning outcomes and curriculum maps revised by May 2016 • Improved assessment plans, as demonstrated by ratings on assessment plan rubric
1.4 Actively engage in collaborative instructional initiatives, both within academic curricula and through extra-curricular activities. • Number of Arnold School students in PUBH 678: Transforming Health Care for the Future • Number of Arnold School students who are members of the Institute for Healthcare Improvement Open School • Number of course sections taught for interdisciplinary programs • Number of sections of honors classes taught by Arnold School faculty • Number of sections of UNIV 101 taught by Arnold School faculty/staff
1.5 Increase the number of students learning about global health. • Number of course sections offered on global health • Number of students enrolled in global health courses
1.6 Enhance distance education in the Arnold School by creating new courses and revising existing courses to meet campus distributed learning quality review (DLQR) standards. • Number of students enrolled in the HPEB MPH distance programs • Number of students enrolled in the HSPM MPH distance programs • Percentage of distance courses that have been developed/revised through DLQR
1.7 Enhance involvement with USC Connect and other student opportunities for community engagement. • Percentage of undergraduate students graduating with leadership distinction
1.8 Develop new and maintain current educational partnerships with units within the university and partners outside the university. • Number of faculty assigned to Greenville satellite campus
1.9 Maintain high quality, diverse student enrollment in Arnold School undergraduate programs. • Number of undergraduate students in Arnold School majors • Race/ethnicity distribution of undergraduate student body • Undergraduate student admissions: average Scholastic Aptitude Test scores

1.10 Maintain high quality, diverse student enrollment in all Arnold School graduate programs.

- Number of graduate students enrolled
- Race/ethnicity distribution of graduate student body
- Number (percentage) of graduate students who are foreign nationals
- Master's student admissions data:
    - Average undergraduate grade point average (GPA)
    - Average Graduate Record Exam (GRE) verbal score
    - Average GRE quantitative score
- Doctoral student admissions data:
    - Average GPA as undergraduate
    - Average GPA as graduate student
    - Average GRE verbal score
    - Average GRE quantitative score

1.11 Maintain a high quality of instruction for graduate & undergraduate teaching and mentoring.

- Average rating of faculty teaching effectiveness on student course evaluation
- Average rating of faculty preparation for teaching on exit questionnaire
- Percentage of faculty receiving satisfactory or better ratings on peer review of teaching

1.12 Maintain high levels of student achievement among undergraduate students.

- Percentage of undergraduates who graduate within 2 years of entering their senior year at Arnold School
- Percentage of undergraduate students still actively seeking employment 1 year post-graduation
- Percentage of undergraduate students on dean's list
- Percentage of undergraduate students on president's list
- Percentage of undergraduates graduating with highest Latin Honors

1.13 Maintain high levels of student achievement among graduate students.

- Percentage of master's students who graduate within 6 years of matriculation
- Percentage of doctoral students who graduate within 8 years of matriculation
- Percentage of graduate students who are still seeking employment 1 year post-graduation
- Average master's GPA at graduation
- Average doctoral GPA at graduation

Goal 2: To achieve and maintain research excellence as demonstrated by the creation of knowledge of high impact and importance to public health.

2.1 Develop strategies to increase extramural funding.

- Total dollar amount of extramural sponsored research proposals
- Total dollar amount of extramural sponsored National Institutes of Health (NIH) proposals
- Total dollar amount of extramural sponsored research awards
- Total dollar amount of NIH awards
- Number of seed grants funded by the university

2.2 Increase publications, especially in top-tier journals.

- Number of peer-reviewed publications with at least one Arnold School author
- Number of peer-reviewed publications with the collaboration of multiple Arnold School authors

2.3 Facilitate collaborations to compete for large, interdisciplinary grants.

- Number of large program/project type proposals submitted
- Number of large program/project type proposals funded by FY2018-19
- Number of research and service projects (internal or external funding) with international collaborations

2.4 Increase student and community engagement in scholarly endeavors.

- Number of faculty mentoring undergraduate students through the Magellan Scholar Program and number of students mentored
- Percentage of research projects conducted with community engagement
- Percentage of research projects conducted with student participation
- Number of students receiving SPARC graduate research grants

Goal 3: To support and enhance community engagement through professional, community, and academic service in order to address health issues facing South Carolina, the nation, and global communities.
3.1 Provide substantive services to local and state agencies supported by formal grants and contracts. • Dollar amount of service contracts & grants to the school • Number and dollar amount of graduate assistantships in community agencies & organizations
3.2 Provide workforce development offerings to the public health workforce. • Number of participants in continuing education core competency based courses • Number of participants accessing QuickLearn continuing education modules
3.3 Provide clinical services to the community. • Number of sites at which USC Speech and Hearing Research Center conducts screenings • Number of continuing education events sponsored/co-sponsored by the USC Speech and Hearing Research Center
3.4 Encourage faculty to provide professional service and outreach activities. • Percentage of service projects conducted with community engagement • Percentage of funded service projects conducted with student participation • Percentage of tenure-track/tenured faculty who report at least one professional service activity on the faculty annual review report • Percentage of tenure-track/tenured faculty who report at least one community service activity on the faculty annual review report
3.5 Provide lectures and similar events accessible to the general public. • Number of school-sponsored events each calendar year promoted to the general public
Goal 4: To provide the infrastructure and resources to meet the goals of education, research, and professional service.
4.1 Increase faculty participation in school and university faculty development opportunities. • Status of formal evaluation of administrators • Number of faculty participating in professional development programs offered by the university
4.2 Expand staff strategically to support growing programs at the Arnold School. • Undergraduate student/advisor ratios • Race/ethnicity distribution of staff
4.3 Recruit and retain a highly qualified and diverse faculty complement. • Status of faculty searches • Number of primary tenure-track/tenured faculty • Percentage of primary faculty who are tenure-track or tenured • Race/ethnicity distribution of primary and secondary faculty • Percentage of tenure-track/tenured faculty serving as PI on NIH or National Science Foundation (NSF) grant • Number (percentage) of faculty members with at least one peer-reviewed publication by calendar year • Number (percentage) of tenure-track/tenured faculty with at least 3 peer-reviewed publications by calendar year
4.4 Provide adequate fiscal resources to support activities of the Arnold School. • Total general operating funds per fiscal year (FY) • Total annual budget per FY • Total extramural funding (grants and contracts) per FY • Total expenditures for grants and contracts per FY
4.5 Solicit philanthropic contributions to the school for programming, capital improvements, and scholarships. • Total dollars of donations received • Number of individual donors • Number of corporation and foundation donors

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

The school's Administrative Council, led by the dean, reviews the mission, goals and objectives at least annually in the context of updating the school's *Blueprint for Academic Excellence* (see criterion 1.2). The Administrative Council is the primary decision-making body of the school and acts as a liaison between the higher administration and the faculty and staff in departments. It is discussed in more detail in criterion 1.5.

In addition to the *Blueprint*, a strategic planning process was begun in fall 2014 with a faculty retreat. To help develop the school's strategic plan for 2015-2020, strategic planning workgroups (see table 1.1.e) were convened in fall 2015. These workgroups continued the work begun at the retreat and provided input into the self-study. The planning process was overseen by the senior associate dean for academic affairs and the director of evaluation and academic assessment.

The Self-Study Steering Committee (SSSC) was convened in spring 2015 to support the self-study process. Members of the SSSC were selected to represent faculty from all of our academic departments and key administrative staff. Departmental representatives included a mix of department chairs and program directors to capture varying perspectives. As needed, members were asked to solicit both information and input into the self-study process from their department or area of responsibility.

Table 1.1.e Strategic planning workgroups

Workgroup	Purpose
Mission, Vision, & Values	Review and revise school's mission, vision, and values statements.
Faculty Development	Develop more systematic mentoring program to include both individual/small team mentoring and school level networking and professional development opportunities.
Diversity and Inclusion	Develop a diversity plan for the school.
MPH and DrPH Curricula	Study the current MPH and DrPH curricular programs and make recommendations about the most effective delivery of the public health core content for the MPH, consider the current structure of the MPH practicum and culminating experience, and review the current DrPH programs in terms of viability, distinction from each other and distinction from the corresponding PhD programs.
Outreach & Community Engagement	Define the scope of community engagement for the school. Make recommendations for building more community engagement into faculty evaluation criteria. Make recommendations for tracking service activities.
Research Advisory Committee (RAC)	Review and revise the strategic plan for research and develop related targets.
Undergraduate Student Services	Explore most efficient/effective model for providing undergraduate student services for large and growing undergraduate programs.
Graduate Student Services	In context of roles and responsibilities of departmental/program staff and program directors, consider how the current Office of Graduate Student Services can best serve the six departments.

Mission, vision, and values. The Mission, Vision, and Values Workgroup reviewed the school's vision and mission statements, comments from the faculty retreat, and examples from other USC schools/colleges and other schools of public health across the country. The workgroup compiled a long list of values and value statements, added more through brainstorming, and followed a modified Delphi process within the workgroup to develop a recommended list of value and value statements. The workgroup then engaged in an iterative process with the Administrative Council until consensus was reached on the final mission, vision, and values.

Goals and objectives. The four goals, which the school has been using in the *Blueprint* process, were not changed as they still meet the school's needs. Objectives were developed an iterative process led by the director of evaluation and academic assessment, working with the strategic planning workgroups, the SSSC, the dean, and members of the Administrative Council, as well as other faculty and staff in the school. Objectives and plans from the current *Blueprint* were used to create an initial list of objectives and indicators. Workgroups added recommendations. The resulting list of objectives and indicators was reviewed by the SSSC and printed in the draft self-study document. In the process of completing the self-study, objectives and indicators were once more reviewed by SSSC as well as other faculty and staff in the school. They were also reviewed by a group of community partners and alumni (see section 1.2.d). Suggested changes were reviewed and revisions were made where appropriate. The final revision was approved by the SSSC and the Administrative Council.

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

The school's mission, vision, values, goals, and objectives are available on our website. The mission of the Arnold School of Public Health is closely aligned with the work of many public and private-sector organizations throughout our state and beyond that focus on improving health and quality of life. This synergistic alignment reflects strong partnerships that engage faculty, staff, and students from the Arnold School in collaborative work addressing a full range of public health priorities. Through innovative research, education, and practice activities, the Arnold School has become a vital resource and trusted partner in promoting effective solutions to population health concerns.

The annual *Blueprint for Academic* Excellence is shared with all faculty and staff through email and posted on the provost's website for strategic planning and blueprints. As part of the self-study process, the objectives were sent to various constituent groups for review and comment.

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

This criterion is met.

Strengths:

- The school has clearly articulated mission, vision, and values, with goals and objectives to support the mission.
- The mission, goals, and objectives are reviewed at least annually in the context of the *Blueprint for Academic Excellence.*

Weaknesses:

- Although the strategic planning process had wide involvement of faculty and staff through the workgroups involved, the school had less direct involvement from other constituent groups in the early stages of the process.

Plans:

- To enhance input from constituent groups, the school conducted targeted outreach to key community partners who are linked to the school through ongoing engagement activities.

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

1.2.a Description of the evaluation processes used to monitor progress against objectives defined in Criterion 1.1.d, including identification of the data systems and responsible parties associated with each objective and with the evaluation process as a whole. If these are common across all objectives, they need be described only once. If systems and responsible parties vary by objective or topic area, sufficient information must be provided to identify the systems and responsible party for each.

The Arnold School's Office of Operations and Accreditation centralizes management and oversight of the numerous surveys, reports, evaluation documents, and other sources of information that are used for departmental and school-wide planning and evaluation. The overall process is designed to help the school address its mission and meet its objectives in education, research, and outreach. This effort has three major components:

- Collection of data related to the school's teaching, research, and outreach programs in a systematic and reliable manner
- A systematized approach for analysis, evaluation, and reporting of useful information to the school's departments, committees, and decision-making bodies
- Coordination of the school's strategic planning processes as informed by data and data analysis

Blueprint for Academic Excellence. Since 2006, every school and college at the university has been required to present a *Blueprint for Academic Excellence* as a combination strategic planning document and annual report of productivity for a variety of performance metrics. The planning process is intended to provide clear articulation and coordination of priorities and goals with action plans and assessment measures. This activity's primary aim is for schools and colleges to annually: recalibrate and summarize major goals and priorities in view of current and projected budget and fiscal constraints; assess progress toward the attainment of established goals; project available resources and recalibrate timelines for achieving goals as necessary; and describe the action plans for achieving goals presented for the coming year. The *Blueprint's* objectives are a subset of those presented in the response to criterion 1.1. Each year, the school also develops action plans for each objective and reviews indicators and associated targets to measure progress toward each objective. While the *Blueprint* process does not directly involve external constituents, the document does include their input indirectly through evaluative measures and feedback from departments, centers, and other school entities via the Administrative Council.

Monitoring progress against indicators. The school has access to a rich source of data at the university and school levels (see table 1.2.a). Undergraduate data related to applications and admissions are available upon request from the registrar's office. Enrollment and graduation data can be extracted from the university's data warehouse by approved faculty and staff. The school maintains its own database of graduate student data called PHGrad (Public Health Graduate Application). This database houses data and documents related to applications, admissions, and student progression. Graduate directors and faculty/staff in the departments and staff in the Office of Graduate Student Services have access to the data through a web interface. The director of evaluation and academic assessment can

extract data from the database using Microsoft Access. The director of evaluation and academic assessment conducts student surveys, such as student course evaluations, exit surveys, and alumni surveys. The MySPH web portal has data on practicum and evaluations and online workforce development training. The school's administrative business manager has access to most of the school's financial data through Oracle PeopleSoft. Grant-related financial data are accessed by the director of the research support core in the Office of Research. This director compiles information annually about all of the school's grants and contracts through the USC Electronic Research Administration System (USCeRA). She also compiles a list of journal articles, books, and other publications for each calendar year.

Table 1.2.a Data sources associated with objectives

Indicator	Type of data collected (data repository, if applicable)	Group/person responsible for accessing/summarizing data
1.1	Student participation in training programs	Center for Teaching Excellence*
	Student travel awards	Graduate Student Services
	Financial support for doctoral students	Academic departments, Dean's Office
1.2	Curriculum status (Academic Programs Proposal System)	Faculty Affairs & Curriculum
1.3	Academic assessment (Assessment Plan Composer)	Evaluation & Academic Assessment
1.4	Course schedules & enrollment (Self Service Carolina)	Evaluation & Academic Assessment
	Membership data	Institute for Healthcare Improvement Open School
	UNIV101 teaching assignments	Undergraduate Student Services
1.5	Course schedules & enrollment (Self Service Carolina)	Evaluation & Academic Assessment
1.6	Student enrollment data (Data Warehouse)	Evaluation & Academic Assessment
	Status of distance course review	Department records
1.7	Graduation data (Data Warehouse)	Evaluation & Academic Assessment
1.8	Faculty assignments to Greenville satellite campus	Department records
1.9	Student enrollment data (Data Warehouse)	Evaluation & Academic Assessment
	Undergraduate Scholastic Aptitude Test scores	Office of Institutional Research, Assessment, & Analytics*
1.10	Student enrollment data (Data Warehouse)	Evaluation & Academic Assessment
	Graduate applications/admissions data (PHGrad)	Evaluation & Academic Assessment
1.11	Course evaluations & exit surveys	Evaluation & Academic Assessment
	Peer review of teaching ratings	Faculty Affairs & Curriculum
1.12	Student enrollment and graduation data (Data Warehouse)	Evaluation & Academic Assessment
	Undergraduate exit surveys	Career Center*
1.13	Graduation data (Data Warehouse)	Evaluation & Academic Assessment
	Graduate exit & alumni surveys	Evaluation & Academic Assessment
2.1	Grant application & award data (USCeRA)	Research Support Core
2.2	Publication data	Research Support Core
2.3	Grant application & award data (USCeRA)	Research Support Core
2.4	Magellan Scholar program data	Office of Undergraduate Research
	Community & student engagement in research	Research Support Core
	Grant application & award data (USCeRA)	Research Support Core
3.1	Grant application & award data (USCeRA)	Research Support Core
3.2	Participation in continuing education offerings	Workforce Development
3.3	Clinical services to the community	USC Speech & Hearing Research Center
3.4	Community & student engagement in service	Research Support Core
	Faculty participation in service (faculty annual reviews)	Faculty Affairs & Curriculum
3.5	School events calendar	Dean's Office
4.1	Status of administrator evaluation	Human Resources
	Faculty participation in university professional development	University offices offering programs *

Indicator	Type of data collected (data repository, if applicable)	Group/person responsible for accessing/summarizing data
4.2	Undergraduate enrollment data (Data Warehouse)	Evaluation & Academic Assessment
	Number & type of undergraduate advisors	Undergraduate student services
	Staff demographic data (Data Warehouse)	Human Resources
4.3	Faculty employment data (Data Warehouse)	Human Resources
	Status of faculty searches	Human Resources
	Faculty status on grants (USCeRA)	Research Support Core
	Publication data	Research Support Core
4.4	Financial data (People Soft)	Administrative Manager
4.5	Donation data	Director of Development

* University offices provide data on request

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

Data are regularly reported to department chairs, program directors, and senior leadership. Some data are reported at the end of each semester (e.g., course evaluations), while others are reported annually. For example, student application, admissions, enrollment, and graduation data are reviewed at least annually as part of the reports to the Council on Education for Public Health (CEPH) and the Association for Schools and Programs of Public Health (ASPPH). The program measures identified in the academic assessment plans are reported annually and used to make program improvements and/or adjustments to the annual assessment plans and targets (see criterion 2.7).

While not as intensive as an accreditation self-study, preparation of the annual update to the school's *Blueprint* requires careful introspection and consideration of the school's strengths and weaknesses. The provost relies increasingly on this strategic plan as indication of advanced planning for any unit request, such as for new faculty/staff positions or financial resources, including salary, operating budget, facilities, space, and student lab or program fees. Any of these requests must be contained within the strategic plan and have a very strong justification in order to be considered seriously.

1.2.c Data regarding the school's performance on each measurable objective described in Criterion 1.1.d must be provided for each of the last three years. To the extent that these data duplicate those required under other criteria (eg, 1.6, 1.7, 1.8, 2.7, 3.1, 3.2, 3.3, 4.1 and 4.3), the school should parenthetically identify the criteria where the data also appear. See CEPH Outcome Measures Template.

Table 1.2.c, which begins on the next page, contains the outcome measures, targets, and data for the past three years. Most data are presented by academic year (AY: fall, spring, summer); financial data are generally reported by fiscal year (FY: July 1 – June 30); other data are by calendar year (CY) or specific semester. The reporting period is identified in the table. Some items also appear as outcome measures in other criteria as referenced in the table.

Table 1.2.c Goals, objectives, and targets with outcome measures for the past three years

Goal 1: To provide educational programs of excellence for public health professionals and scholars to gain recognition as one of the top ten schools of public health in public institutions of higher education.				
Objective/Indicator	**Target**	**Year 1**	**Year 2**	**Year 3**
1.1 Promote and enhance doctoral education in the Arnold School by increasing the quality and number of doctoral students and the educational opportunities available to them.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Dollar amount and number of student travel awards made to doctoral students	≥ $15,000 to support at least 50 doctoral students per academic year	$13,850 N=48	$15,550 N=58	$16,200 N=55
Number of doctoral students supported by Arnold Fellowships	Average 24 students per year	23	24	23
Number of doctoral students receiving graduate school or university funding (i.e., Presidential Fellowships, Behavioral-Biomedical Interface Program (BBIP) funding)	≥ 4 per year	New Pres = 2 BBIP = 3	New Pres = 4 BBIP = 4	New Pres = 4 BBIP = 7
Number of graduate students participating in training sponsored by the Center for Teaching Excellence (e.g., Preparing Future Faculty (PFF), Teaching Assistant (TA) Orientation, GRAD 701 for teaching assistants)	≥ 120/year	PFF: 13 TA Orient: 70 GRAD 701: 56 Total: 139	PFF: 6 TA Orient: 62 GRAD 701: 48 Total: 116	PFF: 8 TA Orient: 53 GRAD 701: 41 Total: 102
1.2 Incorporate public health curriculum into all academic and allied health professional program curricula.		**AY2013-14**	**AY2014-15**	**AY2015-16**
PUBH 700 added to all academic and allied health professional program curricula by fall 2015	Implemented by fall 2015	-	PUBH 700 first offered fall 14 for MCD/MSP	Fully implemented as of fall 15
Epidemiology added to all academic program curricula by fall 2015	Implemented by fall 2015	-	Program changes submitted	Fully implemented as of fall 15
1.3 Continue to enhance academic program assessment, including linkage of learning outcomes and curriculum.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of technical assistance sessions provided by director of evaluation and academic assessment to program directors working with academic program assessments	≥ 1 meeting per year with program directors as a group or individually	1 group meeting; individual meetings as needed	1 group meeting; individual meetings as needed	Individual meetings with all program directors
Learning outcomes and curriculum maps revised by May 2016	Curriculum maps completed by May 2016 for all programs	3 of 28	6 of 28	28 of 28

Objective/Indicator	Target	Year 1	Year 2	Year 3
Improved assessment plans, as demonstrated by ratings on assessment plan rubric	≥ 90% of plans will meet at least 90% of required elements on rubric by AY16-17	NA (old rubric)	54%	86%
1.4 Actively engage in collaborative instructional initiatives, both within academic curricula and through extra-curricular activities.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of Arnold School students in PUBH 678: Transforming Health Care for the Future	≥ 50 students take PUBH 678 each year	42	51	55
Number of Arnold School students who are members of the Institute for Healthcare Improvement Open School	≥ 15 students are registered members of Open School	18	17	18
Number of course sections taught for interdisciplinary programs (courses cross-listed with departments outside the school)	Faculty teaching ≥ 10 sections of cross-listed courses per year	11	16	13
Number of sections of honors classes taught by Arnold School faculty	≥ 28 sections/year	29	27	30
Number of sections of UNIV 101 taught by Arnold School faculty/staff	8-10 sections/year (taught fall semester)	8	11	9
1.5 Increase the number of students learning about global health.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of course sections offered on global health	≥ 10 sections/year by AY2019-20	4	3	7
Number of students enrolled in global health courses	≥ 250 students/year by AY2019-20	33	51	84
1.6 Enhance distance education in the Arnold School by creating new courses and revising existing courses to meet campus distributed learning quality review (DLQR) standards.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of students enrolled in the HPEB MPH distance program	Average 20 new students per year by AY2019-20	12	21	12
Number of students enrolled in the HSPM MPH distance program	Average10 new students per year by AY2019-20	9	6	0
Percentage of distance courses that have been developed/revised through DLQR	100% by AY2019-20 (n=19 COMD, 20 HPEB)	COMD: 0% HPEB: 35%	COMD: 0% HPEB: 75%	COMD: 26% HPEB: 100%
1.7 Enhance involvement with USC Connect and other student opportunities for community engagement.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Percentage of undergraduate students graduating with leadership distinction	≥ 10% per year by AY 2015-16	10 (3%)	31 (7%)	63 (12%)

Objective/Indicator	Target	Year 1	Year 2	Year 3
1.8 Develop new and maintain current educational partnerships with units within the university and partners outside the university.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of faculty assigned to Greenville satellite campus	Establish a 9-10 faculty complement in Greenville by AY2018-19	1	3	3
1.9 Maintain high quality, diverse student enrollment in Arnold School undergraduate programs.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of undergraduate students in Arnold School majors (fall 2016 includes BS in athletic training)	2100 by fall 2020	Fall 2014: 1749 15% increase	Fall 2015: 1797 3% increase	Fall 2016: 2022 13% increase
Race/ethnicity distribution of undergraduate student body comparable to distribution of USC undergraduate student body (criterion 1.8)	≥ 10% Black ≥ 4% Hispanic by fall 2020	Fall 2014: 11% Black 3% Hispanic	Fall 2015: 11% Black 4% Hispanic	Fall 2016: 11% Black 3% Hispanic
Undergraduate student admissions: average Scholastic Aptitude Test (SAT) scores (criterion 4.3)	1225 by AY2019-20	1180	1177	1174
1.10 Maintain high quality, diverse student enrollment in all Arnold School graduate programs.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of graduate students enrolled (fall 2016 includes MS in advanced athletic training)	750 by fall 2018	Fall 2014: 735 6% increase	Fall 2015:715 3% decrease	Fall 2016: 753 5% increase
Race/ethnicity distribution of graduate student body comparable to US distribution age 18-44 with bachelor's or master's degree (criterion 1.8)	≥ 9% Black ≥ 9% Hispanic by fall 2020	Fall 2014: 13% Black 4% Hispanic	Fall 2015: 12% Black 2% Hispanic	Fall 2016: 12% Black 3% Hispanic
Number (percentage) of graduate students who are foreign nationals	Average 15%	Fall 2014: 106 (14%)	Fall 2015: 101 (14%)	Fall 2016: 99 (13%)
Master's student admissions data (criterion 4.3):		**AY2013-14**	**AY2014-15**	**AY2015-16**
Average undergraduate grade point average (GPA)	≥ 3.3	3.4	3.4	3.4
Average Graduate Record Exam (GRE) verbal score	≥ 60th percentile by fall 2020	153.3 (61st percentile)	152.6 (58th percentile)	153.1 (60th percentile)
Average GRE quantitative score	≥ 50th percentile by fall 2020	152.1 (47th percentile)	152.4 (48th percentile)	151.8 (46th percentile)
Doctoral student admissions data (criterion 4.3):		**AY2013-14**	**AY2014-15**	**AY2015-16**
Average GPA as undergraduate	≥ 3.3	3.3	3.4	3.3
Average GPA as graduate student	≥ 3.5	3.8	3.7	3.7
Average GRE verbal score	≥ 65th percentile by fall 2020	152.7 (59th percentile)	153.5 (62nd percentile)	154.4 (66th percentile)
Average GRE quantitative score	≥ 55th percentile by fall 2020	155.2 (60th percentile)	154.1 (55th percentile)	155.4 (61st percentile)

Objective/Indicator	Target	Year 1	Year 2	Year 3
1.11 Maintain a high quality of instruction for graduate & undergraduate teaching and mentoring.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Average rating of faculty teaching effectiveness on student course evaluation (criterion 4.1)	≥ 4.3	4.3	4.3	4.2
Average rating of faculty preparation for teaching on exit questionnaire (converted to 5 point scale) (criterion 4.1)	≥ 4.3	4.0	4.1	4.3
Percentage of faculty receiving satisfactory or higher ratings on peer review of teaching (criterion 4.1)	≥ 90%	97%	97%	90%
1.12 Maintain high levels of student achievement among undergraduate students.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Percentage of undergraduates who graduate within 2 years of entering their senior year at Arnold School (criterion 2.7)	≥ 85%	AY 12-13 senior cohort 89%	AY 13-14 senior cohort 90%	AY 14-15 senior cohort 92%
Percentage of undergraduate students still actively seeking employment (or further education) 1 year post-graduation (criterion 2.7)	≤ 20% actively seeking employment 1 year post-graduation	AY12-13 grads Not available	AY13-14 grads 30%	AY14-15 grads 9%
Percentage of undergraduate students on dean's list (spring, fall only)	≥ 50%	52%	55%	54%
Percentage of undergraduate students on president's list (spring, fall only)	≥ 20% by AY2019-20	15%	18%	18%
Percentage of undergraduates graduating with highest Latin Honors (Summa Cum Laude: GPA 3.95-4.00; criterion 2.7)	≥ 5% by AY2019-20	16 (4%)	16 (3%)	26 (5%)
1.13 Maintain high levels of student achievement among graduate students.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Percentage of master's students who graduate within 6 years of matriculation (criterion 2.7)	≥ 80%	AY 08-09 cohort 87%	AY 09-10 cohort 91%	AY 10-11 cohort 92%
Percentage of doctoral students who graduate within 8 years of matriculation (criterion 2.7)	≥ 70%	AY 06-07 cohort 79%	AY 07-08 cohort 89%	AY08-09 cohort 90%
Percentage of graduate students who are still seeking employment (or further education) 1 year post-graduations (criterion 2.7)	≤ 10% actively seeking employment 1 year post-graduation	AY12-13 grads 2%	AY13-14 grads 2%	AY14-15 grads 2%
Average master's GPA at graduation (criterion 2.7)	≥ 3.8	3.83	3.84	3.85
Average doctoral GPA at graduation (criterion 2.7)	≥ 3.8	3.87	3.82	3.81

Goal 2: To achieve and maintain research excellence as demonstrated by the creation of knowledge of high impact and importance to public health.				
Objective/Indicator	**Target**	**Year 1**	**Year 2**	**Year 3**
2.1 Develop strategies to increase extramural funding.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Total dollar amount of extramural sponsored research proposals (first/next year requests; criterion 3.1)	5% annual increase (baseline = $44,863,735 in FY2012-13)	$59,436,748 + 32%	$53,824,827 -9%	$60,650,909 +13%

Objective/Indicator	Target	Year 1	Year 2	Year 3
Total dollar amount of extramural sponsored NIH proposals (first/next year requests; criterion 3.1)	5% annual increase (baseline = $29,911,497 in FY2012-13)	$32,119,984 +7%	$31,245,463 -3%	$42,454,188 +36%
Total dollar amount of extramural sponsored research awards (criterion 3.1)	5% annual increase (baseline = $18,731,642 in FY2012-13)	$22,964,874 +23%	$24,006,239 +5%	$27,443,204 +14%
Total dollar amount of NIH awards (criterion 3.1)	5% annual increase (baseline = $10,551,456 in FY2012-13)	$12,732,845 +21%	$11,345,445 -11%	$13,838,949 +22%
Number of seed grants funded by the university (ASPIRE & others)	≥ 15/year	15	14	16
2.2 Increase publications, especially in top-tier journals.		**CY 2013**	**CY 2014**	**CY 2015**
Number of peer-reviewed publications with at least one Arnold School author (criterion 3.1)	5% annual increase (baseline 339 in FY 2012-13)	411 +21%	485 +18%	536 +11%
Number of peer-reviewed publications with the collaboration of multiple Arnold School authors (criterion 3.1)	≥ 75% of publications with more than one school author	325 79% of total	378 78% of total	416 78% of total
2.3 Facilitate collaborations to compete for large, interdisciplinary grants.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Number of large program/project type proposals submitted	≥ 3 per year by FY2019-20	1	2	3
Number of large program/project type proposals funded by FY2018-19	≥ 5 total by FY2019-20	1	1	1
Number of research and service projects (internally or externally funded) with international collaborations	15/year by FY2019-20	34 research projects and 1 training project funded with international collaboration FY 2014-16		
2.4 Increase student and community engagement in scholarly endeavors.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Number of faculty mentoring undergraduate students through the Magellan Scholar Program and number of students mentored	Average 25 faculty/year Average 25 students/year	24 faculty 33 students	21 faculty 24 students	17 faculty 17 students
Percentage of research projects conducted with community engagement (criterion 3.2)	≥ 65% by FY2019-20	49%	56%	57%
Percentage of research projects conducted with student participation	≥ 85% by FY2019-20	79%	74%	75%
Number of students receiving SPARC graduate research grants	≥ 10/year by FY2017-18	7	7	9

Goal 3: To support and enhance community engagement through professional, community, and academic service in order to address health issues facing South Carolina, the nation, and global communities.				
Objective/Indicator	**Target**	**Year 1**	**Year 2**	**Year 3**
3.1 Provide substantive services to local and state agencies supported by formal grants and contracts.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Dollar amount of service contracts & grants to the school	Average $7 million/year	$5,779,181	$11,053,260	$3,354,106
Number and dollar amount of graduate assistantships in community agencies & organizations	Average 90/year; Average $500,000 by FY2019-20	N=94 $369,800	N=79 $405,398	N=95 $608,410
3.2 Provide workforce development offerings to the public health workforce.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Number of participants in continuing education core competency based courses	≥ 240/year by	75	223	231
Number of participants accessing QuickLearn continuing education modules (available through virtual campus and YouTube)	≥ 70,000/year	41,014	49,030	68,373
3.3 Provide clinical services to the community.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of sites at which USC Speech and Hearing Research Center conducts screenings	≥ 8 different sites/year	14	15	13
Number of continuing education events sponsored/co-sponsored by the USC Speech and Hearing Research Center	≥ 2 events/year	6	3	4
3.4 Encourage faculty to provide professional service and outreach activities.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Percentage of funded service projects conducted with community engagement (criterion 3.2)	≥ 75% by FY2019-20	71%	70%	74%
Percentage of funded service projects conducted with student participation (criterion 3.2)	≥ 75% by FY2019-20	67%	74%	78%
Percentage of tenure-track/tenured faculty who report at least one professional service activity on the faculty annual review report (criterion 3.2)	≥ 90% report at least one professional service activity	CY2014 96%	CY2015 99%	CY2016 99%
Percentage of tenure-track/tenured faculty who report at least one community service activity on the faculty annual review report (criterion 3.2)	≥ 75% report at least one community service activity	CY2014 75%	CY2015 68%	CY2016 70%
3.5 Provide lectures and similar events accessible to the general public.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Number of school-sponsored events each calendar year promoted to the general public (e.g., Vernberg Lecture, Clyburn Lecture, Delta Omega Lecture, etc.)	≥ three events per year	3	3	3

Goal 4: To provide the infrastructure and resources to meet the goals of education, research, and professional service.				
Objective/Indicator	**Target**	**Year 1**	**Year 2**	**Year 3**
4.1 Increase faculty participation in school and university faculty development opportunities.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Status of formal evaluation of administrators (annual by dean, every three-four years by faculty, staff, and students)	All administrators are reviewed according to the set schedule	100%	100%	100%
Number of faculty participating in professional development programs offered by the university (e.g., Pipeline for Academy Leaders (PAL), SEC Advanced Leadership Development Program (ALDP))	≥ 1 per year in PAL ≥ 1 SEC ALDP every five years	AY2014-15 PAL: 2 SEC: 1	AY2015-16 PAL: 0 SEC: 0	AY2016-17 PAL:2 SEC: 0
4.2 Expand staff strategically to support growing programs at the Arnold School.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Undergraduate student/advisor ratios (criterion 1.7)	By AY 2017-18, have sufficient staff to meet the following student/advisor ratios: 150/faculty advisor (FA) 300/staff advisor (SA)	Fall 2014 8 FA 251/advisor	Fall 2015 8 FA 225/advisor	Fall 2016 9 FA, 1 SA 202/advisor
Race/ethnicity distribution of staff comparable to distribution for USC unclassified staff (criterion 1.8)	≥ 25% Black ≥ 2% Hispanic by fall 2020	CY2014 Black: 21% Hispanic: 7%	CY2015 Black: 16% Hispanic: 8%	CY2016 Black: 18% Hispanic: 7%
4.3 Recruit and retain a highly qualified and diverse faculty complement.		**AY2013-14**	**AY2014-15**	**AY2015-16**
Status of faculty searches (criterion 1.7)	80% of searches for tenure-track/tenured faculty are completed within 12 months	67% of 6	78% of 9	38% of 16
Number of primary tenure-track/tenured faculty (criterion 1.7)	100 tenure-track/tenured faculty by fall 2019	Fall 2014 83	Fall 2015 83	Fall 2016 87
Percentage of primary faculty who are tenure-track or tenured (criterion 4.1)	75% by 2020	Fall 2014 72%	Fall 2015 72%	Fall 2016 67%
Race/ethnicity distribution of primary and secondary faculty comparable to distribution of US population age 18-64 with a professional or doctorate degree (criterion 1.8)	≥ 6% Black ≥ 6% Hispanic by fall 2020	Fall 2014: Black 7% Hispanic 1%	Fall 2015: Black 7% Hispanic 1%	Fall 2016: Black 5% Hispanic 1%
Percentage of tenure-track/tenured faculty serving as PI on NIH or NSF grant (criterion 4.1)	40% by 2020	FY2013-14 38%	FY2014-15 34%	FY2015-16 35%
Number (percentage) of faculty members (all tracks) with at least one peer-reviewed publication by calendar year (criterion 4.1)	≥ 80%	CY2013 105 (81%)	CY2014 114 (83%)	CY2015 113 (82%)
Number (percentage) of tenure-track/tenured faculty with at least 3 peer-reviewed publications by calendar year (criterion 4.1)	≥ 80%	CY2013 67 (82%)	CY2014 66 (80%)	CY2015 72 (87%)

Objective/Indicator	Target	Year 1	Year 2	Year 3
4.4 Provide adequate fiscal resources to support activities of the Arnold School.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Total general operating funds per FY (criterion 1.6)	Average ≥ 5% annual increase (baseline FY13=24,951,494)	26,911,168 +8%	27,725,321 +3%	30,144,717 +9%
Total annual budget per FY (criterion 1.6)	Average ≥ 5% annual increase (baseline FY13=52,112,355)	58,891,108 +13%	61,363,555 +4%	62,960,684 +3%
Total extramural funding (grants and contracts) per FY (criterion 1.6)	Average ≥ 5% annual increase (baseline FY13=23,614,560)	30,684,758 +30%	30,711,308 +0%	32,326,919 +5%
Total expenditures for grants and contracts per FY (criterion 1.6)	Average ≥ 5% annual increase (baseline FY13=19,762,604)	21,618,994 +9%	25,669,370 +19%	24,619,616 -4%
4.5 Solicit philanthropic contributions to the school for programming, capital improvements, and scholarships.		**FY2013-14**	**FY2014-15**	**FY2015-16**
Total dollars of donations received	FY16-17 target: match or exceed total $ raised in FY14-15	$6,833,874	$5,456,036	$5,410,631
Number of individual donors	≥ 10 new donors by the end of FY16-17 (compared to FY15-16)	351	368	339
Number of corporation and foundation donors	≥ 3 new donors for FY16-17	49	63	61

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

The self-study process for accreditation by the Council on Education for Public Health (CEPH) was begun early in 2014 and led by the former senior associate dean of academic affairs, Dr. Cheryl Addy, and the director of evaluation and academic assessment, Dr. Delores Pluto. Although she now holds a new role as vice provost and dean of The Graduate School, Dr. Addy continues to support the self-study process. Responsibility for overseeing the re-accreditation processes within the school now rests with the new associate dean for operations and accreditation, Dr. Lee Pearson, with daily assistance from the director of evaluation and academic assessment.

Initial work on the self-study included reviewing the 2009 self-study document, developing an approach for the self-study process, developing templates, and insuring that data collection processes were in place. The Self-Study Steering Committee (SSSC) was first convened in spring 2015 to provide collective guidance for the re-accreditation process. The school's Administrative Council selected individuals with enough seniority and leadership experience to understand the school historically and to appreciate the strategic importance of the re-accreditation process. Operationally, the committee is primarily a mix of administrators at various levels (e.g., associate deans, chairs, program directors), and represents faculty from all academic departments plus key administrative staff. In drawing upon departmental-level representatives, the committee intentionally includes a mix of department chairs and program directors to capture varying public health perspectives.

Members of the SSSC were asked to collectively guide the re-accreditation process, reach out to other faculty and staff for assistance with specific tasks and information as necessary, and to solicit and provide reflective feedback on the self-study contents.

In addition to the SSSC, the strategic planning workgroups described in 1.1.e helped develop and review goals and objectives and suggest revisions and additions to develop a strategic plan for 2015-2020.

The director of evaluation and academic assessment met with each of the academic departments in spring 2015 to introduce faculty and staff to the self-study process and make them aware of our deliberative approach through the SSSC and strategic planning workgroups. She also worked with the Office of Graduate Student Services to keep the Dean's Student Advisory Committee (DSAC) informed about and involved in the self-study process.

As a part of the self-study process, the Arnold School engaged a select group of community partners and alumni to review the preliminary Self-Study Report and provide input on specific sections. These individuals were identified in several ways. Members of the SSSC were asked for recommendations of individuals they felt would be strong contributors to the process. Committee members were then asked to confer with their departmental colleagues for additional recommendations. All recommendations were compiled and reviewed by the associate dean for operations and accreditation, and the list was refined to ensure balance in representation across disciplines. The final group included 18 individuals who were contacted individually by the associate dean, who provided background information on the self-study process and the timeline for finalizing the report. All of the identified community partners and alumni were asked to review the entire report, with particular emphasis on key sections pertinent to their professional and/or personal interests. Written guidance was requested regarding any specific feedback. The feedback provided was used, where appropriate, in making final revisions to the self-study document. All 18 individuals contacted were invited to participate in the school's accreditation

site visit and meet with the review team. A list of these individuals is included in the ERF with the lists of committees.

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

This criterion is met.

Strengths:

- The school has a comprehensive set of evaluation and planning processes, coordinated with university activities, such as the *Blueprint for Academic Excellence* and formal academic assessment plans and reports.
- The evaluation activities are coordinated by the associate dean for operations and accreditation, with the assistance of the director of evaluation and academic assessment and other staff who have access to school and university resources for data collection and aggregation.

Weaknesses:

- The school's planning and evaluation activities have had limited direct involvement of students, alumni, external members of the public health community.

Plans:

- Involve students, alumni, and community partners in evaluation and planning activities on a regular basis, e.g., as members of the Diversity and Inclusion Committee and the Evaluation Committee (see criterion 1.5).

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

1.3.a A brief description of the institution in which the school is located, and the names of accrediting bodies (other than CEPH) to which the institution responds.

The University of South Carolina (USC) was established in 1801 and is a full-service, state-supported research university that includes the 358-acre Columbia campus and seven regional campuses with a total full-time student body population of more than 46,000 and 2,100 full-time faculty members. Located in the capital city of Columbia in the geographic center of the state, USC's main campus is part of a thriving metropolitan community of more than 450,000 inhabitants. USC offers a broad spectrum of educational opportunities with 14 colleges and schools that encompass 324 undergraduate and graduate degree-granting programs. The university confers 40% of all bachelors, professional, and graduate degrees awarded by public institutions in South Carolina.

Recognized by the Carnegie Foundation as an R1 Doctoral University of Highest Research since 2006 and for community engagement since 2008 (for both curricular engagement and outreach and partnerships), the university has profound relevance, reach, and impact on the people of the state. As the flagship institution of the South Carolina state system of higher education, USC Columbia leads the way in providing all students with the highest-quality education, skills, and values required for success and responsible citizenship in a complex and changing world. This is done through student engagement in nationally and internationally ranked research, scholarship, community outreach, and artistic creation from the baccalaureate through doctoral levels.

Beyond USC Columbia, the USC system serves students with campuses throughout the state. The three comprehensive campuses – USC Aiken, USC Beaufort, and USC Upstate – offer traditional four-year degree programs, awarding bachelors and advanced degrees. These campuses maintain separate accreditations from the Southern Association of Colleges and Schools (SACS). Palmetto College encompasses our four associate degree-granting campuses – USC Lancaster, USC Salkehatchie, USC Sumter, and USC Union – and online bachelor's degree completion programs. These campuses are included in the USC SACS accreditation.

USC includes six health science schools and colleges: School of Medicine-Columbia, School of Medicine-Greenville, College of Nursing, College of Pharmacy, Arnold School of Public Health, and College of Social Work. While there is not a formal academic health center structure, these schools and colleges participate in many interdisciplinary activities, including collaborative research, dual-degree programs and interprofessional education for the health sciences. In addition, the provost has initiated a broad health sciences "living and learning" initiative at the undergraduate level to facilitate students' awareness of health science degree programs and career options, and to co-locate many of these students in a common campus-living and experiential environment (see http://www.housing.sc.edu/communities/hs.html).

Accrediting bodies. The university has been accredited by *SACS* since 1917 and was last reaffirmed in 2011. The next reaffirmation is scheduled for 2021. The Arnold School of Public Health has been accredited by the *Council on Education for Public Health (CEPH) s*ince 1977. In addition, four of our programs hold separate accreditations:

- Master of Health Administration, Commission on Accreditation of Healthcare Management Education (CAHME), accredited through 2021

- Master of Speech-Language Pathology & Master of Communication Disorders, Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (CAA), accredited through 2017 (site visit completed Oct 2016; decision pending)
- Doctor of Physical Therapy, Commission on Accreditation in Physical Therapy Education (CAPTE), accredited through 2019
- Bachelor of Science in Athletic Training, Commission on Accreditation of Athletic Training Education (CAATE), accredited through 2019

A complete list of the accrediting bodies to which the university responds is shown in table 1.3.a.

Table 1.3.a Accrediting bodies to which the university responds

Abbreviation	Accrediting Agency Name
AACSB	Association to Advance Collegiate Schools of Business
AAMC	Association of American Medical Colleges
ABA	American Bar Association
ABET	Accreditation Board for Engineering & Technology
ABGC	American Board of Genetics Counseling
ACEI	Association for Childhood Education International
ACEJMC	Accreditation Council on Education in Journalism and Mass Communications
ACPE	American Council on Pharmaceutical Education
ACPHA	Accreditation Commission for Programs in Hospitality Administration
ACS	American Chemical Society
ACTFL	American Council on the Teaching of Foreign Languages
AECT	Association for Educational Communications & Technology
ALA	American Library Association
AMA	American Medical Association - Liaison Committee on Medical Education
APA	American Psychological Association
CAA	Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association
CAATE	Commission on Accreditation of Athletic Training Education
CACREP	Council for the Accreditation of Counseling and Other Related Educational Programs
CAEP	Council for the Accreditation of Educator Preparation
CAHME	Commission on Accreditation of Healthcare Management Education
CAPTE	Commission on Accreditation in Physical Therapy Education
CCNE	Commission on Collegiate Nursing Education
CEC	Council for Exceptional Children
CEPH	Council on Education for Public Health
CHE	(South Carolina) Commission on Higher Education
COA	Council on Accreditation of Nurse Anesthesia Educational Programs
COSMA	Commission on Sport Management Accreditation
CRE	Commission of Rehabilitation Education
CSWE	Council on Social Work Education
ELCC	Educational Leadership Constituent Council
IRA	International Reading Association
NAEYC	National Association for the Education of Young Children
NASAD	National Association of School of Art and Design
NASD	National Association of Schools of Dance
NASDTEC	National Association of State Directors of Teacher Education and Certification
NASM	National Association of Schools of Music
NASP	National Association of School Psychologists

Abbreviation	Accrediting Agency Name
NASPAA	National Association of School of Public Affairs and Administration
NASPE	National Association for Sport and Physical Education
NAST	National Association of School of Theatre
NCATE	National Council for Accreditation of Teacher Education
NCSS	National Council for the Social Studies
NCTE	National Council for Teachers of English
NCTM	National Council for Teachers of Mathematics
NMSA	National Middle School Association
NSTA	National Science Teachers Association
URTA	University/Resident Theatre Association

1.3.b One or more organizational charts of the university indicating the school's relationship to the other components of the institution, including reporting lines.

The dean of the Arnold School reports directly to the executive vice president for academic affairs and provost (provost), with the same status as the deans of all schools and colleges at the university. The online copies of the university organizational chart and the provost's organizational chart clearly show these reporting lines. Copies of these organizational charts are included in the ERF.

1.3.c Description of the school's level of autonomy and authority regarding the following: i) budgetary authority and decisions relating to resource allocation; ii) lines of accountability, including access to higher-level university officials; iii) personnel recruitment, selection and advancement, including faculty and staff; iv) academic standards and policies, including establishment and oversight of curricula

i. Budgetary authority and decisions relating to resource allocation. As a public institution, the university depends on general operating funds from state appropriations and tuition. It competes for funding with other state schools and universities and with other components of the state budget. The legislature's annual allocation to the university is informed by recommendations provided by the Commission on Higher Education (CHE), the South Carolina (SC) Department of Administration, and the General Assembly. Within the university, it is the provost's responsibility to divide the academic portion of the state allocation and tuition revenue among the colleges and schools based on annual budget proposals developed by the deans. The dean has the authority to allocate these funds across the academic departments within the Arnold School and to request additional funds from the provost, both for time-limited and recurring needs. Revenue from school and program-specific fees comes directly to the school for internal distribution.

ii. Lines of accountability, including access to higher-level university officials. Externally, the following groups exercise various types of authority over the university:

- The General Assembly represents the final authority over the existence of the university.
- The SC Department of Administration must prioritize competing statewide requests for state funds and balance expenditures against anticipated revenues.
- The Commission on Higher Education must approve all major new programs, degrees and research initiatives such as establishment of institutes and centers, if any state funding is requested.

The university's Board of Trustees exercises final internal authority over the life and activities of the university. The membership of the board reflects the university's status as a state institution. The president of the university, who is an ex-officio member of the faculty and all faculty committees, is the

chief executive officer of the university system and is responsible for administering the educational and business policies of the university.

The Arnold School is one of fourteen co-equal schools and colleges on the Columbia campus. The dean of a school or college is the chief academic administrator of the unit and as such is responsible for the personnel and program administration of that division and reports directly to and serves at the pleasure of the provost.

The full Council of Academic Deans is composed of the president, provost, vice provosts, academic deans of the Columbia campus, dean of undergraduate studies, dean of The Graduate School, and dean of libraries. The council serves in an advisory capacity to the president and the provost on academic matters including academic planning and the setting of priorities for the university, and it meets routinely every three weeks.

In addition to the formal structure of Council of Academic Deans, each dean has individual interaction with the provost through strategic planning meetings, annual reviews, and other meetings and conversations as needed. The deans also have direct access to the president, although with less frequency.

The authority for academic affairs belongs to the faculty of each department. The line of authority carries forward, in order, from faculty to department chairs, deans, the provost, the president, and the Board of Trustees. Appendix 1 of the Faculty Manual (included in the ERF) describes the responsibilities of each of these offices. The university faculty originates, modifies, and executes academic programs and manages faculty affairs. All curricular proposals are initiated by faculty in a particular school or college. Proposals concerning undergraduate programs must be approved by the Faculty Senate, representing interests of the general faculty of the university. Proposals concerning graduate programs must be approved by the Graduate Council, representing the graduate faculty of the university. Proposals for new curricula and major changes to existing curricula also require approval by the Board of Trustees and either approval or notification to the CHE. Within broad limits, the authority of these faculty-governing bodies is supreme, subject only in extremis to veto by the president, the Board of Trustees, and the CHE.

iii. Personnel recruitment, selection and advancement, including faculty and staff. Recruitment and selection of new faculty is a faculty responsibility, undertaken by faculty members in the department where the vacancy exists. Faculty recruitment is described in detail in criterion 4.2.

Requests for any faculty or staff position requires initial provost and human resources approval, primarily to verify that funding is available for the position and that the position description, job title, and advertised salary are consistent. The academic unit has complete responsibility for writing the position description, advertising it, screening and interviewing candidates, and making a final hiring recommendation to the Dean. The hiring decision is made by the Dean in consultation with the department chair.

Tenured faculty members, operating within the general guidelines set forth by the University Committee on Tenure and Promotion, have the primary responsibility for deciding tenure. The Board of Trustees has final hiring and tenure authority. Tenured faculty also must undergo a post-tenure review every six years, as described in criterion 4.2.

iv. Academic standards and policies, including establishment and oversight of curricula. The Faculty Senate approves the minimum standards of admission, matriculation, and graduation for all undergraduate programs on the Columbia campus. Admission of new students is managed by the university Office of Undergraduate Admissions, but undergraduate programs can establish progression

standards (e.g., minimum GPA to continue, minimum grades in specific classes) and minimum criteria to transfer from one major to another as part of the general program development process.

The Graduate School of the university establishes the minimum standards of admission, matriculation, and graduation for all graduate programs on the Columbia campus. The policies of The Graduate School are established, reviewed, and modified on the advice of the Graduate Council, whose membership is from the faculty of the graduate programs. Within the minimum guidelines set by The Graduate School, individual colleges, schools, and departments determine their own policies and standards. Subject only to a negative vote of the Graduate Council, individual program standards may be more rigorous than the minimums.

Academic standards for undergraduate and graduate curricula are ultimately governed by the Office of Academic Programs within the Office of the Provost. This office maintains the academic policies, facilitates the internal approval processes beyond the schools and colleges, and coordinates any required approvals by the Board of Trustees, CHE, and SACS. This office also maintains all records and procedures associated with state authorization for distributed learning.

Academic standards and policies of the school are set by the faculty of each department, subject to veto by majority vote of the assembled faculty of the school. Admissions, student evaluations, and recommendations for graduation are determined at the department level by the faculty. Each department chair appoints one or more faculty members as graduate director(s) to work with The Graduate School to facilitate communication and timely completion of necessary administrative duties.

1.3.d Identification of any of the above processes that are different for the school of public health than for other professional schools, with an explanation.

Not applicable.

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

Not applicable

1.3.f If a collaborative school, a copy of the formal written agreement that establishes the rights and obligations of the participating universities in regard to the school's operation.

Not applicable

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

This criterion is met.

Strengths:

- The school has maintained stable leadership for nearly a decade with clear, consistent reporting lines and strong relationships to university leadership.

Weaknesses:

- In the past two years, there have been numerous personnel changes in The Graduate School and Office of the Provost resulting in some modification of procedures and personnel duties and responsibilities in associated offices and programs.

Plans:

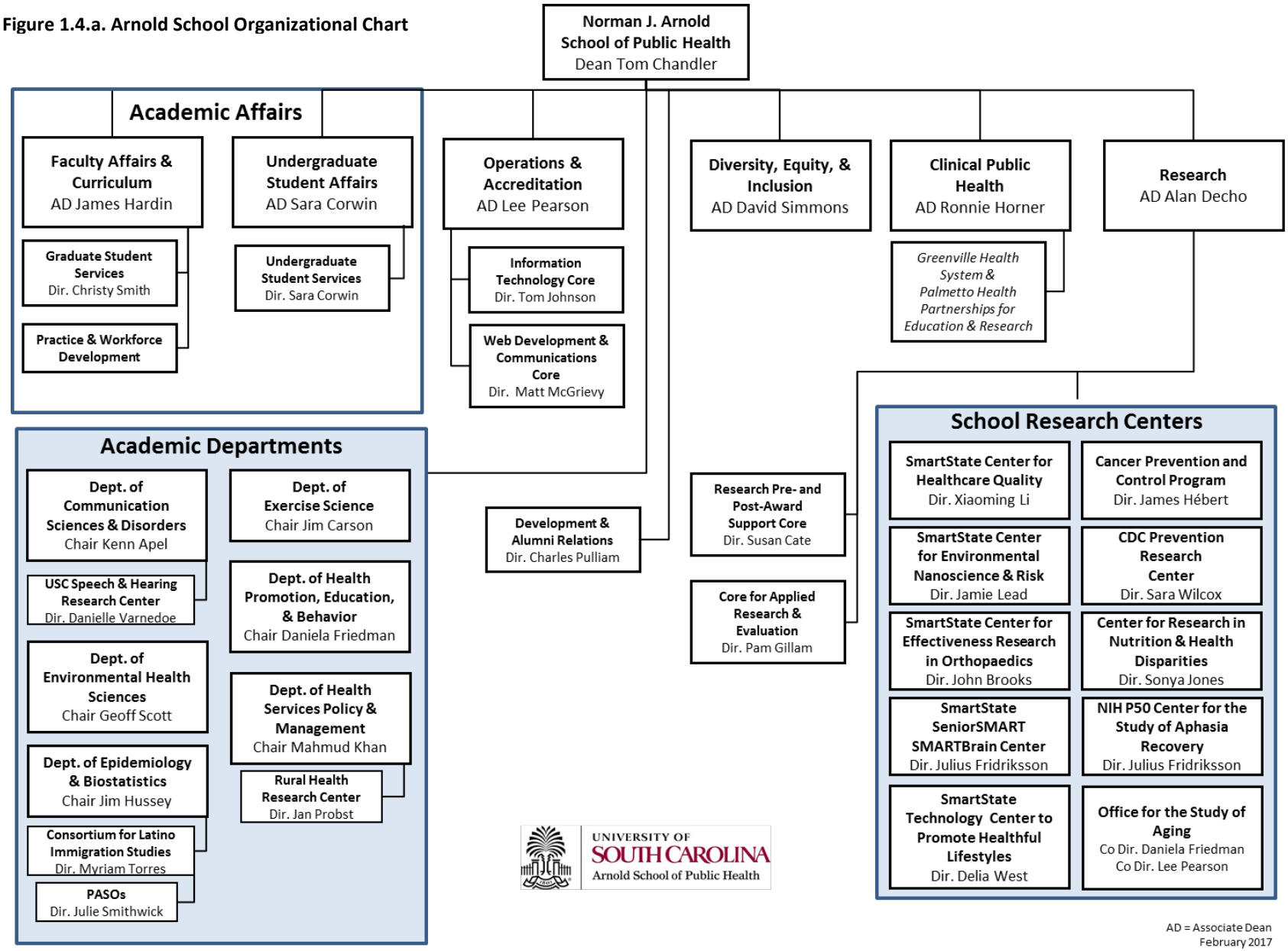
- Leadership in the Office of the Provost has stabilized with the final administrative appointments in January 2017. Because the school's leadership has strong relationships with leaders in all other parts of the university, any impact from the noted personnel changes are being effectively managed by frequent communication of concerns to higher administration. The dean meets monthly one-to-one with the provost, and every three weeks with the full dean's council and provost. He has unfettered access to the President if/when necessary, and also the Health Sciences Subcommittee of the Board of Trustees. The health sciences deans meet quarterly with at least two members of the Health Sciences Subcommittee to share a meal and discuss progress and any particular college or division concerns. The move of former Senior Associate Dean Cheryl Addy to dean of The Graduate School has provided fresh ideas and new stability to that important and broad academic unit.

1.4 <u>Organization and Administration</u>. The school shall provide an organizational setting conducive to public health learning, research and service. The organizational setting shall facilitate interdisciplinary communication, cooperation and collaboration that contribute to achieving the school's public health mission. The organizational structure shall effectively support the work of the school's constituents.

1.4.a One or more organizational charts showing the administrative organization of the school, indicating relationships among its component offices, departments, divisions or other administrative units.

Figure 1.4.a on the next page shows the current organization of the Arnold School. A description of the units on the organizational chart follows.

Figure 1.4.a. Arnold School Organizational Chart



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

As mentioned in criterion 1.3, the dean reports to the provost and provides leadership to the school's teaching, research, service, and development activities. The dean is responsible for the school's administrative and fiscal management and for effectively representing the school to a wide range of campus, community, agency, and professional constituencies. Six associate deans report to the dean of the school, as do the chairs of the six academic departments and the director of development and alumni relations. Directors of the research centers report to the dean through the associate dean of research and, in their faculty roles, they also report to and are evaluated by their department chairs.

Dr. Thomas Chandler has been dean of the Arnold School since August 2009, after serving two years as acting dean. He has been on the faculty of the school's Department of Environmental Health Sciences (ENHS) since 1991, tenured since 1995. He became chair of ENHS in 1996 and served as vice provost for health sciences from 2010-2014.

In summer 2016, Dr. Cheryl Addy, senior associate dean of academic affairs, left the school to become vice provost and dean of The Graduate School. She had been in the school's administration for over fifteen years, and her departure represented a potential loss of experience and institutional knowledge. In response to Dr. Addy's departure, and in the process of reviewing the school's organizational structure in the context of the self-study, the school underwent a reorganization of administrative responsibilities as shown on the organizational chart. After identifying several unmet administrative needs and the functions that had been the responsibility of the senior associate dean, two new positions were created: the associate dean for faculty affairs and curriculum and the associate dean for operations and accreditation. In addition, for parity, the assistant dean for undergraduate student services was elevated to associate dean and assumed responsibilities related to the undergraduate programs that were formerly managed by the senior associate dean.

The *Division of Academic Affairs* shown on the organizational chart represents an inclusive and collaborative structure to link the complementary work of the associate dean for faculty affairs and curriculum and the associate dean for undergraduate student affairs. This structure respects the unique distinctions across graduate and undergraduate programs while allowing for integration of activity and information where needed. This division is aligned with the Office of Operations and Accreditation to provide information and promote efficiencies in regard to accreditation reporting and evaluation activities, as well as informing key aspects of faculty affairs, such as teaching evaluation, tenure/promotion coordination, and faculty recruitment/retention/welfare.

Faculty affairs and curriculum. The associate dean for faculty affairs and curriculum, Dr. James Hardin, is responsible for:

- Managing school-wide course/curriculum development and revision processes.
- Overseeing development of international degree-granting programs offered jointly by Arnold School departments with partner institutions around the world.
- Partnering with deans, chairs, and program directors to ensure CEPH and program-specific accreditation standards related to academics are being met.
- Managing faculty recruitment and retention activities, and managing faculty evaluation processes and policies.
- Assisting the academic units and the chair of the school's Tenure and Promotion Committee with monitoring faculty promotion and tenure progression and revising policy when necessary.
- Identifying and addressing faculty performance, welfare, and retention issues with the dean/chairs/directors.

- Working with the associate dean for research to mentor and develop faculty grantsmanship skills and reinforce the important role of sponsored research in tenure/promotion progression.
- Serving as Academic Program Liaison for USC curriculum policy and approval processes and liaison to the USC Graduate Council.
- Attending and supporting the Dean's Student Advisory Council.
- Addressing graduate student grievances, petitions and appeals (evoking grievance committee action when required, through the school's Scholastic Standards and Petitions Committee).
- Overseeing the scheduling and management of regular classroom peer reviews of teaching.
- Overseeing appointments and renewals of adjunct faculty, affiliate faculty, and term graduate faculty as required.
- Overseeing the Office of Graduate Student Services (OGSS) and the public health Practice and Workforce Development group (see below).

Dr. Hardin has been with the Department of Epidemiology and Biostatistics at the Arnold School since 2003, first as a research associate professor, then moving to a tenure track position as associate professor in 2011. He received tenure as associate professor in 2014 and became a full professor in fall 2016. As such, he has strong familiarity with the policies and procedures and responsibilities of this new position.

The *Office of Graduate Student Services* coordinates recruitment for graduate programs, facilitation of student applications to graduate programs, and maintenance of PHGrad (an internal web-based system for applications, progression, and graduation data management). OGSS also organizes the school-wide new-student orientation for graduate students, provides support for the Dean's Student Advisory Council and for the Delta Omega annual nomination/induction activities, and assists with special events such as the school's annual hooding ceremony.

Faculty and staff in the *Practice and Workforce Development* group provide support for student practicum identification and placement; monitor the practicum database and evaluation efforts; coordinate workforce development and continuing education for the workforce; administer the general MPH and certificate of graduate studies in public health; and coordinate PUBH 700: Perspectives in Public Health.

Undergraduate student affairs. The associate dean for undergraduate student affairs, Dr. Sara Corwin, is responsible for the following:

- Providing leadership, development, and oversight for the undergraduate programs in the school.
- Coordinating 10 undergraduate advisors for triannual recruitment, orientation, and advisement of undergraduate students in public health and exercise science.
- Overseeing the undergraduate curriculum and working with department chairs/faculty to revise/develop courses and curriculum as the needs of students and employers change.
- Providing general public health courses (PUBH) and coordinating/scheduling discipline-specific undergraduate course offerings to be regularly available to students.
- Representing the school on both school and campus-wide committees (including the Assistant/Associate Deans Council) to facilitate communication about and support for quality academic programs and services for undergraduate student success.
- Directing and coordinating intervention efforts for undergraduate students facing unique academic, logistical, and personal challenges.
- Providing leadership in policy formulation and program development to support undergraduate education and student success within and beyond the school.
- Recruiting, managing, assigning, and evaluating undergraduate advisors.

- Working with academic departments for the consistent delivery of required and elective undergraduate courses of appropriate quality and rigor for our growing undergraduate student body.

Dr. Corwin has been associated with the Arnold School since 1996, first as an instructor, then as non-tenure track faculty since 2001. She became undergraduate director of the public health degree program in 2010 and assistant dean for undergraduate student services in 2012. She was named associate dean for undergraduate student affairs as a result of the reorganization in fall 2016.

The *Office of Undergraduate Student Services* (currently led by Dr. Corwin) provides undergraduate orientation and advising services for the public health (PUBH) and exercise science (EXSC) undergraduate programs, facilitates new student orientation sessions, recruits new students at campus admissions events, monitors student progress toward degree, provides undergraduate career counseling services (including coordinating professional development seminars), and handles undergraduate petitions and appeals.

Operations and accreditation. The associate dean for operations and accreditation, Dr. Lee Pearson, is responsible for:

- Developing and overseeing the schoolwide annual budget from state and university appropriations, indirect costs recovery, and gift/endowment income.
- Approving financial transactions, such as travel authorizations and reimbursements, contract approvals, and USC Education Foundation expenditures from various accounts.
- Overseeing school human resources functions, including reviewing and approving staff hiring, raises, bonuses, and payroll; approving faculty salary and supplement requests; overseeing tenure-track faculty start-up logistics.
- Overseeing classroom scheduling in the Public Health Research Center (with department staff and USC registrar).
- Overseeing the Information Technology Core and Web Development and Communications Core, working in partnership with the respective directors of those areas (see below).
- Coordinating school-level strategic planning and implementation (including the annual *Arnold School Blueprint for Academic Excellence*).
- Supporting the gathering, management, and analysis of operational information/data
- Ensuring that the Arnold School maintains its various accreditations (working with the dean, other academic deans, chairs, and the director of evaluation and academic assessment).

Dr. Pearson has worked for and with the Arnold School in various capacities since 2003, beginning as a research associate and project director. In 2005, he accepted a dual administrative role serving as the director of special projects for the Office of the Dean and as the Homeland Security liaison for the university's Office of the Vice President for Research and Health Sciences. In 2007, he became founding director of what is now the SC Institute of Medicine and Public Health. Dr. Pearson also served for many years as adjunct faculty in the Arnold School's Department of Health Promotion, Education, and Behavior where he is now a clinical associate professor. He was named associate dean for operations and accreditation in September 2016. Dr. Pearson brings unique skills and experience from his diverse employment history into this new position.

The *director of evaluation and academic assessment,* Dr. Delores Pluto, reports to the associate dean for operations and accreditation and works with chairs, faculty, and staff to assess the performance of academic programs against learning outcomes. She oversees school-level data collection efforts, such as course evaluations, graduate exit surveys, and alumni surveys and provides student data for annual reports to the school, university, CEPH, and ASPPH. She also provides leadership support related to comprehensive outcome tracking and reporting efforts that are vital to meeting accreditation standards.

The *Information Technology Core* provides hardware and network support for school faculty and staff; supports normal research computing needs in the school; maintains the school's file, web, and application servers; consults on computer and technology purchases; supports the audio/visual equipment for the school's conference and seminar rooms; and operates student computer labs.

The *Web Development and Communications Core* provides website design and hosting; custom web application development; mobile application development; technology consulting; centralized database management and security consulting; audio/video production; electronic data capture; and specialized electronic communication dissemination. Many of these services are provided on a fee-for-service basis to funded faculty and departments/centers.

Diversity, equity, and inclusion. The associate dean of diversity, equity, and inclusion, Dr. David Simmons, is responsible for:

- Serving as a resource to all Arnold School faculty and search committees for provision of diversity, equity, and inclusion training and policy discussions.
- Promoting diversity, equity, and inclusion awareness and enrichment to faculty, staff, and students through recruitment of thought-provoking seminar speakers, creating working group diversity discussions, and engaging in one-to-one meetings with under- and well-represented faculty, staff, and students.
- Managing school-wide efforts to improve workforce diversity, equity, and inclusion by engaging human resources in diverse recruitments at every level.
- Representing the school on the Council of Academic Diversity Officers.

Dr. Simmons has been on the faculty of the Arnold School and the Department of Anthropology in the College of Arts and Sciences since 2005. He has served on the university's Diversity Committee since 2011 and currently serves as chair of that committee. He was named associate dean of diversity, equity, and inclusion in 2015 and chairs the school's Diversity and Inclusion Committee.

Clinical public health. Dr. Ronnie Horner, the associate dean for clinical public health, is responsible for:

- Overseeing all educational and research activities in clinical public health with USC-partnered medical delivery systems, i.e., Greenville Health System, Inc. (GHS) and Palmetto Health, Inc.
- Coordinating activities of faculty presently at GHS (each of whom have a home academic department in the Arnold School) and leading tenure-track faculty searches tenure-track faculty to be hired in 2017 and 2018 and based in GHS.
- Serving as public health liaison with the USC School of Medicine-Greenville.
- Serving as public health liaison with the statewide Health Sciences South Carolina initiative.
- Coordinating future course offerings by public health faculty to the greater Greenville community via satellite Arnold School facilities conjoint with the USC School of Medicine-Greenville.

Dr. Horner has been a tenured professor with the Arnold School and director of The Institute for the Advancement of Healthcare since 2013. The institute is a partnership between the Greenville Health System and the University of South Carolina for the purpose of fostering research collaborations between the two faculties. He was named associate dean for clinical public health in January 2016.

Research. The school's Office of Research was founded in 2001 to assist the school's faculty, staff, students, and their research partners with activities designed to increase research productivity for the school. The associate dean for research, Dr. Alan Decho, is responsible for:

- Providing general oversight of the office and strategic leadership that promotes effective seeking and receipt of extramural funding for research.

- Representing the school on the campus-wide Associate Deans Council of the VP for Research where, for example, concerns related to IRB, animal models, HIPPA, research ethics, etc. may be raised and discussed, or large interdisciplinary grant proposals designed and produced.
- Regularly reviewing the work and productivity of all school-level research centers (in partnership with the dean). Center directors are responsible for the grants/contracts that largely fund their centers and for the day-to-day operations of the centers. The centers are described in more detail in criterion 3.1.
- Overseeing the office's two staff divisions (called cores, see below).

Dr. Decho has been on the faculty of the Arnold School since 1994, receiving tenure in 1998. He is a global expert in the role of bacterial biofilms in pathogenic and non-pathogenic bacteria. He holds funding from the NSF and the NIH. He was nominated and selected by the faculty as associate dean for research in 2014.

Research Pre- and Post-Award Support Core (called the Research Support Core for short) assists school faculty, staff, and students with grant and contract proposal development; arranges pre-submission peer reviews of major grant proposals; works closely with the university's Sponsored Awards Management office to route, review, and track the school's grant and contract proposals; produces reports and analyses of sponsored award activity for the school; and provides training to faculty and staff on budget development. Post-award support includes technical assistance related to grant and contract awards, such as support for PeopleSoft, the Finance Intranet, the General Accounting Intranet, and adherence to agency and university policies and procedures for extramurally funded research.

The *Core for Applied Research and Evaluation* operates on a user fee-for-service model. It helps its partners to improve public health practice and systems by providing evaluation services, including process, outcome, development, and economic evaluation; qualitative and quantitative data collection and analysis; quality improvement consultation; community engagement; group facilitation and strategic planning; and translation of research into practice.

Academic departments. The school has six academic departments: Environmental Health Sciences (ENHS); Epidemiology and Biostatistics (EPID/BIOS); Health Promotion, Education, and Behavior (HPEB); Health Services Policy and Management (HSPM); Communication Sciences and Disorders (COMD); and Exercise Science (EXSC). The physical therapy and athletic training programs are located in the Department of Exercise Science. Programs offered by the school are discussed in detail in the criteria in section 2. Each department has a chairperson who reports to the dean and oversees instructional programs, research activities, research compliance, service activities, faculty development, student welfare, support staff, and budget. In addition, each department has one or more program directors to oversee individual academic programs. Faculty members report to the department chair and work with the department chair to establish and implement departmental policies and procedures.

Department chairs are also responsible for oversight of specialized units in their departments, such as those shown on the organizational chart. The *USC Speech and Hearing Research Center* in COMD provides a variety of diagnostic and treatment programs for individuals of all ages with communication disorders. The *Consortium for Latino Immigration Studies* in EPID/BIOS promotes and coordinates interdisciplinary and transnational research on the experiences of Latino/as in South Carolina and the Southeast. The Consortium works closely with *PASOs*, a community-focused program that provides culturally responsive education on family health, early childhood, and positive parenting skills; individual guidance for participants in need of resources; and partnership with health care and social service providers to help them provide more effective services. The *Rural Health Research Center* in HSPM focuses on investigating persistent inequities in health status within the population of the rural US, with

an emphasis on inequities stemming from socioeconomic status, race and ethnicity, and access to healthcare services in the southeastern US.

Development and alumni relations. Charles Pulliam, director of development and alumni relations, reports jointly to the dean and to the university's central development office. He works closely with the dean and other school leadership to identify and cultivate potential donors and to work with the school's benefactors, including the Arnold family, Blue Cross and Blue Shield of SC, AFLAC, Ramboll ENVIRON, Nebupure, and many others. The Office of Development and Alumni Relations is responsible for procuring financial support for the Arnold School by fostering philanthropic partnerships with individual, corporate and foundation donors. The office works closely with Arnold School faculty and student researchers to discover and apply for competitive grants, secure scholarships, create endowments, and fund school programs. The office also serves as the center for the school's alumni relations, building strong connections with alumni by communicating school events and news and by encouraging graduates to become public advocates of the school and of public health.

1.4.c Description of the manner in which interdisciplinary coordination, cooperation and collaboration occur and support public health learning, research and service.

The Arnold School's faculty members cooperate and collaborate extensively within the school, across the university, throughout the local community, and in many areas of the state, region, and nation.

Within the school, faculty work across departments to ensure the core public health courses serve the needs of all programs. Faculty in the Office of Undergraduate Student Services, who support the undergraduate programs, work closely with the other departments that offer undergraduate courses.

Faculty regularly work across departments within the various centers and on multidisciplinary grants. A table listing collaborations through the school's centers is included in the ERF as table 1.4.c.) For example:

- The Prevention Research Center, led by Dr. Sara Wilcox of EXSC, works with faculty from EXSC, EPID/BIOS, HPEB, the College of Social Work, the College of Nursing and the Department of Psychology in the College of Arts and Sciences. The center partners with Clemson University; state agencies, such as SC Department of Health and Environmental Control (SC DHEC); and community organizations, such as the SC Conference of the United Methodist Church, Fairfield Behavioral Health Services, Fairfield Community Coordinating Council, and Eat Smart Move More Fairfield County.
- The Office for the Study of Aging is co-led by Dr. Daniela Friedman and Dr. Lee Pearson of HPEB. Other faculty involved represent HPEB, EPID/BIOS, EXSC, COMD, the College of Social Work, the College of Nursing, the School of Medicine, and the College of Engineering and Computing. External partners include state agencies that support older adults (including SC DHEC, SC Department of Health and Human services, SC Department of Mental Health, and the Lt. Governor's Office on Aging) as well as state and local service providers (e.g., Alzheimer's Association, Leeza's Care Connection, and the Friendship Village).
- The Consortium for Latino Immagration Studies, led by Dr. Myriam Torres of EPID/BIOS, works with faculty from HPEB, HSPM, the Department of Psychology, and the College of Social Work. They also partner with SC DHEC, the SC School Improvement Council, the Children's Trust of SC, and HopeHealth, Inc.

Across the university, the school's faculty participate on doctoral committees, give guest lectures, and conduct collaborative research with faculty from many other colleges. Numerous faculty hold joint or adjunct faculty appointments in other units and serve on various advisory committees. Five dual and/or

joint degree programs exist between the school and other colleges and schools on campus, demonstrating the recognition of the inter-dependency and integration of the health professions (see criterion 2.13). We also work with other schools on interdisciplinary graduate certificate programs (see criterion 3.3).

The school maintains strong relationships with the *SC Department of Health and Environmental Control* (SC DHEC), *Palmetto Health Alliance*, *Blue Cross and Blue Shield of South Carolina*, and numerous other local and state agencies. In addition to formal field experiences (practica, residencies, and internships), the school has numerous contracts with local agencies for faculty consultation and graduate student assistantships. Several departments utilize practitioners as instructors for various courses and clinical supervision. Exposure to this current real world experience is invaluable for students and enhances the school's academic programs.

Through numerous research projects and centers, the Arnold School partners with other colleges and schools at the university, other universities in the state and across the country, public health-related state agencies and private-sector organizations, and a diverse array of community groups. Key examples of these partners include SC DHEC, the SC Department of Health and Human Services, the SC Hospital Association, the SC Medical Association, the SC Institute of Medicine and Public Health, the SC Office of Rural Health, Health Sciences South Carolina, and the SC Campaign to Prevent Teen Pregnancy.

These far-reaching and diverse collaborations are a significant factor in allowing the school to have one of the most consistently successful track records in research at the university. In addition, many of our graduate students have assistantships working in these partner organizations – learning not only from their direct research and practice work but also from the unique experience of collaborative engagement and service. Many of these multi-partner project activities also have service and workforce development components. For example, the Office for the Study of Aging maintains the state's Alzheimer's Disease Registry, in partnership with the SC Department of Health and Human Services, the SC Department of Mental Health, the USC School of Medicine, and the SC Office of Revenue and Fiscal Affairs (Division of Research and Statistics). This project has led to the creation of tailored training and workforce development programs for eldercare providers and family caregivers. (See criteria 3.2 and 3.3 for more information about service and workforce development.)

Another school partner is the *SC Institute of Medicine and Public Health*, which was established in 2011 as an informed, neutral, non-partisan convener around the important health issues in our state. The institute also serves as a provider of evidence-based information. The work of the institute is an extension of the South Carolina Public Health Institute which began in 2007 under a collaborative partnership between the Arnold School of Public Health and the South Carolina Department of Health and Environmental Control. Funding for the initial strategic planning and formation of the institute was provided by the Robert Wood Johnson Foundation and expanded with support from The Duke Endowment. Since its inception, the work of the Institute has received support from a diverse array of public and private sources.

The Arnold School and the *Greenville Health System* have an ongoing research partnership focused on improving the delivery of healthcare, advancing population health, and building research capacity within the health system. Established in 2012 and jointly supported by both entities, the Institute for the Advancement of Healthcare serves to link Arnold School faculty with clinical and other investigators of the Greenville Health system to conduct research into clinically-driven issues to find feasible and sustainable solutions. Examples of the successful partnership include an ongoing investigation into the implications of anxiety and depression in the clinical management of children with autism spectrum disorders, a recently completed pilot controlled trial of the impact of mindfulness on cancer survivors in reducing the negative effects of chemotherapy on sleep and mental health, and a recently initiated

study of the ability of mobile medical apps to improve access to care, the patient's experience with care and improve health system efficiency in delivering care. The Institute also provides seed grants to university-based investigators to develop collaborative projects with clinical investigators in Greenville.

Beginning in fall 2017, the Arnold School anticipates formal establishment of a satellite campus in Greenville to advance its work into clinical public health, that is, the partnership of public health and clinical medicine to improve population health through health systems. Recruitment is underway for three full-time tenure-track faculty who will be based in Greenville, working with staff and faculty in the Greenville Health System and School of Medicine-Greenville on research projects. They will teach graduate students in Greenville and Columbia through state-of-the-art classrooms in the School of Medicine-Greenville.

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

This criterion is met.

Strengths:

- The school has a strong leadership team that fosters an effective organizational setting conducive to public health learning, research, and service. Although some members of the team are relatively new to their roles, they all bring a long history of close engagement with the Arnold School. The school's leaders promote faculty engagement within and beyond the university community and advance a research climate that continues to yield distinguished scholarship opportunities that involve students, interdisciplinary faculty and community partners alike.
- The school has strong partnership activity in teaching, service and research through its departments and centers. These partnerships occur among departments in the school, across colleges and schools in the university, and with external partners that vary from academic institutions and government agencies, to non-profit organizations and community groups.

Weaknesses:

- Because the BS in EXSC program was the only undergraduate program in the school for more than 20 years, integration of student support services with the interdisciplinary public health programs has been on ongoing challenge, exacerbated by separate physical locations and limited personnel resources.

Plans:

- The 2016 reorganization provides more centralized infrastructure for the undergraduate programs, including physical relocation of the EXSC advising faculty and staff. Going forward, services can be provided more efficiently and consistently with the expanded centralization.

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

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

The school's **Administrative Council** is the primary decision-making body of the school and acts as a liaison between the higher administration and the faculty and staff in departments. It is comprised of the dean, associate deans, and department chairs. The council reviews and approves programmatic and policy decisions for the Arnold School, although the dean has the authority to make decisions against or in the absence of the council's endorsement. In these discussions the department chairs represent the views of their respective faculty and staff. Planning activities at the school level primarily occur within the Administrative Council and often in the context of development of the school's *Blueprint for Academic Excellence*. Discussion of any substantive topic extends over multiple meetings to allow chairs to discuss the issues with and solicit input from the departments.

In addition to the Administrative Council, the school has a variety of standing committees and councils (see table 1.5.a). The school also convened its Self-Study Steering Committee and strategic planning workgroups to work through the planning and self-study process, as described in sections 1.1.e and 1.2.d. Detailed descriptions of all committees and committee membership lists for AY2016-17 are included in the ERF.

Table 1.5.a. Description of school committees

Committee & Charge	Composition (term)
Standing committees	
The **Academic Programs Committee** oversees the process for proposing new curricula or courses and for making changes to existing curricula. Since the university implemented an online Academic Programs Proposal System, this committee works through email, rather than face to face meetings.	• One faculty representative per department (3 years) *ex officio and co-chairs*: • Associate dean of faculty affairs & curriculum • Associate dean for undergraduate student affairs
The **Diversity and Inclusion Committee** is charged with developing, maintaining, and monitoring the school's progress in implementing its *Strategic and Tactical Plan Concerning Diversity, Inclusion and Equity*. The committee identifies policies and resources at the university level that can assist the school in meeting its diversity goals, and recommend policies and procedures for the school level concerning faculty, staff, and student recruitment and retention. Thinking beyond race/ethnicity, the committee advises the school in developing a culture of respect, acceptance, and inclusivity.	• One faculty representative per department (3 years) • At least one student (1 year) *ex officio and chair*: • Associate dean for diversity, equity, and inclusion

Committee & Charge	Composition (term)
The **Evaluation Committee** was developed to ensure a purposeful, collaborative approach to all planning and evaluation activities. The committee assists school leadership in developing evaluation plans in connection with the strategic planning process and reviewing and making recommendations for improving the school's data collection and evaluation processes. All of this is focused on ensuring that useful, accurate data are efficiently collected with a minimum duplication of effort and that the evaluation results are available and used by school and department leadership.	• One faculty representative per department (3 years) • At least one student (1 year) • At least one representative from the public health community (alumni and/or partner) *ex officio and co-chairs*: • Associate dean for operations & accreditation • Director of evaluation & academic assessment
The **Tenure and Promotion Committee** promotes excellence in performance of teaching, research, and service of tenure-track faculty. The committee is responsible for evaluation of candidates for tenure and promotion; third-year review of untenured faculty; post-tenure review of tenured faculty; and development and approval of tenure and promotion guidelines and criteria.	• All tenured faculty • Chair, tenured professor elected by committee (2 year term)
The **Scholastic Standards and Petitions Committee** meets as needed to act as an investigatory and advisory body on student appeals and grievances of an academic nature (excluding grades), and reviews and recommends appropriate action on academic requirements and standards, current academic policies and practices, and petitions from students who seek relief from scholastic regulation and requirements. Committee responsibilities are included in the university's *Faculty Manual*.	• At least one faculty representative per department (3 years) • At least one undergraduate and one graduate student (1 year) *ex officio*: • Associate dean for undergraduate student affairs (chair) • Associate dean for faculty affairs and curriculum
Special Councils	
The **Council of Program Directors** addresses policies and issues related to student services and support, including student recruitment and application procedures, policies related to student support, and student travel awards. Members of this council are expected to be actively involved with annual program assessments. This council is advisory to both the Division of Academic Affairs and to the dean. Subgroups of the council meet separately to address issues for specific groups of programs, e.g., undergraduate, graduate, or MPH. These focused meetings often include program coordinators and student services staff.	• All graduate and undergraduate program directors *ex officio and co-chairs*: • Associate dean of faculty affairs & curriculum • Associate dean for undergraduate student affairs
The **Research Advisory Council** (RAC) advises the Office of Research on ways to increase the school's research productivity; recommend specific research topics and directions for development within the school; provide guidance on protocols for research functions; review new research policies and procedures; and serve as a communication link between the Office of Research and faculty and staff within each member's department and/or affiliated unit.	• One faculty representative per department (3 years) *ex officio*: • Associate dean for research (chair)

Committee & Charge	Composition (term)
The mission of the **Dean's Student Advisory Council (DSAC)** is to provide departmental student representation to the school administration to address student concerns; promote volunteer, social, and networking opportunities; and to aid in gaining and retaining top tier students.	• Two graduate students per department (1-2 years) • Two undergraduate students per department (PUBH, EXSC; 1-2 years) • Liaisons from the university's graduate student association, Institute for Healthcare Improvement Open School, and APHA student caucus as available. *ex officio*: • Dean • Associate dean for faculty affairs and curriculum • Staff support by the Office of Graduate Student Services
Awards Committees (award recipients are recognized at the annual hooding ceremony)	
The **Faculty Research Award Committee, Faculty Service Award Committee,** and the **James A. Keith Teaching Award Committee** select a faculty member to receive the respective faculty award**.** The award announcement, nomination, and selection process is coordinated by the Division of Academic Affairs.	• Three to four recent past winners of the respective awards *ex officio*: • Associate dean for research (research award) • Associate dean for faculty affairs & curriculum (service and teaching awards)
The **Student Awards Committee** selects graduate students to be recognized at the annual hooding ceremony. Student awards include the Jeffrey Keith Mattison Outstanding Student Achievement Award and the Doctoral Student Achievement Award. The school student award announcement, nomination, and selection process is coordinated by the Office of Graduate Student Services.	• One faculty representative per department (3 years) • One student for the Mattison award. *ex officio*: • Associate dean for faculty affairs and curriculum • Director of graduate student services
The **Alumni Awards Committee** selects alumni to receive the **Gerry Sue Arnold Alumni Award** (alumni who graduated less than 10 years prior) and the **Norman J. Arnold Alumni Medal** (alumni who graduated more than 10 years prior). The alumni award announcement, nomination, and selection process is coordinated by the Office of Development and Alumni Relations.	• Three school alumni from different disciplines *ex officio*: • Associate dean for operations and accreditation • Director of development and alumni affairs

In the course of conducting the self-study, the school's leadership reviewed the committee structure and made some changes (which are reflected above). Two committees, which hadn't met in several years, were disbanded; the Diversity and Inclusion Committee, which started as a strategic planning workgroup, was given permanent status; and the Evaluation Committee was created. The full development of the latter two committees is in process. The inaugural meeting of the Evaluation Committee will occur in spring 2017. The Diversity and Inclusion Committee is discussed further in criterion 1.8.

1.5.b Description of the school's governance and committee structure's roles and responsibilities relating to the following: i) general school policy development; ii) planning and evaluation; iii) budget and resource allocation; iv) student recruitment, admission and award of degrees; v) faculty recruitment, retention, promotion and tenure; vi) academic standards and policies, including curriculum development; vii) research and service expectations and policies.

i. General school policy development. The Administrative Council discusses and recommends policies to the dean and therefore is the primary body for school policy development. In these discussions, the department chairs represent the views of their respective faculty and staff. Discussion of any substantive topic (e.g., recent revisions of protocols for non-tenure track faculty) extends over multiple meetings to allow chairs to discuss the issues with and solicit input from the departments. Some chairs collect the information within the department and share it with the Administrative Council, but faculty are welcome to respond directly to whomever has a lead role in that particular discussion. While decisions ultimately must be made in the dean's office, the culture of the school is to seek opinion from among the school's broad leadership for all policy decisions.

Any policies within the school must be consistent with university policy and state law. Thus, any curriculum-based issues ranging from admission prerequisites to course proposals to graduation requirements must be approved by the Faculty Senate for undergraduate programs and the Graduate Council for graduate programs. Additional approval by the Board of Trustees and the CHE may be required for major changes. Faculty standards such as tenure and promotion criteria are approved by the provost and the University Committee on Tenure and Promotion, as are decisions concerning individual tenure and promotion.

ii. Planning and evaluation. Planning activities at the school level primarily occur within Administrative Council and often in the context of development of the *Blueprint for Academic Excellence* and the recent strategic planning process. The *Blueprint* is discussed in more detail in the response to criterion 1.2. Department chairs are encouraged and expected to solicit department input into any plans. Individual departments also have internal planning processes; these planning activities impact the school's priorities and planning and are developed in the context of the current school strategic plan. Any department or school committee can make recommendations for programmatic or policy change. Major procedural changes at the school level are developed initially through discussions with the appropriate constituents before implementation. Additional planning has been undertaken by the strategic planning workgroups, as described in section 1.1.e.

In 2013, the school hired a director of evaluation and academic assessment to provide leadership and support for the school's evaluation activities. This included revising and converting paper surveys into an online format, improving the academic assessment process for the programs, and improving the reporting of results of the data collection processes. She will co-chair the new Evaluation Committee, which will help identify improvements to our data collection and reporting activities to improve the ability of the leadership to use the data in planning and decision making.

iii. Budget and resource allocation. The Arnold School operates through multiple major revenue sources, including tuition, student fees, state appropriations and extramural grants and contracts. The dean of the school provides executive leadership and oversight for all funds at the school level and is supported through the detailed guidance of the school's administrative (business) manager. The associate dean for operations and accreditation also provides leadership for this specific area of operations. The dean, associate dean, and the administrative manager work together to develop the school's operating budget and hold annual budget meetings with all department chairs and business managers to assess the financial health of the departments and address resource issues that may arise.

Ongoing communication between the administrative manager and the business managers across the departments, centers, and programs enables efficient dissemination of information pertaining to financial management practices as well as the effective adherence to budgetary policies.

Each spring, the school's administrative manager, working with the department business managers, provides an estimate of the recurring funds and any carryforward for the next fiscal year. The departments construct a budget, detailing expected personnel expenses, including faculty, staff, and student employees and broad information about non-personnel expenses. These budgets must include reasonable expectations about faculty salary release from grant funding and cannot include salaries for vacant faculty positions. Salary lines for staff vacancies are allowed if the filling of the position is authorized and likely to occur within the budgeted year. The departments can request new recurring or one-time funds at this time for specific purposes. The dean, associate dean for operations and accreditation, and administrative manager review these salary expenses and other requests with each department chair and department business manager. Final budget allocations are based on balancing the department requests against anticipated budget resources.

The detailed budgetary process is described in the response to criterion 1.6.

iv. Student recruitment, admission, and award of degrees. The leadership of the Arnold School is engaged in partnership with key university entities in overseeing the recruitment and admission of students and the awarding of degrees. Through the school's Administrative Council, the dean, associate deans, and department chairs work together to track high-level progress on the school's enrollment and student matriculation. The Council of Program Directors serves as a direct resource for Administrative Council in guiding academic processes and ensuring that recruitment and admissions reflect the values of excellence and equity in academic requirements and standards as well as in all policies and practices. Each department also maintains admission and curriculum committees for their particular programs. Admissions and curriculum committees for the general MPH and the MPH in physical activity and public health are interdisciplinary committees with representation from multiple departments, as shown in table 1.5.a.

v. Faculty recruitment, retention, promotion, and tenure. The Office of Faculty Affairs and Curriculum is responsible for coordinating activities related to faculty recruitment, retention, and tenure and promotion, and for maintaining and updating related policies and procedures. The school's tenure and promotion committee is responsible for evaluation of candidates for tenure and promotion; third-year review of untenured faculty; post-tenure review of tenured faculty; and development and approval of tenure and promotion guidelines and criteria. The school also maintains policies for appointment, evaluation and promotion of clinical/instructional/practice faculty and research faculty. Arnold School faculty policies and procedures are described in more detail in criterion 3.2. Copies of school policies can be found on the faculty affairs web page and are included in the ERF.

vi. Academic standards and policies. The school is guided by established policies and procedures of the university administration regarding academic standards, policies, and curricula. The school administration and committees and departmental committees are involved in the process of managing standards and policies. Three school committees that are directly involved with academic standards and policies are the Council of Program Directors for student issues, the Academic Programs Committee for curricular issues, and the Tenure and Promotion Committee for faculty issues. In addition, the Scholastic Standards and Petitions Committee works closely with the university's Office of Academic Integrity on alleged student violations of academic responsibility standards.

As discussed above and in the response to criterion 1.3, faculty initiate all curricular proposals, which are subsequently approved through appropriate channels outside the school. In general, most proposals

submitted will be approved, often after an iterative process of revisions requested by the approving level (e.g., detail in the syllabus or wording in the course description, or for letters of concurrence from other campus units). For all graduate programs, academic standards or policies must satisfy the minimum requirements established by The Graduate School. Curricula, grade requirements, retention, progression requirements, and thesis/dissertation committee composition are initiated at the department/program level and are subject to review and approval by The Graduate School. The Graduate Council sets university policies concerning admission, progression, and graduation for all graduate students. Comparable undergraduate policies are established and monitored by the Faculty Senate.

vii. Research and service expectations and policies. The school strongly encourages research and service activities, as documented in the policies for tenure and promotion and related policies for non-tenure track faculty. Typically, individual faculty members select and initiate research and service projects, although some projects result from department or school initiatives or external requests. Annual review of faculty gives emphasis and appropriate credit to efforts in research performance. In addition to the research incentive based on IDC generation described in criterion 1.6, the school has policies concerning salary release, research supplement to base salary, and teaching buy-out options. See criterion 3.1 for further detail about research policies and procedures and criterion 3.2 for further detail concerning service activities. Faculty review policies are discussed in criterion 4.2.

As mentioned in criterion 1.4, the school's Office of Research assists the school's faculty, staff, students, and their research partners with activities related to increasing research productivity for the school. The Research Advisory Council (RAC) serves in an advising capacity to the associate dean for research and the director of the Office of Research.

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

As a state institution, the rights and obligations of administrators, faculty and students are largely defined by university policy and state law. The University of South Carolina system is guided by a set of established bylaws, which are supported by standardized policies and procedures that are applied on all campuses. As such, the school does not have a separate constitution, set of bylaws, or similar comprehensive policy document. The USC Policies and Procedures Manual is an online repository of all university policies, including the *USC Faculty Manual.* The *USC Faculty Manual* "delineates faculty organization and confirms the authority of the faculty to participate in the governance of the university, especially in regard to academic matters." A copy of the policy index is included in the ERF to illustrate the breadth of policies addressed in the document. Copies of specific policies referenced in this self-study are also included in the ERF. The university documents student policies in the academic bulletin.

Internal school policies that are found on the faculty affairs web page (and included in the ERF) include:

- Policies and procedures for tenure track and non-tenure track faculty; annual review; third-year review and post-tenure review
- Faculty search procedures
- Charges of school committees and councils
- Evaluation of department chairs (every three years)

Other school internal policies address specific programs such as the dean's office student travel program and the Arnold Fellowships are included in the ERF. Each department has its own internal policies and committee structure. For example, most departments have admission and curriculum committees for their particular programs.

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

A total of 29 primary faculty members currently serve or recently served (in AY2015-16) on the faculty senate and/or the graduate council (see table 1.5.d.1). In addition, 49 primary faculty members serve on a wide variety of university advisory committees (see table 1.5.d.2 in the ERF).

Table 1.5.d.1 Faculty members on university governance committees (during past 2 academic years)

Faculty member	Committee	Term
Annang, Lucy	Faculty Senate, Committee on Instructional Development	2013-2016
Behroozmand, Roozbeh	Faculty Senate, Faculty Welfare Committee	2015-2018
Brandt, Heather	Graduate Council	2015-2016
Brandt, Heather	Graduate Council, Fellowships & Scholarships Committee (chair)	2013-2016
Burch, Jim	Faculty Senate	2016-2019
Cai, Bo	Faculty Senate, Tenure Review Board	2013-2016
Carson, Jim	Faculty Senate, University Athletics Advisory Committee	2013-2016
Chakraborty, Hrishikesh	Faculty Senate	2013-2016
Chakraborty, Hrishikesh	Faculty Senate, Committee on Scholastic Standards & Petitions	2013-2016
Chatterjee, Saurabh	Faculty Senate	2014-2017
Davis, Rachel	Faculty Senate	2013-2016
den Ouden, Dirk	Graduate Council	2015-2018
den Ouden, Dirk	Graduate Council, Fellowships & Scholarships Committee	2015-2018
Durstine, Larry	Faculty Senate, Univ. Committee on Tenure & Promotions	2013-2016
Fritz, Stacy	Faculty Senate, Senate Steering Committee	2013-2016
Fritz, Stacy	Faculty Senate, University Athletics Advisory Committee (chair)	2013-2016
Fritz, Stacy	Graduate Council, Academic Policy and Practices Committee	2015-2018
Geraci, Marco	Faculty Senate	2016-2019
Herter, Troy	Faculty Senate	2013-2016
Horner, Ronnie	Faculty Senate, Univ. Committee on Tenure & Promotions	2015
Liese, Angela	Faculty Senate, Univ. Committee on Tenure & Promotions	2016-2019
Mann, Emily	Faculty Senate	2014-2017
McDermott, Suzanne	Faculty Senate, Committee on Professional Conduct	2013-2016
Monroe, Courtney	Faculty Senate	2016-2019
Ostermann, Jan	Faculty Senate	2013-2016
Qureshi, Zaina	Faculty Senate	2016-2019
Robillard, Alyssa	Faculty Senate, Honorary Degrees Committee	2013-2016
Rothenberg, Sarah	Faculty Senate, Committee on Curricula and Courses	2015-2018
Sarzsinski, Mark	Faculty Senate	2016-2019
Torres-McGehee, Toni	Faculty Senate, Senate Steering Committee	2014-2017
Torres-McGehee, Toni	Faculty Senate, University Athletics Advisory Committee	2014-2017
Wade-Woolley, Lesly	Faculty Senate, Committee on Libraries	2016-2019
Wang, Xuewen	Faculty Senate	2014-2017
Werfel, Krystal	Faculty Senate	2015-2018
White, Kellee	Faculty Senate, Committee on Instructional Development	2015-2018
White, Kellee	Graduate Council	2015-2018
Yeargin, Susan	Graduate Council	2015-2018
Yeargin, Susan	Graduate Council	2013-2016

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

The Dean's Student Advisory Council (DSAC) is the most visible student presence in the school's governance. The group is a liaison between the student body and the dean's office. The council plans several professional development and social events for students each semester, assists with the new student orientation each fall, and coordinates service activities for the students. DSAC includes at least two graduate student representatives from each department and (as of spring 2016) at least two undergraduate students from each department offering an undergraduate degree (PUBH and EXSC). In addition, students are members of the Scholastic Standards and Petitions Committee, the Diversity and Inclusion Committee, and the Evaluation Committee.

Students have several formal methods of input through evaluation processes. All students have the opportunity to evaluate the instructor of each course through a standardized instrument (see ERF). Results are summarized at the course/instructor and department level for both individual and programmatic evaluation. Ratings from the course evaluation are used in the tenure and review process. Students are invited to complete an exit questionnaire prior to or upon graduation, at which time they can comment more broadly about curriculum, faculty, instruction, advisement, and facilities. The survey also invites students to share their immediate career plans. Alumni from the graduate programs are also surveyed for feedback approximately one year after graduation. Undergraduate students provide feedback in surveys (conducted twice a year) about the advising process and less formally during meetings with their advisors.

Every department chair is evaluated every three to four years; students are invited to participate in this assessment activity by completing a short questionnaire and providing optional comments.

The school recommends that all search committees include a student as a non-voting member to play an active role on the committee and in committee deliberations. Committees are also encouraged to arrange for student meetings with visiting candidates and to gather and compile student input regarding the candidates, to be used in deliberations.

Many faculty members in the school, including administrators, maintain an open door policy as much as possible (in addition to posted office hours). Many students utilize these open-door opportunities for informal discussions to share concerns and suggestions for the school. While not well documented, this accessibility and these conversations are critical to maintaining the culture of community and mutual respect for which the school strives. They also provide valuable informational feedback about how the school is functioning.

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

This criterion is met.

Strengths:

- The school's administration engages a broad array of expertise and perspective through its Administrative Council.
- The school continues to have an effective and functioning system of self-governance with a balance between centralized governance and departmental autonomy.
- The school's faculty are well represented on university committees.
- Students from the graduate and undergraduate programs are afforded opportunities to provide effective input in governance and exercise their individual and collective leadership abilities.

Weaknesses:

- While students have multiple opportunities for involvement in school activities, their formal involvement in school committees is limited.

Plans:

- Recognizing the limited opportunities for students to be involved in governance, outside of DSAC, student members have been added to the Diversity and Inclusion Committee and the Evaluation Committee. Undergraduate students have been added to DSAC to ensure their participation in governance as well.

1.6 Fiscal Resources. The school shall have financial resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.

1.6.a Description of the budgetary and allocation processes, including all sources of funding supportive of the instruction, research and service activities. This description should include, as appropriate, discussion about legislative appropriations, formula for funds distribution, tuition generation and retention, gifts, grants and contracts, indirect cost recovery, taxes or levies imposed by the university or other entity within the university, and other policies that impact the fiscal resources available to the school.

The general operating budget for the school is comprised of student tuition and fees revenue, money the university allocates to the school from its state appropriations, and other university funds. In the current budget model (in effect since FY2010-11), the allocation of state funds and tuition to the school is determined by the provost, primarily based on the previous year's allocation with the possible addition and subtraction of recurring funds and one-time transfers. Examples of recurring funds include funds for cost of living salary and fringe benefit increases, provost's support of new faculty salary lines, and budget cuts. These are shown in table 1.6.b as "recurring university funds." Examples of one-time transfers (shown as "non-recurring university funds") include carry-forward, inter-collegiate agreements and provost support for startup commitments for new faculty hires, including SmartState chairs. Unspent funds from the previous year (carry forward) and some one-time transfers from the university are also part of non-recurring funds.

The tuition schedule published for students includes several embedded fees mandated by the Board of Trustees, including bond and renovation revenue, transportation fee, Wellness Center fee, student activities fee, Student Health Center fee, computer fee, and athletics activity fee. These fees total about 12% of tuition and are retained by the university. All students in the Arnold School also pay the health professions program fee (along with students in social work and nursing). The dean's office receives the health professions fee revenue to support undergraduate and graduate student services, student travel for professional development, technology maintenance and improvements for students, and a portion of annual accreditation costs. Several programs, such as physical therapy, have additional matriculation or enrichment fees justified by specific programmatic demand (e.g., workers' compensation and liability insurance; support of and access to dedicated discipline-specific facilities, such as special lab equipment/facilities and audiology booths). The revenue from these fees is distributed directly to the respective generating department. Revenue from the health professions program fees and other program fees are included in the tuition and fee line in table 1.6.b.

The tuition from all students enrolled in Arnold School summer classes (minus Board-mandated fees) is transferred to the school (shown under tuition and fees in table 1.6.b); however, any non-fee tuition for fall and spring semesters is embedded in the "recurring university funds" line item, as determined by the provost.

Direct cost expenditures (shown as "grants & contracts" in table 1.6.b) are managed within the department or center receiving the award and are dedicated to meeting the scope of the contract or grant. These expenditures include support for a large number of students and provide salary release for many faculty. Salary release is returned 100 percent to faculty home departments and is critical to departmental budgets.

The university's current federally negotiated indirect cost recovery (IDC) rates (through 6/30/2017) are 46.5% for on-campus research, 35% for on-campus service and training, and 26% for all off-campus grants (as long as at least 51% of the work is done off-campus). Of this IDC, the university retains 25% as

a facilities charge and 37.5% to the university's Office of Research. The remaining 37.5% is returned to the school. Of the IDC returned to the school, 10% is distributed to the faculty principal investigator (PI) as research incentive; the balance is divided either between the dean's office and the department of the PI or between the dean's office, the department of the PI and the center providing post-award support for the grant.

The school IDC accounts are used primarily for departmental, non-personnel operating budgets, and, when necessary, to support some research-related administrative staff and faculty start-up commitments. These funds also have supported school-wide seed grant programs and incentive programs, but these programs are now provided by IDC returns from the central Office of Research as "ASPIRE" intramural grants direct to faculty. IDCs frequently are used to meet institutional matching funds requirements of some extramural funding agencies.

Donors direct many charitable contributions (gifts in table 1.6.b) to specific purposes (e.g., scholarship programs). As accounts grow to maturity (i.e., achieve minimum balance), investment revenue can be drawn for targeted purposes. The USC Educational Foundation manages all gifts/donations, and annual investment proceeds from 2010 to 2016 have ranged from 3.5% to 4.5% on corpus. Most donations from the school's faculty and staff (Family Fund) and alumni (Annual Giving) are directed to discretionary accounts in the dean's office, departments, and centers. These funds are given as direct expenditure resources and are used for supports that cannot be paid from state or federal funds. The endowment line item in table 1.6.b is revenue from the Arnold Endowment.

1.6.b A clearly formulated school budget statement, showing sources of all available funds and expenditures by major categories, since the last accreditation visit or for the last five years, whichever is longer. This information must be presented in a table format as appropriate to the school. See CEPH Data Template 1.6.1.

For several years, the university operated under a responsibility-centered management budget model through which each academic unit received all tuition revenue and paid a series of taxes based on budget, faculty and staff full-time equivalent (FTE) count, carryforward, and credit hour generation. This model was suspended after FY 2009-10 with a return to the historical annual budget allocation model and therefore is not described in further detail. Table 1.6.b shows the annual budget using the current budget model from FY2010-11 through FY2015-16.

Table 1.6.b Sources of funds and expenditures by major category, fiscal years 2011 to 2016

	FY2010-2011	FY2011-2012	FY2012-2013	FY2013-2014	FY2014-2015	FY2015-2016
Source of Funds						
Recurring university funds[1]	11,057,785	11,998,768	13,078,865	14,172,430	14,676,282	15,509,860
Non-recurring university funds[2]	5,066,504	5,829,342	5,842,377	6,578,640	5,953,767	7,571,576
Tuition (summer only) & all student fees[3]	5,010,536	4,784,688	6,030,252	6,160,098	7,095,272	7,063,281
Grants & contracts[4]	18,864,023	18,870,536	19,762,604	21,618,994	25,669,370	24,619,616
Indirect cost recovery	1,758,777	1,798,954	1,739,846	1,496,063	1,633,075	1,825,028
Endowment[5]	376,107	319,710	287,722	268,596	268,596	317,989
Gifts[6]	381,293	258,030	534,038	3,813,323	332,109	1,368,495
Other – continuing education[7]	19,337	19,312	10,656	5,025	4,480	3,576
Other – revenue[8]	4,007,467	4,990,037	4,825,995	4,777,939	5,730,604	4,681,263
Total Funding	**46,541,829**	**48,869,377**	**52,112,355**	**58,891,108**	**61,363,555**	**62,960,684**
Expenditures						
Faculty salaries & benefits	12,335,213	14,187,782	16,767,109	18,403,416	18,897,688	20,018,598
Staff salaries & benefits	2,459,125	2,881,429	2,997,602	2,891,333	2,897,987	3,098,283
Operations	6,785,471	8,168,134	8,393,634	11,468,415	14,187,120	12,939,166
Travel	687,417	771,221	911,504	896,547	880,590	947,265
Student support[9]	4,431,951	4,448,028	4,768,352	5,165,840	5,341,398	4,724,968
Other – temporary staff[10]	8,009,997	8,637,324	9,281,336	9,170,159	9,403,932	9,450,275
Total Expenditures	**34,709,174**	**39,093,918**	**43,119,537**	**47,995,710**	**51,608,715**	**51,178,555**

[1] Blend of state appropriations allocated to the school by the university and revenue from spring and fall tuition from all Arnold School courses (minus fees, which are included in the line above.

[2] Non-recurring university funds include inter-collegiate agreements and startup costs for new faculty hires, including SmartState chairs. Unspent funds from the previous year (carry forward) and some one-time transfers are also part of non-recurring funds.

[3] Student fees include health professions and other program fees for Arnold School students for all terms. Summer tuition includes revenue from tuition from all students taking Arnold School summer courses.

[4] Direct expenditures

[5] Spendable allocation from the Arnold Endowment only.

[6] All gifts, including gifts to endowments.

[7] Revenue for continuing education programs in COMD.

[8] Transfers into the school over and above IDC, but majority of funds are from carry forward balance.

[9] Graduate assistant salaries, tuition supplements, scholarships, and fellowships.

[10] Salary and benefits for temporary, non-student staff plus honoraria for guest speakers, etc.

From FY2010-11 through FY2015-16, our operating revenue (the first three line items in the budget) has grown by 43% (or an average of 9% per year). Some increases relate to partial support of cost of living and fringe benefit increases, but most increases reflect our success in creating new faculty positions through various campus-level programs such as the Faculty Replenishment Initiative, the SmartState endowed chairs program, and junior faculty hires associated with the SmartState program. Carry forward funds are also included in operating revenue.

From FY2010-11 to FY2015-16, direct cost expenditures (shown as grants & contracts in table 1.6.b) increased 31% (average 6% per year). On average, direct cost expenditures make up about 40% of the school's total budget each year.

Revenue allocated by central administration to the school from indirect costs (IDC) has not increased as rapidly (4% since FY2010-11 or 1% per year), in part because of centralized withholdings for the university facilities fund and Office of Research (25% and 37.5% respectively). Overall IDC recovery is also affected by an increase in funding from sources that either restrict or do not allow IDC.

In 2015, the Arnolds pledged an additional $7 million to the school for development of the Gerry Sue and Norman J. Arnold Institute on Aging. The first payment to the endowment is reflected in FY 2015-16, but no spendable revenue will be available until FY2016-17. This accounts for the large increase in gift revenue over previous years.

Over half of the endowment revenue (all from the Arnold Endowment) is dedicated to fellowships for outstanding doctoral students ($40,000 per department in FY2010-11 through FY2015-16; $60,000 per department in FY2016-17). The revenue also supports operations of the Office of Development and Alumni Relations, expenses of school-wide seminar speakers, faculty international travel assistance, and special school events.

In table 1.6.b, "Other – continuing education" line item is revenue from continuing education programs in the Department of Communication Sciences and Disorders, while "Other – Revenue" includes transfers to the school over and above IDC, mostly from carry forward balances.

In the expenditures section of table 1.6.b, total expenditures have increased 47% (9% per year). In FY2015-16, 64% of the total expenditures was for faculty, staff, and other temporary staff salaries and benefits; 9% was for student support (e.g., salaries for graduate assistants, tuition stipends, fellowships, and scholarships); and 27% was for operations and travel (including student travel).

1.6.c If the school is a collaborative one sponsored by two or more universities, the budget statement must make clear the financial contributions of each sponsoring university to the overall school budget. This should be accompanied by a description of how tuition and other income is shared, including indirect cost returns for research generated by school of public health faculty who may have their primary appointment elsewhere.

Not applicable

1.6.d Identification of measurable objectives by which the school assesses the adequacy of its fiscal resources, along with data regarding the school's performance against those measures for each of the last three years. See CEPH Outcome Measures Template.

Table 1.6.d displays additional outcomes relevant to the adequacy of fiscal resources. General operating funds are defined as the sum of state appropriations, university funds, and tuition and fees.

Table 1.6.d Outcome measures for fiscal resources

Outcome Measure	Target	FY2013-2014	FY2014-2015	FY2015-2016
Total general operating funds per FY	Average ≥ 5% annual increase (baseline FY13=24,951,494)	26,911,168 +8%	27,725,321 +3%	30,144,717 +9%
Total annual budget per FY	Average ≥ 5% annual increase (baseline FY13=52,112,355)	58,891,108 +13%	61,363,555 +4%	62,960,684 +3%
Total extramural funding (grants and contracts) per FY	Average ≥ 5% annual increase (baseline FY13=23,614,560)	30,684,758 +30%	30,711,308 +0%	32,326,919 +5%

Outcome Measure	Target	FY2013-2014	FY2014-2015	FY2015-2016
Total expenditures for grants and contracts per FY	Average ≥ 5% annual increase (baseline FY13=19,762,604)	21,618,994 +9%	25,669,370 +19%	24,619,616 -4%

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

This criterion is met.

Strengths:

- The school is afforded equitable monetary resources relative to other units on campus and has wide budgetary authority on strategic use of funds in support of programming.
- The Arnold School has maintained a stable budget with substantial carryforward for several years. Extramural research funding has grown substantially, and the school has been successful in competing for recurring funds for new faculty through various provost initiatives.

Weaknesses:

- The school has experienced substantial student growth at the undergraduate level that has not been matched by budget increases beyond support for faculty.

Plans:

- Recurring funds have been identified to provide additional capacity to undergraduate student services, specifically in the area of advising.

1.7 Faculty and Other Resources. The school shall have personnel and other resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.

1.7.a A concise statement or chart defining the number (headcount) of primary faculty in each of the five core public health knowledge areas employed by the school for each of the last three years. See CEPH Data Template 1.7.1.

The number of faculty in the school has increased substantially from the 106 reported in fall 2009 at the last self-study to 148 in fall 2016. The current count includes 128 primary faculty and 20 secondary faculty who contribute substantially to the broader instructional mission of the school (see table 1.7.a). The primary faculty is comprised of full-time university faculty with 100% appointments to the Arnold School. Teaching and mentoring students is a fundamental component of primary faculty's expectations. The secondary faculty includes 14 research faculty plus 6 employed part-time by the university, and 2 with primary appointments in other schools on campus. More detailed information on these and other faculty who contribute to the Arnold School on a more limited basis is provided in criterion 4.1.

Table 1.7.a Headcount of primary and secondary faculty by core knowledge area

	Primary/secondary faculty by year		
Public Health Disciplines	**Fall 2014**	**Fall 2015**	**Fall 2016**
Biostatistics	10/0	11/0	10/0
Environmental health sciences	12/4	10/3	11/3
Epidemiology	13/5	13/3	13/3
Social & behavioral sciences	22/2	21/2	23/3
Health services administration	11/6	13/6	13/5
General public health	3/1	3/2	3/2
Total in Public Health Disciplines	**71/16**	**71/16**	**73/16**
Allied Health Disciplines			
Communication Sciences and Disorders	20/3	20/2	22/2
Exercise Science (including physical therapy & athletic training)	25/1	25/4	33/2
Total in Allied Health Disciplines	**45/4**	**45/6**	**55/4**
Total Primary/Secondary Faculty	**116/22**	**116/22**	**128/20**

1.7.b A table delineating the number of faculty, students and SFRs, organized by department or specialty area, or other organizational unit as appropriate to the school, for each of the last three years (calendar years or academic years) prior to the site visit. Data must be presented in a table format (see CEPH Data Template 1.7.2) and include at least the following information: a) headcount of primary faculty (primary faculty are those with primary appointment in the school of public health), b) FTE conversion of faculty based on % time appointment to the school, c) headcount of other faculty (adjunct, part-time, secondary appointments, etc.), d) FTE conversion of other faculty based on estimate of % time commitment, e) total headcount of primary faculty plus other (non-primary) faculty, f) total FTE of primary and other (non-primary) faculty, g) headcount of students by department or program area, h) FTE conversion of students, based on definition of full-time as nine or more credits per semester, i) student FTE divided by primary faculty FTE and j) student FTE divided by total faculty FTE, including other faculty. All schools must provide data for a), b) and i) and may provide data for c), d) and j) depending on whether the school intends to include the contributions of other faculty in its FTE calculations. *Note: CEPH does not specify the manner in*

which FTE faculty must be calculated, so the school should explain its method in a footnote to this table. In addition, FTE data in this table must match FTE data presented in Criteria 4.1.a (Template 4.1.1) and 4.1.b (Template 4.1.2).

Tables 1.7.b.1 through 1.7.b.3 show faculty and student counts with student:faculty ratios (SFR) by department and programmatic area for fall 2016, 2015, and 2014 respectively. "Other" faculty includes secondary faculty counted in table 1.7.a plus part-time faculty who teach regularly (see criterion 4.1). Because most of our faculty work with both graduate and undergraduate students, it is impossible to display an unduplicated headcount for primary and other faculty by graduate and undergraduate levels; therefore, the headcount is listed with the graduate programs for the public health disciplines. The faculty FTEs are split between graduate and undergraduate programs based on estimated percent effort toward each level. For example, in table 1.7.b.1, the 23 primary HPEB faculty are shown with 16.27 FTE toward graduate programs and 6.73 toward undergraduate public health programs (BA/BS). Faculty FTEs for the undergraduate programs in public health are the sum of the undergraduate FTEs for the core departments and the dedicated faculty assigned to undergraduate programs in public health (PUBH). Exercise science faculty FTEs are similarly split between graduate and undergraduate categories. Only the fall 2016 table includes data on the athletic training program, which was moved to the school that semester.

The university classifies graduate students as full time when registered for nine or more credit hours. The student FTE information in the following tables reflects this definition, but there are two caveats that influence interpretation. Any student with a graduate assistantship and registered for six or more graduate hours is considered full-time by the university. A student who has completed program credit-hour requirements, but has not completed a culminating experience (e.g., practicum or thesis) can request non-credit registration ("Z status"). These definitions primarily impact external student considerations such as insurance eligibility, visa requirements for international students, and student loan repayment requirements. Thus some graduate students who are considered full-time by the university may not be counted as full-time in these tables. SFRs for the graduate programs range from 1.08 in BIOS to 7.72 in EXSC.

Full-time undergraduate students must register for 12 or more credit hours. Undergraduates take a large number of courses outside the Arnold School to satisfy the general education requirements. This explains the higher SFRs for undergraduate programs (32.51 in PUBH and 80.02 in EXSC in fall 2016). The SFR calculations for the EXSC undergraduate programs do not take into account faculty from other programs who teach core courses required for the EXSC BS.

Table 1.7.b.1 Faculty, students, and student/faculty ratios by core knowledge area – Fall 2016

Fall 2016	HC Primary Faculty[1]	FTE Primary Faculty[2]	HC Other Faculty[1]	FTE Other Faculty[2]	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students[3]	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Public health programs										
Graduate PH programs										
BIOS	10	10.00	0	0.00	10	10.00	17	10.78	1.08	1.08
ENHS	11	7.69	5	2.14	16	9.83	47	34.00	4.42	3.46
EPID	13	11.83	4	1.55	17	13.38	61	45.56	3.85	3.41
HPEB	23	16.27	9	1.70	32	17.97	119	91.44	5.62	5.09
HSPM[4]	13	10.98	12	5.80	25	16.78	81	56.22	5.12	3.35
PUBH[5]	3	0.00	2	0.75	5	0.75	21	17.89		
All graduate PH programs	**73**	**56.77**	**32**	**11.94**	**105**	**68.71**	**346**	**255.89**	**4.51**	**3.72**
Undergraduate programs (PUBH BA/BS)[6]										
BIOS		0.00		0.00		0.00				
ENHS		3.06		1.16		4.22				
EPID		1.17		1.00		2.17				
HPEB		6.73		1.46		8.19				
HSPM		2.02		1.15		3.17				
PUBH		3.00		0.75		3.75				
Total PUBH BA/BS		**15.98**		**5.52**		**21.50**	**702**	**699.00**	**43.74**	**32.51**
Allied health programs										
COMD (graduate)	22	22.00	14	3.50	36	25.50	177	144.67	6.58	5.67
EXSC	33		20		56					
Graduate programs[7]		18.20		3.69		21.89	194	168.89	9.28	7.72
Undergraduate[8]		14.80		1.64		16.44	1325	1315.58	88.89	80.02

[1] Faculty HC for public health programs are listed with graduate programs; FTE are distributed across graduate and undergraduate programs.

[2] FTE numbers for primary and other faculty are split between graduate and undergraduate based on estimates of % effort toward each program.

[3] Graduate student FTE = 9 or more credit hours; undergraduate student FTE = 12 or more credit hours.

[4] Includes students in the Master of Health Administration (MHA) program. It is not possible to separate faculty by program to remove these students from the SFR calculations.

[5] The SFR is not calculated for the general MPH because students take courses across the school, not just with PUBH faculty.

[6] Faculty FTE BA/BS are sum of all undergraduate faculty in the above departments; students are taught by faculty across departments.

[7] Includes MPH in Physical Activity and Public Health (PAPH), EXSC MS & PhD, MS in Advanced Athletic Training, and Doctor of Physical Therapy (DPT) programs. The PAPH MPH program does not have dedicated faculty. Students in the MPH take the core PH courses plus courses primarily in EXSC and HPEB.

[8] Includes EXSC BS and BS in athletic training programs.

Table 1.7.b.2 Faculty, students, and student/faculty ratios by core knowledge area – Fall 2015

Fall 2015	HC Primary Faculty[1]	FTE Primary Faculty[2]	HC Other Faculty[1]	FTE Other Faculty[2]	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students[3]	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Public health programs										
Graduate PH programs										
BIOS	11	11.00	0	0.00	11	11.00	23	15.11	1.37	1.37
ENHS	10	6.70	5	2.14	15	8.84	35	24.33	3.63	2.75
EPID	13	11.33	4	1.55	17	12.88	56	39.11	3.45	3.04
HPEB	21	14.90	9	0.80	30	15.70	120	89.01	5.97	5.67
HSPM[4]	13	10.98	22	7.60	35	18.58	136	111.11	10.12	5.98
PUBH[5]	3	0.00	2	0.75	5	0.75	23	21.67		
All graduate PH programs	**71**	**54.91**	**42**	**12.84**	**113**	**67.75**	**393**	**300.34**	**5.47**	**4.43**
Undergraduate programs (PUBH BA/BS)[6]										
BIOS		0.00		0.00		0.00				
ENHS		3.06		1.16		4.22				
EPID		1.67		1.00		2.67				
HPEB		6.10		1.76		7.86				
HSPM		2.02		1.15		3.17				
PUBH		3.00		0.75		3.75				
Total PUBH BA/BS		**15.85**		**5.82**		**21.67**	**651**	**644.83**	**40.68**	**29.76**
Allied health programs										
COMD (graduate)	20	20.00	14	3.10	34	23.05	183	156.33	7.82	6.77
EXSC	25		20		45					
Graduate programs[7]		15.45		4.14		19.59	139	113.66	7.36	5.80
Undergraduate[8]		9.55		2.14		11.69	1146	1139.75	119.35	97.50

[1] Faculty HC for public health programs are listed with graduate programs; FTE are distributed across graduate and undergraduate programs.

[2] FTE numbers for primary and other faculty are split between graduate and undergraduate based on estimates of % effort toward each program.

[3] Graduate student FTE = 9 or more credit hours; undergraduate student FTE = 12 or more credit hours.

[4] Includes students in the MHA program. It is not possible to separate faculty by program to remove these students from the SFR calculations.

[5] The SFR is not calculated for the general MPH because students take courses across the school, not just with PUBH faculty.

[6] Faculty FTE BA/BS are sum of all undergraduate faculty in the above departments; students are taught by faculty across departments.

[7] Includes PAPH MPH, EXSC MS & PhD, and DPT programs. The PAPH MPH program does not have dedicated faculty. Students in the MPH take the core PH courses plus courses primarily in EXSC and HPEB. The ATEP MS was not part of the school until 2016.

[8] EXSC BS only. The ATEP BS was not part of the school until 2016.

Table 1.7.b.3 Faculty, students, and student/faculty ratios by core knowledge area – Fall 2014

Fall 2014	HC Primary Faculty[1]	FTE Primary Faculty[2]	HC Other Faculty[1]	FTE Other Faculty[2]	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students[3]	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Public health programs										
Graduate PH Programs										
BIOS	10	10.00	0	0.00	10	10.00	22	16.45	1.65	1.65
ENHS	12	7.33	5	2.99	17	10.32	30	23.44	3.20	2.27
EPID	13	11.83	7	3.20	20	15.03	68	41.22	3.48	2.74
HPEB	22	15.70	8	0.80	30	16.50	122	97.22	6.19	5.89
HSPM[4]	11	9.48	23	7.95	34	17.43	144	118.22	12.47	6.78
PUBH[5]	3	0.00	1	0.00	4	0.00	16	11.66		
All graduate PH programs	**71**	**54.34**	**44**	**14.94**	**115**	**69.28**	**402**	**308.21**	**5.67**	**4.45**
Undergraduate programs (PUBH BA/BS)[6]										
BIOS		0.00		0.00		0.00				
ENHS		4.42		1.16		5.58				
EPID		1.17		1.50		2.67				
HPEB		6.30		1.61		7.91				
HSPM		1.52		0.95		2.47				
PUBH		3.00		0.75		3.75				
Total PUBH BA/BS		**16.41**		**5.97**		**22.38**	**542**	**536.83**	**32.71**	**23.99**
Allied health programs										
COMD (graduate)	20	20.00	17	4.55	37	24.55	185	165.11	8.26	6.73
EXSC	25		14		39					
Graduate programs[7]		15.70		0.89		16.59	149	123.55	7.87	7.45
Undergraduate[8]		9.30		1.84		11.14	1207	1187.83	127.72	106.63

[1] Faculty HC for public health programs are listed with graduate programs; FTE are distributed across graduate and undergraduate programs.

[2] FTE numbers for primary and other faculty are split between graduate and undergraduate based on estimates of % effort toward each program.

[3] Graduate student FTE = 9 or more credit hours; undergraduate student FTE = 12 or more credit hours.

[4] Includes students in the Master of Health Administration (MHA) program. It is not possible to separate faculty by program to remove these students from the SFR calculations.

[5] The SFR is not calculated for the general MPH because students take courses across the school, not just with PUBH faculty.

[6] Faculty FTE BA/BS are sum of all undergraduate faculty in the above departments; students are taught by faculty across departments.

[7] Includes PAPH MPH, EXSC MS & PhD, and DPT programs. The PAPH MPH program does not have dedicated faculty. Students in the MPH take the core PH courses plus courses primarily in EXSC and HPEB. The ATEP MS was not part of the school until 2016.

[8] EXSC BS only. The ATEP BS was not part of the school until 2016.

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

The school employs eleven administrators with faculty status: the dean, six associate deans, and six department chairs. Research centers also have faculty directors. These individuals are included in the faculty counts above. As of fall 2016, the school employed 53 permanent staff, 86 temporary grant staff, and 64 other temporary staff (see table 1.7.c). Permanent staff include undergraduate advisors, school administrative staff (e.g., the administrative manager, director of evaluation and academic assessment, and director of workforce development) and departmental staff (e.g., department business managers and administrative assistants). Temporary grant staff are solely funded on grant money, often split across multiple grants (e.g., project coordinators). The "other temporary staff" category includes several types of employees including former staff hired for a post-retirement role and staff primarily working on research grants but hired through a separate mechanism because of funding issues. The level of effort of other temporary staff ranges from a few hours per week to full or nearly full time.

Table 1.7.c Non-faculty, non-student personnel

Category	Head Count	FTE
Permanent staff	53	51.33
Temporary grant staff	86	76.70
Other temporary staff	64	35.65
All staff	**203**	**163.68**

With the steady growth of the undergraduate program, the school has an increased need for undergraduate advisors. Twice a semester, during peak times (e.g., after new student orientation, after change of major deadlines, and before graduation), the number of Arnold School undergraduate students requiring advising ranges from 2,300-2,400. The University Advising Center has adopted the best practice recommendation for undergraduate advising at a ratio of 300 students per full-time advisor. Until recently, the Arnold School used only faculty advisors, who have teaching responsibilities in addition to their advising load. The Arnold School is in the process of hiring professional staff advisors to meet a ratio of 300 students per professional advisor and 150 students per faculty advisor. Two new advisors were hired in fall 2016 and three new staff positions have been advertised along with a replacement faculty advisor position. When these positions are filled, the school will have 10 faculty advisors and 4 staff advisors (one of whom is hired by the University Advising Center and assigned to the Arnold School). Undergraduate advising is discussed in more detail in criterion 4.4.

1.7.d Description of the space available to the school for various purposes (offices, classrooms, common space for student use, etc.), by location.

As of fall 2016, most of the school faculty and staff were located in four campus buildings and in rented space in two off-site buildings (see table 1.7.d.1). Gross square footage is the entire space of a facility, while net square footage is that space allocated to a given unit. By university standards, net square footage excludes, for example, mechanical space, hallways, and restrooms. For leased space, gross square footage is most accurate, while net square footage is accurately used for campus spaces and is more applicable for assessing space resources.

Table 1.7.d.1 Space available by building and department

Building	*Occupants*	*Net Square Footage*	*Gross Square Footage*
Campus Facilities			
Blatt PE Center	EXSC, athletic training, & physical therapy	15,684	185,024
Devine St Research Center	Consortium for Latino Immigration Studies, Office for the Study of Aging	8,325	13,686

Building	*Occupants*	*Net Square Footage*	*Gross Square Footage*
Discovery I	School offices, ENHS, EPID/BIOS, HPEB, HSPM, Cancer Prevention and Control Program	56,654	115,845
Public Health Research Center (PHRC)	Dean's office, undergraduate & graduate student services, ENHS, EXSC, Nutrition Center, Prevention Research Center	49,235	104,580
Sub-total: campus space		**129,898**	**419,135**
Off-campus Facilities			
220 Stoneridge Dr	Rural Health Research Center, Office of Research Core for Applied Research and Evaluation (CARE)	3,855	6,323
Keenan Building	COMD, USC Speech & Hearing Research Center	13,561	19,935
Sub-total: off-campus space		**17,416**	**26,258**
TOTAL		**147,314**	**445,393**

The *Blatt PE Center* primarily has office and classroom space used by exercise science, physical therapy, and athletic training. Faculty and staff from the Department of Exercise Science are divided between Blatt and the PHRC.

The *Devine Street Research Center* is a small office building that houses the Consortium for Latino Immigration Studies and the Office for Study of Aging.

The *Discovery I* building is a 115,846 square foot LEED-certified structure that is home to research labs, academic offices, and centers. Fully open for occupancy in January 2014, Discovery I houses the departments of Epidemiology and Biostatistics, Health Services Policy and Management, and Health Promotion, Education, and Behavior as well as offices and research space used by the departments of Communication Sciences and Disorders and Environmental Health Sciences. Also located in the building are the Arnold School's Office of Research; the Cancer Prevention and Control Program; Columbia's Cooking! (an experiential learning kitchen); the Disability Research and Dissemination Center; research affiliates of the McCausland Center for Brain Imaging; the SmartState Center for Effectiveness Research in Orthopædics; the SmartState Technology Center for Promoting Healthful Lifestyles; the USC Institute for the Advancement of Healthcare; and the Behavioral Neuroscience laboratory.

The *Public Health Research Center* (PHRC) is a 104,580 square foot structure that was completed in 2006. The building houses the dean's office and the offices of graduate and undergraduate students services. All of the Department of Environmental Health Sciences and part of the Department of Exercise Science occupy the building, along with the Prevention Research Center and most of the Center for Research on Nutrition and Health Disparities. Three of the five stories are laboratories and associated office and support space for the two academic departments. The lower two levels include two large office suites, approximately 10,000 square feet, that are dedicated to Public Health Service-funded research groups since the construction costs of this space were supported by an NIH National Center for Research Resources grant. The building also includes an auditorium, small seminar rooms, and a large lobby used as a student social area and for special events.

The school leases high-cost, commercial space at the *Keenan Building* for the Department of Communication Sciences and Disorders and the USC Speech and Hearing Research Center. The cost of this space (lease, utilities, custodial, and other services) is over $250,000 this year. With an average 2.5% annual increase, the costs next year will be almost $260,000. The lease will be up for renegotiation in about 2.5 years. Two faculty members and one staff member from this department are located in Discovery I.

The leased space at *Stoneridge* is paid at least partially by direct cost grant expenditures. This space is home to the Rural Health Research Center and the Office of Research Core for Applied Research and Evaluation.

Table 1.7.d.2 summarizes the square footage by usage. The allocation by usage is based on official listings of space utilization and may not reflect current usage. Less detail is available on off-campus space, so it is primarily listed as office and laboratory (clinical) space. The square footage for the PHRC does not include the large lobby, which is officially classified as hallway space. The PHRC contains a large auditorium, which is managed by the provost's office as classroom space for the university. Other classroom/seminar space in the PHRC and Discovery I are scheduled by the school. The PHRC includes substantial non-allocated space for building infrastructure due to the laboratories and several mechanical systems (e.g., back-up generator and fire pump).

Table 1.7.d.2 Space allocation by usage

Location	*Offices*	*Classrooms /Seminar Rooms*	*Laboratories /Clinic Rooms*	*Conference Rooms*	*Storage*	*TOTAL*
Campus Facilities						
Blatt PE Center	3,891	4,686	6,181	240	686	15,684
Devine St. Research Ctr.	5,805	0	1,410	1,110	0	8,325
Discovery I	44,165	0	7,165	3,620	1,704	56,654
PHRC	19,651	3,645	23,725	1,657	557	49,235
Sub-total	**73,512**	**8,331**	**38,481**	**6,627**	**2,947**	**129,898**
Off-Campus Facilities						
220 Stoneridge Dr.	3,556	0	0	299	0	3,855
Keenan Building	6,557	0	7,004	0	0	13,561
Sub-total	**10,113**	**0**	**7,004**	**299**	**0**	**17,416**
TOTAL	**83,625**	**8,331**	**45,485**	**6,926**	**2,947**	**147,314**

1.7.e A concise description of the laboratory space and description of the kind, quantity and special features or special equipment.

Laboratory space is primarily found in environmental health sciences, communication sciences and disorders, and exercise science, described below.

Environmental health science laboratories

The **Center for Environmental Nanoscience & Risk**, a SmartState center, aims to i) investigate the effects and behaviors of manufactured nanoparticles in the environment and subsequent effects on environmental and human health and ii) develop of low hazard and low risk nanotechnologies for the benefit of human and environmental health. The center has over 4000 square feet of high quality laboratory space and is fully equipped to perform detailed nanoscale synthesis and characterization, with a focus on complex media such as the atmosphere, the aquatic environment, and biological systems, alongside nanotoxicology research. Notable features include state-of-the-art single-particle and single-cell inductively-coupled plasma mass spectroscopy (ICP-MS), field flow fractionation (FFF) system, scanning mobility particle sizer (SPMS) and atomic force microscope (AFM) with environmental stage. The center is directed by Dr. Jamie Lead, SmartState endowed chair.

The main objective of the **Environmental Health & Disease Laboratory** (directed by Dr. Saurabh Chatterjee) is to perform cutting edge biomedical research on the development of metabolic syndrome and chronic inflammatory liver diseases like nonalcoholic steatohepatitis in an underlying condition of obesity. The laboratory has special research emphasis on the effects of environmental toxins in affecting

the above disease developments and pathogenesis. Major instrumentation includes: CFX96 Real Time PCR (Bio Rad), GBOX-XT4 imaging system (Thermo scientific), trans blot turbo, Nano Drop, bright field and fluorescence(OLYMPUS BX43), inverted microscope(OLYMPUS CKX-41), microplate reader (Synergy HT), ELISA plate washer (Bio Tek, elx 50), 4 centrifuges (Bio Rad), CO2 incubator for cell culture (Thermo), water bath (VWR), biological safety cabinet for cell culture (NuAire), Sonicator (Branson Sonifier 250), freezers (-80 and -20 degree Celsius), refrigerator (4 degree Celsius), fume hood, refrigerator for cell culture (Kenmore), tissue homogenizer (OMNI international), thermomixers (Eppendorf), ice machine (Scotsman), weighing balances, rocking incubators (Thermo, VWR), western blot equipment (Fisher, Bio rad), and a Milli-Q water purification system.

The **Fungal Pathogenesis and Secondary Metabolism Laboratory** (directed by Dr. Anindya Chanda) is primarily interested in understanding how filamentous fungi impacts environmental and human health. One part of this research investigates the physical and the biological processes of fungal colonies underlying their synthesis of natural products (such as mycotoxins and antibiotics) and their response to chemicals in the environment (such nanoparticles, inorganic pollutants and other microbial metabolites). The other part of this research identifies the fungal communities that form key functional components in ecosystems that are significant to environmental and human health, such as ecosystems of the gut and plant rhizospheres and the indoor air. This 1600 sq. ft. lab is located in the Public Health Research Center and includes open space with benches for 12 people. The space is adjacent to the autoclave room and the equipment room containing a Molecular Imager Gel Doc system and film developing system. The key equipment in the lab is a Leica inverted motorized TIRF and wide-field microscope that is used in the lab's research on understanding cellular events on the cell surface.

ENHS maintains a 12-seat **GISciences and Spatial Modeling Lab** in Discovery I. This lab supports both the spatial analyses and modeling research activities of ENHS faculty and students as well as ENHS courses that incorporate GISciences in to the learning goals and outcomes. Lab computers provide access to GIS, remote sensing and image processing and geostatistical software.

The **Meiobenthic Ecology and Estuarine Ecotoxicology Laboratory** (directed by Dr. Tom Chandler) conducts research in estuarine ecotoxicology, reproductive/endocrine disruption in invertebrates (principally crustaceans), effects of emerging contaminants such as nanomaterials and pharmaceuticals on benthos, sediment biogeochemistry and toxicant bioavailability, deep-sea foraminiferal culture linked to questions in paleoceanography and climate change, and genetic/molecular-scale responses of crustaceans to toxic chemicals. Equipment available includes four Olympus SZX and 4 Nikon SMZ-U stereomicroscopes, two Hoffman DIC and one Nomarski inverted microscopes for microplate bioassays, one in-lab Olympus Fluoview 300 laser-scanning confocal (inverted), and two high resolution video-image analysis systems for live/dead observations, imposex detection, egg quality, growth measurements, etc. Our confocal microscope is coupled to a Dell workstation for real-time 3D visualization of egg development/quality, digestive processes, nanoparticle internal disposition, etc. The lab has five temperature:photoperiod controlled environmental chambers with enclosed recirculating seawater systems for chronic bioassays and environmental fate incubations in e.g., estuarine sediments. It also contains a Coulter Multisizer-III particle size analyzer for precise control of algal feeding regimens (number and size/mass of cells). The lab has a Shimadzu TOC-L carbon analyzer for seawater dissolved organics; a Sartorius S-4 super-micro balance ($\pm$0.3 ug) for toxicant spiking and body micromass measurements, and Eppendorf ultracentrifuges and volumetric pipettors. For osmolality and water quality chemistry, the lab contains a WESCOR vapor pressure osmometer, pH meters, HACH ammonia analyzers, and YSI/Orion microprobe dissolved-oxygen meters. It also has BIOTEK fluorescent and UV-visible microplate readers where required. All analytical equipment is interfaced directly to data collection, analysis, and QA/QC software on PC platforms.

The **Microbial Interactions Laboratory** (directed by Dr. Alan Decho) is designed to conduct microbial biofilm research, which centers on the role of the "extracellular matrix" of bacterial "biofilms" in marine, environmental, and health-related processes. The lab is exploring a range of biological and chemical processes that occur within biofilms in order to understand how they function, and ultimately, how they may be manipulated or controlled. Major laboratory instrumentation includes a scanning spectrophotometer, fluorescence plate reader, confocal scanning laser microscopy system (Leica SP5), Fourier-transform infrared spectrometer (FT-IR), Raman confocal microscope, various incubators, and ultra-cold freezers.

The **Molecular Microbial Ecology Laboratory** (directed by Dr. Sean Norman) is a 1950 sq. ft. lab in the PHRC. The laboratory is specifically equipped for the molecular analysis of microbial communities and high throughput metagenomics/transcriptomics. Equipment includes an Illumina MiSeq DNA sequencer for next generation DNA sequencing of complex microbial communities, a Corvaris S2 adaptive focused acoustic technology for DNA shearing, an ABI 7900HT QRT-PCR, an Agilent 2100 Bioanalyzer, a Thermo Scientific Nanodrop 2000, a Bio-Rad Denaturing Gradient Gel Electrophoresis (DGGE) system for fingerprinting complex microbial communities, a Bio-Rad/MJ Research DNA Engine Thermal cycler with 96 well capacity and dual 48 well capacity for amplification of DNA/RNA, Bio-Rad CHEF-DR II pulsed field electrophoresis system for the analysis of HMW-DNA, a Perkin Elmer Victor X3 96 well plate reader for nucleic acid quantitation, a 12-core unix and a 64-core linux computer for bioinformatic analysis. The Norman laboratory also maintains a separate RNA isolation and analysis room with 2 HEPA-filtered air filtration and UV sterilization for microbial gene expression studies. Additional equipment includes -80C (2), -20C (2) freezers, 2 laboratory refrigerators, UVP Gel imaging system, 2 incubators, refrigerated Sorvall centrifuge, 2 fume hoods, and 4 gel electrophoresis systems. For routine anaerobic culturing, the Norman lab has a Coy anaerobic chamber and a gassing station for specialized gas mixes.

The **Rothenberg Lab** (directed by Dr. Sarah Rothenberg) is focuses on research in the areas of mercury cycling and human health. The Rothenberg lab is approximately 1300 sq. ft., with two adjoining rooms, and is fully equipped to measure mercury species. There are two wings attached to the lab, including one wing for students. The lab has a Lumex RA 915+ Pyro 915 Mercury Analyzer for high throughput analysis of total mercury in solid-phase. The instrument is portable, requires no compressed gas and may be used in the lab or the field. Samples are combusted in quartz boats, and elemental mercury is quantified. The manual total mercury analysis system is used for low concentrations of total mercury (< 1 ng/g). This system includes the MerxT Automated Total Mercury Purge and Trap Module and CVAFS III Detector (Brooks Rand). The manual methyl mercury analysis system is used for all methylmercury analyses. This system includes Manual Methylmercury Purge and Trap Module (8 bubblers & flow meters, 16 traps), Dual Trap Desorption Module (TDM-2), MERX GC & Pyrolysis Module Model III CVAFS Detector (Brooks Rand). In addition to the instruments listed, the lab contains 2 Mettler balances, 3 refrigerators/freezers (-20--25^{o}C), 1 -80^{o}C freezer, 1 incubator (ThermoScientific, Heratherm), 1 oven (FisherScientific Isotemp Oven), Class II Biological Safety Cabinet, 1 muffle furnace, pipetters, JLGJ4.5 from China to de-hull rice samples and a rice grinder, Eppendorf centrifuge, IKA shaker, dual-water bath, and 4 computers.

Communication sciences and disorders laboratories

The **Aphasia Laboratory**, directed by Dr. Julius Fridriksson, is located in Discovery 1. The research foci of the lab include understanding the neurophysiology of aphasia recovery in stroke; understanding speech motor perception in normal and disordered populations (e.g. autism, stroke, etc.); and understanding the neural basis of motor speech processing. Much of this research relies on technologies such as magnetic resonance imaging (MRI), including DTI, fMRI, VBM, LSM, and brain stimulation techniques (transcranial magnetic stimulation, TMS; transcranial direct current stimulation, tDCS).

The **Knowledge of Orthographic Learning Lab** (KOOL2, directed by Dr. Kenn Apel) investigates factors that potentially affect the development of reading and writing. One major focus is on how children develop orthographic knowledge (i.e., knowledge regarding the systematic manner in which we represent spoken language in writing).

The **Language Processing Laboratory** (directed by Dr. Hiram McDade) seeks to examine the mechanisms involved in the human response to the communication signal (auditory or visual). In particular, research focuses on the assessment of those factors that affect the speed and accuracy of language processing. Studies in spoken word recognition have utilized the lexical decision (word/non-word) task to investigate Luce and Pisoni's neighborhood activation model. Investigations in lip reading explore the effect of verbal prompting and the extent to which lexical characteristics of single words influence the visual intelligibility of sentences. Finally, studies with adult cochlear implant users have investigated the effects of CI implantation on the processing of the acoustic signal.

The **Neurolinguistics Lab** of Dr. Dirk den Ouden studies the neural correlates of language processing and production. The lab is focused on the nature of language and linguistic representations, the extent to which language functions interact with other cognitive domains, the nature of language disorders, and the role of neural plasticity in recovery from aphasia. The Lab has access to a Siemens 3T Trio MRI scanner housed in the McCausland Center for Brain Imaging (MCBI) and to an experimental MxN HD-tDCS stimulator (Soterix Medical), owned by Dr. Julius Fridriksson's Aphasia Lab (COMD). The lab owns EEG caps (EASYCAP, size 56 (2x) and 58), as well as the custom-made holders required for fitting HD electrodes (Soterix Medical).

The **SC Autism and Fragile X Project** (directed by Dr. Jessica Klusek) investigates the nature and basis of communication deficits in autism and fragile X-associated conditions, with a focus on identifying biomarkers for communication impairments. The project adopts a family approach that focuses on delineating broader phenotypes in at-risk relatives, including individuals with the *FMR1* premutation. The lab has an Actiwave Cardio ECG recording device, audio and video recording equipment for participant assessment, and four desktop computers equipped with software for data coding and analysis.

The **South Carolina Research on Language & Literacy Lab** (SCROLL, directed by Dr. Suzanne Adlof) conducts research that improves the early identification of language and reading difficulties in children and aids in the development of effective interventions for language and reading difficulties. The lab has a large variety of standardized tests of language, reading, and cognitive abilities, four video cameras and tripods and 10 digital audio recorders for data collection. Eight desktop and laptop computers are equipped with software for study preparation, data collection, and analysis. All data collection equipment is portable, allowing for easy transportation to off-campus data collection sites. In addition, the SCROLL Lab makes use of a Mobile Lab, which is a 2015 Ford Transit 150 customized for data collection and equipped with an SR Eyelink 1000 Plus eye-tracker. The van includes seatbelts for up to four researchers to travel to the intended location. The rear area is temperature controlled with ample lighting and room for a desk, data collection supplies, and storage.

The mission of the **Speech Neuroscience Lab** of Dr. Roozbeh Behroozmand is to provide an integrated approach to the understanding of speech production and motor control mechanisms in the human brain. The ultimate goal of our research is to promote knowledge that can lead to the development of novel methods for diagnosis and treatment of speech motor disorders in patients with neurological deficits.

The **Speech Perception Laboratory** (directed by Dr. Dan Fogerty) seeks to define how basic properties of speech contribute to speech understanding under a variety of complex and adverse listening conditions.

Laboratory projects focus on how age, hearing loss, and cognitive function influence a listener's ability to use these speech properties. The laboratory houses a sound-attenuating audiometric booth with three participant testing stations and is equipped with a sound level meter and Tucker-Davis Technologies (TDT) System III hardware. Peripheral equipment also includes a KEMAR Manikin and a variety of condenser microphones, digital recorders, and audiometric headphones.

The **USC Speech and Hearing Research Center** (directed by Danielle Varnedoe, M.A.) provides a variety of diagnostic and treatment programs for individuals of all ages with communication disorders. The center trains future speech-language pathologists and researchers while providing our patients with the highest quality evaluation and treatment to improve social, educational and vocational participation.

This mission of the **Written Language Lab** (directed by Dr. Krystal Werfel) is to increase educational and occupational opportunities for all individuals, particularly those with hearing loss and/or language impairment, by conducting research that improves literacy assessment practices, develops and validates effective literacy interventions, and increases teachers' literacy knowledge and skills. We utilize behavioral assessment, eye tracking, and intervention methodology to accomplish these goals. Major laboratory instrumentation includes a portable eye tracker, computer-based and portable audiometers, a tympanometer, and a sound booth.

Exercise science laboratories

The **Behavioral Science Laboratory** (directed by Dr. Sara Wilcox) studies factors that influence physical activity as well as interventions to promote physical activity and healthy eating in individuals and in communities. The Current project is on promoting physical activity and healthy eating in pregnant and postpartum women. The lab contains office space, computers, printers, and a scanner. Research supplies include accelerometers, stadiometers, and scales.

The **Clinical Exercise Research Center** (CERC, directed by Dr. James Carson) consists of several adjacent multipurpose laboratories and specialized rooms and offices: the Clinical Exercise Research Laboratory designed for delivery of clinical exercise programs for exercise therapy and disease prevention. The lab is equipped with exercise apparatus that allow a group of participants to receive a full-body aerobic and/or resistance exercise session. The Exercise Testing Facility is comprised of three rooms that includes an aerobic testing area for administration of exercise stress tests under the supervision of clinical personnel with full emergency medical equipment, a room restricted for body composition analysis through dual energy x-ray absorptiometry (DXA) scans, and an environmental growth chamber for testing under humidity controlled conditions. In addition, the CERC has a two-room Human Performance Laboratory suite consisting of laboratory equipped to examine cardiovascular, metabolic, and ventilation responses to various intensities of aerobic and resistance exercise testing. The suite is also outfitted to measure strength and range of motion in isolated muscle groups or multi-joint muscular systems and houses a phlebotomy room equipped with a clinical phlebotomy chair and standard blood handling equipment that meets the standards for universal precautions procedures.

The goal of the **Concussion & Health Neuroscience Lab** (directed by Dr. R. Davis Moore) is to determine the biological, psychological, and social factors that influence concussive outcomes. The lab also seeks to advance clinical practices by developing novel assessment, management, and rehabilitation techniques. To do so, the lab uses a variety of physiological measures including: functional near infrared imaging, electroencephalography, electro-oculography, electromyography, electro-dermography, and electrocardiography. In addition, the lab utilizes a variety of clinical and experimental measures of sensory, cognitive, and psycho-affective health.

The **Foundations of Lipids and Exercise Laboratory** (FLEX lab, directed by Dr. Mark Sarzynski) uses observational and experimental studies to examine the effects of lifestyle behaviors on lipids and

lipoproteins. Research currently focuses on the effects of exercise, diet, and weight loss interventions on the function and composition of high-density lipoproteins (HDL) using cellular and molecular models. The lab uses an integrated –omics (e.g., genomics, metabolomics, transcriptomics) approach to identify the mechanisms and pathways underlying these lifestyle-induced changes in HDL function and composition. To perform this research, the FLEX lab houses a FPLC system that can separate whole blood into the lipoprotein fractions (i.e., HDL, LDL, VLDL), which are then used in various assays including cell-based assays.

The **Human Metabolism Laboratory** (directed by Xuewen Wang) conducts observational and interventional studies of obesity, body composition, energy expenditure, and insulin sensitivity, and uses stable isotope tracers to study metabolism in vivo. Current projects focus on the effects of exercise intervention in women and older adults. Major instrumentation includes: MAGPIX multiplex platform, YSI glucose and lactate analyzer, Randox Monza clinical chemistry analyzer, AcT diff hemotology analyzer, WatchPAT home sleep assessment device, and continuous glucose monitors.

Investigations in the **Integrative Muscle Biology Laboratory** (directed by Dr. James Carson) examine cellular and molecular mechanisms that influence muscle plasticity in skeletal and cardiac muscle. Specific attention is given to the interaction of endocrine signaling and muscle mass regulation through extracellular matrix remodeling and inflammation. Scientific models examine alterations in muscle activity due to disuse, increased loading, and regeneration from injury. The regulation of these processes in conditions of underlying disease (cancer cachexia, diabetes) or aging is also examined. The laboratory has all the equipment necessary for standard measurement of blood inflammatory markers, blood metabolic markers, tissue protein expression, tissue histology, and tissue RNA expression. Additionally, we have facilities for culturing myoblasts and cancer cells.

The **Molecular Metabolism Laboratory** (directed by Ho-Jin Koh) focuses on three major areas: 1) the effects of exercise and high fat diet on skeletal muscle and white adipose tissue metabolism; 2) understanding the molecular mechanism(s) by which high fat diet and obesity develop insulin resistance in skeletal muscle; and 3) identify novel molecules regulating brown adipose tissue and beige fat development and metabolism during exercise and cold exposure. To address the various questions, the lab uses various mouse models and cell culture systems. The laboratory is fully equipped for biochemical, metabolic and immunoassay procedures, including refrigerated microcentrifuge, fume hood, refrigerator, -20 °C freezer, liquid N_2 cryogenic containers, polytron homogenizer, multiple vertical and horizontal electrophoresis set ups, balances, heating blocks, spectrophotometer, plate reader, thermocycler, pH meter, table top centrifuge, sonicater, and other small equipment. It also has a shared 150 sq. ft. tissue culture room containing a laminar flow hood, a CO_2 incubator, an inverted microscope, a low speed table top centrifuge and 37°C water bath.

The overall goal of the **Motor Behavior and Neuroimaging Laboratory** (directed by Dr. Jill Stewart) is to develop novel, effective, and individualized treatments to improve motor function and quality of life after stroke. To achieve this goal, our research focuses on the brain-behavior relationship during the control and learning of skilled motor tasks using detailed measures of movement (kinematics, EMG) and brain structure and function (functional MRI, diffusion tensor imaging) combined with clinical measures of impairment, function, and quality of life.

The **Psychoneuroimmunology of Exercise and Nutrition Laboratory** directed by Dr. J. Mark Davis, located in the PHRC, consists of a main laboratory and small auxiliary cell culture/radioisotope laboratory. This laboratory is fully equipped with state-of-the-art equipment for cell/molecular, immunological, and biochemical analysis. The psychoneuroimmunology laboratory also utilizes several testing rooms for behavioral testing in both animals and humans. It contains all of the equipment necessary for routine analysis of gene expression and cellular signaling by ELISA, real-time PCR, western

blot, and northern blot analysis. In the same corridor, there are a cold room, glassware washing and sterilization facility, autoclave room, cell culture room, dark room, fluorescent microcopy room, and shared instrumentation space.

The main focus of the **Rehabilitation through Exercise Laboratory** (directed by Dr. Stacy Fritz) is to increase physical activity for individuals with chronic disability or functional limitations from neurological insult (e.g. stroke). The lab is equipped with various exercise and assessment equipment that can be used for special populations (e.g. body-weight support treadmill system, nu-step, GAITRite system).

The **Sensory Motor Assessment and Robotic Technology Laboratory** (SMART, directed by Dr. Troy Herter) seeks to improve assessment and treatment of neurological impairments by using robotic and eye tracking technology to develop objective, quantitative measures of sensory, motor and cognitive function. The key laboratory instrumentation is the KINARM Endpoint Lab, which combines an upper-limb robotic device with camera-based eye tracking within an augmented reality environment.

The **USC Brain Stimulation Lab** (directed by Dr. Roger Newman-Norlund) focuses on a pipeline that begins with behavioral experiments, and continues with brain imaging (fMRI) and brain stimulation (TMS/tDCS) experiments. The lab houses a MagPro x100 Magnetic Stimulator and is equipped with the MEP Option for measuring motor evoked potentials elicited by cortical stimulation, and three stimulation coils: a standard figure-8 coil used for estimation of motor threshold, a figure-8 coil capable of delivering single-pulse, patterned, and repetitive TMS, and a figure-8 coil capable of delivering both real and simulated single-pulse, patterned and repetitive TMS (experimenter can be blinded using built in software).

Exercise science also has two **classroom labs**. PHRC Room 210 contains a fume hood; 2 sinks with eye wash stations and a shower; fixed tables for students with floor outlets; an island for instruction and demonstration; additional counter space for lab activities; and a digital projection system with audio and a manual display screen for presentations. The Blatt PE Center Room 113 contains an audio/visual system with 4 flat panel displays, whiteboard, a counter top with sink, cabinets and drawers, free standing cabinets, two treadmills, five cycle ergometers, two gas analysis systems and two EKGs.

Other laboratories

In addition to the labs listed above, Arnold School researchers have access to resources through partnerships in university and other lab facilities, described below.

The ***Center for Colon Cancer Research*** is funded as a Center of Biomedical Research Excellence by the National Center for Research Resources. The center collaborates closely with the Cancer Prevention and Control Program. Research projects are supported by several core facilities, including the Mouse Core (which provides animal care and housing, reagents, training, and equipment), the Histology and Imaging Core (which provides access to light microscopy, tissue processing, and confocal microscopy), and the Biorepository Core (which collects tissue, blood, and saliva specimens from patients with cancer and facilitates research by providing these specimens and data to cancer researchers).

Researches on campus have access to the ***McCausland Center for Brain Imaging***, situated within the Palmetto Health Richland. This state-of-the-art facility opened in January 2006 and contains 3,090 square feet of dedicated research space. This facility is jointly managed by Palmetto Health and the university. The Siemens 3-Tesla magnetic resonance imaging system is shared between clinical and research work, with dedicated research time each day. The system is fully equipped for functional brain imaging, with a back projection computer screen, optical trigger pulses (to ensure acquisition times do not drift with respect to behavioral tasks), optical response buttons, MRI compatible tactile stimuli, MRI-

compatible ERG/EEG, MRI-compatible pulse and respiration measurement, and high-quality (ceramic) audio presentation headphones. The center has dedicated labs for research and behavioral testing.

The Department of Environmental Health Sciences in Arnold School partners with the **National Atmospheric and Oceanic Administration/Center for Coastal Environmental Health and Biomolecular Research** in Charleston, SC. This center focuses on collaborative research related to marine ecotoxicology including impacts of urbanization, pesticides, and contaminants of emerging concern on ocean ecosystems and human health. Faculty and students conduct research in unique state of the art laboratories including salt marsh and coral reef ecosystem mesocosms, which allow holistic environmental risk assessments of community responses in pelagic and benthic species of fish and shellfish. Major instrumentation includes state-of-the-art chemistry (e.g. mass spectroscopy, intracoupled plasma spectroscopy, electron capture detection gas chromatography, atomic absorption spectroscopy, nuclear magnetic resonance spectroscopy) and ecotoxicology equipment.

1.7.f A concise statement concerning the amount, location and types of computer facilities and resources for students, faculty, administration and staff.

The USC **Division of Information Technology**, under the direction of the Vice President for Information Technology and Chief Information Officer, oversees centralized and distributed computing and telecommunications services for academic, research, and administrative use to meet the needs of USC faculty, staff, and students. The division provides the USC community (faculty, staff, and students) with computing, voice, and data communications, networking, data security, video transport, information technology training, web services, customer support, desktop and server support, installation and maintenance of information technology (IT) infrastructure, policies and procedures assistance, computer labs, software licensing and distribution, IT planning, applications development and support, and operational systems. The Columbia campus is covered by wireless service.

The Arnold School's **Information Technology Core** maintains numerous computer systems spanning the school's six sites and includes 33 Microsoft-based servers, a student computer lab, and more than 800 individual faculty, staff, and research computer systems. The student computer lab has 34 all-in-one desktop computers and two high capacity laser printers for student and instructional use. It can be divided into 20 and 14 systems for class reservations, with an LCD TV for instruction from the lectern in front of each section. Seminar rooms in Discovery I and the PHRC have lecterns with laptop connections, a permanent PC, and a document camera. Lectern content is displayed using a Sony laser projector and external wall-mounted speakers. Discovery has one multipurpose room with Polycom equipment used to host distance education courses with the Greenville Health System campus. One of the seminar rooms in the PHRC is also equipped for distance educations. Four full-time information resource consultants manage and maintain the school's computing resources.

School Computing Security and Capacity. The school's datacenter is key access only by the IT staff and the dean. The server infrastructure is primarily run on 3 Dell PowerEdge R710 and 1 Dell PowerEdge R720 servers each with dual 6-core processors and 48GB of memory each that run VMware vSphere 5 Enterprise software. These servers run 33 virtual Windows 2008 R2 and 2012 servers. The virtual servers are stored on a 6TB Dell MD3200 Storage Area Network running a RAID6 array for redundancy and a 30TB expansion network also running a RAID6 array. The datacenter also houses 5 additional physical servers. All of the servers have battery backup power supplies and gigabit Ethernet connections. The datacenter has full generator backup power. Full encrypted data backups are run to an off-site Network Attached Storage located in a secure, locked facility each weekend and incremental backups are captured Monday-Friday evenings. Network shares for users are created via a Distributed

File System in Windows Server and are access controlled via user groups containing unique IDs that require complex passwords.

1.7.g A concise description of library/information resources available for school use, including a description of library capacity to provide digital (electronic) content, access mechanisms, training opportunities and document-delivery services.

Home to the oldest freestanding college library in the U.S., our university libraries build on that tradition with special collections ranging from early medieval manuscripts to modern literature and politics.

The Thomas Cooper Library is the university's main library, centrally located on the Columbia campus. It is open 24 hours a day during the fall and spring semesters. The library provides access to hundreds of online research databases, thousands of online journals and ebooks, and millions of volumes in print. Thomas Cooper has laptops and iPads available to checkout, a coffee shop, and comfortable study rooms. Access to online databases and full-text journals is available through the Thomas Cooper Library Web page with a network username and password.

In addition to providing access to these resources, the library operates an excellent interlibrary loan service and is a member of the PASCAL consortium, which provides easy access for users to borrow materials from other South Carolina academic libraries. The library offers book delivery to faculty offices and electronic delivery of articles and book chapters from the collections. The reserve room offers electronic reserves through Blackboard courseware. The reference department offers introductions to library resources instruction in the school's multimedia classrooms and individual faculty research consultation by appointment. The reference department also offers online, chat, and instant message reference service and has created web page guides to resources for each department in the school. The guides for public health can be found at http://guides.library.sc.edu/sb.php?subject_id=58863.

Arnold School faculty and students also have access to the USC School of Medicine library, which is a 15-minute drive from the Columbia campus. The school of medicine library provides connection to more than 28,000 biomedical electronic journals, 400 electronic textbooks and 80 biomedical databases. Its print collection has more than 116,000 volumes. Most of its services and resources can be accessed through its website. The library also houses the Center for Disability Resources collection.

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

Since its inception, the school has been practice-oriented, and the availability of practice sites is one of its greatest strengths. Having the university located in the capital city has enhanced the opportunities for very close working relations with state agency heads and their staffs. In addition, the school has worked diligently to develop practice sites in state and local private and non-profit organizations, national agencies, and other countries. As a result, the school now has hundreds of sites available for practice work for the public health professional degrees (see criterion 2.4). Other groups with which the school collaborates are discussed in section 1.4.c.

The school also benefits from the *SmartState Program.* Established in 2002 by South Carolina's leading research universities, the *SmartState Program* has created 10,000 jobs and secured more than $1.5 billion in investments from non-state partners. The core of the program is its approximately 55 Centers of Economic Excellence, which are organized into six clusters. The S.C. Education Lottery provides between $2 and $5 million in funding, which the Centers must match dollar-per-dollar with support from non-state partners. The program also supports SmartState Endowed Chairs — world-renowned scientists and engineers who lead the centers. The Arnold School is home to five SmartState Endowed Chairs, listed below. The centers are described in more detail in criterion 3.1.

- Dr. John Brooks, SmartState Endowed Chair for Effectiveness Research in Orthopædics
- Dr. Julius Fridriksson, SmartState Endowed Chair for SmartBRAIN (Supporting Mobility, Activity, Rehabilitation, Transportation/Technology)
- Dr. Jamie Lead, SmartState Endowed Chair for Environmental Nanoscience and Risk
- Dr. Xiaoming Li, SmartState Endowed Chair for Translational Clinical Research
- Dr. Delia West, SmartState Endowed Chair for the Technology Center to Promote Healthy Lifestyles (TecHealth)

1.7.i Identification of measurable objectives through which the school assesses the adequacy of its resources, along with data regarding the school's performance against those measures for each of the last three years. See CEPH Outcome Measures Template.

Outcome measures for other resources are shown in table 1.7.i. Currently, the school has eleven open tenure-track faculty positions (including one for chair of EPID/BIOS) and 1 clinical faculty position. When these positions are filled it would bring the total tenured/tenure-track faculty to 98. Offers have been made for several of these positions.

Using faculty advisors for the past three years, the undergraduate student/advisor ratio has averaged over 200 students per faculty advisor. As mentioned in 1.7.c, the school is in the process of hiring staff advisors to meet student/advisor ratios of 150 per faculty advisor and 300 per staff advisor.

Table 1.7.i. Outcome measures for other resources

Outcome Measure	Target	Year 1	Year 2	Year 3
Number of primary tenure-track/tenured faculty	100 tenure-track/tenured faculty by fall 2019	Fall 2014 83	Fall 2015 83	Fall 2016 87
Status of faculty searches	80% of searches for tenure-track/tenured faculty are completed within 12 months	AY2013-14 67% of 6	AY2014-15 78% of 9	AY2015-16 38% of 16
Student/advisor ratios	By AY 2017-18, have sufficient staff to meet the following student/advisor ratios: 150/faculty advisor (FA) 300/staff advisor (SA)	Fall 2014 8 FA 251/advisor	Fall 2015 8 FA 225/advisor	Fall 2016 9 FA, 1 SA 202/advisor

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

This criterion is met.

Strengths:

- The Arnold School has maintained a culture of excellence in teaching, research, and service while experiencing a period of considerable expansion in faculty, staff, and resources achieved through strategic leadership and sound fiscal management.

Weaknesses:

- In undergraduate advising, past advising ratios were excessive for faculty advisors who also have teaching responsibilities.
- Communication Sciences and Disorders, Physical Therapy, Athletic Training, and several school-based centers are located 1-5 miles from the Arnold School core campus buildings. This geographical separation creates difficulties for daily administrative contact, support, and oversight.

Plans:

- The school is in the process of hiring staff and faculty advisors. When these positions are filled, the school will have 10 faculty advisors and 4 staff advisors (one of whom is hired by the University Advising Center and assigned to the Arnold School).
- A capital campaign effort is underway to raise funds for a third Arnold School facility either beside the PHRC or the Discovery I building, plus a parking facility, to enable all school units to co-locate finally within one city block. Estimated cost: $100M. School match requirement: $35M.

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

1.8.a A written plan and/or policies demonstrating systematic incorporation of diversity within the school. Required elements include the following: i). Description of the school's under-represented populations, including a rationale for the designation; ii). A list of goals for achieving diversity and cultural competence within the school, and a description of how diversity-related goals are consistent with the university's mission, strategic plan and other initiatives on diversity, as applicable; iii). Policies that support a climate free of harassment and discrimination and that value the contributions of all forms of diversity; the school should also document its commitment to maintaining/using these policies; iv). Policies that support a climate for working and learning in a diverse setting; v). Policies and plans to develop, review and maintain curricula and other opportunities including service learning that address and build competency in diversity and cultural considerations; vi). Policies and plans to recruit, develop, promote and retain a diverse faculty; vii). Policies and plans to recruit, develop, promote and retain a diverse staff; viii). Policies and plans to recruit, admit, retain and graduate a diverse student body; ix). Regular evaluation of the effectiveness of the above-listed measures.

The Arnold School of Public Health embraces diversity, inclusion, and equity as a strategic imperative in preparing our students to serve as culturally competent leaders and global citizens. As such, we view our ability to attract and retain a diverse student population, faculty, staff, and administration as central to our mission to improve population health in diverse communities – locally and globally.

i). Description of the school's under-represented populations, including a rationale for the designation.

The university defines underrepresented racial/ethnic groups (Black/African-American; Hispanic/Latino (of any race); Hawaiian/Pacific Islander; American Indian/Alaska Native) as well as other underrepresented populations (Lesbian/Gay, Bisexual, Transgender, Questioning/Queer (LGBTQ); religious minorities; and those with low socioeconomic status). The Arnold School recognizes the potential for all the forms of underrepresentation mentioned above and works to create an inclusive environment for all; however, certain kinds of underrepresentation (e.g., sexual orientation) are often invisible and, unless self-reported, are difficult to account for and/or quantify.

To identify specific under-represented populations upon which to focus, the strategic planning workgroup on diversity and inclusion reviewed available demographic data from the school, the university, ASPPH, and the US Census. Because of our southern history and status as the state's flagship university, the school and university have been working to increase the representation of Black/African-Americans in the faculty, staff, and student complements. It is important that the university better reflect the population of the state that supports it. In recent years, the state has also seen a rapid increase in the representation of Hispanics in the workforce and in student populations at all levels. For these reasons, the school has identified Black/African-American and Hispanic populations as the under-represented groups that we want to further engage. This is also consistent with our research and service work, much of which involves one or both of these population groups.

More specifics about the target metrics and data sources are included in section 1.8.e.

ii). A list of goals for achieving diversity and cultural competence within the school, and a description of how diversity-related goals are consistent with the university's mission, strategic plan and other initiatives on diversity, as applicable.

The University of South Carolina is committed to preparing students who are culturally competent and well equipped to lead in an increasingly diverse and global workforce. The university's Office of Diversity and Inclusion has taken the lead by enhancing and sustaining an inclusive learning, living and working environment where all members of the university's community feel that they are welcomed, valued, and supported. The university's current strategic plan includes a focus on diversity, with objectives of "increasing the number of underrepresented minority faculty, staff and students…"; "increasing the number of international faculty and students and expanding diverse thinking…"; and "focusing on cultivation of on academic environment that welcomes a diversity of concepts, ideas and approaches." A new strategic plan, still in draft form, includes as one of five goals "Building Inclusive and Inspiring Communities: A 21st Century University recognizes that there is strength in leveraging unique perspectives and global points of view while anchoring the institution in tradition and values." Supporting this goal is the objective to "develop and sustain a welcoming community and an inclusive university culture."

The Arnold school shares this commitment to diversity. The following goals were adapted from the university's diversity plan and included in the school's 2016-2019 draft diversity plan:

- Improve the visibility and integration of diversity and inclusion as a strategic imperative.
- Increase the proportion of underrepresented students who apply, are accepted, and enroll in the Arnold School of Public Health.
- Increase the number of faculty, staff, and administrators from underrepresented groups.
- Enhance the Arnold School of Public Health's climate for diversity, inclusion, and equity by continuing to build a school-wide environment that is inclusive and respectful of all people and one that fully embraces the Carolinian Creed.
- Foster an environment that enhances teaching, research, and scholarship around issues of diversity and inclusion.

iii). Policies that support a climate free of harassment and discrimination and that value the contributions of all forms of diversity; the school should also document its commitment to maintaining and using these policies; and iv). Policies that support a climate for working and learning in a diverse setting.

The university has policies and procedures that support a climate free of harassment and discrimination and that support a climate for working and learning in a diverse setting. The Arnold School has adopted and adheres to university policies on harassment and discrimination, including the University Policy on Sexual Harassment and the University Affirmative Action and Non-Discrimination policies. In addition, the school adopts and adheres to the University's Carolinian Creed. The Creed emphasizes integrity, openness and the general principles of civility. A commitment to these policies is reiterated in the school's policies and procedures, such as the policies for search committees, annual review of faculty, and faculty tenure and promotion policies (included in the ERF).

The Office of Student Disability Services (OSDS) serves students with disabilities and temporary injuries in managing the varying demands of the university experience. In addition to serving students, the staff assists the university community in making programs, services, and activities accessible for everyone.

Grievances relating to discrimination by reason of age, color, gender, disability, national origin, genetics, race, religion, sexual orientation, or veteran status are handled by the Office of Equal Opportunity

Programs. In addition, has several resources for handing faculty, staff, and student concerns about harassment and discrimination, including the University Ombudsman, the Faculty Civility Advocate, Employee Relations staff in the Division of Human Resources, Undergraduate Student Ombuds Services, and the Graduate School Ombudsman. Student grievance policies are discussed in detail in section 4.4.d.

In spring 2016, the Office of the President and the Office of the Provost launched the university's PULSE campus climate surveys to provide the university with a baseline of data regarding the campus climate. The first survey was administered to undergraduate students in spring 2016. Surveys of faculty and staff began in early February 2017.

Additionally, the university has a number of affinity groups such as the Black Faculty Caucus, Latino/a & Faculty Caucus, and LGBTQ Caucus. All of these groups provide a space for discussions unique to each group, as well as a space for airing concerns and developing actions to address them. Members of the Arnold School chair both the Black Faculty Caucus and the Latino/a & Faculty Caucus, and these individuals are members of the Arnold School's diversity committee.

v). Policies and plans to develop, review and maintain curricula and other opportunities including service learning that address and build competency in diversity and cultural considerations.

Diversity and cultural considerations, as well as disparities issues are woven throughout many of the learning opportunities in the school. For example, the MPH and MSPH programs in EPID and HPEB each have competencies that directly pertain to diversity and cultural competence:

- EPID MPH & MSPH: Students will describe the roles of history, power, privilege, and structural inequality in producing health disparities.
- HPEB MPH & MSPH: Students will develop skills and knowledge to work effectively with culturally diverse individuals and communities, and to apply principles for ethical conduct in health promotion, education, and behavior.

In addition, the allied health professional programs are all required to address diversity and cultural competence to meet the requirements of their accrediting bodies.

Graduate and undergraduate students have opportunities to build competency through classroom experiences, practice experiences, and (for graduate students) assistantships. The school's departments and centers regularly offer seminars that touch on the issues of diversity, inclusion, and/or equity in public health.

Within the **undergraduate curriculum**, the following courses are required of all PUBH BA and BS majors; PUBH 102, EPID 410, and EXSC 191 are also required for EXSC BS majors. While none of these courses has a primary focus on cultural competence, each includes discussions of diversity, disparities, and/or cultural competence in connection with the course content.

- *PUBH 102: Introduction to Public Health* is an introduction to the history, theory, and practice of public health. Emphasis is on the population perspective and the ecological model including the population impacts of health care systems.
- *EXSC 191: Physical Activity and Health* presents concepts of exercise, nutrition, behavior changes, and skills to promote lifelong physical activity and health.
- *EPID 410: Principles of Epidemiology* discusses some of the historical ethical considerations of diversity related to race, disability, gender, nation of origin, socioeconomic status, and religion and the safeguards that have been put in place to prevent such ethical violations from occurring again. Examples are used throughout the semester to highlight health disparities throughout the world.

- *HPEB 300: Introduction to Health Promotion, Education, and Behavior* provides the historical and philosophical basis, current problems, career opportunities, and literature in the health promotion, education, and behavior change professions.
- *HPEB 511: Health Problems in a Changing Society* examines major global health topics and approaches used by governmental, non-governmental, international institutions and donor agencies to improve health in low and middle income countries. Critical analysis and generation of intervention strategies to combat health issues in various country settings.
- *HPEB 553: Community Health Problems* looks at the identification and analysis of major community health problems, their causes, the roles of individuals, community agencies, and government in affecting their solutions. Emphasis is upon personal involvement and the responsibility for community health.
- *HSPM 412: Health Economics* serves as an introduction to economic principles and applications used in the health sector. The role economics plays in various aspects of health care, demand-side and supply-side factors and issues, how various health care systems are impacted.
- *HSPM 500: Introduction to Health Care Management and Organizations* provides an overview of health services management, management techniques, and the different roles and functions of the different health care services. Use of field trips and guest speakers from different health care providers.
- *PUBH 498: Public Health Capstone Seminar* requires students to synthesize and apply public health BA/BS program content and competencies in a practice setting with emphasis on student identified areas for professional growth.

In addition to the above courses, the following electives also address these issues to some degree. Undergraduates may also take 500- and 600-level courses with permission. Those courses are discussed with graduate programs below.

- EXSC 410: Psychology of Physical Activity
- HPEB 470: Principles of Global Health
- HPEB 321: Personal and Community Health
- PUBH 499: Foundations of Public Health Leadership

Within the **public health graduate programs**, HPEB offers courses that have a primary focus on diversity, disparities, and cultural competence. HPEB 771 is required for HPEB DrPH and PhD students, and is open to other doctoral students with instructor permission. The remaining courses are open to all graduate students as an elective.

- *HPEB 512: Southern Discomfort: Public Health in the American South* investigates the unique health and disease profile of the American South, including regional disparities that remain unresolved despite a public health revolution. Topics range from endemic diseases of the antebellum period to the current HIV/AIDS crisis, and ethics of research.
- *HPEB 513: Race, Ethnicity, and Health (Examining Health Inequalities)* is a comprehensive overview of race/ethnicity and health. Class discussions will focus on comparing health status and health outcomes of different racial/ethnic groups in the U.S. and discussing possible explanations for inequalities from a behavioral science perspective.
- *HPEB 627: Lesbian, Gay, Bisexual and Transgender (LGBT) Health* discusses the health status and concerns of lesbian, gay, bisexual, and transgender communities. Includes an examination of

measurement issues and methodological considerations in research, as well as intervention efforts targeting LGBT populations.

- *HPEB 771: Socio-Cultural Perspectives on Population Health* presents theories, measurement, and empirical evidence related to macro-level factors and health. How socio-cultural and physical environments as well as socially ascribed identities can constrain or promote health.
- *HPEB 772: Current Trends in Developing World Health* discusses current issues in health of the developing world as represented in literature, policy documents, and program materials.

In addition to the courses mentions above, diversity, disparities, and cultural competence are woven through many of the graduate courses offered by the school. Three of the required core MPH courses accomplish this:

- *ENHS 660: Concepts of Environmental Health Science* presents the earth as a complex system in which people, plants, animals, and non-living physical-chemical components interact. Issues of health disparities and environmental justice are discussed.
- *HPEB 700: Concepts and Methods in Health Promotion* discusses the fundamental principles and practices of public health promotion including history, ethics, cultural competence, professional responsibilities, overview of theory and models, and selection and implementation of instructional methods.
- *HSPM 700: Approaches and Concepts for Health Administration* provides an interdisciplinary perspective on the field of health administration, including the philosophy concepts, and skills of implementation, management, and evaluation. Principles in the practice of health administration are applied to identified problems and situations.

Diversity, disparities, and cultural competence area also woven into course content in the following courses offered in the public health disciplines:

- *ENHS 670: Environmental Pollutants and Human Health* is an overview of environmental pollutants and their impact on human health; case studies of environmental catastrophes; principles of ecotoxicology; air, water, and land pollution associated with neurotoxicity, toxicology, and carcinogenesis. Includes discussions of health disparities and environmental justice.
- *ENHS 771: Environmental Health Seminar* is a one credit course that provides the opportunity for graduate students within the department and other related departments/programs to enhance and broaden their knowledge in environmental health by exploring current research and case studies. Health disparities and environmental justice are discussed.
- *ENHS 775: Resource Management and Environmental Impact Assessment* is a review of ecological principles as applied to environmental impact assessment. Study of the mandates of the National Environmental Policy Act of 1969. Analysis of several impact assessment methodologies. Health disparities and environmental justice are discussed.
- *EPID 745: Seminar in Epidemiology – Scientific Writing* teaches the concept of "people-first language" which is required by many scientific journals when submitted manuscripts for publications. "People-first language" attempts to structure wording so that persons are referred to as people rather than their condition or disease. For example, instead of saying "autistic man," we would say "man with autism."
- *EPID 747: Environmental Epidemiology* includes examples and discussion of: susceptible subpopulations, environmental justice, the role of socio-economic status and race in disease outcomes related to environmental exposures.

- *EPID 758: Application of Epidemiology in Public Health* talks about the role of history, power, privilege, and structural inequality in producing health disparities.
- *EPID 770: Social Epidemiology* pays major attention to issues of population composition, race, and socio-economic status inequalities, with focus on building awareness of common assumptions & misperceptions.
- *EPID 802: Epidemiologic Methods III – Grant Writing* includes a discussion regarding conducting research in Latino and African-American populations.
- *HPEB 550: Behavioral Concepts and Processes for the Health Professional* helps students develop interpersonal skills in dealing with health clients in various settings.
- *HPEB 553: Community Health Problems* focuses on identification and analysis of major community health problems, their causes, the roles of individuals, community agencies, and government in affecting their solutions. Emphasis upon personal involvement and the responsibility for community health.
- *HPEB 748: Community Health Development* focuses on organizational development, policy influence, capacity building, empowerment, community diagnosis, and coalition development for enhancing health.
- *HSPM 711: Health Politics* provides an analysis of issues and forces affecting health delivery through the public sector; major models of political decision-making; and current health legislation.
- *HSPM 712: Health Economics* is a critical introduction to the application of economic analysis to problems in the health care field and related scientific literature.
- *HSPM 713: Information Systems in Health Administration* teaches students to understand and optimize the use of health information systems and allied technologies to improve healthcare organizations' performance in the areas of care delivery, operations management, quality, safety, and accessibility of healthcare services.
- *HSPM 714: Perspectives in Community Health Organizations* discusses the origins and functions of public health and the U.S. health-care system with special attention to public health perspectives, social/behavioral determinants of health, and environmental health issues.
- *HSPM 715: Community Assessment and the Delivery of Health Care Services* is an introduction to concepts of community assessment and managerial epidemiology and their use in population-based planning and management of integrated health systems.
- *HSPM 716: Quantitative Methods for Health Administration* is an introduction to quantitative methods and analytical techniques with application to health administration. The course includes the use of models and simulation for decision making and control in health administration.
- *HSPM 718: Health Planning* discusses strategy and tactics of state, regional, institutional health services planning with special attention to the role of marketing.
- *HSPM 769: Organizational Behavior* explores organizational behavior at the micro level (individuals, motivation, leadership, conflict management) and macro level (social systems, inter-organizational relationships, change and innovation, performance and strategy, organizational design), with particular focus on health care environments.
- *HSPM 772: International Health* offers an overview of international health status and demographics; diseases; health care needs, financing, and infrastructure delivery; and maternal and child health, family planning, and public health programs.
- *HSPM 774: Quality Management in Healthcare* provides a systems approach to quality management focusing on Lean and other quality methods that can be directly applied in a

healthcare setting. Group projects in local acute-care settings allow students to practice quality management skills.

- *PUBH 678: Transforming Health Care for the Future* addresses cultural competence in the process of providing the foundation for beginning health professions students to gain an understanding of the complexities of the health care system through experiential activities conducted in interprofessional teams and the importance of interprofessional collaboration in order to improve the system.
- *PUBH 700: Perspectives in Public Health* is an orientation to the history, mission, and core services and disciplines of public health to develop understanding of current public health practice and how many health-related disciplines contribute to achieving public health goals. It touches on such issues as health disparities, social determinants of health, and community-based participatory research.
- *PUBH 810: Ethics in Public Health Research and Practice* pays attention to issues of diversity and cultural competency in the context of research ethics, and then again with respect to health disparities.

vi). Policies and plans to recruit, develop, promote and retain a diverse faculty.

The school's draft plan for recruiting and retaining a diverse faculty, staff, and student body draws from and adheres to the university's diversity plans. The university has recently invested in an institutional membership to the National Center for Faculty Development and Diversity (NCFDD). This is an independent professional development, training, and mentoring community of graduate students, post-docs, and faculty members dedicated to supporting academics in making successful transitions throughout their careers. Membership in the NCFDD provides a valuable tool for both recruitment (as a demonstration of the university's commitment to supporting faculty, particularly from underrepresented groups) and retention (by offering support on achieving tenure and promotion through workshops, online tools, and writing support groups).

Open faculty positions are filled through a national search process that includes advertising in professional journals as well as reaching out to likely sources of minority candidates. The importance of maintaining a diverse workforce is reinforced with each search committee. In the case of tenure-track positions, the school is committed to competitive start-up packages, and to identifying a mentor or mentoring team for incoming assistant professors, as well as limiting most faculty teaching loads to one 3-hour course per semester (although this could change with the teaching demands of a growing undergraduate population). Providing support and mentoring for incoming faculty is intended to help them successfully pursue outside funding for their research that, in addition to excellent teaching and service, is expected for tenure.

The school follows the university's Office of Equal Opportunity Programs (EOP) protocols in the advertising for, and recruitment of, underrepresented groups (specifically African American and Hispanic faculty). Search committees work closely with the associate dean of diversity, equity, and inclusion in writing job descriptions that specifically mention diversity, equity, and inclusion as important considerations when selecting a person for the job. Job ads are sent to publications, websites, and information clearinghouses that have as their specific audience underrepresented groups. Candidates who respond to ads are sent an Equal Employment Opportunity (EEO) Data Reporting Form that captures gender as well as racial identity. (It is important to note that completion of this form is voluntary.) The EOP guidelines also specify that candidate selection protocols should be followed to ensure that selection criteria are applied uniformly and in a manner that does not adversely impact on the employment opportunities of any race, sex, or ethnic group (see p. 10 of *Strengthening Academic*

Excellence Through Affirmative Recruiting: Academic Recruitment and Selection Guidelines prepared by the USC Office of Equal Opportunity Programs; included in the ERF). Likewise, each search committee has a designated affirmative action advocate whose responsibilities include: making sure job ads are advertised in a manner that would insure they reach minority and women candidates; making sure reasonable deadlines are set for the search process conducive to an active search for women and minority candidates; and encouraging applicants to complete the EEO Data Reporting Form.

vii). Policies and plans to recruit, develop, promote and retain a diverse staff.

USC is an Equal Opportunity/Affirmative Action employer and has established goals (updated annually) to support a more diversified workforce. As an equal opportunity employer, the university does not discriminate in employment opportunities or decisions for qualified persons on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, or veteran status. As an affirmative action employer, the university complies with state law requiring an approved Affirmative Action Plan and Program. With each fiscal year, USC establishes realistic goals with the State Human Affairs Commission related to the elimination of underutilization of minorities and women within its workforce.

In an effort to promote those goals, all hiring managers are contacted by the USC Office of Equal Opportunity Programs when a staff position is posted and advised in writing that black males and black females are under-represented as members of the university's workforce. In addition, all supervisory managers are required to participate in available management training offered by the university's Division of Human Resources. That training includes specific courses focused on interviewing and selecting employees. Course content serves to reinforce the university's hiring policies and procedures. The Arnold School promotes all equal opportunity/affirmative action guidelines issued by the university and adheres to all human resources policies and procedures. Although formal selection committees are rarely used for staff hires, the principles of broad dissemination of opportunities and the cultivation of diverse applicant pools parallel those identified in the faculty recruitment process. The Arnold School's associate dean for operations and accreditation works closely with the dean and the school's director of human resources to ensure compliance with all university polices related to hiring and employment.

viii). Policies and plans to recruit, admit, retain and graduate a diverse student body.

A diverse student body is important not only to the vibrancy of the Arnold School but to a full and reflective discourse on public health. Efforts to promote diversity in undergraduate student recruitment and enrollment are supported by the university's diversity initiatives, including the work of the Office of Multicultural Student Affairs, the Multicultural Outreach Student Team, the Summer Seniors program, and the Gamecock Guarantee. On the graduate level, the USC Graduate School supports diversity efforts through several means, most notably through diversity fellowship programs such as the Grace Jordan McFadden Professors Program (formerly the African American Scholars Program), which recruits and prepares underrepresented minorities to become college and university professors. Participants receive a stipend to supplement their departmental assistantships, faculty mentors, and extensive professional development opportunities while pursuing their degrees. One of the school's EPID PhD students is in this program.

Additionally, the Southern Regional Education Board State Doctoral Scholars Program is part of a nationwide initiative to produce more minority PhDs and encourage them to seek faculty positions. These efforts not only create opportunities for minority students but serve to create future faculty that reflect greater diversity. More information about student recruitment appears in criterion 4.3.

ix). Regular evaluation of the effectiveness of the above-listed measures.

Monitoring adherence to diversity policies and evaluating the effectiveness of these measures takes place at several levels. For example, faculty recruitment is primarily managed at the department level, but the associate dean for faculty affairs and curriculum has oversight and reporting responsibilities for both recruitment and retention. Similarly, staff recruitment occurs at the department level, but monitoring and compliance is also addressed by the school's human resources director. Program directors are ultimately responsible for courses and curricula and monitoring fair and equitable treatment of students, in partnership with the academic advisors and student services staff. The associate deans and the Diversity and Inclusion Committee work closely with the director of evaluation and academic assessment and will engage with the school's newly formed Evaluation Committee to identify opportunities to improve and expand on our data collection and evaluation activities, to ensure that meaningful, accurate data are collected, reported, and used to inform and evaluate our planning and implementation. At the university level, this evaluation is facilitated by the Office of Diversity and Inclusion, the Council of Academic Diversity Officers, and the Diversity and Inclusion Advisory Committee.

1.8.b Evidence that shows the plan or policies are being implemented. Examples may include mission/goals/objectives that reference diversity or cultural competence, syllabi and other course materials, lists of student experiences demonstrating diverse settings, records and statistics on faculty, staff and student recruitment, admission and retention.

The Arnold School adheres to all of the policies and practices of the university, which has a strong track record and commitment to diversity. In 2016, *INSIGHT Into Diversity* named the University of South Carolina a recipient of their Higher Education Excellence in Diversity Award for the fifth straight year. This award honors institutions for making diversity and inclusion a high priority, based on the institution's diversity achievements and its level of commitment to diversity, as shown through initiatives and outreach programs to broaden diversity. Staff hiring practices and student recruitment and retention are also measured for the award. The university was one of 83 institutions nationally that received the award in 2016 and one of only 17 schools that received the award all 5 years.

The Arnold School's work in diversity and cultural competence is rooted in long-standing efforts to elevate the diversity and cultural competence of our faculty, staff and students and to ensure that diversity considerations receive focused attention at the administrative level. In 2007, the Arnold School named its first associate dean for health disparities and social justice, demonstrating a formal and active commitment to these vital issues. Although the focus of this administrative role began with an emphasis on the elimination of disparities in health outcomes, it also served to strengthen the school's specific commitment to improving the diversity of its faculty, staff and students. With this broader focus, the Arnold School became an early leader on the university campus in advancing diversity concerns. This work was accelerated in 2015 with the redefining of the associate dean role and the appointment of Dr. David Simmons as the school's current associate dean for diversity, equity, and inclusion. With this redefinition, the associate dean focuses more overtly on the diversity issues affecting our faculty, staff and students and on the culture of diversity affecting the school itself.

Since spring 2016 each college or school at the university is required to have a diversity officer who reports to the dean (Dr. Simmons for the Arnold School). Diversity officers develop and implement unit-level strategic plans for diversity and inclusion focusing on composition, achievement, engagement and inclusion as the attributes of their inclusion efforts. Unit-level diversity officers also work closely with the university's chief diversity officer as (collectively) the Council of Academic Diversity Officers to support and advance university equity, inclusion and diversity efforts. Dr. Simmons is chair of the USC

Diversity Committee, a university-wide committee that works to make USC a more equitable and diverse environment. This leadership connection enhances the ability of the school to stay abreast of the latest diversity-related activities at the university level.

In an effort to promote a broader discourse on diversity issues, the Arnold School regularly sponsors seminars and speakers that address health disparities and related issues such as cultural competence. For example, since 2009 the school has sponsored the annual James Clyburn Health Disparities Lecture series. Most recently (spring 2016), this lecture featured Dr. Camara Jones, president of the American Public Health Association.

As part of our mission, the Arnold School has a number of units and activities devoted to serving diverse populations through outreach, research, and training. For example, the school is home to the Center for Research in Nutrition and Health Disparities, the South Carolina Cancer Disparities Community Network, the Consortium for Latino Immigration Studies, and PASOS, a community-focused organization addressing the needs of our state's growing Hispanic population.

Within the Arnold School, the Institute for Partnerships to Eliminate Health Disparities (which ended operations in June 2016 following the retirement of its long-time, founding director) and the Rural Health Research Center specifically recruited minority students for graduate research assistantships. This is still true for the Rural Health Research Center. These students have assisted in crafting federal grant submissions and developing and writing scientific peer-reviewed journal articles.

In other examples of diversity in the school, several departments in the school have established themselves as attractive programs for international students, adding to the cultural mix of the school. The increased emphasis on distance education has also helped reach a more diverse student population, particularly across age ranges. For example, recruitment for the MPH Professional Online Program in Health Promotion, Education, and Behavior specifically targets current professionals in health-related professional occupations. These professionals are generally older than typical graduate students and bring a wealth of experience to the educational discourse, enhancing the learning experience for everyone involved.

1.8.c Description of how the diversity plan or policies were developed, including an explanation of the constituent groups involved.

After the school's 2014 faculty strategic planning retreat, strategic planning workgroups were established to develop plans in several areas (as discussed in section 1.1.e). The Diversity and Inclusion Workgroup was comprised of faculty members from each of the school's academic departments. The charge of the committee was to identify policies and resources at the university level and to recommend policies and procedures at the school level to create and sustain a culture of respect, acceptance, and inclusivity. The associate dean for diversity, equity, and inclusion led the workgroup and worked closely with the USC Chief Diversity Officer John Dozier, as well as Arnold School Dean Tom Chandler in the planning process. The committee met in fall 2015 and developed the draft strategic plan mentioned in 1.8.a to promote a multicultural environment for faculty, staff, and students (included in the ERF). The goals and objectives outlined in the plan lay out a commitment to diversity in the faculty, staff, and student populations, and the plan includes a recurring budget of $30-35K per year for implementation of the plan.

In the process of conducting this self-study, the Diversity and Inclusion Workgroup was made a permanent committee in fall 2016. Membership on this committee is being expanded to include student(s) and partners from outside the school. This committee is working with the associate dean for

diversity, equity, and inclusion to refine and finalize the diversity plan and develop an implementation plan with specific measureable objectives, action items, and timelines.

1.8.d Description of how the plan or policies are monitored, how the plan is used by the school and how often the plan is reviewed.

As mentioned in 1.8.a, section ix, evaluation will take place on a number of levels and will be guided by the Arnold School's Diversity and Inclusion Committee in collaboration with the Evaluation Committee. In addition, the strategic plan itself, and the implementation plan when developed, will include clear, measurable objectives with plans for how they will be measured and evaluated. This process will be monitored by the associate dean for diversity, equity, and inclusion with the assistance of the diversity committee. The implementation plan will include a timeline for monitoring specific actions and will be reviewed by the diversity committee and the school's Administrative Council annually. The strategic plan, intended to apply through 2019, will be reviewed over the next two years and serve as a basis for a new plan for the next five years.

1.8.e Identification of measurable objectives by which the school may evaluate its success in achieving a diverse complement of faculty, staff and students, along with data regarding the performance of the program against those measures for each of the last three years. See CEPH Data Template 1.8.1. At a minimum, the school must include four objectives, at least two of which relate to race/ethnicity. For non-US-based institutions of higher education, matters regarding the feasibility of race/ethnicity reporting will be handled on a case-by-case basis. Measurable objectives must align with the school's definition of under-represented populations in Criterion 1.8.a.

In determining reasonable targets for outcome measures, we compared distributions within the Arnold School with available data on distributions within the university, among accredited schools of public health (using data available in the ASPPH data portal), and in applicable state and national populations (using US Census data). After reviewing the data, appropriate comparison data and target outcomes were selected as follows (see table 1.8.e):

- Because the university handles **undergraduate student** recruitment, the Arnold School expects to maintain the same demographic distribution as the university. Therefore, the target for under is based on the demographic distribution of USC Columbia undergraduate students in the fall 2014 fact book.
- Our **graduate students** come from across the country (and around the world). The school would like to maintain a demographic distribution that is consistent with the distribution of the US population age 18-44, with a bachelor's or master's degree (per the 2015 US Census). The proportion of Black/African-American graduate students is slightly higher than the population distribution, possibly due to our strong research focus on the needs of Black/African-American populations, which attracts graduate students and researchers who are interested in working in these areas and who may belong to this ethnic group. The current proportion of Hispanic students lags behind the population distribution. One reason may be that we have fewer research projects that focus on Hispanic issues, but that is growing with the work of the Consortium for Latino Immigration Studies and PASOs (see criteria 3.1, 3.2, and 3.3). Another possible reason for this is that South Carolina, like other southern states, is perceived as an anti-immigration state that may not be welcoming to Hispanic populations.
- **Faculty** members are also recruited from across the country, so the targets are based on the population distribution of those age 18-64, with a professional or doctorate degree (per the

2015 US Census). As with graduate students, the proportion of faculty who are Black/African-American is close to the target value, while the proportion of faculty who are Hispanic is much lower than the target value.

- The distribution of Arnold School unclassified **staff** will be compared to the distribution of unclassified staff across the university. Although the school employs a larger percentage of Hisapnic staff than the university average, Black/African-Americans are still under-represented.

Table 1.8.e Measureable objectives for student, faculty, and staff diversity*

Category/Definition	Target[1] (comparison population)	Fall 2014	Fall 2015	Fall 2016[2]
Undergraduate students Non-Hispanic Black/African American	≥ 10% (USC undergraduates)	11% (n=199)	11% (n=198)	11% (n=227)
Hispanic	≥ 4% (USC undergraduates)	3% (n=59)	4% (n=64)	3% (n=69)
Graduate students Non-Hispanic Black/African American	≥ 9% (US Census[3])	13% (n=80)	12% (n=75)	12% (n=79)
Hispanic	≥ 9% (US Census[3])	4% (n=25)	2% (n=15)	3% (n=22)
Primary and secondary faculty Non-Hispanic Black/African American	≥ 6% (US Census[4])	7% (n=10)	7% (n=9)	5% (n=8)
Hispanic	≥ 6% (US Census[4])	1% (n=1)	1% (n=1)	1% (n=2)
Staff Non-Hispanic Black/African American	≥ 25% (USC unclassified staff)	CY2014 21% (n=36)	CY2015 16% (n=34)	CY2016 18% (n=45)
Hispanic	≥ 2% (USC unclassified staff)	7% (n=13)	8% (n=16)	7% (n=17)

* All data are collected through self-report. Student data is collected at admissions; faculty and staff data are collected by human resources.

[1] Targets are based on appropriate, comparable population averages.

[2] Fall 2016 student data includes athletic training students; program is new to Arnold School as of July 2016

[3] Graduate student comparisons are made to US population age 18-44, with a bachelor's or master's degree.

[4] Faculty comparisons are made to US population age 18-64, with a professional or doctorate degree.

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

This criterion is met.

Strengths:

- Diversity, equity, and inclusion are an important part of the schools teaching, research, and service activities.
- The Arnold School is a model for other units across campus. We were the first school to have an associate dean with responsibility for diversity issues. Now all units are required to have a chief diversity officer. School faculty are leading many of the university effort in diversity and inclusion (e.g., as chair of University Diversity Committee, chair of the Black Faculty Caucus, and chair of the Latino/a & Hispanic Faculty Caucus.

Weaknesses:

- Although the school has a draft strategic plan in place, an implementation plan is needed with clear, actionable objectives, action items, and timelines. We recognize that a purposeful process and long-term commitment are required to achieve the established strategic objectives.

Plans:

- The school is in the process of refining the strategic plan and developing a specific implementation plan. This process is being led by the associate dean for diversity, equity, and inclusion and the Diversity and Inclusion Committee. The intention is to have an action plan completed by fall 2017. Examples of actions that can be taken include training faculty about how to advise students of a different race/ethnicity and reviewing the retention records of faculty to determine what issues may be particularly relevant to maintaining a diverse faculty complement.
- To ensure a broader focus on diversity within the school, the associate dean for diversity, equity, and inclusion will be closely involved in key strategic activities such as planning for the implementation of the new CEPH criteria. He will also engage regularly with ongoing activities and groups within the school at multiple levels (e.g., Administrative Council, DSAC, graduate student orientation, faculty meetings, search committee training, etc.).

2.0 Instructional Programs

2.1 <u>Degree Offerings</u>. The school shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional master's degree in at least the five areas of knowledge basic to public health. The school may offer other degrees, professional and academic, and other areas of specialization, if consistent with its mission and resources.

2.1.a An instructional matrix presenting all of the school's degree programs and areas of specialization. If multiple areas of specialization are available within departments or academic units shown on the matrix, these should be included. The matrix should distinguish between public health professional degrees, other professional degrees and academic degrees at the graduate level, and should distinguish baccalaureate public health degrees from other baccalaureate degrees. The matrix must identify any programs that are offered in distance learning or other formats. Non-degree programs, such as certificates or continuing education, should not be included in the matrix. See CEPH Data Template 2.1.1.

The Arnold School is composed of six academic departments: Environmental Health Sciences; Epidemiology and Biostatistics; Health Promotion, Education, and Behavior; Health Services Policy and Management; Communication Sciences and Disorders; and Exercise Science. Thirty-one degrees (not counting joint degrees) are offered at the undergraduate, master's, and doctoral levels (see table 2.1.a). The undergraduate public health degrees are administered by the Office of Undergraduate Affairs. The general MPH degree is administered by a program director in the Practice and Workforce Development group.

Table 2.1.a. Instructional matrix by degree and major

	Undergraduate Degrees	
PUBLIC HEALTH BACHELOR'S DEGREES		
Public Health (PUBH)	BA, BS	
ALLIED HEALTH BACHELOR'S DEGREES		
Exercise Science (EXSC)	BS	
Athletic Training	BS[1]	
	Academic Degrees	**Prof. Degrees**
PUBLIC HEALTH MASTER'S DEGREES		
Biostatistics (BIOS)	MSPH	MPH
Environmental Health Sciences (ENHS)	MS	MPH
Epidemiology (EPID)	MSPH	MPH
Health Promotion, Education, and Behavior (HPEB)	MSPH	MPH[2]
Health Services Policy and Management (HSPM)		MPH[2]
General Public Health (PUBH)		MPH
Physical Activity and Public Health (EXSC)		MPH
ALLIED HEALTH MASTER'S DEGREES		
Advanced Athletic Training		MS[1]
Health Services Policy and Management (HSPM)		MHA
Communication Sciences and Disorders (COMD)		MSP, MCD[2]
Exercise Science (EXSC) Applied Physiology Emphasis Health Aspects of Physical Activity Emphasis Rehabilitation Sciences Emphasis	MS	

	Academic Degrees	Prof. Degrees
PUBLIC HEALTH DOCTORAL DEGREES		
Biostatistics (BIOS)	PhD	DrPH
Environmental Health Sciences (ENHS)	PhD	
Epidemiology (EPID)	PhD	
Health Promotion, Education, and Behavior (HPEB)	PhD	DrPH
Health Services Policy and Management (HSPM)	PhD	DrPH
ALLIED HEALTH DOCTORAL DEGREES		
Communication Sciences and Disorders (COMD)	PhD	
Exercise Science (EXSC) concentrations: Applied Physiology Health Aspects of Physical Activity Rehabilitation Sciences	PhD	
Physical Therapy (PHYT)		DPT
JOINT DEGREES with MPH		
Medicine with General MPH		MD/MPH
Pharmacy with General MPH		PharmD/MPH
Social Work with HPEB MPH		MSW/MPH
Social Work with HSPM MPH		MSW/MPH
Political Science MPA with HSPM MPH[3]		MPA/MPH
OTHER JOINT DEGREES		
Law with HSPM MHA		JD/MHA
Environmental/Epidemiology (ENHS/EPID)	PhD/PhD	

[1] The athletic training programs moved from College of Education into Arnold School beginning AY2016-17

[2] Degree options offered entirely online or with a distance option

[3] New joint degree starting fall 2017

Currently the EXSC MS offers three concentrations; however, the faculty have found that having three concentrations creates difficulty with advisement, management, progression to degree, and student satisfaction with the program. As of fall 2017, the program will offer only one concentration, with required coursework from each of the three divisions and electives that can be tailored to students' interests and professional goals. This change will also promote better cohesiveness among students.

2.1.b The school bulletin or other official publication, which describes all degree programs identified in the instructional matrix, including a list of required courses and their course descriptions. The school bulletin or other official publication may be online, with appropriate links noted.

The university's *Graduate Studies Bulletin* and *Undergraduate Studies Bulletin* are available electronically, and contain information about all academic programs, and courses. University academic policies and requirements are also part of the bulletin and are available by selecting *Policies and Regulations Bulletin* from the drop-down on the bulletin's website. Information about registration, academic calendars, etc. is available at the registrar's website. Program information is also available on the school's website under "Study."

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

This criterion is met.

Strengths:

- The Arnold School offers four bachelor's degrees, seven MPH programs, three DrPH programs, five academic master's programs, seven PhD programs, and five graduate professional degree programs. In addition to the five required MPH disciplines, the school also offers a general MPH and an MPH in physical activity and public health. This diversity enhances the educational experience for all our students by breadth of course offerings and expertise of our faculty complement.

Weaknesses:

- Departments are sometimes challenged to provide sufficient differentiation between multiple degrees in the same discipline at the same level (e.g., MPH and MSPH or DrPH and PhD), especially when resources are tight.

Plans:

- The new 2016 CEPH criteria provide the school with an opportunity to review all of its degree offerings, both to ensure compliance with the new criteria and to assess the needs for each of its degree offerings. Preliminary discussion began during the self-study process, but more substantive discussion has been deferred until April 2017.

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.

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

All coursework is in the form of standard semester credit hours which are defined in terms of contact hours, as stated in university policy ACAF 2.03:

> *Each single course credit requires a minimum of 700 minutes or 14 hours of continuous and ongoing instructional time. Additionally, a minimum of five consecutive calendar days of continuous instruction is required per credit. This time excludes breaks and final exams.*

2.2.b Information about the minimum degree requirements for all professional public health master's degree curricula shown in the instructional matrix. If the school or university uses a unit of academic credit or an academic term different from the standard semester or quarter, this difference should be explained and an equivalency presented in a table or narrative.

The MPH degrees offered by the Arnold School require 42-45 credit hours, depending on the program, as shown in Table 2.2.b below.

Table 2.2.b. Credit hours required for MPH degrees

MPH DEGREES	MPH hours
Biostatistics (BIOS)	45
Environmental Health Sciences (ENHS)	42
Epidemiology (EPID)	43
Health Promotion, Education, and Behavior (HPEB)	45
Health Services Policy and Management (HSPM)	45
General Public Health (PUBH)	42*
Physical Activity and Public Health (EXSC)	45

* Preventive medicine residents complete the general MPH with 36 credit hours, along with completion of the preventive medicine residency, which substitutes for the 6-hour practicum (see 2.4.d)

2.2.c Information about the number of professional public health master's degrees awarded for fewer than 42 semester credit units, or equivalent, over each of the last three years. A summary of the reasons should be included.

All seven MPH programs in the Arnold School require six credit hours of public health practicum for degree completion. As described in section 2.4.d, preventive medicine residents in the MPH program in general public health receive full practicum credit for their residency clinical rotations. Because these rotations are coordinated and managed by the Department of Family and Preventive Medicine in the USC School of Medicine, we request documentation of the rotations but do not require the students to register for PUBH 798, normally required for MPH completion. Therefore, these students complete the MPH for 36 hours without academic credit for the public health practicum. However, they fully satisfy the practicum requirement through the clinical rotations.

In the past three academic years (since fall 2014), two students in the preventive medicine residency graduated with the MPH in general public health with 36 credit hours each at USC, along with completion of preventive medicine residencies at the USC School of Medicine. See section 2.4.d for more information.

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

This criterion is met.

Strengths:

- All of our programs meet the criteria for a minimum of 42 credit hours.

Weaknesses:

- None noted.

Plans:

- None noted.

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

2.3.a Identification of the means by which the school assures that all graduate professional degree students have fundamental competence in the areas of knowledge basic to public health. If this means is common across the school, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program. See CEPH Data Template 2.3.1.

MPH Students. All students in the school who receive the MPH degree, regardless of department or specialization, must enroll in and pass with a grade of C or higher, a three credit hour graduate course in each of the five core areas of public health. Table 2.3.a.1 lists the core courses in each topic area. Syllabi are included in the ERF. The biostatistics and epidemiology courses are offered in two options (700 and 701). The 701 courses address the material at a more advanced level (e.g., more conceptual material and quantitative methods). Students in epidemiology and biostatistics are required to take the 701 courses. Some students in other programs may also be advised into these classes (e.g., preventive medicine residents in general public health program and PAPH students interested in the surveillance option of that program). Criterion 2.6 presents competencies for the MPH and DrPH core courses.

Table 2.3.a.1 MPH core public health courses

Core Knowledge Area	Course Number & Title	Credits
Biostatistics	BIOS 700: Introduction to Biostatistics *or* BIOS 701: Concepts and Methods of Biostatistics	3
Epidemiology	EPID 700: Introduction to Epidemiology *or* EPID 701: Concepts and Methods of Epidemiology	3
Environmental Health Sciences	ENHS 660: Concepts of Environmental Health Sciences	3
Social & Behavioral Sciences	HPEB 700: Concepts and Methods in Health Promotion	3
Health Services Administration	HSPM 700: Approaches and Concepts of Health Administration	3

DrPH Students. The school's DrPH programs are in transition, with the programs in biostatistics and health services policy and management currently not accepting new students, pending a school-wide comprehensive review of the programs. The DrPH in health promotion, education, and behavior technically can admit students who are post-baccalaureate, but the majority of admitted students have a closely related master's degree and/or extensive public health experience. The DrPH core curriculum includes courses offered by three of the four departments offering the core public health disciplines. These courses represent a broad focus on public health concepts from various perspectives. Where there are course options (i.e., for advanced evaluation and research methods), students in a given discipline are advised to take the option in their own discipline. Syllabi are included in the ERF.

Table 2.3.a.2 DrPH core public health courses

Course Number & Title	Credits
HSPM 820: Public Health Leadership	3
HPEB 820: Public Health Advocacy and Policy	3
Advanced Evaluation – one of the following: HPEB 818: Advanced Evaluation of Health Promotion Programs HSPM 818: Economic Evaluation and Policy Analysis of Health Services	3
Research Methods – one of the following: BIOS 765: Research Design in the Biomedical Sciences HPEB 802: Implementing and Monitoring Health Promotion Interventions HSPM 719: Health Services Research Methods II	3

2.3.b Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

- The MPH core includes five courses that address current foundational content in the five traditional areas.

Weaknesses:

- While the DrPH programs expect professional experience prior to admission, the explicit inclusion of all five traditional public health disciplines is not well documented for each student; however, the core curriculum does provide strong, advanced instruction in public health knowledge and concepts.

Plans:

- Under the new 2016 criteria, the school must ensure that students are grounded in the foundational public health knowledge and meet the MPH and DrPH foundational competencies (criterion D1-D3), but explicit linkage to the current traditional public health disciplines is not required. As part of the ongoing discussion of ensuring compliance with the 2016 criteria, we will explore possible revisions for the DrPH core curriculum.

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.

2.4.a Description of the school's policies and procedures regarding practice experiences, including the following: i) selection of sites; ii) methods for approving preceptors; iii) opportunities for orientation and support for preceptors; iv) approaches for faculty supervision of students; v) means of evaluating student performance; vi) means of evaluating practice placement sites and preceptor qualifications; vii) criteria for waiving, altering or reducing the experience, if applicable.

The public health practicum is a three-way partnership among the student, faculty advisor, and preceptor. Each partner in this mutually beneficial relationship assumes certain responsibilities, performs specific functions, and receives benefits. The practicum is guided by a set of goals, competencies, and objectives, which are based on the needs and resources of all parties involved. A practicum is individually developed; therefore, the focus, substance, and approach of the practicum will vary, depending on a student's particular academic program and the student's individual interests and professional goals. However, the objectives of the practicum must be consistent with the vision, mission, and goals of the Arnold School and of the student's particular program.

The school's practice and placement coordinator provides support to departments and students for the practicum experience. This includes practicum reference materials on the school's website, including the *Practicum Guide*, checklists, reporting guidelines, preceptor trainings, and related links. The school's Opportunity Manager website provides students, faculty, and preceptors with a database of practicum opportunities and a portal for completing the practicum proposal and evaluations. All forms must be submitted electronically to the practice and placement coordinator through this system. Examples of practicum proposals are included in the ERF.

The *Practicum Guide* provides an overview of the practicum; lists criteria for sites and preceptors; describes the roles and responsibilities of the student, practicum advisor, and preceptor; and describes the practicum process in detail. It also includes program-specific information, such as contact information, practicum learning outcomes (tied to competencies), and program-specific prerequisites.

i. Selection of sites. A variety of agencies offer practice opportunities for students. To be considered an eligible practicum site, an organization must meet the following criteria:

- Address or serve a public health or health service mission
- Offer students the opportunity to learn from professionals in a supervised environment
- Have a completed and approved practicum site application through the Opportunity Manager
- Establish a memorandum of agreement with the school

Copies of the practicum site application and Memorandum of Agreement are included in the ERF.

ii. Methods for approving preceptors. Preceptors for the practicum are professionals who work in public health practice or health service organizations, such as those who develop, manage, or evaluate programs at the SC Department of Health and Environmental Control. To be considered an eligible preceptor, a professional must meet the following criteria:

- Be employed by an approved organization
- For the MPH: Have at least a bachelor's degree and two years of experience
- For the DrPH: Have a graduate degree and five years senior-level experience
- Complete the preceptor/supervisor online orientation

- Agree to professional standards and ethics and to abide by the policies and procedures established by the Arnold School
- Have an approved practitioner profile through the MySPH Opportunity Manager

Preceptors have the option of completing introductory coursework in public health, such as *Introduction to Public Health*, which includes a history of public health, the 10 essential public health services, and an orientation to the public health profession. This is a self-paced, online course. Directions for enrolling are available through the school's Virtual Campus. In exceptional circumstances, departments can waive preceptor criteria by filing a Preceptor Waiver Form. The student is responsible for submitting the completed preceptor waiver form to their practicum advisor for approval by the student's academic department.

iii. Opportunities for orientation and support for preceptors. As mentioned above, preceptors must a complete preceptor/supervisor online orientation. Preceptors also receive support from the departments and from the school's practice and placement coordinator. The orientation describes the practicum, roles and responsibilities of the participants, and best practices for a beneficial practicum experience. It also includes a link to the preceptor agreement, which also records completion of the course.

iv. Approaches for faculty supervision of students. The practicum advisor is the faculty member within the student's department/program who serves as a resource for both the student and the preceptor. The practicum advisor tracks the student's progress and consults with the preceptor when necessary. The practicum advisor is expected to advise the student in developing practicum learning objectives, review and approve the practicum proposal, communicate with the student and preceptor throughout the practicum, and provide ongoing expert advice and guidance as needed or required.

v. Means of evaluating student performance. The preceptor and advisor work together to evaluate student performance. They both attend and evaluate the student's final oral presentation, review and evaluate the practicum final report, and assess accomplishment of learning objectives. The practicum advisor then assigns a pass/fail grade for the practicum course. In addition, the student, preceptor, and faculty advisor complete an online practicum evaluation at the end of the practicum. This evaluation is conducted electronically through MySPH, which sends email requests and reminders to all parties to complete the survey. Copies of the surveys are included in the ERF.

vi. Means of evaluating practice placement sites and preceptor qualifications. The practicum and placement coordinator reviews qualifications of any proposed site and preceptor when the initial profiles are submitted. Students and faculty advisors provide an evaluation of placement sites and preceptors as part of the practicum evaluation. This information is used to determine whether the site and/or preceptor should be encouraged for future placements.

vii. Criteria for waiving, altering, or reducing the experience, if applicable. The Arnold School MPH practica require a minimum of 250 contact hours through six credit hours, carried out over one to two semesters. The DrPH practicum requires a minimum of 300 contact hours through six credit hours and is carried out over one to three semesters. With the exception of HSPM 798, all practica are graded on a pass/fail basis. HSPM 798 will be changed to pass/fail grading beginning fall 2017. Students in the MSW/MPH dual degree programs receive up to three credit hours public health practicum credit for an appropriate field placement in the MSW curriculum. Similarly, students in the MD/MPH or PharmD/MPH programs may replace up to three credit hours of practicum credit with a rotation in their respective programs (e.g., rural health/preventive medicine for MD, Indian Health Service for PharmD). See criterion 2.13 for more information on dual degree programs. Preventive Medicine residents, per our

accreditation standards, receive full practicum credit for their residency clinical rotations (see 2.4.d below).

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

Over the past two years, 7 DrPH and 118 MPH students have completed practica at over 80 different locations. The list of sites and preceptors is listed by program in table 2.4.b.

Table 2.4.b Agencies and preceptors used for practice experiences, by program area, for last two academic years

Discipline	Practicum Location	Preceptor	AY
DrPH Practicum Sites (7 students)			
BIOS	SC DHEC, Bureau of Maternal & Child Health	Elizabeth De Santis	2014-15
HPEB	Center for Colon Cancer Research	Franklin G. Berger	2014-15
HPEB	USC School of Medicine, Greenville	Jennifer Trilk	2014-15
HSPM	Health Care Incentives Improvement Institute	Doug Emery	2015-16
HSPM	SC Dept. of Health & Human Services	Tony Keck	2014-15
HSPM	SC Primary Health Care Association	Vicki Young	2014-15
HSPM	SC Rural Health Research Center	Amy Brock Martin	2014-15
MPH Practicum Sites (118 students)			
ENHS	International Shellfish Sanitation Conference	Ken Moore	2014-15
ENHS	JC & Associates	Carl Coleman	2014-15
ENHS	Lockheed Martin	Casey Anderson	2014-15
ENHS	SC DHEC, Bureau of Water	Carol Roberts	2014-15
ENHS	SC DHEC, Bureau of Water	David Graves	2014-15
ENHS	SC DHEC, Office of Public Health Stat. & Information	Harley Davis	2015-16
ENHS	Water Mission International, Charleston, SC	J. Deal	2014-15
EPID	Prevention Partners	Amy Meador	2015-16
EPID	SC DHEC, Bureau of Community Health & Chronic Disease Prevention	Khosrow Heidari	2014-15
EPID	SC DHEC, SC Central Cancer Registry	Susan Bolick	2015-16
HPEB	ABA Outreach, LLC	Kerri Pakurar	2014-15
HPEB	AIDS Health Foundation	Elizabeth McLendon	2014-15
HPEB	Alala Cancer Society	Kim Neel	2014-15
HPEB	BlueCross BlueShield of SC Foundation	Erika Kirby	2015-16
HPEB	Fast Forward	Alex Ruffin	2015-16
HPEB	HopeHealth, Inc.	Anita Longan	2015-16
HPEB	Lexington Richland Alcohol & Drug Abuse Council	Deborah Early	2015-16
HPEB	Mann Global Health	Chastain Mann	2015-16
HPEB	Marine Corps Community Services SC	Kathy Williams	2015-16
HPEB	Mothers Against Drunk Driving	Steven Burritt	2015-16
HPEB	Palmetto Health Heart Hospital	Sara Prothro	2014-15
HPEB	Palmetto Health Richland	Harmony Robinson	2015-16
HPEB	Palmetto Health Richland	Mandy Felder	2015-16
HPEB	PASOs	Myriam Torres	2014-15, 2015-16
HPEB	Richland County School District One	Anthony Boatwright	2014-15
HPEB	SC Campaign to Prevent Teen Pregnancy	Andrea Heyward	2014-15
HPEB	SC Cancer Prevention & Control Network	Kandice Smith	2015-16
HPEB	SC Contraceptive Access Campaign	Deborah Billings	2014-15
HPEB	SC Dept. of Agriculture	Amy Weaver	2014-15, 2015-16

Discipline	Practicum Location	Preceptor	AY
HPEB	SC DHEC, Office of Minority Health	Jacqlyn Atkins	2015-16
HPEB	SC Hospital Association	Emily O'Sullivan	2014-15
HPEB	SC Institute of Medicine & Public Health	Megan Weis	2014-15
HPEB	SC Tobacco-Free Collaborative	Megan Hicks	2015-16
HPEB	Sexual Trauma Services of the Midlands	Kayce Singletary	2015-16
HPEB	St. Joseph Mercy Health System	Vita McCabe	2015-16
HPEB	The FriendShip	Jeanette Bodie	2015-16
HPEB	USC Arnold School, Undergraduate Student Services	Kara Montgomery	2014-15
HPEB	USC Campus Wellness	Amanda Castles	2015-16
HPEB	USC Campus Wellness	Elizabeth Money	2014-15
HPEB	USC Campus Wellness	Marguerite O'Brien	2015-16
HPEB	USC Campus Wellness for Faculty/Staff	Michael Crowley	2014-15
HPEB	USC Cancer Prevention & Control Program	Julia Houston	2014-15, 2015-16
HPEB	USC CPCP, Columbia's Cooking	Trisha Mandes	2015-16
HPEB	USC Center for Environmental NanoScience & Risk	Jamie Lead	2014-15
HPEB	USC Center for Research in Nutrition & Health Disparities	Carrie Draper	2014-15
HPEB	USC GoodBodies Wellness Program	Teresa Moore	2014-15
HPEB	USC Office for the Study of Aging	Brenda Hyleman	2014-15
HPEB	USC Prevention Research Center	Deborah Kinnard	2014-15
HPEB	USC School of Medicine	Sandra Kammermann	2014-15
HPEB	Wayne State Univ, College of Education, Center for School Health, Detroit, MI	Noel Kulik	2015-16
HPEB	YMCA Columbia	Amanda Metzger	2015-16
HSPM	AARP, SC Chapter	Teresa Arnold	2015-16
HSPM	American Public Health Association, Washington, DC	Mekia Barclift	2014-15
HSPM	Children's Trust of SC	Melissa Strompolis	2014-15
HSPM	Chucktown Squash, Charleston, SC	Lauren Herterich	2015-16
HSPM	City of Charleston	Ron Acierno	2014-15
HSPM	Cobb & Douglas Public Health	Albert Case	2015-16
HSPM	Columbia Free Medical Clinic	Christopher Goodman	2015-16
HSPM	Consortium for Latino Immigration Studies	Myriam Torres	2014-15
HSPM	Emory University	Marlene Sidon	2014-15
HSPM	Emory University, Grady Health	Winifred Wilkins Thompson	2014-15
HSPM	Family Dental of Canton, GA	Hanshesh Patel	2014-15
HSPM	Girls on the Run	Mary Lohman	2014-15
HSPM	Lexington Medical Center	Timothy James	2014-15
HSPM	March of Dimes, SC Chapter	Breana Lipscomb	2014-15 2015-16
HSPM	My Sister's House, Charleston, SC	Virginia Vedilago	2014-15
HSPM	National Ability Center	Tracy Meier	2015-16
HSPM	New Day Clubhouse, Spartanburg, SC	Jane Clemmer	2014-15
HSPM	Palmetto Health Baptist	Shawnée Garrick	2015-16
HSPM	Palmetto Health Quality Collaborative	Anna Kay	2015-16
HSPM	Palmetto Health Richland	Forrest Fortier	2015-16
HSPM	Palmetto Health/USC Medical Group	Freddie Strange	2015-16
HSPM	SC Dept. of Alcohol & Drug Abuse Services	Bob Toomey	2014-15
HSPM	SC Dept. of Health & Human Services	Teeshla Curtis	2014-15, 2015-16
HSPM	SC Dept. of Health & Human Services	Amanda Williams	2014-15

Discipline	Practicum Location	Preceptor	AY
HSPM	SC Dept. of Health & Human Services	Peter Brooks	2015-16
HSPM	SC DHEC, Bureau of Community Health & Chronic Disease Prevention	Krystal Johnson	2014-15
HSPM	SC DHEC, Bureau of Disease Control	Linda Bell	2015-16
HSPM	SC DHEC, Bureau of Maternal & Child Health	Lucy H. Gibson	2014-15
HSPM	SC DHEC, Bureau of Maternal & Child Health	Michael Smith	2014-15
HSPM	SC DHEC, Division of Women's Health	Stephanie Derr	2014-15
HSPM	SC Hospital Association	Dr. Richard Foster	2015-16
HSPM	SC Office of Rural Health	Mark Griffin	2015-16
HSPM	Software Catalysts, LLC	Raj Mukhi	2015-16
HSPM	The Free Medical Clinic	Christopher Goodman	2015-16
HSPM	USC Cancer Prevention & Control Program	Dr. Tisha Felder	2015-16
HSPM	USC School of Medicine	Linda Renner	2014-15
HSPM	Westview Behavioral Health Services, Newberry, SC	Hugh B. Gray, Jr.	2014-15
PAPH	American Health Association	Catherine Ramsey	2015-16
PAPH	CDC, National Center for Chronic Disease Prevention and Health Promotion, School Health Branch	Sarah Lee	2014-15
PAPH	City of Columbia, Parks & Recreation	Scott Riley	2014-15
PAPH	Lexington County Recreation & Aging Commission	Lynda Christison	2014-15
PAPH	Medical University of South Carolina (MUSC) Weight Management Center	Patrick M O'Neil	2015-16
PAPH	SC DHEC, Bureau of Community Health & Chronic Disease Prevention	Kate Callahan-Myrick	2015-16
PAPH	SC DHEC, Bureau of Community Health & Chronic Disease Prevention	Lori Phillips	2014-15
PAPH	SC DHEC, Bureau of Community Health & Chronic Disease Prevention	Teresa Hill	2014-15
PAPH	Sports Performance & Wellness Inst., Richmond, VA	Jessica Spiers	2014-15
PAPH	USC Center to Promote Healthy Lifestyles	Delia West	2014-15
PAPH	Verizon Wireless Health & Wellness Center, Elgin, SC	Shelley Hinson	2015-16
PUBH	Alala Cancer Society	Kim Neel, Sherry Norris	2014-15
PUBH	Community Health Services of Lamiolle Valley, Inc.	Kevin Kelley	2014-15
PUBH	McLeod Regional Medical Center	Hattie Main	2015-16
PUBH	Medical University of South Carolina	Amy Martin	2015-16
PUBH	New Horizons Family Health Service	Chris Thomas	2014-15
PUBH	SC Dept. of Alcohol & Drug Abuse Services	Harry Prim	2014-15
PUBH	SC DHEC	Robert Davila	2015-16
PUBH	SC DHEC, Health Services	Henry G. Potter	2015-16
PUBH	Senior Resources	Anne Shissias	2015-16

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

No practicum waivers were awarded in the past three years.

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

Table 2.4.d lists the clinical rotations completed by the two preventive medicine residents who graduated from the MPH in general public health program in the past three academic years. Further documentation of these rotations is provided in the ERF.

Table 2.4.d Preventive medicine residents completing their academic program in last three years

Graduation AY	Student	Rotations
2013-14	*None*	
2014-15	Student A	W.J.B. Dorn Veterans Administration Medical Center – Addiction Medicine Lexington Medical Center - Occupational Med Dept of Family and Preventive Medicine Clinic Healthy Columbia Richland Springs Addiction Psychiatry C.M. Tucker Nursing CareCenter SC Department of Health and Environmental Control: Midlands Office (regional); Central Office; Division of Tobacco Prevention & Control Blue Cross Blue Shield
2014-15	Student B	W.J.B. Dorn Veterans Administration Medical Center – Addiction Medicine Lexington Medical Center - Occupational Med Dept of Family and Preventive Medicine Clinic Healthy Columbia Infectious Disease Clinic C.M. Tucker Nursing CareCenter SC Department of Health and Environmental Control: Midlands Office (regional); Central Office; Community Health Blue Cross Blue Shield
2015-16	*None*	

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

This criterion is met.

Strengths:

- The Arnold School has developed a broad network of practicum placement sites and provides infrastructure to facilitate tracking and evaluation activities of practicum experiences.
- Over the past two years, the general MPH graduate director has worked closely with the PharmD and preventive medicine program directors to more clearly define and document procedures for completing the practicum.

Weaknesses:

- Because of the diversity of sites, preceptors, and practicum proposals, assuring a consistent level of rigor in the MPH concentration area and integration of core public health concepts is an ongoing challenge. To address this we have developed a set of requirements for both the practicum proposal and final report, which document more consistently how students are demonstrating achievement of program competencies and practicum objectives.

Plans:

- The practicum experience will be reviewed in the context of implementing the 2016 CEPH criteria for applied practice experiences (criteria D5 and D6).

2.5 Culminating Experience. All graduate professional degree programs, both professional public health and other professional degree programs, identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.

2.5.a Identification of the culminating experience required for each professional public health and other professional degree program. If this is common across the school's professional degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each.

MPH students. The culminating experience for most MPH students includes two major components: the practicum experience and a comprehensive exam. All students complete the practicum project near the end of their programs, as described in criterion 2.4. Practicum requirements include application of appropriate skills and integration of knowledge across the public health curriculum. In particular, the purpose of the final report and oral presentation is to allow assessment of the student's learning experience and application of public health theories. The requirements for the final report are designed to demonstrate the student's ability to synthesize and integrate knowledge acquired in academic graduate training, including the core public health disciplines, and to apply theory and principles in an experience that represents some aspect of professional practice.

MPH students must also pass a written or oral comprehensive examination as requisite for awarding the degree. These examinations are administered and evaluated by individual departments for their students. The MPH programs in BIOS, EPID, HPEB, and PAPH require a written comprehensive exam that focuses on required coursework. The MPH programs in ENHS and HSPM conduct an oral comprehensive examination after the practicum presentation that addresses knowledge learned by the student from course work.

Because the general MPH curriculum is so individualized, a consistent comprehensive exam across students is not feasible. Most of these students are either in a dual degree program (with the MD or PharmD) or in the preventive medicine residency. Students in these three programs are required to write a reflection paper that includes a synthesis of the MPH course work and their population health practice opportunities. In particular, this reflection paper must a) incorporate any clinical rotation used to satisfy part or all of the practicum credit, b) address how the student recognizes public health concepts in their clinical work and c) demonstrate that the student is able to apply public health knowledge and concepts in the clinical setting. The very rare general MPH student who is not in one of these programs will have an oral comprehensive examination after the practicum presentation.

DrPH students. DrPH students must satisfactorily complete a comprehensive exam with both written and oral components and conduct research to complete a dissertation as their culminating experiences. In HPEB and HSPM, the written portion of the comprehensive exam is satisfied by the written dissertation proposal. BIOS DrPH students take a separate written comprehensive exam. In all cases, the oral exam is conducted at the end of the proposal defense.

Examples of the products from the culminating experiences for both the MPH and DrPH are included in the ERF.

2.5.b Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

- The MPH practicum final report provides a consistent mechanism to assess student's ability to integrate and apply knowledge and skills in a professional setting, while the comprehensive exam extends this to address achievement of other content-specific competencies.
- The practicum process benefits from the use of the MySPH Opportunity Manager as a central location for practicum opportunities, proposals, and evaluation surveys.

Weaknesses:

- The comprehensive exams tend to focus on concentration-specific competencies rather than competencies associated with the public health core. However, inclusion of a separate competency (learning outcome) reflecting the public health core content forces explicit assessment of students' achievement of the core competencies.

Plans:

- The culminating experience will be reviewed in the context of implementing the 2016 CEPH criteria for integrative learning experiences (criteria D7 and D8).

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 school must identify competencies for graduate professional public health, other professional and academic degree programs and specializations at all levels (bachelor's, master's and doctoral).

2.6.a Identification of a set of competencies that all graduate professional public health degree students and baccalaureate public health degree students, regardless of concentration, major or specialty area, must attain. There should be one set for each graduate professional public health degree and baccalaureate public health degree offered by the school (eg, one set each for BSPH, MPH and DrPH).

Undergraduate public health degrees (following Standalone Baccalaureate Program (SBP) criteria 5.2). Both the BA and BS in public health share the same nine core public health learning outcomes listed in SBP Template P below. The BA curriculum places more emphasis on social and behavioral sciences for entry into social science-based graduate programs in public health, sociology, anthropology, social work, education, law, and similar disciplines; while the BS curriculum places more emphasis on natural sciences, preparing those students for further study in natural and environmental public health sciences, medicine, and other clinical professions. These learning outcomes are aligned with the university's regional accreditation standards (i.e., SACS), and guide course and curriculum design as well as implementation and student evaluation of learning. Courses associated with these outcomes are shown in sections 2.6.b and 2.6.c, which are combined into one section (2.6.b/c).

SBP Template P: Student learning outcomes for BA and BS in public health

Students will be able to…
1. Illustrate the contributions of a range of disciplines and professions in improving the health of the public.
2. Demonstrate the ability to utilize information from various contexts in the field of public health.
3. Understand the role of the socio-behavioral sciences in the determinants and prevention of public health problems.
4. Understand and discuss the importance and influence of social and cultural factors and their effects on public health.
5. Explain how public health can utilize social and behavioral interventions to improve the health of populations.
6. Understand the role of the physical and natural sciences in the determinants of and relationship to problems in the health of the public.
7. Discuss individual and social accountability including civic responsibility and ethical reasoning as they apply to the health of populations.
8. Use suitable technologies, scientific inquiry skills, and communication strategies to understand ethical research on public health issues.
9. Demonstrate proficient reasoning and critical thinking including the ability to analyze, synthesize, and evaluate information to make sound decisions and solve problems as they apply to public health.

Graduate professional public health degrees. Table 2.6.a.1 lists the core competencies that are common to all MPH programs, along with the learning experiences through which they are met. These five core competencies correspond to the five public health disciplines. More detail for specific MPH programs is included in sections 2.6.b/c. A list of course titles by course ID appears in the ERF.

Table 2.6.a.1 Core competencies common to all MPH programs

Competencies	HPEB 700	HSPM 700	EPID 700 or EPID 701	BIOS 700 or BIOS 701	ENHS 660	Practicum (798)
Students will demonstrate an understanding of the following:						
a. fundamental principles and practices in health promotion, education, and behavior;	**P**					**R**
b. organization, principles, and practices in health administration;		**P**				**R**
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**			**R**
d. public health statistical applications;				**P**		**R**
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**	**R**

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.a.2 lists the competencies that are common to all DrPH programs, along with the learning experiences through which these are met. More detail for specific DrPH programs are included in section 2.6.b/c.

Table 2.6.a.2 Core competencies common to all DrPH programs

Competencies	HSPM 820	HPEB 820	HPEB 818 or HSPM 818	BIOS 765 or HPEB 802 or HSPM 719	Practicum (898)
Students will demonstrate the ability to lead the process of creating an organization's vision, mission and goal-setting for the organization, guide decision-making, influence and advise others in a way that benefits the organization, and build capacity to successfully carry out the mission of the organization.	**P**				
Students will use effective communication strategies and be able to persuasively argue for policies that improve the health of the public.		**P**			
Students will develop and implement formative, process, impact and outcome evaluations for the performance of a specific program or of the organization in relation to its vision and mission.			**P**		
Students will conduct various types of research studies, interpret and communicate study results, synthesize information from multiple studies, assess the merits of research done elsewhere, and determine how research results can be applied to the organization.				**P**	
Students will demonstrate integration of the DrPH core competencies and expertise in their specific specialization through the Doctor of Public Health Practicum.					**P**

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

2.6.b Identification of a set of competencies for each concentration, major or specialization (depending on the terminology used by the school) identified in the instructional matrix. The school must identify competencies for all degrees, including graduate public health professional degrees, graduate academic degrees, graduate other professional degrees, as well as baccalaureate public health degrees and other bachelor's degrees.

2.6.c A matrix that identifies the learning experiences (eg, specific course or activity within a course, practicum, culminating experience or other degree requirement) by which the competencies defined in Criteria 2.6.a. and 2.6.b are met. If these are common across the school, a single matrix for each degree will suffice. If they vary, sufficient information must be provided to assess compliance by each degree and concentration. See CEPH Data Template 2.6.1.

Criteria 2.6.b and 2.6.c are addressed together in this document. The matrices list all competencies for each public health program, along with the learning experiences by which they are met. Matrices for the allied health programs are not included. Note that within the university setting, the term "learning outcomes" is used rather than "competencies."

Competencies for each of the public health programs are shown in the tables below:

- Table 2.6.c.1: BA and BS in public health.
- Tables 2.6.c.2 – 2.6.c.8: MPH programs (core competencies followed by program specific competencies)
- Tables 2.6.c.9 – 2.6.c.11: DrPH programs (core competencies followed by program specific competencies)
- Tables 2.6.c.12 – 2.6.c.15: Public health MS and MSPH programs
- Tables 2.6.c.16 – 2.6.c.20: Public health PhD programs

Table 2.6.c.1 BA/BS in Public Health competencies

Competencies/Learning Outcomes	PUBH 102	PUBH 498	HPEB 300	HPEB 553	ENHS 321	EXSC 191	EPID 410	HSPM 500	Carolina Core	Cognate
Illustrate the contributions of a range of disciplines and professions in improving the health of the public.	**P**	**P**							**R**	
Demonstrate the ability to utilize information from various contexts in the field of public health.	**P**									**R**
Understand the role of the socio-behavioral sciences in the determinants and prevention of public health problems.			**P**	**P**					**R**	**R**
Understand and discuss the importance and influence of social and cultural factors and their effects on public health.			**P**	**P**					**R**	**R**
Explain how public health can utilize social and behavioral interventions to improve the health of populations.			**P**	**P**						**R**
Understand the role of the physical and natural sciences in the determinants of and relationship to problems in the health of the public.					**P**	**P**			**R**	**R**
Discuss individual and social accountability including civic responsibility and ethical reasoning as they apply to the health of populations.	**P**	**P**							**R**	**R**
Use suitable technologies, scientific inquiry skills and communication strategies to understand ethical research on public health issues.		**P**					**P**			**R**
Demonstrate proficient reasoning and critical thinking including the ability to analyze, synthesize and evaluate information to make sound decisions and solve problems as they apply to public health.		**P**					**P**	**P**		**R**

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.2 MPH in Biostatistics competencies

	Public Health Core					Dept. Core					Major Courses			
Competencies/Learning Outcomes	**HPEB 700**	**HSPM 700**	**EPID 701**	**BIOS 701**	**ENHS 660**	**BIOS 710**	**EPID 741**	**EPID 745**	**BIOS 745**	**BIOS 757**	**BIOS 758**	**BIOS 759**	**STAT 512**	**BIOS 798 Practicum**
* Students will demonstrate an understanding of the following:														
a. fundamental principles and practices in health promotion, education, and behavior;	**P**													**R**
b. organization, principles, and practices in health administration;		**P**												**R**
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**											**R**
d. public health statistical applications;				**P**										**R**
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**									**R**
Demonstrate the ability to evaluate a given health related problem, and to identify the most appropriate statistical technique (e.g., t-test, contingency table, correlation) for analysis.				**P**						**R**				
Display a mastery of a variety of traditional and newly developed statistical techniques, including multivariable methods for continuous and categorical data analysis.										**P**	**R**			
Demonstrate the ability to apply analytic epidemiologic methods used to investigate health conditions.				**P**			**R**							
Demonstrate the ability to interpret the results of a statistical analysis, and to communicate such interpretations in an easily comprehendible manner.				**P**			**R**	**R**	**R**		**R**	**R**	**R**	
Demonstrate the ability to structure available data in an easily useable form, using a variety of data management software tools.						**P**								
Gain exposure to a wide variety of public health topics, and develop a basic understanding of the philosophy of public health practice.	**P**	**P**	**P**	**P**										
Demonstrate the ability to interpret the results of a statistical analysis, and to explain those results in understandable terms to public health practitioners.														**P**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.3 MPH in Environmental Health Sciences competencies

	Public Health Core						
Competencies/Learning Outcomes	**HPEB 700**	**HSPM 700**	**EPID 700**	**BIOS 700**	**ENHS 660**	**ENHS Cognate Courses**	**ENHS 798 Practicum**
* Students will demonstrate an understanding of the following:							
a. fundamental principles and practices in health promotion, education, and behavior;	**P**						
b. organization, principles, and practices in health administration;		**P**					
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**			**R**	
d. public health statistical applications;				**P**			
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**	**R**	**R**
Students will be able to organize data and information, prepare reports, and give oral presentations on environmental contaminants, their impacts on environmental and human health, and current management and regulation efforts.			**P**	**R**		**P**	**R**
Students completing the MPH program will obtain experience in a public health setting and will develop basic understanding of the philosophy of public health practice.							**P**
Students completing the MPH program will demonstrate their understanding of the concepts and application of environmental health sciences to address public health concerns.					**P**	**P**	**R**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.4 MPH in Epidemiology competencies

	Public Health Core					Dept. Core						EPID		
Competencies/Learning Outcomes	**HPEB 700**	**HSPM 700**	**EPID 701**	**BIOS 701**	**ENHS 660**	**BIOS 710**	**EPID 741**	**EPID 745 (Fall)**	**EPID 745 (Spr)**	**BIOS 745**	**BIOS 757**	**EPID 730**	**EPID 758**	**EPID 798 Practicum**
* Students will demonstrate an understanding of the following:														
a. fundamental principles and practices in health promotion, education, and behavior;	**P**													
b. organization, principles, and practices in health administration;		**P**												
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**				**R**					**R**		**P**
d. public health statistical applications;				**P**						**R**	**P**			
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**									
Students will differentiate between common epidemiologic study designs.			**P**				**P**					**R**	**R**	
Students will demonstrate the ability to calculate and interpret measures of association.			**P**				**P**				**R**	**R**	**R**	
Students will understand basic ethical principles pertaining to public health research and practice.							**P**		**R**				**P**	
Students will describe the roles of history, power, privilege, and structural inequality in producing health disparities.													**P**	
Students will explain how the findings of a program evaluation can be used.													**P**	
Students will explain how individuals, social networks, organizations and communities may be viewed as systems in the analysis of public health problems.								**R**					**P**	
Students will create and manipulate datasets and analyze data using appropriate statistical methods and software packages.				**P**		**P**					**P**			
Students will demonstrate proficiency in creating tables and reports using appropriate software packages.						**P**								
Students will correctly interpret results from statistical analyses.							**R**				**P**			
Students will gain practical skills in a public health practice setting.													**R**	**P**
Students will demonstrate proficiency in public health practice by successfully completing at least two of the following competencies during their practicum: (1) designing a public health program, (2) monitoring and evaluating a public health program, (3) writing progress report for funding agency or reporting authority, (4) participating in data analysis related to public health program, (5) participating in applying for funding for public health program, (6) participating in public health related service delivery.														**P**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.5 MPH in Health Promotion, Education, and Behavior competencies

	Public Health Core					Dept. Core					
Competencies/Learning Outcomes	**HPEB 700**	**HSPM 700**	**EPID 700 or EPID 701**	**BIOS 700 or BIOS 701**	**ENHS 660**	**HPEB 701**	**HPEB 702**	**HPEB 707**	**HPEB 710**	**HPEB 748**	**HPEB 798 Practicum**
* Students will demonstrate an understanding of the following:											
a. fundamental principles and practices in health promotion, education, and behavior;	**P**					**R**	**R**	**R**	**R**	**R**	
b. organization, principles, and practices in health administration;		**P**									
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**								
d. public health statistical applications;				**P**				**R**			
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**						
Students will understand and develop the ability to apply proven social science, health and behavior theories in the planning, implementation, and evaluation of health education and promotion programs.						**P**	**P**	**P**	**P**	**R**	
Students will develop skills and knowledge to work effectively with culturally diverse individuals and communities, and to apply principles for ethical conduct in health promotion, education, and behavior.	**R**									**P**	
Students will demonstrate an ability to research, develop, implement, and evaluate a program involving health behavior change at the individual, agency, or community level.						**R**	**R**	**R**	**R**		**P**
Students will demonstrate effective written and oral skills for communication with different audiences in the context of professional public health activities.											**P**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.6 MPH in Health Services Policy and Management competencies

	Public Health Core					Management						Other HSPM Core				
Competencies/Learning Outcomes	**HPEB 700**	**HSPM 700**	**EPID 700 or EPID 701**	**BIOS 700 or BIOS 701**	**ENHS 660**	**HSPM 712**	**HSPM 713**	**HSPM 716**	**HSPM 730 (PH)**	**HSPM 774 (PH)**	**HSPM 711**	**HSPM 718**	**HSPM 769**	**HSPM 715**	**HSPM 726**	**HSPM 798 Residency**
* Students will demonstrate an understanding of the following:																
a. fundamental principles and practices in health promotion, education, and behavior;	**P**													**R**		
b. organization, principles, and practices in health administration;		**P**									**R**		**R**	**R**		**R**
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**													
d. public health statistical applications;				**P**				**R**								
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**											
Students will be able to apply management principles and demonstrate skills in program planning, development, budgeting, management and evaluation in health care and/or public health organizational settings. Students will demonstrate leadership skills for building partnerships and leading organizations.		**p**				**P**	**P**	**P**	**P**	**R**		**P**	**P**	**R**	**R**	**P**
Students will be able to apply principles of finance, budgeting, quantitative tools for financial management, economics, and current public and private payment policies to health care and public health.						**P**		**R**	**P**		**R**					**R**
Students will be able to apply principles of strategic planning, quality and performance improvement, program evaluation and marketing in public health and healthcare settings.										**P**		**P**	**P**	**P**		**R**
Students will be able to apply legal and ethical principles to health care and public health and to critically evaluate the ethical and moral issues confronting health care organizations and the individuals that work therein.							**R**		**R**		**P**			**R**	**P**	**R**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.7 MPH in General Public Health competencies

	PH Core						
Competencies/Learning Outcomes	**HPEB 700**	**HSPM 700**	**EPID 700 or EPID 701**	**BIOS 700 or BIOS 701**	**ENHS 660**	**Special interest (15 hrs)†**	**PUBH 798 Practicum**
* Students will demonstrate an understanding of the following:							
a. fundamental principles and practices in health promotion, education, and behavior;	**P**						**R**
b. organization, principles, and practices in health administration;		**P**					**R**
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**				**R**
d. public health statistical applications;				**P**			**R**
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**		**R**
The student will demonstrate at least three of the following:							
a. the ability to evaluate a given health related problem, and to identify the most appropriate statistical technique for analysis;				**R**		**P (BIOS)**	
b. understanding of and ability to discuss specific applications of environmental health sciences;					**R**	**P (ENHS)**	
c. ability to apply descriptive and analytic epidemiology methods including approaches and study designs to identify and investigate factors associated with various health conditions;			**R**			**P (EPID)**	
d. understanding of and ability to apply proven social science, health and behavior theories in the planning, implementation, and evaluation of health education and promotion programs;	**R**					**P (HPEB)**	
e. the ability to apply the principles of program planning, development, budgeting, management and evaluation to organizational and community initiatives.		**R**				**P (HSPM)**	
Students completing the MPH program will demonstrate integration of the MPH core competencies and will demonstrate basic understanding of the philosophy of public health practice through the Public Health Practicum.							**P**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

† Students are required to take 15 hours from at least three public health core disciplines

Table 2.6.c.8 MPH in Physical Activity and Public Health competencies

	Public Health Core					Physical Activity Core				Programmatic Core			Surveillance Core		
Competencies/Learning Outcomes	**HPEB 700**	**HSPM 700**	**EPID 700 or EPID 701**	**BIOS 700 or BIOS 701**	**ENHS 660**	**EXSC 530/530L or EXSC 780**	**EXSC 700**	**EXSC 710**	**PUBH 798 Practicum**	**HPEB 702**	**EXSC 754 (or HPEB 748)**	**HPEB 710**	**BIOS 710**	**EPID 730**	**EPID 820**
* Students will demonstrate an understanding of the following:															
a. fundamental principles and practices in health promotion, education, and behavior;	**P**														
b. organization, principles, and practices in health administration;		**P**													
c. principles and practices in epidemiology, and tools for translating epidemiological findings into public health action;			**P**												
d. public health statistical applications;				**P**											
e. environmental health from the perspective of the earth as a complex, dynamic system.					**P**										
Students will be able to explain the multiple health effects of varying doses and types of physical activity and the physiological changes that occur with acute and chronic bouts of exercise.						**P**	**R**								**R**
Students will explain accepted physical activity guidelines for persons of diverse demographics (e.g., age, gender, fitness, functional capacity).							**P**	**R**	**R**					**R**	**R**
Students will be able to plan a physical activity intervention and develop an evaluation plan.								**R**		**P**	**P**	**P**			
The student will identify and describe evidence-based intervention strategies to promote physical activity at the informational, behavioral, social, environmental, and policy levels.								**P**			**P**				**R**
Each student completing the MPH in PAPH will integrate and apply public health knowledge, skills, and attributes to a defined physical activity issue in a policy, community, school, or worksite setting to increase/promote physical activity, or to conduct surveillance of physical activity.						**R**	**R**	**R**	**P**	**R**	**R**	**R**	**R**	**R**	**R**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.9 DrPH in Biostatistics competencies

	DrPH Core Courses							
Competencies/Learning Outcomes	**HSPM 820**	**HPEB 820**	**HPEB 818 or HSPM 818**	**BIOS 765**	**BIOS 898 Advanced Practicum**	**800-level BIOS**	**Other BIOS/STAT**	**BIOS 899 Dissertation**
*Students will demonstrate the ability to lead the process of creating an organization's vision, mission and goal-setting for the organization, guide decision-making, influence and advise others in a way that benefits the organization, and build capacity to successfully carry out the mission of the organization.	**P**							
*Students will use effective communication strategies and be able to persuasively argue for policies that improve the health of the public.		**P**						
*Students will develop and implement formative, process, impact and outcome evaluations for the performance of a specific program or of the organization in relation to its vision and mission.			**P**					
*Students will conduct various types of research studies, interpret and communicate study results, synthesize information from multiple studies, assess the merits of research done elsewhere, and determine how research results can be applied to the organization.				**P**				
*Students will demonstrate integration of the DrPH core competencies and expertise in their specific specialization through the Doctor of Public Health Practicum.					**P**	**R**	**R**	**R**
Students will demonstrate command of a wide variety of biostatistical methods, particularly a strong, thorough knowledge of those methods that are most relevant to the application area.						**P**	**R**	
Students will demonstrate familiarity with the culture and parlance of both biostatistics and the application area, in order to foster interdisciplinary research and improve communication between the two areas.					**R**	**P**		
Students will demonstrate leadership and communication skills in detailing the benefits of biostatistical methods.					**P**			
Students will communicate results of newly developed techniques, or a novel application of an existing technique, through publications in the application area.								**P**

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.10 DrPH in Health Promotion, Education, and Behavior competencies

	DrPH Core					HPEB Core			Research	
Competencies/Learning Outcomes	**HSPM 820**	**HPEB 820**	**HPEB 818 or HSPM 818**	**HPEB 802**	**HPEB 898 Advanced Practicum**	**HPEB 771**	**HPEB 824**	**HPEB 704**	**Research Methods** (12 hrs)	**HPEB 899 Dissertation**
*Students will demonstrate the ability to lead the process of creating an organization's vision, mission and goal-setting for the organization, guide decision-making, influence and advise others in a way that benefits the organization, and build capacity to successfully carry out the mission of the organization.	**P**									
*Students will use effective communication strategies and be able to persuasively argue for policies that improve the health of the public.		**P**								
*Students will develop and implement formative, process, impact and outcome evaluations for the performance of a specific program or of the organization in relation to its vision and mission.			**P**				**R**			
*Students will conduct various types of research studies, interpret and communicate study results, synthesize information from multiple studies, assess the merits of research done elsewhere, and determine how research results can be applied to the organization.				**P**			**P**		**P**	**P**
*Students will demonstrate integration of the DrPH core competencies and expertise in their specific specialization through the Doctor of Public Health Practicum.					**P**					
Identify and understand individual, organizational, community and socio-cultural influences on health and health behavior.						**P**	**R**			
Exhibit professional skills including scientific writing, oral communication, grant-writing, professional service, and collaboration.						**R**		**P**	**R**	

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.11 DrPH in Health Services Policy and Management competencies

	DrPH Core					HSPM Doctoral Core					
Competencies/Learning Outcomes	**HSPM 820**	**HPEB 820**	**HSPM 818**	**HSPM 719**	**HSPM 898 Advanced Practicum**	**HSPM 800**	**HSPM 717**	**HSPM 845**	**HSPM 846**	**HSPM 711**	**HSPM 899 Dissert.**
*Students will demonstrate the ability to lead the process of creating an organization's vision, mission and goal-setting for the organization, guide decision-making, influence and advise others in a way that benefits the organization, and build capacity to successfully carry out the mission of the organization.	**P**										
*Students will use effective communication strategies and be able to persuasively argue for policies that improve the health of the public.		**P**									
*Students will demonstrate integration of the DrPH core competencies and expertise in their specific specialization through the Doctor of Public Health Practicum.					**P**						
*Students will develop and implement formative, process, impact and outcome evaluations for the performance of a specific program or of the organization in relation to its vision and mission.			**P**								
*Students will conduct various types of research studies, interpret and communicate study results, synthesize information from multiple studies, assess the merits of research done elsewhere, and determine how research results can be applied to the organization.	**P**		**P**					**R**	**R**		**R**
Students will be able to conduct empirical analyses, able to use quantitative methodologies, formulate alternative hypotheses for empirical testing, carryout analysis for testing hypotheses and able to derive conclusions and policy implications.				**P**		**R**	**P**	**P**	**P**		

** Core competencies* *P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced*

Table 2.6.c.12 MSPH in Biostatistics competencies

		Dept. Core						BIOS Core					
Competencies/Learning Outcomes	**PUBH 700**	**BIOS 701**	**EPID 701**	**EPID 745**	**BIOS 745**	**BIOS 710**	**BIOS 761**	**BIOS 758**	**BIOS 759**	**BIOS 770**	**STAT 512**	**STAT 513**	**BIOS 799 Thesis**
Demonstrate the ability to evaluate a given health related problem, and to identify the most appropriate statistical technique (e.g., t-test, contingency table, correlation) for analysis.		**P**	**R**	**R**	**R**			**R**	**R**				
Demonstrate the ability to interpret the results of a statistical analysis, and to communicate such interpretations in an easily comprehendible manner.					**R**		**R**	**R**			**R**	**R**	
Display a mastery of a variety of traditional and newly developed statistical techniques, including multivariable methods for continuous and categorical data analysis.								**P**	**R**	**R**			
Demonstrate the ability to structure available data in an easily useable form, using a variety of data management software tools.						**P**							
Demonstrate the ability to use a variety of statistical software packages, to create and maintain databases, and to analyze data.						**P**							
Demonstrate the ability to work independently on a research problem, outside of the classroom setting and present the results to an audience.													**P**
Demonstrate the ability to modify and extend existing statistical techniques to answer questions posed by health related situations, and to synthesize such research results into acceptable research papers.													**P**
Demonstrate an understanding of current public health practice and how various health-related disciplines contribute to achieving public health goals.	**P**												

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.13 MS in Environmental Health Sciences competencies

	PH Core					
Competencies/Learning Outcomes	**ENHS 660**	**EPID 700**	**PUBH 700**	**ENHS courses** (12 hrs)	**Quant & Tech Skills** (9 hrs)	**ENHS 799 Thesis**
Students are expected to demonstrate an overall mastery of concepts of environmental health sciences; demonstrate competency of the major concepts and applications of environmental health practice specific to their respective area of research; and display the ability to extend this understanding to relevancy and application to real-world environmental health sciences issues.	**P**	**R**	**R**			
Students are expected to understand and be able to discuss specific applications of environmental health practice in their respective area of research interest.			**R**	**P**	**P**	
Students will demonstrate the ability to develop original hypotheses to address relevant concerns in the environmental health sciences and possess skills to advance the role of environmental health sciences in the field of public health.						**P**
The student must demonstrate detailed knowledge of how their specific studies fill a gap in the field of environmental health sciences. The student must also demonstrate detailed understanding of specific research topics examined as part of the thesis and the ability to apply this knowledge to broader real-world environmental health topics.				**R**	**R**	**P**

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.14 MSPH in Epidemiology competencies

	PH Core	Department Core								Major Courses		Thesis
Competencies/Learning Outcomes	**PUBH 700**	**BIOS 701**	**EPID 701**	**BIOS 757**	**EPID 741**	**EPID 745 (Fall)**	**EPID 745 (Spring)**	**BIOS 745**	**BIOS 710**	**BIOS 754**	**EPID 758**	**EPID 799 Thesis**
Students will demonstrate the ability to calculate and interpret measures of association.			**P**		**P**	**R**	**R**	**R**		**R**	**R**	**P**
Students will differentiate between various study designs.		**R**	**P**	**R**	**P**	**R**	**R**	**R**			**R**	**P**
Students will describe the roles of history, power, privilege and structural inequality in producing health disparities.	**R**										**P**	
Students will explain how the findings of a program evaluation can be used.	**R**										**P**	
Students will explain how individuals, social networks, organizations, and communities may be viewed as systems in the analysis of public health problems.	**R**					**R**					**P**	
Students will understand basic ethical principles pertaining to public health research and practice.	**R**						**R**				**P**	**R**
Students will demonstrate their research capabilities by designing a research project which is presented orally in class.					**P**		**R**	**R**				**P**
Students will write an abstract of sufficient quality for submission to a professional meeting.					**P**		**R**					**R**
Students will create and manipulate datasets and analyze data using appropriate statistical methods and software packages.		**R**		**R**	**P**			**R**	**P**			**P**
Students will demonstrate proficiency in creating tables and reports using appropriate software packages.					**P**		**R**	**R**	**P**			**P**
Students will correctly interpret results from statistical analyses.		**P**		**R**	**P**			**R**		**R**		**P**

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.15 MSPH in Health Promotion, Education, and Behavior competencies

	PH Core				HPEB Core					
Competencies/Learning Outcomes	**HPEB 700**	**EPID 700**	**BIOS 700**	**PUBH 700**	**HPEB 701**	**HPEB 702**	**HPEB 710**	**HPEB 748**	**Research Methods** (6 hrs)	**HPEB 799 Thesis**
Students will demonstrate an understanding of the history and fundamental principles and practices in health promotion, education, and behavior.	**P**			**P**						
Students will understand and develop the ability to apply proven social science, health and behavior theories in the planning, implementation, and evaluation of health education and promotion programs.					**P**	**P**	**P**	**R**		
Students will develop skills and knowledge to work effectively with culturally diverse individuals and communities, and to apply principles for ethical conduct in health promotion, education, and behavior.	**R**			**P**				**P**		
Students will demonstrate the ability to develop a logical, congruent progression of research questions, hypotheses, methods, analysis, and study conclusions, and to develop an appropriate research/evaluation design to test hypotheses or evaluate intervention effectiveness.		**P**	**P**		**R**	**R**	**R**	**R**		**P**
Students will develop skills in the interpretation and communication of research/statistical findings to professional and lay audiences.										**P**

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.16 PhD in Biostatistics competencies

Competencies/Learning Outcomes	PUBH 700	800-level BIOS	STAT 712	STAT 713	STAT 714	STAT 715 (or other STAT)	BIOS 845	BIOS 890 Teaching	BIOS 890 Consulting	BIOS 899 Dissertation
Display command of a wide variety of biostatistical techniques, as well as have a deeper understanding of these techniques than someone at a Masters level.		P					R			
Demonstrate the ability to present basic statistical material in a formal classroom setting.			R	R	R	R	R	P		
Demonstrate the ability to consult with clients outside of the university setting, and provide them with statistical assistance on a health related problem.							R		P	
Communicate results of newly developed techniques through publications and teaching.							R			P
Demonstrate an understanding of current public health practice and how various health-related disciplines contribute to achieving public health goals.	P									

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.17 PhD in Environmental Health Sciences competencies

	PH Core				
Competencies/Learning Outcomes	EPID 700 or EPID 701	PUBH 700	ENHS 660	ENHS Cognate Courses	ENHS 899 Dissertation
Students are expected to demonstrate an overall mastery of the core concepts of public health as it relates to environmental health sciences and display the ability to extend this understanding to relevancy and application to real-world environmental health sciences issues.	R	P	P	P	R
Students will demonstrate an ability to write competitive research grant proposals.				P/R	R
Students will demonstrate the ability to present talks to a scientific and/or public audience as well as presenting a "guest lecture" in a class selected by the Student's advisor and/or committee.	R	R	R	P/R	R
Students will clarify critical gaps in scientific knowledge concerning the resolution of environmental health problems and plan and execute original research that will lead to solutions of such problems.				P/R	P
Students are expected to promote and actively participate in the dissemination of research results in environmental health sciences in order to further the overall knowledge of the field.				P/R	P

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.18 PhD in Epidemiology competencies

		EPID Core								
Competencies/Learning Outcomes	**PUBH 700**	**EPID 800**	**EPID 801**	**EPID 802**	**EPID 890 Teaching**	**EPID 890 Consulting**	**EPID 845 (A)**	**EPID 845 (B)**	**EPID 845 (C)**	**EPID 899 Dissertation**
Each doctoral student will demonstrate mastery of biological concepts and epidemiologic methods relevant for estimating the association between at least one exposure and one outcome.	**R**	**P**		**P**			**R**			**P**
Each doctoral student will apply epidemiologic methods learned into solving an epidemiologic problem.		**P**	**P**	**R**			**R**	**R**		**P**
Each doctoral student will apply statistical methods learned during his/her master's program to solve more complex statistical questions.		**P**	**P**					**R**		**P**
Each student will exhibit the ability to teach basic epidemiologic methods.					**P**					
Each doctoral student will exhibit the ability to consult with clients outside the university setting, and provide them with epidemiological assistance on a health related problem.			**R**			**P**			**R**	
Each doctoral student will conduct rigorous and original epidemiologic research resulting in publishable manuscripts.		**R**	**R**	**R**					**R**	**P**

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.19 PhD in Health Promotion, Education, and Behavior competencies

	PH Core		**HPEB Core**					
Competencies/Learning Outcomes	**PUBH 700**	**EPID 700 or EPID 701**	**HPEB 771**	**HPEB 824**	**HPEB 818**	**HPEB 704**	**Research Methods** (15-21 hrs)	**HPEB 899 Dissert.**
Students will be able to identify individual, organizational, community, and socio-cultural influences on health and health behavior.	**R**		**P**	**P**				
Students will be able to develop, implement and evaluate interventions at multiple levels to promote health.		**R**		**P**	**P**			
Students will be able to design and conduct rigorous and innovative social and behavioral science research relevant to public health.		**R**	**R**	**R**			**P**	**P**
Student will be able to exhibit professional skills including scientific writing, oral communication, grant-writing, teaching, scientific service, and collaboration.		**R**	**R**	**R**		**P**	**R**	

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

Table 2.6.c.20 PhD in Health Services Policy and Management competencies

	PH Core		HSPM Topics & Research Methods						
Competencies/Learning Outcomes	**PUBH 700**	**EPID 700 or EPID 701**	**HSPM 845**	**HSPM 846**	**HSPM 717**	**HSPM 719**	**HSPM 800**	**HSPM Concentration** (15 hours)	**HSPM 899 Dissertation**
Understand health care policy development and implementation and its relationship to management of health care organizations.			**P**	**P**		**P**	**R**		
Demonstrate skills in the application of statistical techniques to health services research data through creation and defense of the doctoral dissertation.		**R**	**R**		**P**	**P**	**R**		
Demonstrate professional written communication and oral presentation skills through the doctoral dissertation proposal, submission of the dissertation, and the dissertation defense.			**R**	**R**		**R**	**R**	**P**	**P**
Understand public health context of health policy, health services research and management	**P**	**R**	**R**	**R**		**R**			

P = Courses in which competencies are primarily gained; R = Courses in which competencies are reinforced

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

The competency matrices were developed and revised in conjunction with the annual academic program assessment process over the past two years. As departments reviewed the matrices, the programs were able to clarify competencies and, in some cases, added competencies or more appropriate measures to their assessment plans. For example, the HSPM MPH committee reviewed the curriculum maps and identified some gaps. One of those gaps was addressed by developing an MPH version of HSPM 774 (formerly only open to MHA students). The program then modified the matrix to add a competency with the associated course. The EPID curriculum committee determined the MPH practicum had no associated competencies and added two competencies to address this gap. The MSPH and PhD in BIOS and the PhD in ENHS programs added explicit competencies related to the requirement for PUBH 700. Other academic programs were mapped PUBH 700 to existing competencies. By reviewing the matrix, the director for the MPH in physical activity and public health was able to clarify the competencies and improve the linkage between the competencies and the required coursework.

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

Core competencies for the BA and BS programs were initially developed by a committee comprised of a representative from each of the six academic departments along with the associate dean of undergraduate student affairs. The public health undergraduate program director works with the faculty across the school who teach the required core public health courses to systematically review/revise the competencies for the undergraduate degree programs.

Core competencies for the MPH and DrPH programs were initially developed in AY2010-11 by a committee comprised of the MPH and DrPH program directors along with the senior associate dean for academic affairs at that time. Subsequent changes to content-specific MPH/DrPH competencies are recommended by the curriculum committee at the department level. These recommendations must be approved by departmental faculty.

Once adopted, these competencies serve as guidelines for course development, course learning outcomes, determination of course requirements, progression examinations, comprehensive examinations, culminating experiences, and academic program assessment. The competencies (labelled as learning outcomes) are published in the *Academic Bulletin* for each program.

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

Departmental curriculum committees are responsible for monitoring and revising program competencies as their disciplines evolve and students' needs change. Formal and informal communications with practicum supervisors, alumni, student exit surveys, and employers are also used to adjust/revise program competencies to reflect changing needs in the practice and academic arenas. The development and review of competencies has been an iterative process of faculty asking themselves, students, and employers what knowledge, skills, and other attributes students should have upon completion of the program relative to what is provided in the curriculum. Information gleaned from this process is used to assess how well the curriculum satisfies these competencies and what can be done to enhance the presentation of that content. Additionally, programs that have their own professional competencies (e.g., MSP, MCD, DPT) frequently review – through their individual curriculum committees – updated competencies and incorporate changes into their programs.

Curriculum committees recommend curriculum changes, which must be approved by the department faculty. Departments and programs have substantial autonomy with this process, but have access to some technical support. For example, the school's director of workforce development provides input regarding evolving workforce development practices and professional competencies for public health professionals.

The university governance units must review and approve all major curricular changes reflecting changes in program and course objectives and goals (i.e., Graduate Council for graduate curricula or Faculty Senate for undergraduate curricula). For example, a simple change to an existing graduate-level course requires a course change proposal submission by the faculty, which is approved by the department and school representatives. The submission then goes to the Graduate Council Sciences Committee, which checks carefully for any issues. Once approved by this committee, Graduate Council approves the proposal, and the course change is sent to the Registrar to update the academic bulletin. If a substantive degree program change is required, the same general process is followed; however, additional approvals are may be required by the Board of Trustees and the Commission on Higher Education and SACS is notified. The university recently moved to simplify the entire process by going to a paperless submission and approval system entitled the Academic Programs Proposal System.

As part of the university's requirements for institutional accreditation, faculty have developed an academic program assessment plan for every academic degree. The program competencies are a major part of these plans, which also require identification of measures, methods of assessment, and criteria of success for meeting every outcome identified. This assessment is at the program level, not at the individual student level, but measures used for program assessment are often aggregates of individual student assessment data. The process of identifying explicit measures of success for each competency forces faculty to consider what each competency represents in the overall curriculum.

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

This criterion is met.

Strengths:

- Compliance with the academic program assessment requirement, managed through the university Office of Institutional Research, Assessment, and Analytics (OIRAA) has required faculty to review program competencies and develop explicit learning experiences to address competency achievement. This has improved the quality of our curricula, our program competencies, and our ability to monitor them at the program level.

Weaknesses:

- The university systems for curriculum approval, academic program assessment, and bulletin publication do not interact efficiently. Competencies (learning outcomes) can only be changed when updating the academic program assessment, not as part of a curriculum revision, but these changes are not automatically submitted to the respective *Academic Bulletin.* This is a university issue that is being addressed by OIRAA.

Plans:

- With the release of the 2016 CEPH criteria, faculty have begun to review the new competencies and to identify how these competencies are being met through the existing curricula and what changes may need to be made. Meetings are being held at the school and department levels. We anticipate being in compliance with the new criteria by January 2018.

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

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

Academic assessment takes place at both the student and the program level. Students' progression toward and mastery of expected competencies are primarily monitored through course assignments, class grades, and students' performance in degree-specific culminating experiences. In addition, faculty advisors monitor individual students' academic progress on an ongoing basis. This allows them to address any potential problems proactively.

Program assessment. Program-level assessment (as mentioned in section 2.6.f) is part of a university-mandated initiative led by the university's Office of Institutional Research, Assessment, and Analytics (OIRAA). At the end of spring semester each year, each program in the school updates its assessment plan for the next academic year. This plan describes in detail how the program will assess aggregate student performance at the program level. The plan includes goals, learning outcomes (competencies), curriculum, measures and criteria, and methods. Also in spring, each program prepares a report for the current academic year, based on that year's plan. For each program learning outcome (competency) this report presents results for each measure and indicates the extent to which associated criteria were met. The report also identifies strengths and weaknesses and describes how the findings will be used to make changes to improve the program or assessment processes (if applicable). By June 1st, the school submits these plans and reports to OIRAA and sends an executive summary to the Office of the Provost. The executive summary highlights the major results and use of results for the school and describes any budgetary effects of the plans. Copies of the executive summaries for the past three academic years and examples of the assessment plans are included in the ERF.

Undergraduate student assessment (public health bachelor's). SBP Template Q maps assessment to student outcomes for the BA and BS in Public Health

SBP Template Q: Outcome assessment for undergraduate programs in public health

Student Outcomes from SBP Template P in Criterion 2.6.a	Course(s) & Assessment Opportunities
1. Illustrate the contributions of a range of disciplines and professions in improving the health of the public.	PUBH 102: Introduction to Public Health • exam questions (objective and essay) • class discussions about assigned readings and current public health events PUBH 498: Senior Capstone Seminar • reflection papers • electronic portfolio • oral presentation • class discussion HSPM 412: Health Economics • online discussion board posts • class participation/discussions • exam and quiz questions (objective and subjective) • concept application homework

Student Outcomes from SBP Template P in Criterion 2.6.a	Course(s) & Assessment Opportunities
	• economic comparison paper HSPM 500: Introduction to Healthcare Management and Organization • exam questions • online discussion board posts • group case study project • in-class presentation of health care journal article critique
2. Demonstrate the ability to utilize information from various contexts in the field of public health.	PUBH 102: Introduction to Public Health • data retrieval & business memo integration w/ policy recommendations HPEB 300: Introduction to Health Promotion, Education, and Behavior • intervention planning project (group) needs assessment HPEB 553: Community Health Promotion • community health analysis (group project) EPID 410: Principles of Epidemiology • survey development, implementation, data analysis, reporting (written and oral) • infographics creation • journal abstract retrieval (online data bases) and summary • literature review for survey and/or infographic
3. Understand the role of the socio-behavioral sciences in the determinants and prevention of public health problems.	HPEB 300: Introduction to Health Promotion, Education, and Behavior • exam questions (objective) • intervention planning project (group) – 4 papers • intervention planning presentation (group) HPEB 553: Community Health Promotion • community health analysis (group project) • annotated bibliography • project presentation • service learning
4. Understand and discuss the importance and influence of social and cultural factors and their effects on public health.	HPEB 300: Introduction to Health Promotion, Education, and Behavior • exam questions (objective) • intervention planning project (group) – 4 papers • intervention planning presentation (group) HPEB 553: Community Health Promotion • community health analysis (group project) • annotated bibliography • project presentation • service learning HPEB 470: Global Health Perspectives (fall 2016) • journal article critiques • policy/case studies • DVDs/videos • issue research paper
5. Explain how public health can utilize social and behavioral interventions to improve the health of populations.	HPEB 300: Introduction to Health Promotion, Education, and Behavior • exam questions (objective) • intervention planning project (group) – 4 papers • intervention planning presentation (group)

Student Outcomes from SBP Template P in Criterion 2.6.a	Course(s) & Assessment Opportunities
	HPEB 511: Health Problems in a Changing Society • policy analysis • reflection papers • online discussion forum HPEB 553: Community Health Promotion • community health analysis (group project) • annotated bibliography • project presentation • service learning
6. Understand the role of the physical and natural sciences in the determinants of and relationship to problems in the health of the public.	ENHS 321: Environmental Health and Pollution • exam questions (objective) • in class discussions/reflections on popular press book selection EXSC 191: Physical Activity and Health • dietary intake log • dietary intake analysis and report • fitness testing and analysis report
7. Discuss individual and social accountability including civic responsibility and ethical reasoning as they apply to the health of populations.	PUBH 102: Introduction to Public Health • exam questions (objective and essay) • class discussions about assigned readings and current public health events PUBH 498: Senior Capstone Seminar • reflection papers • electronic portfolio • oral presentation • class discussion
8. Use suitable technologies, scientific inquiry skills and communication strategies to understand ethical research on public health issues.	EPID 410: Principles of Epidemiology • survey development, implementation, data analysis, reporting (written and oral) • infographics creation • journal abstract retrieval (online data bases) and summary • literature review for survey and/or infographic PUBH 498: Senior Capstone Seminar • journal article and epi data retrieval (online data bases) • CITI Training review for Human Subjects • USC IRB application (for students conducting research) • electronic portfolio • class discussion • reflection papers
9. Demonstrate proficient reasoning and critical thinking including the ability to analyze, synthesize, and evaluate information to make sound decisions and solve problems as they apply to public health.	PUBH 102: Introduction to Public Health • data retrieval & business memo integration w/ policy recommendations • class discussion with PH framework analysis EPID 410: Principles of Epidemiology • survey development, implementation, data analysis, reporting (written and oral) • infographics creation • journal abstract retrieval (online data bases) and summary

Student Outcomes from SBP Template P in Criterion 2.6.a	Course(s) & Assessment Opportunities
	• literature review for survey and/or infographic PUBH 498: Senior Capstone Seminar • journal article and epi data retrieval (online data bases) • electronic portfolio (w/ recommendations for solving PH problem/issue) • class discussion • reflection papers HSPM 412: Health Economics • online discussion board posts • class participation/discussions • exam and quiz questions (objective and subjective) • concept application homework • economic comparison paper HSPM 500: Introduction to Healthcare Management and Organization • exam questions • online discussion board posts • group case study project • in-class presentation of health care journal article critique

Graduate student assessment (public health programs)**.** Competencies in the graduate public health programs are assessed through a combination of course assignments and grades, exams (qualifying exams, progression exams, and comprehensive exams), and assessment of final projects (practica, theses/research projects, and dissertations).

Course assignments and grades. Course grades provide an initial opportunity for competency assessment. For example, the competencies in the five core areas for the MPH programs are each associated with a required introductory course in the associated public health discipline. The course assignments and grades provide the first opportunity for faculty to assess student achievement of these competencies.

Qualifying exams. Qualifying exams are used in the doctoral programs to assess student competencies finishing the first year or second year in the program. All departments use written exams. Students who fail may retake the exam at a later date. Those who fail the second attempt are not allowed to continue in the program. Students in the ENHS PhD program have two options for the format of their qualifying exams. They may elect to take a written test with an oral follow-up or write a grant proposal with an oral defense of the proposal. Students in the HSPM PhD program matriculating in fall 2016 or later take a two-part qualifying exam: the first part is an on-campus, written exam on two core areas of the program (research method and health policy/management) and the second part is a take-home written research proposal focusing on the concentration area of the student.

Progression exams. Students in the EPID and BIOS MPH and MSPH programs take a progression exam at the end of their first year of study. Similar to the qualifying exam for doctoral students, this exam covers material from the courses students have taken in the first year. Students who fail may retake the exam at a later date. Those who fail the second attempt are not allowed to continue in the program.

Comprehensive exams/assessments. As a university requirement, all candidates for a master's degree must complete a "comprehensive assessment" and doctoral students must pass a "written and oral comprehensive exam" in their respective programs.

Master's programs use different approaches for the comprehensive assessments, typically taken in the last semester of the program. BIOS, EPID, and PAPH all require students to take a written comprehensive exam. One retake is allowed if students fail. The HPEB MPH programs require students to take a written comprehensive exam and also assess competencies in an oral component following the practicum presentation. The HPEB MSPH program considers the written thesis to be the written comprehensive assessment and the oral component is assessed at the thesis defense. The HSPM MPH and the ENHS MPH and MS use only an oral assessment conducted at the time of the practicum presentation or thesis defense.

For students in the general MPH program, the comprehensive exam consists of a formal presentation of the practicum experience and a follow-up oral examination that covers wide ranging aspects of the program of study. This is discussed in more detail in criterion 2.5, culminating experience.

Doctoral programs also use different approaches to the comprehensive exams. In general, the programs use the dissertation proposal as the written component of the comprehensive exam and conduct the oral exam along with the proposal defense. EHNS conducts their assessment at the time of the dissertation defense. BIOS and EPID conduct written and oral exams after students have completed their coursework. EPID is currently testing an alternate option of using the dissertation proposal as the written component and questions at the proposal defense as the oral component.

Dissertation/thesis/research project. Dissertations, theses, and final research projects measure student attainment of key competencies at multiple points in the programs that require them. Generally, students first develop and defend a proposal, which allows for an initial assessment of these competencies. The final written product and its oral defense are used as a final assessment of related competencies.

Practicum assessments. The public health practica for the MPH and DrPH programs allow students to apply their classroom learning to real-world situations. Each program publishes one or more learning objectives for the respective practicum. Student-specific learning objectives, consistent with the program's practicum learning objectives, are developed and approved at the time of the practicum proposal and are assessed by the faculty advisor and preceptor through a review of the student's written report and oral presentation. Evaluation questionnaires are also completed by the student, the faculty advisor, and the preceptor to provide additional information about the experience. The public health practicum for MPH and DrPH students is described in detail in criterion 2.4.

Teaching and consulting practica. Doctoral students in BIOS and EPID complete a consulting and a teaching practicum. The consulting practicum involves application of advanced methods to furthering the research agenda for an agency or organization outside the department. Activities can include the design, development, and implementation of an advanced data analysis plan and interpretation of real data. Students are evaluated in the practica by the faculty mentor with whom they are working. Evaluation of the consulting practicum is based on the student's interaction with the agency, the completeness and precision of the attainment and analysis of the data, and the ability of the student to summarize and communicate the results to the agency or organization. Evaluation of the teaching practicum is based on planning and organization of the lessons, integration of instructional elements, efficient use of class time, teaching techniques, rapport with the students in the class, and knowledge and presentation of the subject matter. Copies of these assessment forms are included in the ERF. HSPM PhD students are required to complete USC's Center for Teaching Excellence (CTE) trainings on teaching methodology and/or preparing new faculty members and must complete teaching and research practica with faculty members of the department.

2.7.b Identification of outcomes that serve as measures by which the school will evaluate student achievement in each program, and presentation of data assessing the school's performance against those measures for each of the last three years. Outcome measures must include degree completion and job placement rates for all degrees (including bachelor's, master's and doctoral degrees) for each of the last three years. See CEPH Data Templates 2.7.1 and 2.7.2. If degree completion rates in the maximum time period allowed for degree completion are less than the thresholds defined in this criterion's interpretive language, an explanation must be provided. If job placement (including pursuit of additional education), within 12 months following award of the degree, includes fewer than 80% of the graduates at any level who can be located, an explanation must be provided. See CEPH Outcome Measures Template.

Outcome measures. The school evaluates student achievement by tracking student graduation rates, job placement rates, and grade point averages (GPA) at graduation aggregated across all disciplines, not just public health (see table 2.7.b.1). Graduation rates are calculated from two sources: the school's PHGrad database and the university registrar's data warehouse. Job placement rates are calculated from survey responses and Internet searches. GPA at graduation is extracted from the graduation data in the registrar's data warehouse. More detailed information about graduation rates and job placement rates follows.

Table 2.7.b.1 Outcome measures for student achievement

Indicator	Target	Year 1	Year2	Year 3
Percentage of undergraduates who graduate within 2 years of entering into senior year at Arnold School)	≥ 85%	AY 12-13 senior cohort 89%	AY 13-14 senior cohort 90%	AY 14-15 senior cohort 92%
Percentage of undergraduate students still actively seeking employment (or further education) 1 year post-graduation	≤ 20% actively seeking employment 1 year post-graduation	data not available	AY13-14 grads 30%	AY14-15 grads 9%
Percentage of undergraduates graduating with highest Latin Honors (Summa Cum Laude: GPA 3.95-4.00)	≥ 5% by AY2019-20	AY 13-14 16 (4%)	AY 14-15 16 (3%)	AY 15-16 26 (5%)
Percentage of master's students who graduate within 6 years of matriculation	≥ 80%	AY 08-09 cohort 87%	AY 09-10 cohort 91%	AY 10-11 cohort 92%
Percentage of doctoral students who graduate within 8 years of matriculation	≥ 70%	AY 06-07 cohort 79%	AY 07-08 cohort 89%	AY08-09 cohort 90%
Percentage of graduate students who are still seeking employment (or further education) 1 year post-graduation	≤ 10% actively seeking employment 1 year post-graduation	AY12-13 grads 2%	AY13-14 grads 2%	AY14-15 grads 2%
Average master's GPA at graduation	≥ 3.8	AY 13-14 3.83	AY 14-15 3.84	AY 15-16 3.85
Average doctoral GPA at graduation	≥ 3.8	AY 13-14 3.87	AY 14-15 3.82	AY 15-16 3.81

Graduation rates. The Graduate School requires master's students to graduate within six years after enrolling and doctoral students to graduate within ten years after enrolling. The university recently changed the maximum time to graduation for doctoral programs from eight to ten years; however, for

our annual reports to CEPH, we have elected to continue monitoring graduation within the 8-year window for comparability from year to year in this accreditation cycle.

For the purposes of calculating graduation rates and as recommended by CEPH, undergraduates are counted in cohorts once they have reached senior status (completing roughly 90 credit hours of course work). Maximum time to graduation is then considered to be two years after reaching senior status.

As shown in summary table 2.7.b.2, accumulating cohort data through AY2015-16, over 80% of students graduated within the maximum time to graduation for their program. The one exception to this was the DrPH cohort, of which only 40% graduated. The DrPH program has a wide variation in graduation rates due to the small number of students enrolled. In addition, the AY2008-09 cohort included students from a short-lived international DrPH in health services policy and management; three of the withdrawals in this cohort were students in this program. This cohort also began before a substantial revision in the DrPH programs in AY2010-11. Since then, graduation rates have improved in the DrPH program.

Table 2.7.b.2 Summary of most recent graduation rates for all degrees[1]

Public Health Degrees	MTTG[2]	# starting	# withdrawn	# graduating	# continuing	Graduation rate (# grad/# start)
BA PUBH	2	118	3	112	3	95%
BS PUBH	2	56	2	53	1	95%
MPH (all, including dual and distance)	6	58	4	54	0	93%
MS/MSPH (BIOS, EPID, ENHS, HPEB)	6	16	3	13	0	81%
DrPH (BIOS, HPEB, HSPM)	8	6	4	2	0	33%
PhD (BIOS, ENHS, EPID, HPEB, HSPM)	8	28	3	25	0	89%
Allied Health Degrees						
BS EXSC	2	319	21	291	7	91%
MS (EXSC)	6	15	2	13	0	87%
Professional master's (MCD/MSP, MHA)	6	87	5	82	0	94%
PhD (COMD, EXSC)	8	9	0	9	0	100%
Professional doctorate (DPT)	8	17	0	17	0	100%

[1] *Most recent rates include graduations through AY2015-16 (bachelor's cohort=AY2014-15; master's cohort=AY2010-11; doctoral cohort=AY2008-09)*

[2] *MTTG = maximum time to graduation*

Detailed graduation rates for public health degrees are shown in tables 2.7.b.3-2.7.b.7 below. Graduation rate tables for allied health degrees are included in the ERF.

Table 2.7.b.3 Graduation rates for BA and BS in public health (MTTG = 2 years from senior status)

		BA in Public Health			BS in Public Health		
	Cohort →	2013-14	2014-15	2015-16	2013-14	2014-15	2015-16
2013-14	# entered/continuing	96			39		
	# withdrew	3			1		
	# graduated	72			25		
	grad rate	75%			64%		
2014-15	# entered/continuing	21	118		13	56	
	# withdrew	0	3		0	2	
	# graduated	17	84		12	41	
	grad rate	93%	71%		95%	73%	
2015-16	# entered/continuing	4	31	162	1	13	62
	# withdrew	0	0	1	1	0	0
	# graduated	4	28	136	0	12	47
	grad rate	97%	95%	84%	95%	95%	76%
2016-17	# continuing	0	3	25	0	1	15

Table 2.7.b.4 Graduation rates for all MPH Programs, including distance and dual (MTTG = 6 years)

	Cohort →	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
2009-10	# entered/continuing	61						
	# withdrew	3						
	# graduated	1						
	Grad rate	2%						
2010-11	# entered/continuing	57	58					
	# withdrew	1	2					
	# graduated	29	1					
	Grad rate	49%	2%					
2011-12	# entered/continuing	27	55	57				
	# withdrew	1	2	4				
	# graduated	17	33	0				
	Grad rate	77%	59%	0%				
2012-13	# entered/continuing	9	20	53	69			
	# withdrew	1	0	2	4			
	# graduated	4	17	34	0			
	Grad rate	84%	88%	60%	0%			
2013-14	# entered/continuing	4	3	17	65	82		
	# withdrew	0	0	1	4	7		
	# graduated	2	2	11	40	1		
	Grad rate	87%	91%	79%	58%	1%		
2014-15	# entered/continuing	2	1	5	21	74	91	
	# withdrew	0	0	1	3	3	10	
	# graduated	2	1	3	12	44	0	
	Grad rate	90%	93%	84%	75%	55%	0%	
2015-16	# entered/continuing	0	0	1	6	27	81	57
	# withdrew			0	0	1	0	1
	# graduated			1	4	14	35	0
	Grad rate	90%	93%	86%	81%	72%	38%	0%
2016-17	# entered/continuing	0	0	0	2	12	46	56

Table 2.7.b.5 Graduation rates for MS/MPSH in BIOS, EPID, ENHS, and HPEB (MTTG = 6 years)

	Cohort→	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
2009-10	# entered/continuing	18						
	# withdrew	1						
	# graduated	0						
	Grad rate	0%						
2010-11	# entered/continuing	17	16					
	# withdrew	1	1					
	# graduated	2	0					
	Grad rate	11%	0%					
2011-12	# entered/continuing	14	15	13				
	# withdrew	0	2	3				
	# graduated	8	4	0				
	Grad rate	56%	25%	0%				
2012-13	# entered/continuing	6	9	10	20			
	# withdrew	0	0	2	2			
	# graduated	3	6	3	0			
	Grad rate	72%	63%	23%	0%			
2013-14	# entered/continuing	3	3	5	18	14		
	# withdrew	0	0	0	0	2		
	# graduated	1	2	4	4	0		
	Grad rate	78%	75%	54%	20%	0%		
2014-15	# entered/continuing	2	1	1	14	12	12	
	# withdrew	0	0	1	1	1	0	
	# graduated	0	0	0	7	4	0	
	Grad rate	78%	75%	54%	55%	29%	0%	
2015-16	# entered/continuing	2	1	0	6	7	12	17
	# withdrew	0	1		0	0	0	1
	# graduated	0	0		3	5	7	0
	Grad rate	78%	75%	54%	70%	64%	58%	0%
2016-17	# entered/continuing	2	0	0	3	2	5	16

Table 2.7.b.6 Graduation rates for DrPH in BIOS, HPEB, and HSPM (MTTG = 8 years)

	Cohort→	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
2007-08	# entered/continuing	0								
	# withdrew									
	# graduated									
	Grad rate									
2008-09	# entered/continuing	0	6							
	# withdrew		0							
	# graduated		0							
	Grad rate		0%							
2009-10	# entered/continuing	0	6	5						
	# withdrew		0	1						
	# graduated		0	0						
	Grad rate		0%	0%						
2010-11	# entered/continuing	0	6	4	5					
	# withdrew		0	0	0					
	# graduated		0	0	0					
	Grad rate		0%	0%	0%					

	Cohort→	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
2011-12	# entered/continuing	0	6	4	5	1				
	# withdrew		0	0	0	0				
	# graduated		1	0	0	0				
	Grad rate		17%	0%	0%	0%				
2012-13	# entered/continuing	0	4	4	5	1	4			
	# withdrew		4	0	1	0	0			
	# graduated		0	0	0	0	0			
	Grad rate		17%	0%	0%	0%	0%			
2013-14	# entered/continuing	0	1	4	4	1	4	1		
	# withdrew		0	0	0	0	1	0		
	# graduated		1	0	1	0	0	0		
	Grad rate		33%	0%	20%	0%	0%	0%		
2014-15	# entered/continuing	0	0	4	3	1	3	1	4	
	# withdrew			0	0	0	1	0	1	
	# graduated			2	0	0	0	0	0	
	Grad rate		33%	40%	20%	0%	0%	0%	0%	
2015-16	# entered/continuing	0	0	2	3	1	2	1	3	3
	# withdrew			0	0	0	0	0	0	0
	# graduated			1	3	1	1	0	0	0
	Grad rate		33%	60%	80%	100%	25%	0%	0%	0%
2016-17	# entered/continuing	0	0	1	0	0	1	1	3	3

Table 2.7.b.7 Graduation rates for PhD in BIOS, ENHS, EPID, HPEB, and HSPM (MTTG = 8 years)

	Cohort →	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
2007-08	# entered/continuing	24								
	# withdrew	1								
	# graduated	0								
	Grad rate	0%								
2008-09	# entered/continuing	23	28							
	# withdrew	0	0							
	# graduated	0	0							
	Grad rate	0%	0%							
2009-10	# entered/continuing	23	28	35						
	# withdrew	0	1	3						
	# graduated	3	1	0						
	Grad rate	13%	4%	0%						
2010-11	# entered/continuing	20	26	32	37					
	# withdrew	0	1	0	2					
	# graduated	6	2	0	0					
	Grad rate	38%	11%	0%	0%					
2011-12	# entered/continuing	14	23	32	35	44				
	# withdrew	0	0	1	2	3				
	# graduated	9	13	4	0	0				
	Grad rate	75%	57%	11%	0%	0%				
2012-13	# entered/continuing	5	10	27	33	41	31			
	# withdrew	0	0	2	1	0	1			
	# graduated	0	4	9	5	0	0			
	Grad rate	75%	71%	37%	14%	0%	0%			

	Cohort →	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
2013-14	# entered/continuing	5	6	16	27	41	30	39		
	# withdrew	0	1	1	0	2	3	3		
	# graduated	1	3	9	9	1	0	0		
	Grad rate	79%	82%	63%	38%	2%	0%	0%		
2014-15	# entered/continuing	4	2	6	18	38	27	36	39	
	# withdrew	0	0	0	1	0	0	2	4	
	# graduated	1	1	2	8	13	5	0	0	
	Grad rate	83%	86%	69%	59%	32%	16%	0%	0%	
2015-16	# entered/continuing	3	1	4	9	25	22	34	35	26
	# withdrew	0	0	0	1	0	1	0	0	0
	# graduated	2	1	2	2	9	8	1	0	0
	Grad rate	92%	89%	74%	65%	52%	42%	3%	0%	0%
2016-17	# entered/continuing	1	0	2	6	16	13	33	35	26

Job placement rates. The job placement rates for public health degrees are shown in table 2.7.b.8. Data collection for students who graduated in AY2014-15 shows that only 11% of public health undergraduate students, 3% of public health graduate students, and 1% of allied health students were actively seeking employment one year post graduation. The apparent improvement in undergraduate placement rates from AY2013-14 to AY2014-15 is a result of improved data collection methods used in with the AY2014-15 cohort (see section 2.7.c). The school relies on surveys conducted by the university's Career Center for data on undergraduate student job placement. No data are available from the Career Center for AY 2012-13 due to a loss of data at the center. The director of evaluation and academic assessment began to work closely with staff at the Career Center in AY2013-14 to ensure that data were collected and available and continues work with them to improve response rates and access to data.

Table 2.7.b.8 Job placement rates by public health program[1]

	Academic Year of Graduation		
	AY2012-13	**AY2013-14**	**AY2014-15**
BA/BS (PUBH)[2]			
Employed	*Data not available*	23 (31%)	75 (73%)
Continuing education/training (not employed)		25 (33%)	16 (16%)
Actively seeking employment		27 (36%)	11 (11%)
Not seeking employment		0 (0%)	1 (1%)
Unknown/non-respondents	85	57	62
Number of graduates	85	132	165
MPH			
Employed	38 (78%)	42 (86%)	47 (92%)
Continuing education/training (not employed)	10 (20%)	3 (6%)	2 (4%)
Actively seeking employment	1 (2%)	4 (8%)	2 (4%)
Not seeking employment			
Unknown/non-respondents	8	9	14
Number of graduates	57	58	64
MS/MSPH (excluding EXSC MS)			
Employed	5 (56%)	7 (78%)	10 (91%)
Continuing education/training (not employed)		2 (22%)	
Actively seeking employment			1 (9%)
Not seeking employment			
Unknown/non-respondents	3	1	0
Number of graduates	12	10	11

	Academic Year of Graduation		
	AY2012-13	**AY2013-14**	**AY2014-15**
DrPH			
Employed		2 (100%)	2 (100%)
Continuing education/training (not employed)			
Actively seeking employment			
Not seeking employment			
Unknown/non-respondents		1	0
Number of graduates	0	3	2
PhD (excluding EXSC, COMD)			
Employed	22 (92%)	21 (100%)	27 (96%)
Continuing education/training (not employed)	2 (8%)		
Actively seeking employment			
Not seeking employment			1 (4%)
Unknown/non-respondents	0	2	2
Number of graduates	24	23	30

[1] Percentages are calculated based on known responses; i.e., the denominator does not include non-respondents. The total number of graduates is provided for reference.

[2] Data for undergraduates are not available for AY2012-13.

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

Undergraduate students. The university's Career Center conducts an undergraduate exit survey to capture data on the students' future plans to meet SACS accreditation requirements. Data for public health students is only available beginning with the AY2013-14 graduating classes. An initial survey is conducted each term around the time of graduation. For students who do not respond to the survey or who respond but indicate they are still seeking employment or waiting on an admission decision, the Career Center conducts a follow-up survey 3-6 months later. A copy of the questionnaire appears in the ERF. Even with this second data collection effort, we found the Career Center data shows 30% or more of our undergraduates still seeking employment 6 months post-graduation (as seen in the results for AY2013-14). Unfortunately, the Career Center was unable to provide data for AY2013-14 that would allow us to follow-up at the one-year mark. For the AY2014-15 graduates, data about survey responses was available that allowed us to search LinkedIn for non-respondents and any students who indicated they were still seeking employment or further education. This allowed us to substantially improve our response rates and to identify a greater percentage of students who were employed or pursuing graduate/professional education by one year post-graduation (see table 2.7.c below).

Graduate students. Prior to AY2013-14, job placement data were collected by individual departments using various methods of personal contact. No response rates were calculated for that academic year; however, job placement data are available for the majority of graduates. Beginning AY2013-14, the Arnold School began conducting online exit surveys of graduate students in most at the end of their final semester in the program and online alumni surveys of graduate students 9-12 months post-graduation.

The school has participated in graduate outcomes project of the Association of Schools and Programs of Public Health (ASPPH). This effort has identified common data elements that can be collected by all schools and reported in the ASPPH annual data reporting process. These common data elements are collected on our alumni survey.

The exit and alumni surveys capture the following information regarding the graduates' current or future employment status: employment situation (seeking employment, continuing in same position/found a new position, continuing education, not seeking work, or unsure); employment status (full- or part-time); type of employer organization; nature of employment (U.S. based or in medically underserved area); and salary range (see questionnaires in ERF).

Response rates. Response rates shown in table 2.7.c include response rates for surveys along with the number of students whose data were captured through other sources. The adjusted response rates take into account all sources used. The response rate for undergraduate surveys was only 28%, but that was increased to 62% through the use of social media searches (i.e.., LinkedIn). Our annual response rate for the graduate exit survey averages 89% and for the alumni survey averages 50%. Job placement data in table 2.7.b.8 for public health graduate students reflect results of the alumni surveys, supplemented by information about non-respondents collected from the exit survey, social media, and Internet searches.

Table 2.7.c Survey response rates by program for students graduating AY2014-15

	Graduated	Responded to survey	Survey[1] response rate	Data from other sources[2]	Adjusted response rate[3]
Public health degrees					
BA/BS	165	47	28%	56	62%
MPH	62	34	55%	17	82%
MS/MSPH	11	9	82%	2	100%
DrPH	2	2	100%	0	100%
PhD	30	15	50%	13	93%
All public health degrees	**270**	**107**	**40%**	**88**	**72%**

[1] *Surveys include the Career Center survey for undergraduates and the alumni survey for graduate students*
[2] *Other sources include the graduate exit survey, LinkedIn and other Internet searches*
[3] *Percentage of graduates for whom job placement information was found through surveys and other sources*

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

N/A for public health degrees

2.7.e Data and analysis regarding the ability of the school's graduates to perform competencies in an employment setting, including information from periodic assessments of alumni, employers and other relevant stakeholders. Methods for such assessments may include key informant interviews, surveys, focus groups and documented discussions.

The Arnold School uses several techniques to assess the ability of our public health graduates to perform in an employment setting. Self-assessments are included in the regular exit surveys, alumni surveys, and surveys of MPH and DrPH students at the end of their practica. Preceptors also assess student preparation at the end of their practica. In addition to these regular surveys, the school periodically surveys employers. Overall, these assessments indicate that students are prepared for their future employment, and point to some areas where the school could improve (specifically in preparing students for professional writing and data analysis). Copies of the questionnaires and most recent reports are included in the ERF.

Employer survey. In spring 2016, the Arnold School conducted a survey of employers to assess the preparation of our public health graduates for the workforce. Fifty-eight employers of our recent public health graduates were identified. The list was limited to South Carolina employers. Of the 58 employers

surveyed, 33 (57%) responded. The questionnaire included objective and open-ended questions. Overall, the results of the survey were positive. Employers generally find our graduates to be skilled and qualified to the needs of the work place. Specific recommendations included improving writing skills, some technical skills, and the ability of students to apply what they learn to real-world situations.

The main body of the survey asked employers to think about their employee(s) who recently graduated from the Arnold School and indicate the extent to which they agree or disagree with a set of statements about the graduate's abilities (1=strongly disagree to 4=strongly agree). The responses indicated a high level of agreement that our graduates have the selected skills and abilities. No one selected "strongly disagree" on any item. The percentage who strongly agreed ranged from 45% for the ability to adapt communications for the audience to 73% for the ability to perform in accordance with guidelines and the ability to work effectively in teams. The average scores ranged from 3.5 to 3.7.

The employer questionnaire also asked "How well prepared were these employees for the job requirements (e.g., to what extent did they have the appropriate knowledge and skills to meet the requirements)?" Response options are on a scale of 1=poorly prepared to 5=very well prepared. Most respondents indicated that our graduates were very well prepared (n=17, 52%) or well prepared (n=13, 39%). The average response to this item was 4.4. Eight employers added comments related to this question. Most of these comments were positive, indicating that our graduates are well-qualified, well-prepared, and skilled. One employer noted a lack of "real world" experience.

The questionnaire also asked "How well qualified are our graduates as employees compared to current employees at a similar level?" Response options to this item are less qualified, about the same, and more qualified. Of the 33 responses, 2 (6%) said less qualified, 17 (52%) said about the same, and 14 (42%) said more qualified. Eight employers also provided comments related to this question. One respondent stated, "Comparing to other students in which we have hired from USC in different fields, we find your student more prepared and more sensitive to real life situations." Another pointed to the benefits the "technical knowledge with manipulating 'big data' and comfort levels with applied research methods within a policy environment."

Finally, the questionnaire included open-ended questions asking about the graduates' skill deficiencies and strengths, and strategies for preparing out students. Six employers provided comments on deficiencies and sixteen on strengths; however, due to the variety of responses, no obvious patterns emerged. Ten employers responded to the question about strategies the school could use to better prepare our students. Example of strategies included improving writing skills through practice writing grants or papers and critical review of writing samples and providing more opportunities for practical, hands-on experience. A specific suggestion for BIOS/EPID was for students to get more experience with publicly available datasets (e.g., vital records, Behavioral Risk Factor Surveillance System) and with programming logic in SAS.

Practicum assessments. The students and preceptors both complete surveys at the end of a practicum experience that assesses the student's performance in the practicum. These data provide a sense of how the student may perform in the workforce. Preceptors are asked the extent to which they agree with the statement, "The student was well-prepared academically for this practicum/residency experience." Response options range from 1=strongly disagree to 4=strongly agree. The average on this response increased from 3.6 in AY2014-15 to 3.8 in AY2015-16. Both the preceptor and the student also respond to Likert-style questions about the student's performance during the practicum (using the same response options). In AY2014-15 and AY2015-16, the average score across these items was 3.8 in the preceptor survey. Students rated themselves at an average of 3.6 in AY2014-15 and 3.7 in AY2015-16. Overall, the performance assessments from the practica were positive and point to potential student success in the workforce.

Exit surveys. The school conducts exit surveys for undergraduate and graduate students ask students the extent to which they agree with the statement, "I feel that I am academically and professionally well prepared for the career field I plan to enter after graduation." Response options range from 1=strongly disagree to 4=strongly agree. In both AY2014-15 and AY2015-16, the average score for undergraduate public health majors was 3.4. For graduate public health majors the average was 3.3 in AY2014-15 and 3.4 in AY2015-16. While this is a very crude measure of competence, it does provide an indication that students feel prepared for the workforce as they finish their degrees.

Alumni surveys. Since the graduating class of spring 2014, we have included a set of Likert-style questions on our graduate alumni surveys that ask students how satisfied they are with the way the school prepared them for their chosen career and how satisfied they are with the contribution of the school to their professional and academic growth in each of 12 areas. Response options range from 1=very dissatisfied to 4=very satisfied. For public health students graduating in AY2013-14 and AY2014-15, the average score for preparation overall was 3.3. All of the averages responses increased from AY2013-14 to AY2014-15. Average responses for the detailed questions in AY2014-15 ranged from 3.3 (writing effectively in the field and understanding the interaction of society and environment; both averaged 3.2 in AY2013-14) to 3.6 (defining and solving problems in the field; average 3.3 in AY2013-14). Again, this is a very crude measure of competence, but it does provide an indication that students feel prepared for the workforce when they reflect back one year later.

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

This criterion is met.

Strengths:

- Programs in the school use a wide variety of academic assessment methods at the student and program levels. This provides the opportunity to monitor student performance and program success.
- The school has high graduation rates within the maximum time to graduation for all programs except the DrPH. The rates for the DrPH programs are extremely variable due to the small number of students in the programs.
- Graduates of the school's graduate programs have high job placement rates, with fewer than 5% still seeking employment one year post graduation.
- Through the use of multiple measures, the school has indications that students are well-prepared for the workforce

Weaknesses:

- The school relies on the Career Center to collect job placement data for undergraduates. The response rates in past years have been low, and the data represent job placement within six months of graduation rather than a full year.

Plans:

- The director of evaluation and academic assessment is working with the Career Center to improve data collection and response rates for undergraduate job placement. We have also begun to use Internet sources to supplement the data for job placement one year post-graduation.

2.8 Other Graduate Professional Degrees. If the school offers curricula for graduate professional degrees other than the MPH or equivalent public health degrees, students pursing them must be grounded in basic public health knowledge.

2.8.a Identification of professional degree curricula offered by the school, other than those preparing primarily for public health careers, and a description of the requirements for each.

The Arnold School offers four graduate professional degrees in allied health professions: Master of Health Administration, Master of Communication Disorders, Master of Speech Pathology, and Doctor of Physical Therapy. In addition, the MS in advanced athletic training was transferred from the College of Education to the Arnold School of Public Health in July 2016.

The **Master of Health Administration** (MHA) prepares students for a career in the management of health services organizations in the private and public sectors, ranging from direct service providers (hospitals, clinics, long-term care settings) through the ancillary industries (health insurers, quality review organizations, government agencies and consulting firms). The 58-hour MHA program provides training in management, accounting, finance, information technology, quantitative methods, leadership, and strategy geared towards healthcare organizations. The MHA is offered in a full-time format for regular students, while working professionals can enroll to take courses on a part-time basis. Most of the courses are offered in the late afternoons and evenings, permitting people who work full time to attend with minimal disruption of their work obligations. The MHA program is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME).

Both the **Master of Communication Disorders** (MCD) and the **Master of Speech Pathology** (MSP) are designed to prepare students for the clinical practice of speech-language pathology and are accredited by the Council on Academic Accreditation in Audiology and Speech Pathology of the American Speech and Hearing Association. Graduates are eligible for national certification, state licensure, and SC teacher certification. The MSP program is the traditional, on-campus program. Students who have completed an undergraduate degree in communication disorders must complete 76 credit hours over a two-year period. Students without that background must take additional 13 credit hours, which lengthens their time of study by one semester. Throughout the two years of enrollment in the MSP program, students complete clinical practicum hours along with academic coursework, while the last summer is devoted to a full-time clinical internship under supervision of a certified speech pathologist.

The MCD degree is an alternative to the MSP intended for individuals who, due to geographic and/or financial circumstances, are unable to attend the full-time program in Columbia. Distance courses are taken on a part-time basis (generally two to three academic courses each fall and spring semester) with summers being reserved for clinical practicum experiences. Students with undergraduate degrees in communication disorders must complete 76 credit hours over a period of three years; those without must complete an additional 13 credit hours (lengthening the program to four years). During the first two summers of the program, students enroll in a clinical practicum involving part-time work in a clinical facility under the supervision of a certified speech-language pathologist. The last summer of the program involves completing a three-month clinical internship.

The **Doctor of Physical Therapy** (DPT) program prepares students who possess the personal and professional characteristics, knowledge, and motor skills necessary to excel in the delivery of the elements of physical therapy practice. A primary program focus is to provide students with a philosophy that the standards of physical therapy practice are dynamic and require the application, evaluation, and adaptation of existing knowledge as well as the generation of new evidence-based knowledge. Students complete 123 credit hours over the course of 3.3 years (10 semesters, including summers). The program

ends in a final clinical experience and a practical research project. The DPT program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).

The **MS in advanced athletic training** prepares athletic trainers for advanced clinical practice, research, and scholarship to advance the quality of patient care, optimize patient outcomes, and improve patient's health-related quality of life. The primary focus of the program is to provide core competencies, including evidence-based practice, patient-centered care, healthcare informatics, quality improvement, professionalism, and interprofessional education and collaborative practice. Admitted students must possess an undergraduate degree in athletic training. The program requires a minimum of 33 credit hours for thesis preparation track and 36 credit hours for research project preparation track.

In May 2015, CAATE and related professional organizations announced that the professional degree for athletic training certification would change from a bachelor's to the master's degree. As a result, the athletic training program in the Arnold School is proposing a new master's in athletic training to meet these accreditation requirements and replace the BS in athletic training, beginning summer 2019.

2.8.b Identification of the manner in which these curricula assure that students acquire a public health orientation. If this means is common across these other professional degree programs, it need be described only once. If it varies by program, sufficient information must be provided to assess compliance by each program.

Students in the MHA, MCD, MSP, and DPT programs are required to take PUBH 700 Perspectives in Public Health. This three-credit online course provides an orientation to the history, mission, and core services and disciplines of public health to develop understanding of current public health practice and how many health-related disciplines contribute to achieving public health goals.

Current students in the MS in advanced athletic training follow the curriculum effective when the program transferred to the Arnold SPH. Therefore students matriculating in 2016 and earlier do not have a curricular requirement for PUBH 700 Perspectives in Public Health; however, the 2016 cohort will be taking PUBH 700 in fall 2017. The program has submitted a request for a curriculum change to require PUBH 700 beginning with the class of 2017.

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

This criterion is met.

Strengths:

- All allied health professional degrees (with the exception of the newly transferred MS in advanced athletic training) require their students to take PUBH 700. This requirement will be incorporated into the MS in advanced athletic training by fall 2017.

Weaknesses:

- It is sometimes a challenge to broaden students' perspectives to see themselves as public health professionals and to accept the need to take PUBH 700.

Plans:

- We are in the process of reviewing the syllabus for PUBH 700 not only to explore and address the integration of clinical and population perspectives but also to ensure that it meets the requirements of the new 2016 CEPH criterion D19.

2.9 Bachelor's Degrees in Public Health/4.0 Undergraduate Public Health Curriculum.

Note: The CEPH standalone baccalaureate program (SBP) criteria 4.0 (curriculum) are used for this section in lieu of section 2.9. SBP criteria are numbered 4.1-4.5.

SBP 4.1 The overall undergraduate curriculum (eg, general education, liberal learning, essential knowledge and skills, etc.) introduces students to the following domains. The curriculum addresses these domains through any combination of learning experiences throughout the undergraduate curriculum, including general education courses defined by the institution as well as concentration and major requirements or electives.

- ***the foundations of scientific knowledge, including the biological and life sciences and the concepts of health and disease***
- ***the foundations of social and behavioral sciences***
- ***basic statistics***
- ***the humanities/fine arts***

The Arnold School offers both a BA and BS in public health (see table 1.2.a). Undergraduates must complete a minimum of 120 credit hours. Students in the BA and BS in public health must complete 46-58 hours of core courses to meet the Carolina Core general education requirements and the school core requirements. All BA and BS students must also take 30 hours of required public health major courses. Students in the BA program must also complete two cognates of 12 credit hours each. Students in the BS program are required to take 16 hours in natural sciences and 12 hours in their major ("selectives"). Syllabi and curriculum checklists with specific courses required for both programs appear in the ERF. Requirements for each program appear in the undergraduate bulletin at the following links:

PUBH BA: http://bulletin.sc.edu/preview_program.php?catoid=37&poid=1375
PUBH BS: http://bulletin.sc.edu/preview_program.php?catoid=37&poid=1374

SBP Template K lists the experience(s) that ensure that students are introduced to each of the domains listed above in SBP criterion 4.1.

SBP Template K: Experiences that introduce general education domains

DOMAINS	**Courses and other learning experiences through which students are introduced to the domains specified**
Science: Introduction to the foundations of scientific knowledge, including the biological and life sciences and the concepts of health and disease	For BS – two semesters of biology and two (2) labs For BA – no current biological or life sciences requirement; students select one lab and one non-lab science class from an approved list from the general education (Carolina Core) requirement For both – PUBH 102: Introduction to Public Health
Social and Behavioral Sciences: Introduction to the foundations of social and behavioral sciences	For both – PSYC 101: Introduction to Psychology and SOCY 101: Introduction to Sociology For BA – ECON 224: Introduction to Economics and ANTH 102: Understanding Other Cultures
Math/Quantitative Reasoning: Introduction to basic statistics	For BA – STAT 110: Introduction to Statistical Reasoning For both – STAT 201: Elementary Statistics or STAT 205: Elementary Statistics for the Biological and Life Sciences
Humanities/Fine Arts: Introduction to the humanities/fine arts	For both - 6 hours of Introductory English (ENGL 101 and ENGL 102) For both - students elect one course for the Aesthetic and Interpretive Understanding component of the Carolina Core (create or interpret literacy, visual or performing arts)

SBP 4.2 The requirements for the public health major or concentration provide instruction in the following domains. The curriculum addresses these domains through any combination of learning

experiences throughout the requirements for the major or concentration coursework (ie, the program may identify multiple learning experiences that address a domain—the domains listed below do not each require a single designated course).

- ***the history and philosophy of public health as well as its core values, concepts and functions across the globe and in society***
- ***the basic concepts, methods and tools of public health data collection, use and analysis and why evidence-based approaches are an essential part of public health practice***
- ***the concepts of population health, and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations***
- ***the underlying science of human health and disease including opportunities for promoting and protecting health across the life course***
- ***the socioeconomic, behavioral, biological, environmental and other factors that impact human health and contribute to health disparities***
- ***the fundamental concepts and features of project implementation, including planning, assessment and evaluation***
- ***the fundamental characteristics and organizational structures of the US health system as well as the differences in systems in other countries***
- ***basic concepts of legal, ethical, economic and regulatory dimensions of health care and public health policy and the roles, influences and responsibilities of the different agencies and branches of government***
- ***basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology***

If the program intends to prepare students for a specific credential, then the curriculum must also address the areas of instruction required for credential eligibility (eg, CHES).

SBP Template L, starting on the next page, shows how the domains listed in SBP criterion 4.2 are introduced and reinforced in the undergraduate curriculum for both the BA and BS in public health. These programs are not intended to prepare students for a specific credential.

SBP Template L: Experiences that provide exposure to public health domains

PUBLIC HEALTH DOMAINS		Course Name and Number									
		PUBH 102 Intro to Public Health	ENHS 321 Envir. Pollution & Health	EPID 410 Principles of Epid.	EXSC 191 Physical Activity & Health	HPEB 300 Intro to Health Promo.	HPEB 511 Health Prob. in Society	HPEB 553 Comm. Health Prob.	HSPM 412 Health Economics	HSPM 500 Intro to Health Mgt.	PUBH 498 PH Capstone Seminar
Overview of Public Health: Address the history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society											
	Public Health History	IC	I								
	Public Health Philosophy	IC	I	I		I	I	I	I	I	
	Core PH Values	IC	I	I		IC	I	I	I	I	I
	Core PH Concepts	IC	IC	IC	I	IC	I	I	I	I	I
	Global Functions of Public Health	I	I	I					IC		
	Societal Functions of Public Health	IC	I	I	I	I	I	I	I	I	I
Role and Importance of Data in Public Health: Address the basic concepts, methods, and tools of public health data collection, use, and analysis and why evidence-based approaches are an essential part of public health practice											
	Basic Concepts of Data Collection	IC		IC	IC	I	I	I	I	I	
	Basic Methods of Data Collection	IC		IC	IC	I	I	I	I	I	
	Basic Tools of Data Collection	I		IC	IC	I	I	I	I	I	
	Data Usage	I		IC	IC	I	I	I	I	I	
	Data Analysis	I		IC	IC	I	I	I	I	I	
	Evidence-based Approaches	I		IC		IC	IC	I	I	I	
Identifying and Addressing Population Health Challenges: Address the concepts of population health, and the basic processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations											
	Population Health Concepts	I		I	I	IC	I	IC	I	I	
	Introduction to Processes and Approaches to Identify Needs and Concerns of Populations	I				IC	I	IC	I	I	
	Introduction to Approaches and Interventions to Address Needs and Concerns of Populations	I				IC	IC	IC	IC		

PUBLIC HEALTH DOMAINS		Course Name and Number									
		PUBH 102 Intro to Public Health	ENHS 321 Envir. Pollution & Health	EPID 410 Principles of Epid.	EXSC 191 Physical Activity & Health	HPEB 300 Intro to Health Promo.	HPEB 511 Health Prob. in Society	HPEB 553 Comm. Health Prob.	HSPM 412 Health Economics	HSPM 500 Intro to Health Mgt.	PUBH 498 PH Capstone Seminar
Human Health: Address the underlying science of human health and disease including opportunities for promoting and protecting health across the life course											
	Science of Human Health and Disease	I	I	I	IC						
	Health Promotion	I			IC	IC	IC	I	I		
	Health Protection	I			IC	IC	IC				
Determinants of Health: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities											
	Socio-economic Impacts on Human Health and Health Disparities	IC		I		IC	I	IC	I		I
	Behavioral Factors Impacts on Human Health and Health Disparities	I		I	IC	IC	I	IC	I		I
	Biological Factors Impacts on Human Health and Health Disparities	I		I	IC	IC	I	I			I
	Environmental Factors Impacts on Human Health and Health Disparities	I	IC	I		IC	I	IC			I
Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation											
	Introduction to Planning Concepts and Features	I				IC	I		I		
	Introduction to Assessment Concepts and Features					IC					
	Introduction to Evaluation Concepts and Features					IC					
Overview of the Health System: Address the fundamental characteristics and organizational structures of the U.S. health system as well as to the differences in systems in other countries											
	Characteristics and Structures of the U.S. Health System	IC							IC	IC	
	Comparative Health Systems	IC							IC		

PUBLIC HEALTH DOMAINS		Course Name and Number									
		PUBH 102 Intro to Public Health	ENHS 321 Envir. Pollution & Health	EPID 410 Principles of Epid.	EXSC 191 Physical Activity & Health	HPEB 300 Intro to Health Promo.	HPEB 511 Health Prob. in Society	HPEB 553 Comm. Health Prob.	HSPM 412 Health Economics	HSPM 500 Intro to Health Mgt.	PUBH 498 PH Capstone Seminar
Health Policy, Law, Ethics, and Economics: Address the basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy, and the roles, influences and responsibilities of the different agencies and branches of government											
	Legal dimensions of health care and public health policy	I					IC		IC	IC	
	Ethical dimensions of health care and public health policy	I	I				IC		IC	IC	
	Economical dimensions of health care and public health policy	I							IC	IC	
	Regulatory dimensions of health care and public health policy	I							IC	IC	
	Governmental Agency Roles in health care and public health policy	I	I					I	IC	IC	
Health Communications: Address the basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology											
	Technical writing	IC		IC			IC				IC
	Professional writing	I				IC	IC	IC	IC	IC	IC
	Use of Mass Media					IC	IC				
	Use of Electronic Technology	IC		IC	IC	IC	IC	IC	IC	IC	IC
I = Introduced; C = Covered; ID = Introduced & covered											

SBP 4.3 Students must demonstrate the following skills:

- ***the ability to communicate public health information, in both oral and written forms and through a variety of media, to diverse audiences***
- ***the ability to locate, use, evaluate and synthesize public health information***

SBP Template M shows the courses and other learning experiences through which students demonstrate the skills specified in SBP criterion 4.3 along with the methods by which the skills are assessed. More information about the course-related assignments can be found in the course syllabi.

SBP Template M: Experiences that ensure students demonstrate skills in communication domains

Skills		**Courses and other learning experiences through which students demonstrate the following skills.**	**Methods by which these skills are assessed.**
Public Health Communication: Students should be able to communicate public health information, in both oral and written forms and through a variety of media, to diverse audiences			
	Oral communication	Within the Classroom: • ENHS 321: Environmental Health and Pollution • HPEB 300: Introduction to Health Promotion, Education, and Behavior • HPEB 553: Community Health Promotion • HSPM 412: Health Economics • HSPM 500: Introduction to Healthcare Management and Organization • PUBH 102: Introduction to Public Health • PUBH 498: Senior Capstone Seminar Beyond the Classroom: • service learning, volunteering, shadowing hours • poster presentations at Discovery Day, USC Connect Showcase, Magellan Scholars Day and other on campus events • presentation at local, state and national conferences/professional meetings	Individual and Group: • in-class oral presentations • in-class participation/discussion • in-class debates/panels • in-class facilitation of reading • meetings with faculty (as course requirement) • community presentations • interviews with community organizations • feedback from community partners
	Written communication	Within the Classroom: • EPID 410: Principles of Epidemiology • EXSC 191: Physical Activity and Health • HPEB 300: Introduction to Health Promotion, Education, and Behavior • HPEB 511: Health Problems in a Changing Society • HPEB 553: Community Health Promotion • HSPM 412: Health Economics • HSPM 500: Introduction to Healthcare Management and Organization • PUBH 102: Introduction to Public Health • PUBH 498: Senior Capstone Seminar Beyond the Classroom: • service learning, volunteering, shadowing hours • faculty projects, grants and research	Individual and Group: • reflection papers • journals • online discussion board posts • research papers • literature reviews • annotated bibliographies • projects (e.g., intervention development, policy analysis, community assessments) • business memos • manuscripts, posters • infographics • newsletters, flyers, posters, other marketing materials
	Communicate with diverse audiences	Within the Classroom: • HPEB 300: Introduction to Health Promotion, Education, and Behavior	• written projects (e.g., intervention development, policy analysis, community

Skills		Courses and other learning experiences through which students demonstrate the following skills.	Methods by which these skills are assessed.
		• HPEB 553: Community Health Promotion • PUBH 498: Senior Capstone Seminar Beyond the Classroom: • service learning, volunteering, shadowing hours • poster presentations at Discovery Day, USC Connect Showcase, Magellan Scholars Day and other on campus events • presentation at local, state and national conferences/ professional meetings	assessments) • oral community presentations • discussions/meetings • business memos • manuscripts, posters • newsletters, flyers, posters, other marketing materials
	Communicate through variety of media	Within the Classroom: • EPID 410: Principles of Epidemiology • EXSC 191: Physical Activity and Health • HPEB 300: Introduction to Health Promotion, Education, and Behavior • PUBH 102: Introduction to Public Health • PUBH 498: Senior Capstone Seminar Beyond the Classroom: • service learning, volunteering, shadowing hours • poster presentations at Discovery Day, USC Connect Showcase, Magellan Scholars Day and other on campus events • presentation at local, state and national conferences/ professional meetings	• electronic portfolios • oral community presentations • infographics • business memos • manuscripts, posters • newsletters, flyers, posters, other marketing materials • YouTube video creation (policy analysis) • professional email • Internet and library data retrieval
Information Literacy: Students should be able to locate, use, evaluate, and synthesize information			
	Locate information	Within the Classroom: • EPID 410: Principles of Epidemiology • HPEB 300: Introduction to Health Promotion, Education, and Behavior • HPEB 553: Community Health Promotion • HSPM 412: Health Economics • HSPM 500: Introduction to Healthcare Management and Organization • PUBH 102: Introduction to Public Health • PUBH 498: Senior Capstone Seminar Beyond the Classroom: • meet with campus librarians assigned to Arnold School • meet with faculty and campus Office of Undergraduate Research • service learning, volunteering, shadowing hours • data collection and retrieval in conjunction with undergraduate research (e.g., associated with work presented at Discovery Day, USC Connect Showcase, Magellan Scholars Day and other on campus events, local, state and national conferences/professional meetings)	• literature reviews • annotated bibliographies • community needs assessments • data retrieval (online) • data collection
	Use information	Within the Classroom: • EPID 410: Principles of Epidemiology • HPEB 300: Introduction to Health Promotion, Education,	• in-class oral presentations • electronic portfolio • online discussion board

Skills		Courses and other learning experiences through which students demonstrate the following skills.	Methods by which these skills are assessed.
		and Behavior • HPEB 553: Community Health Promotion • HSPM 412: Health Economics • HSPM 500: Introduction to Healthcare Management and Organization • PUBH 102: Introduction to Public Health • PUBH 498: Senior Capstone Seminar <u>Beyond the Classroom</u>: • service learning, volunteering, shadowing hours • poster presentations at Discovery Day, USC Connect Showcase, Magellan Scholars Day and other on campus events • presentation at local, state and national conferences/ professional meetings	posts • research papers • projects (e.g., intervention development, policy analysis, community assessments) • business memos • manuscripts, posters • infographics
	Evaluate information	<u>Within the Classroom</u>: • EPID 410: Principles of Epidemiology • HPEB 300: Introduction to Health Promotion, Education, and Behavior • HPEB 553: Community Health Promotion • HSPM 412: Health Economics • HSPM 500: Introduction to Healthcare Management and Organization • PUBH 102: Introduction to Public Health • PUBH 498: Senior Capstone Seminar <u>Beyond the Classroom</u>: • service learning, volunteering, shadowing hours • poster presentations at Discovery Day, USC Connect Showcase, Magellan Scholars Day and other on campus events • presentation at local, state and national conferences/ professional meetings	• literature reviews • annotated bibliographies • community needs assessments • data retrieval (online) • data analysis
	Synthesize information	<u>Within the Classroom</u>: • EPID 410: Principles of Epidemiology • HPEB 300: Introduction to Health Promotion, Education, and Behavior • HPEB 553: Community Health Promotion • HSPM 412: Health Economics • HSPM 500: Introduction to Healthcare Management and Organization • PUBH 102: Introduction to Public Health • PUBH 498: Senior Capstone Seminar <u>Beyond the Classroom</u>: • service learning, volunteering, shadowing hours • poster presentations at Discovery Day, USC Connect Showcase, Magellan Scholars Day and other on campus events • presentation at local, state and national conferences/ professional meetings	• in-class oral presentations • electronic portfolio • online discussion board posts • reflective papers • research papers • projects (e.g., intervention development, policy analysis, community assessments) • business memos • manuscripts, posters • infographics • data interpretation and summary of results

SBP 4.4 Students have opportunities to integrate, synthesize and apply knowledge through cumulative and experiential activities. All students complete a cumulative, integrative and scholarly or applied experience or inquiry project that serves as a capstone to the education experience. These experiences may include, but are not limited to, internships, service-learning projects, senior seminars, portfolio projects, research papers or honors theses. Programs encourage exposure to local-level public health professionals and/or agencies that engage in public health practice.

In fall 2012, PUBH 498: Senior Capstone Seminar was added to the BS and BA in public health programs as an integrated and experiential learning requirement. The requirement was added to:

1) Meet the CEPH requirement that undergraduate degree programs in public health have a culminating experience in an applied setting
2) Provide students with practical experience necessary for professional growth in public health settings
3) Provide students with the opportunity to integrate "within" and "beyond" the classroom learning experiences as advocated by the university's SACS-mandated Quality Enhancement Plan (now known as “USC Connect”)
4) Advance students’ knowledge, skills, and appreciation for their major/degree
5) Support existing community-based organizations, agencies, and groups in their efforts to improve the public's health

Since spring 2013, the course has been taught in a seminar format in which students were required to reflect (in discussion and in papers) upon the public health core courses they had completed, the competencies framing their degree program, their own personal and professional strengths and areas of improvement, and their career goals post-graduation. These assignments facilitated students’ development of a project plan in which they had to complete a minimum of 50 hours of work beyond the classroom. The projects are not official university internships or field placements per se, but projects designed by the students (with oversight from the instructor) to meet their specific interests and to enhance their skill development.

Student projects are diverse and include for example: volunteering at local not-for-profit organizations, training medical office staff in a newly adopted electronic medical records, implementing a railroad safety education program for college students, assessing the prevalence of traumatic brain injury in collegiate women’s soccer, medical translation for Spanish-speaking clients at a free clinic, and assessing community mental health resources for LGBT youth. In order to integrate their experiences with core public health concepts and principles, students must prepare a final reflection paper, oral presentation, and digital portfolio. The capstone course is aligned with requirements for the Graduation with Leadership Distinction (GLD), an honor bestowed upon by the university at commencement. To-date, the Arnold School has the highest percentage of GLD graduates (relative to its overall number of graduates) of any college/school at USC. Student who choose to work toward the GLD must “demonstrate extensive, purposeful engagement beyond the classroom; understanding of course concepts in *real world* settings; and application of learning to make decisions and solve problems.” From spring 2013 to fall 2015, Arnold School faculty members teaching the course and trained in GLD requirements, processed and graded the GLD ePortfolio. Since fall 2015, however, due to enrollment increases that make it infeasible for school faculty to grade the ePortfolios, students interested in pursuing GLD enroll in a 1-credit UNIV 401 course (managed by the USC Connect Office) dedicated to helping students through the application and portfolio creation process.

The objectives of the capstone project are for students to integrate community/public health principles and concepts with "beyond the classroom," community-based practice; to gain an understanding of community/public health agencies; and to develop professional skills through on-the-job-type experiences. Students are in their final semester of coursework for their bachelor's degree in public health and their project is the final, "capstone" experience of their undergraduate program. Students are responsible for implementing their capstone project experience and for making all arrangements necessary for its successful completion. Arrangements include collaborating with the project mentor or supervisor and allotting sufficient time and energy to planning before implementing the project. Students are expected to work a minimum of fifty (50) hours total to complete their project. The project timeline follows the semester schedule. It is attached PUBH 498 and is worth three (3) academic credits. USC provides liability insurance coverage for each student while completing the requirements for this course outside of the classroom and off-campus.

SBP Template N identifies the cumulative and experiential activities through which students have the opportunity to integrate, synthesize, and apply knowledge as indicated in SBP criterion 4.4.

SBP Table N: Opportunities to integrate, synthesize, and apply knowledge

Cumulative and Experiential Activity	**How activity provides students the opportunity to integrate, synthesize, and apply knowledge.**
PUBH 498: Public Health Capstone Seminar	All public health majors are required to take PUBH 498: Public Health Capstone Seminar. The course is structured to be a synthesis and application of BA and BS public health program content and competencies in a practice setting with emphasis on student identified areas for professional growth. Students complete multiple tasks necessary for implementing a public health practice experience (i.e., capstone project) in a setting outside of the classroom. Throughout the course, students communicate in writing and orally how their capstone project contributed to their understanding of public health issues that affect society as a whole as well as those that affect vulnerable populations. Additionally, students must be able to articulate their personal values, beliefs, and goals for how they will contribute to public health problem solving through the application of a multidisciplinary and ecological understanding of enhancing health and prevention of disease. During the experience, students apply knowledge and skills gained in their courses and capstone project to demonstrate mastery of integrating learning needed for further professional development and career exploration.
HPEB 300: Introduction to Health Promotion, Education, and Behavior	HPEB 300: Introduction to Health Promotion, Education, and Behavior is a required course for all public health majors. The Group Program Planning Project requires students to develop a health promotion program plan for a specific target audience. In order to complete the project, students must be able to demonstrate an understanding of specific health-related behavior theories and models which guide practice in the field of health education and promotion and in human behavior change. Additionally, students must apply health behavior theories to appropriate groups and settings. The Group Program Planning Project contains integrative sections such as program rationale; needs assessment; program mission statement, goals and objectives; program implementation and intervention; program resources; program marketing; and evaluation.
HPEB 511: Health Problems in a Changing Society	All students majoring in public health are required to take HPEB 511: Health Problems in a Changing Society. As part of the service-learning requirement of this course, students identify a community organization where they dedicate five hours of their time to promoting public health in some capacity. The course emphasizes that service-learning should be a mutually beneficial

Cumulative and Experiential Activity	How activity provides students the opportunity to integrate, synthesize, and apply knowledge.
	experience; not only will students be addressing the needs of the community, but the experience should help students better understand the course material. Students complete two reflection papers during the semester where they reflect on their service-learning experience. The first paper documents the initial impressions of the service-learning placement and the second focuses more on the overall evaluation of the experience. In addition to the service learning component, students complete a Policy Brief. Each student selects a current public health problem and prepares a Policy Brief requiring thorough research and persuasive arguments. The Policy Brief requires a background of the problem to convince the target audience that a current and urgent problem exists, is important, and requires them to take action. Additionally, students must provide a recommendation that includes a clearly stated call to action.
HPEB 553: Community Health Problems	HPEB 553: Community Health Problems is a required major course for all public health students. In small groups, students identify a community organization that addresses a community health problem of interest. Each student must participate in a service learning activity with the organization for a total of ten hours spread over a minimum of two visits. Multiple visits allow the students to experience the dynamic nature of community-based organizations and further expand their understanding of the organization's work. Group members then synthesize their experiences in a Service Learning Activity Paper including a description of the community partner, the community health problem addressed by the community partner, the social and/or behavioral interventions used by the community partner, the collective experience and themes of the service learning experience, as well as individual reflections of each student's experience. In addition to the Service Learning Activity Paper, students complete a Community Health Analysis. Students complete an in-depth written analysis of a current community health problem, including an overview of different community-based organizations that address the health problem. Additionally, the students develop a creative and innovative intervention to address the problem. The impact of the health problem and issue is investigated including the epidemiological profile and behavioral/environmental diagnoses.
HSPM 412: Health Economics	All public health majors are required to take HSPM 412: Health Economics. The country health and economic comparisons project requires students to utilize and apply information learned in the introductory public health and health promotion courses for successful completion of the project. Each student identifies two countries and compares and analyzes the relationship between a major economic variable (e.g., total health expenditures, per capita health expenditures, share of health expenditures in GDP, growth of health expenditures, hospital spending, etc.) and a major health status indicator (e.g., life expectancy, child mortality, birth outcomes, etc.) for each country using data from the ten latest available years. Students can show the comparison between two countries in terms of the relationship between macroeconomic, health economic, and health status with the use of basic graphical, numerical, or statistical tools.
HSPM 500: Introduction to Health Care Management and Organization	All public health majors must take HSPM 500: Introduction to Health Care Management and Organization, which requires students to examine roles, functions and accountabilities within health care organizational structures as

Cumulative and Experiential Activity	How activity provides students the opportunity to integrate, synthesize, and apply knowledge.
	well as apply management concepts to workplace scenarios. Students are required to work in groups to complete management case studies as learning devices in the education of managers and administrators. The case studies require to the students to identify the major problem, note the key stakeholders, identify organizational strengths and weaknesses, provide reasonable solutions, present the findings in a professional manner, and develop a written report and oral presentation.

SBP 4.5 The overall undergraduate curriculum and public health major curriculum expose students to concepts and experiences necessary for success in the workplace, further education and life-long learning. Students are exposed to these concepts through any combination of learning experiences and co-curricular experiences. These concepts include the following:

- ***advocacy for protection and promotion of the public's health at all levels of society***
- ***community dynamics***
- ***critical thinking and creativity***
- ***cultural contexts in which public health professionals work***
- ***ethical decision making as related to self and society***
- ***independent work and a personal work ethic***
- ***networking***
- ***organizational dynamics***
- ***professionalism***
- ***research methods***
- ***systems thinking***
- ***teamwork and leadership***

Content covered in the capstone seminar includes various topics on professionalism, intrapersonal communication, collaborating with co-workers, leadership characteristics, and integrative learning. These topics (and others) combined with their applied projects offer students the experiences and concepts necessary for success in the workplace, in further education and in life-long learning. Examples of student capstone products are included in the ERF.

Additional opportunities in the curriculum and in co-curricular activities that support the concepts and experiences listed in 4.5 are shown below in SBP Template O. Note that the courses include both required and elective courses in the program.

SBP Template O: Experiences that expose students to concepts necessary for future success

Concept	Manner in which the curriculum and co-curricular experiences expose students to the concepts
Advocacy for protection and promotion of the public's health at all levels of society	ENHS 321: Environmental Pollution and Health HPEB 470: Global Health HPEB 511: Health Problems in a Changing Society HPEB 513: Race, Ethnicity, and Health: Examining Health Inequalities HPEB 553: Community Health Problems PUBH 102: Introduction to Public Health Center for Research in Nutrition and Health Disparities (speaker series & annual conference) Consortium for Latino Immigration Studies (research & outreach) South Carolina Cancer Disparities Community Network (SCCDCN) (research & community-based education & prevention) School seminars, talks & panel discussions USC Community Service Programs (volunteer opportunities) USC Leadership and Service Center (leadership & volunteer opportunities) USC Martin Luther King Days of Service (volunteer opportunities)
Community dynamics	HPEB 470: Global Health HPEB 511: Health Problems in a Changing Society HPEB 512: Southern Discomfort: Public Health in the American South HPEB 513: Race, Ethnicity, and Health: Examining Health Inequalities HPEB 553: Community Health Problems HPEB 627: Lesbian, Gay, Bisexual and Transgender (LGBT) Health HSPM 509: Fundamentals of Rural Health School seminars, talks & panel discussions South Carolina Cancer Disparities Community Network (SCCDCN) (research & community-based education & prevention) USC Community Service Programs (volunteer opportunities) USC Leadership and Service Center (leadership & volunteer opportunities) USC Martin Luther King Days of Service (volunteer opportunities)
Critical thinking and creativity	BIOS 410: Introduction to Biostatistical Modeling BIOS 490: Independent Study EPID 410: Principles of Epidemiology, including infographics creation HPEB 300: Introduction to Health Promotion, Education, and Behavior (community-based intervention planning & development) HSPM 412: Health Economics HSPM 500: Introduction to Health Care Management and Organization PUBH 498: Senior Capstone Seminar, including Digital Portfolio PUBH 399: Independent Study – Public Health STAT 201: Elementary Statistics STAT 205: Elementary Statistics for the Biological Sciences
Cultural contexts in which public health professionals work	HPEB 550: Behavioral Concepts and Processes for the Health Professional PUBH 102: Introduction to Public Health PUBH 498: Senior Capstone Seminar Monthly professional development seminars (coordinated by Office of Undergraduate Student Services)

Concept	Manner in which the curriculum and co-curricular experiences expose students to the concepts
Ethical decision making as related to self and society	ENHS 321: Environmental Pollution and Health EPID 410: Principles of Epidemiology HPEB 511: Health Problems in a Changing Society HSPM 412: Health Economics HSPM 500: Introduction to Health Care Management and Organization PUBH 102: Introduction to Public Health PUBH 498: Senior Capstone Seminar School seminars, talks & panel discussions USC Carolinian Creed USC Creed-X Week CITI Training (human subject & ethical research)
Independent work and a personal work ethic	EPID 410: Principles of Epidemiology PUBH 498: Senior Capstone Seminar, Capstone Project (integrated learning) PUBH 399: Independent Study – Public Health
Networking	PUBH 498: Senior Capstone Seminar PUBH 499: Public Health Leadership Monthly professional development seminars (coordinated by Office of Undergraduate Student Services) School seminars, talks & panel discussions USC GlobeMed (student organization) USC Timmy Global Health (student organization) USC Student Organizations (400+) USC Discovery Day USC Study Abroad Fair
Organizational dynamics	HPEB 553: Community Health Problems HSPM 500: Introduction to Health Care Management and Organization PUBH 498: Senior Capstone Seminar PUBH 499: Public Health Leadership Monthly professional development seminars (coordinated by Office of Undergraduate Student Services)
Professionalism	HPEB 300: Introduction to Health Promotion, Education, and Behavior (community-based intervention planning & development) HSPM 500: Introduction to Health Care Management and Organization PUBH 498: Senior Capstone Seminar PUBH 499: Public Health Leadership Monthly professional development seminars (coordinated by Office of Undergraduate Student Services)
Research methods	EPID 410: Principles of Epidemiology PUBH 399: Independent Study – Public Health Capstone Project Seminars given by any of the school's research centers
Systems thinking	HPEB 488: Food Systems HSPM 500: Introduction to Health Care Management and Organization HSPM 509: Fundamentals of Rural Health PUBH 102: Introduction to Public Health School seminars, talks & panel discussions

Concept	Manner in which the curriculum and co-curricular experiences expose students to the concepts
Teamwork and leadership	HSPM 500: Introduction to Health Care Management and Organization PUBH 498: Senior Capstone Seminar PUBH 499: Public Health Leadership Monthly professional development seminars (coordinated by Office of Undergraduate Student Services) Capstone Project

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

This criterion is met.

Strengths:

- The public health baccalaureate programs provide a strong foundation for students wishing to pursue either entry-level public health job opportunities or graduate studies in a wide range of health-related and other disciplines. Having separate BA and BS programs with the same public health core allows students to choose a curriculum more closely aligned with their strengths and education/career goals.

Weaknesses:

- Because of the rapid growth of enrollment, the school is challenged to meet demands for course capacity, resulting in minimal ability to deliver strategically sequenced courses.

Plans:

- The undergraduate program director will collaborate with the academic departments offering required and elective courses to ensure adequate number of seats and sections. Also, departments will be asked to restrict enrollment of core required courses to public health majors only or to majors for a specified time. Doing so will secure seats for majors needing the courses versus non-majors taking courses for elective credit or without pre-requisites.

2.10 Other Bachelor's Degrees. If the school offers baccalaureate degrees in fields other than public health, students pursing them must be grounded in basic public health knowledge.

2.10.a Identification of other baccalaureate degrees offered by the school and a description of the requirements for each. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

In addition to the BS and BA in public health, the Arnold School offers a BS in exercise science and a BS in athletic training (see Table 2.1.a). The BS in athletic training was moved into the school from the College of Education in July 2016.

The **BS in exercise science** involves a science-based curriculum that is centered on understanding the relationships among physical activity, nutrition, and health. The degree prepares students for entry into post-baccalaureate graduate and professional programs that include medicine, physical therapy, occupational therapy, speech pathology, physician assistants, health promotion education and behavior, and other career directions. The program integrates knowledge from disciplines such as anatomy, biochemistry, biology, computer science, physics, physiology, and psychology. Students can also gain experience with competencies, such as coronary artery disease risk factor screening, exercise testing, counseling individuals to increase daily physical activity levels and reduce factors associated with cardiovascular disease risk, and develop proficiency in the delivery of adult fitness and rehabilitation programming to improve cardiovascular function and foster healthy lifestyles.

As of fall 2016, the BS in exercise science changed from offering three distinct concentrations (health fitness, motor development, and scientific foundations) to offering a single degree with no explicit concentrations. Students must now complete a cognate of 12 credit hours, which can be selected from a list of approved exercise science courses. This allows students more flexibility to develop a program that meets their needs. A description of the program requirements can be found in the academic bulletin.

Accredited by the Commission on Accreditation of Athletic Training Education (CAATE) since 1992, our **BS in athletic training** is one of the largest athletic training programs in the country. It prepares students to work as athletic trainers in a variety of clinical settings, such as schools, colleges, and clinics. The coursework includes a science-heavy curriculum of biology, anatomy, physiology, chemistry, exercise science, nutrition, pharmacology, biomechanics, therapy, and rehabilitation. The program is a mix of classroom studies to build the foundation of professional knowledge and opportunities to use those fundamentals in on-site clinical experiences. Upon completing the degree, students must pass the Board of Certification of the Athletic Trainer Exam and meet continuing education requirements. A description of the program requirements can be found in the academic bulletin.

In May 2015, CAATE and other related professional organizations announced that the professional degree for athletic training certification would change from a bachelor's degree to the master's degree. In addition, the new accreditation criteria require that athletic training programs align with other health professions programs (e.g., mid-level providers such as physician assistant, physical therapist, occupational therapist, or nurse practitioner) and include Institute of Medicine Core Competencies for Health Professionals. As a result, the athletic training programs were transferred from the College of Education to the Arnold School in July 2016. Faculty have already initiated termination of the BS in athletic training at USC; no new students will be admitted beyond January 2017. The program will continue in teach-out phase until the current students graduate, no later than 2020. The Department of Exercise Science is in the process of developing and submitting a proposal for a new MS in athletic training to meet the new requirements.

2.10.b Identification of the manner in which these curricula assure that students acquire a public health orientation. If this means is common across these degree programs, it need be described only once. If it varies by program, sufficient information must be provided to assess compliance by each program.

Students in the BS in exercise science are required to take PUBH 102: Introduction to Public Health and EPID 410: Principles of Epidemiology. PUBH 102 provides an introduction to the history, theory, and practice of public health. Emphasis is places on the population perspective and the ecological model including the population impacts of health care systems. EPID 410 is an introduction to descriptive and analytical epidemiology. Topics include the distribution and determinants of disease, surveillance, outbreak investigations, measures of association, screening tests, bias, and causal reasoning. Both are three-credit courses. Syllabi are included in the ERF.

Curriculum for the BS in athletic training does not include a broad orientation to public health because the program was developed in the College of Education. Fall 2017 would be the earliest possible effective date for a revised curriculum. Since the program had been terminated and is in teach-out phase and continuing students are allowed to follow the curriculum under which they first enrolled, the school cannot add this requirement.

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

This criterion is met with commentary.

Strengths:

- The EXSC BS program requires a 300-hour practicum that provides the students with intensive "hands on" experience and skill development based on each student's needs and interests.

Weaknesses:

- Because the BS in athletic training was moved into the Arnold School in July 2016 and is now in teach-out mode, the school is unable to add a requirement for students to acquire a public health orientation. The final students in the program should graduate by 2020.

Plans:

- Fully implement new more flexible curriculum for exercise science, as students shift from three concentrations to a single, more flexible curriculum.

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

2.11.a Identification of all academic degree programs, by degree and area of specialization. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

The school offers five academic master's degrees and seven academic doctoral degrees (see table 2.1.a). MS or MSPH degrees are offered in four of the five core disciplines plus exercise science, and PhDs are offered in all five core disciplines plus exercise science and communication science and disorders.

2.11.b Identification of the means by which the school assures that students in academic curricula acquire a public health orientation. If this means is common across the school, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each.

If they do not already have an MPH degree, students in all of the graduate academic programs are required to take the three-credit online PUBH 700: Perspectives in Public Health and a three-credit course in epidemiology (either EPID 700: Introduction to Epidemiology or EPID 701: Concepts and Methods of Epidemiology). EPID 701 is required for master's students in biostatistics and epidemiology and is a prerequisite for admission to doctoral programs in these disciplines. It is also required for doctoral students in environmental health sciences, health services policy and management, and communication sciences and disorders. Students in other programs may select either EPID 700 or EPID 701.

PUBH 700 offers an orientation to history, mission, and core services and disciplines of public health to develop understanding of current public health practice and how health-related disciplines contribute to achieving public health goals. EPID 700 presents principles of epidemiology with examples of selected health problems. It also covers the health status of populations and conceptual tools for translating epidemiologic findings into public health action. EPID 701 covers the conceptual foundation of epidemiologic research, quantitative methods, and epidemiologic study design. Syllabi for these courses are included in the ERF.

2.11.c Identification of the culminating experience required for each academic degree program. If this is common across the school's academic degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each.

Culminating experiences in the academic programs generally include a thesis/dissertation and a comprehensive exam, which are completed toward the end of the student's program of study. Students in the MS and MSPH programs generally complete a thesis and a comprehensive exam. The purpose of the thesis is to apply the principles and methods learned during coursework and demonstrate competence in the student's program of study. Students in the MS in exercise science have an option to complete a project in lieu of a thesis. The primary purpose of the project is application, analysis, evaluation, or creation of knowledge. All PhD programs require students to complete a dissertation and a comprehensive exam. The dissertation must be based on original research, typically addressing a basic research problem in the student's program of study. Upon completion of these benchmarks, the departments notify The Graduate School. Data on progression is also recorded in PHGrad.

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

This criterion is met.

Strengths:

- PUBH 700 and EPID 700/701 provide students in all academic programs with a broad public health orientation.
- The school offers a variety of academic programs at the master's and doctoral level, across the public health and allied health disciplines.

Weaknesses:

- None noted.

Plans

- We have begun a review of PUBH 700, EPID 700, and EPID 701 to ensure that the curricula meet the requirements of the new 2016 CEPH criteria D17 and D18. This review will be completed in April 2016.

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

2.12.a Identification of all doctoral programs offered by the school, by degree and area of specialization. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

The Arnold School has seven PhD and three DrPH degree programs as well as the Doctor of Physical Therapy program. Table 2.1.a Instructional Matrix lists these programs by discipline.

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

University resources. The University of South Carolina Graduate School provides links on its website to campus resources designed to meet the needs of graduate students, a detailed guide for navigating the steps to graduation, professional development and funding. These links include but are not limited to: information on library services, childcare services, Preparing Future Faculty, fellowships and scholarships, the writing and career centers, campus life and safety, and transportation. The Graduate School recognizes that graduate students have somewhat different needs than undergraduate students and provide a centralized location on their website with information/resources specific to them.

The Graduate School also coordinates selection and awarding of several fellowships with varying eligibility requirements. The Presidential Fellowship program is the University of South Carolina's most prestigious university-wide award for promise of excellence at the graduate level. Unique among peer institutions for its reach across disciplines and focus on professional development, the merit-based program awards Fellows a supplemental stipend totaling $32,000 for doctoral students (awarded over 4 years).

The University of South Carolina offers several professional development opportunities. The Center for Teaching Excellence offers teacher training for all students hired as graduate teaching or instructional assistants. Formal training consists of teaching assistant (TA) orientation and completion of GRAD 701, a semester-long TA training workshop-based course. In addition, doctoral students who intend to teach post-graduation are encouraged to enroll in Preparing Future Faculty, a national program established by the Council of Graduate Schools, the Association of American Colleges and Universities, The Pew Charitable Trust, and the National Science Foundation.

The Graduate School recently appointed an associate dean for professional development (a tenured faculty member in the Arnold School) signaling a new emphasis on graduate students' skill development necessary to compete and excel in today's job market. The overall goal of the professional development activities is to plan, implement, and evaluate professional development programming for graduate students to enhance their graduate education experience and prepare them for careers after degree. Skill building in areas such as writing and publishing, communication and negotiation, grant and proposal writing and individual career development plans are all available to assist doctoral students in becoming more marketable upon graduation. The Graduate School also provides travel grants which range from $500 for domestic travel to $800 for international travel in order for graduate students to attend and present at professional meetings and conferences.

School resources. The Arnold School provides substantive support to doctoral students through funding, advisement, mentorship, travel, and other professional development opportunities. Most full-time PhD and DrPH students receive a commitment of financial support after they are accepted. The most common mechanism for funding is a graduate assistantship, requiring 10-20 hours of work each week either for research, as a teaching or instructional assistant, or less commonly as a staff assistant. An

assistantship includes a stipend and qualifies the student for in-state tuition. When there is research grant support for a student, part of the tuition will also be covered. In addition, incoming students are eligible for scholarships and fellowships offered by The Graduate School and the Arnold School. The Arnold Fellowships are funded from the Arnold Endowment to the school. The school typically awards four fellowships per department per year. Students must be a full-time doctoral student in the Arnold School with at least a 3.5 GPA in their current program.

Select incoming epidemiology, exercise science, and psychology doctoral students are eligible for the T32 pre-doctoral research training grant called the Behavioral-Biomedical Interface Program or BBIP. This program aims to prepare behavioral scientists in training to biomedical/biological content and methods so that they will function effectively as members of interdisciplinary research teams. Trainees typically receive an annual support package covering stipend at the current NIH level, tuition, and fees.

Incoming doctoral students are paired with an academic advisor who shares similar research interests. This advisor orients the student to the doctoral program; degree requirements; available courses and course sequence university, school, and department policies; etc. The academic advisor may also serve as the student's mentor and dissertation director. Mentors serve a valuable role in demonstrating ethical conduct of research and providing opportunities for personal and professional development.

Student travel support is designed to provide opportunities and support for student research presentations at professional/scientific conferences. Students are encouraged to apply for travel funds available through The Graduate School and the Arnold School. Sponsored by the dean's office, the Arnold School's travel awards are $300, to be matched by a department, center, or research grant. Some programs and grants also provide travel support to their students.

2.12.c Data on student progression through each of the school's doctoral programs, to include the total number of students enrolled, number of students completing coursework and number of students in candidacy for each doctoral program. See CEPH Template 2.10.1.

See table 2.12.c for current doctoral progression data. The Graduate School defines candidacy as completion of qualifying exam along with approval of a doctoral program of study. However, for purposes of this report, the candidacy milestone is defined as completion of the comprehensive exam, which is often concurrent with approval of the dissertation proposal for PhD and DrPH students.

Table 2.12.c: Doctoral progression student data for AY2015-2016 (all doctoral degrees)

	BIOS DrPH	BIOS PhD	ENHS PhD	EPID PhD	HPEB DrPH	HPEB PhD	HSPM DrPH	HSPM PhD	EXSC PhD	COMD PhD	PHYT DPT
# newly admitted in fall 2016	0	1	9	5	2	18	1	14	8	0	22
# currently enrolled (total) fall 2016	0	12	35	32	3	43	2	52	41	5	75
# completed coursework during 2015-16	0	1	2	1	0	8	1	13	3	1	13
# advanced to candidacy (cumulative) during 2015-2016	1	2	1	5	1	3	0	3	9	0	18
# graduated in 2015-2016	1	2	2	5	4	10	1	6	6	1	18

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

Specific course work for doctoral degree programs are listed below in table 2.12.d. The school also offers PUBH 810: Ethics in Public Health Research and Practice, which is open to students across the school as an elective. In departments that offer both the DrPH and PhD programs, the DrPH students must take the DrPH core courses (including the practicum). PhD students typically take more cognate courses or electives in lieu of these courses.

Table 2.12.d Doctoral coursework by public health degree

BIOS, HPEB, HSPM DrPH Core (12 hours core and 6 hours practicum)

- HPEB 820 Public Health Advocacy and Policy
- HSPM 820 Public Health Leadership
- One of the following advanced evaluation courses:
  - HPEB 818 Advanced Evaluation of Health Promotion Programs or
  - HSPM 818 Economic Evaluation and Policy Analysis of Health Services
- One of the following research methods courses:
  - *BIOS 765 Research Design in the Biomedical Sciences
  - HPEB 802 Implementing and Monitoring Health Promotion Interventions
  - HSPM 719 Health Services Research Methods II
- Discipline specific practicum:
  - BIOS 898 Doctor of Public Health Practicum
  - HPEB 898 Doctor of Public Health Practicum
  - HSPM 898 Doctor of Public Health Practicum

*required for all BIOS DrPH

BIOS DrPH & PhD courses

- BIOS 805 Categorical Data Analysis
- BIOS 810 Survival Analysis I
- BIOS 811 Survival Analysis II
- BIOS 820 Bayesian Biostatistics and Computation
- BIOS 822 Statistical Methods in Spatial Epidemiology
- BIOS 825 Multivariate Biostatistics
- BIOS 845 Doctoral Seminar (3 1-hour seminars)
- BIOS 890 Independent Study (teaching practicum)
- BIOS 890 Independent Study (consulting practicum
- BIOS 890 Independent Study
- BIOS 894 Special Topics

ENHS PhD courses

- ENHS 862 Special Research Topics in Environmental Health Sciences
- ENHS 863 Advanced Topics in Environmental Planning
- ENHS 864 Advanced Graduate Seminar
- ENHS 880 Ethics and Research Prep
- ENHS 899 Dissertation Preparation

EPID PhD courses

- EPID 800 Epidemiologic Methods II
- EPID 801 Advanced Analytic Methods in Epidemiology
- EPID 802 Epidemiologic Methods III
- EPID 820 Seminar in the Epidemiology of Health Effects of Physical Activity
- EPID 845 Doctoral Seminar (3 1-hour seminars)
- EPID 890 Independent Study (consulting practicum)
- EPID 890 Independent Study (teaching practica)
- EPID 890 Independent Study
- EPID 894 Special Topics in Epidemiology
- EPID 899 Dissertation Preparation
- EPID 769 Clinical Effectiveness

HPEB DrPH and PhD courses	
HPEB 704	Health Promotion Research Seminar
HPEB 715	Qualitative Research Methods in Public Health
HPEB 771	Socio-Cultural Perspectives on Population Health
HPEB 810	Applied Measurement in Health Education Research
HPEB 815	Theory-Driven Analysis
HPEB 818	Advanced Evaluation of Health Promotion Programs
HPEB 820	Public Health Advocacy and Policy
HPEB 824	Social and Physical Environment Interventions in Health Promotion
HPEB 899	Dissertation Preparation
HSPM DrPH and PhD courses	
HSPM 818	Economic Evaluation and Policy Analysis of Health Services
HSPM 820	Public Health Leadership
HSPM 719	Health Services Research Methods II
HSPM 711	Health Politics
HSPM 717	Health Services Research Methods I
HSPM 720	Health Services Research Methods III
HSPM 800	Doctoral Seminar
HSPM 818	Economic Evaluation and Policy Analysis of Health Services
HSPM 820	Public Health Leadership
HSPM 845	Advanced Study in Health Policy and Management I
HSPM 846	Advanced Study in Health Policy and Management II
HSPM 890	Independent Study
HSPM 899	Dissertation Preparation

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

This criterion is met.

Strengths:

- The school and/or academic departments make a financial commitment to most DrPH and PhD students after they are accepted into their programs.
- The Graduate School's website provides easy access to resources aimed at our graduate students.

Weaknesses:

- Although the level of financial commitment is commensurate with other doctoral programs at USC and other in state and regional peer institutions, the level of financial support is often below what is paid at other institutions.

Plans:

- In light of the 2016 CEPH criteria, we have begun a structured process to assure continued compliance by Jan 2018.
- Faculty continue efforts to secure extramural funding that provides financial support for graduate students, e.g., faculty in COMD recently submitted a proposal for a doctoral student training grant.
- We intend to continue our partnership with The Graduate School's Recruitment Committee given the issue of student financial support is not specific to the Arnold School.

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

2.13.a Identification of joint degree programs offered by the school. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

The Arnold School offers four dual degree programs with the MPH and two other joint degrees (see Table 2.1.a). The MPH in health services policy and management and in health promotion, education, and behavior can be pursued as a dual degree with the Master of Social Work (MSW) from the College of Social Work. The MPH in general public health is offered as a dual degree with the Doctor of Medicine (MD) from either the USC School of Medicine or College of Medicine at the Medical University of South Carolina (MUSC) and with the Doctor of Pharmacy (PharmD) from the South Carolina College of Pharmacy. Students may also take a dual JD/MHA and a dual PhD in epidemiology and environmental health sciences. Beginning fall 2017, HSPM will be offering a dual MPH with the Master of Public Administration from the Department of Political Science in the College of Arts and Sciences. Only the dual degrees with the MPH are discussed below.

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

Students in all dual degree MPH programs must satisfy the requirements of both degrees, although the initial agreements often allow for courses in one discipline to substitute for courses in the other. The program requirements explicitly require all students to complete the five public health core classes. In most cases, elective credits and partial practicum credit for the MPH requirements can be satisfied by course from the other degree. For example, in the MSW/MPH programs, faculty have identified several social work courses that have substantial overlap with specific public health courses; these courses are allowed to substitute for required courses after assurance that students could still achieve competencies related to the required course (see table 2.13.b). The MPH practicum requirement is satisfied by the other program's experiential learning requirement only when the placement site and work requirements demonstrate sufficient public health content and perspective.

Table 2.13.b Course substitutions in the MSW/MPH degrees

Course	Title	Can substitute for public health courses
SOWK 732	Social Work Practice with Organizations and Communities	HSPM MPH/MSW - HSPM 715 HPEB MPH/MSW - HPEB 748
SOWK 783	Field Instruction III, Advanced Practice	HSPM MPH/MSW - HSPM 798 (3 hours) HPEB MPH MSW - HPEB 798A (3 hours)
SOWK 791	Social Work Research Methodologies	HSPM MPH/MSW - HSPM 716 HPEB MPH/MSP - HPEB 707

Students pursuing an MSW and MPH separately would typically take 60 hours to meet MSW requirements and 45 hours for the MPH requirements. By enrolling in the dual degree program, students can graduate with 84 hours of coursework. Typically students take foundational social work courses during the first year, public health courses during the second year, and advanced social work courses with some public health courses during the third year. The MSW electives and one fieldwork social work requirement (9 credit hours total) can be satisfied by public health courses and practicum, while three public health course requirements and partial practicum credit (12 credit hours total) can be satisfied by social work courses and fieldwork.

Students pursuing the MPA and MPH separately would require 39 credit hours for the MPA and 45 hours for the HSPM MPH; however, under the dual degree, 6 hours from each program are shared, allowing the student to complete both degrees with 74 hours. The MPA program strengthens MPH students in policy analysis while MPA student are strengthened in population health which has become increasingly relevant in public agencies.

Students in the MD/MPH program, with program approval, can receive up to nine (9) hours of MPH credit (including no more than three hours substituting for PUBH 798) for specific components of medical education curriculum. Typically this is documented by completion of the medical school's "Introduction to Clinical Medicine" course sequence, which integrates the content of the interprofessional education for health professionals introductory course and has a growing focus on population health. Students who complete a preventive medicine/rural health clinical rotation can partially satisfy the public health practicum requirement (see criterion 2.4).

The South Carolina College of Pharmacy (SCCP) has approved the acceptance of any MPH courses (core or elective) for any or all of the 8 hours of required electives for the PharmD degree. Up to six hours of selected pharmacy courses can be applied towards electives in the MPH program.

In addition, PharmD students may be able to obtain 3 credit hours toward the 6 hours required for PUBH 798 Public Health Practicum if the student completes an advanced pharmacy practice experiential rotation (during the 4th professional year of the PharmD program) in an approved public health discipline site (e.g., DHEC, Area Health Education Centers, Indian Health Services, and other Public Health Service entities). This substitution must be approved by the director of the general MPH program (see criterion 2.4).

Course sharing details are included in the ERF.

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

This criterion is met.

Strengths:

- The dual-degree MPH programs allow students to gain knowledge and skills with clinical settings and clientele, as well as in the development, implementation, and evaluation of programs with a community health focus, in an efficient way that reduces overlap in program content.

Weaknesses:

- At times, students have expressed confusion regarding various aspects of the dual MSW/MPH program including the application process for both programs; timing of specific courses; and meeting MPH practicum and social work field experience requirements through a single placement.

Plans:

- Issues regarding the confusion listed above have been partially addressed through the development of advising materials, web-based information, and student handbook sections, and through the increased use of the MySPH Opportunity Manager for the practica. However, further improvement could be made by having program directors for the relevant Arnold School and College of Social Work departments meet on a more regular basis to ensure an efficient process of program progression for students.

2.14 <u>Distance Education or Executive Degree Programs</u>. If the school offers degree programs using formats or methods other than students attending regular on-site course sessions spread over a standard term, these programs must a) be consistent with the mission of the school and within the school'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 school and 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 school offers distance education or executive degree programs, it must provide needed support for these programs, including administrative, travel, communication and student services. The school 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 school must have processes in place through which it establishes that the student who registers in a distance education course or degree is the same student who participates in and completes the course or degree and receives the academic credit.

2.14.a Identification of all degree programs that are offered in a format other than regular, on-site course sessions spread over a standard term, including those offered in full or in part through distance education in which the instructor and student are separated in time or place or both. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

The Arnold School of Public Health offers two public health degree programs in a distance format (see table 2.1.a):

- Professional Online MPH in the Department of Health Promotion, Education, and Behavior
- Distance format MPH in the Department of Health Services Policy and Management

Students in the distance format programs must satisfy the same curricular requirements and achieve the same learning outcomes as campus-based students in the programs, although distance students may have fewer options for elective courses.

The Department of Communication Sciences and Disorders offers an online Master of Communication Disorders (MCD) degree, which is a distance education version of the Master of Speech Pathology (MSP) program. Based on guidance from CEPH, information in the following sections focuses on the distance MPH programs.

2.14.b Description of the distance education or executive degree programs, including an explanation of the model or methods used, the school's rationale for offering these programs, the manner in which it provides necessary administrative and student support services, the manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to other degree programs offered by the school, and the manner in which it evaluates the educational outcomes, as well as the format and methods.

The professional online MPH in HPEB is designed for practitioners in health department, community, school, and worksite settings who are deeply concerned about human welfare and prefer the flexibility of an online program. Applicants are required to have a minimum of 2 years post-baccalaureate health-related professional work experience to be eligible for enrollment. The program provides highly

transferable, interdisciplinary skills that will help students become more impactful agents of change in their careers and in people's lives. The program is designed to train students to become leaders and advocates for change in organizations and in the larger environment to facilitate healthful practices; develop programs aimed at promoting good health at the personal, organizational, and public-policy levels; evaluate health programs and policies to ensure they are meeting objectives and societal needs; and develop and disseminate knowledge through systematic research and evaluation. All courses are taught online, delivered asynchronously through Blackboard. Blackboard is a course management system that allows faculty to provide content to students electronically in a central location and allows students to electronically submit assignments and work with a variety of built-in Web-based tools to diversify the learning experience. With the exception of the practicum, courses run for seven to eight weeks (rather than the traditional 14-week semester) with five sessions per year. These online sections are only open to students in the HPEB Professional Online Program. The program can be completed in 24-26 months of full-time enrollment including summer school courses.

The distance format MPH in health services policy and management is intended for working professionals enrolled in the program part time. Courses required for the degree are offered in an array of distance-learning formats. Many are offered as blended courses that include both on campus participants, as well as those participating from a distance. Classrooms and seminar rooms in the PHRC are setup for students to participate remotely from similar classrooms on other USC campuses, including the School of Medicine in Greenville. Typically, these blended courses are offered in the evening which allows distance students who work full time to participate while establishing connections to on campus students and faculty. Course instructors determine the most appropriate mechanism for covering the topic in a way that facilitates learning for both on campus and distance students. Distance students participate in the course synchronously as a live Web conference through Adobe Connect or asynchronously, by watching video-taped copies of the classes.

Administrative and student support. At the university level, USC has a Distributed Learning Support Services office that provides support for all students pursuing degrees and taking courses using alternative delivery methods. At the school level, the Office of Graduate Student Services provides support for distance students as they do for all graduate students in the school. Communication may take place by phone or email. All student records are kept electronically. Additionally, the program director serves as administrative support and academic advisor to distance students in each program. Instructors for all courses are available via email and telephone for individual conversations in addition to course-level discussion groups, web conferences, etc. HPEB has recently designated a program director dedicated to their online MPH. Many library resources, especially journal articles, are available online. For students working in or conducting practica at remote sites, student presentations may be conducted through teleconferencing or video conferencing using technologies such as AdobeConnect and Skype. As described in criterion 2.4, the school's practice and placement coordinator and the online Opportunity Manager are available to support the distance students in completing their practicum requirements.

Academic rigor and program evaluation. The Provost's Office instituted a Distributed Learning Quality Review process (DLQR) in 2013 as part of its commitment to ensuring high-quality distributed learning courses at the university. To successfully complete the review, each course must meet basic standards for design quality and accessibility under the Americans with Disabilities Act. These requirements are spelled out in a review checklist approved by the Provost's Committee on Distributed Learning. The checklist is based on the Quality Matters™ Rubric, a nationally recognized quality benchmark. The Center for Teaching Excellence has instructional designers available to help faculty plan design, assess, and review courses to determine if they enable students to achieve learning outcomes and have

meaningful learning experiences. The university's priority is to ensure first that all programs offered entirely online meet the standards. All of the online courses developed for the HPEB online MPH program were developed to meet these standards. Courses in the HSPM distance program are mostly delivered in person and recorded for later viewing; thus the process for meeting the DLQR standards is different.

Distance students are evaluated using the same benchmarks as on-campus students, (e.g., comprehensive exams and culminating field experiences). At the course level, students are evaluated using a variety of assessment methods including tests, quizzes, assignments, presentations, and participation in on-line discussions, etc. Distance students provide feedback to the school through the same mechanisms as on-campus students, i.e., student course evaluations, exit surveys, and alumni surveys. Instructors of distance courses are evaluated at the end of each course term via student evaluations and by faculty peers as determined by the school's peer review of teaching policy.

Every effort is made to ensure that the distance programs provide the same level of academic rigor as the in-person programs and are evaluated by the same methods to ensure comparable educational outcomes. To date, it has been difficult to compare outcomes between the MPH distance and on-campus programs due to the small numbers of students in the distance programs. With the growth of the programs, however, data are available that can be used to make such comparisons going forward. These include data used in the academic assessment process as well as exit and alumni surveys, grade point averages, and graduation rates. See the outcome measures discussed in criterion 2.7.

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

Under the Higher Education Opportunity Act, institutions offering distance courses or programs must have processes in place to ensure that the student registering for a course is the same student who participates in the course or receives course credit. The Act requires that institutions use at least one of the following three methods:

- A secure login and pass code
- Proctored examinations
- New or other technologies and practices that are effective in verifying student identification.

Programs at the Arnold School meet these requirements through the use of a secure login and pass code assigned to each student. All students enrolled at the university are assigned a unique student ID and network username. For each of these, the student must set a strong password. The student ID and associated password are used to access Self Service Carolina, a secure portal for students to handle all personal, academic and financial interactions with the university. The student's network username and associated password are also used to access email, university wired and wireless networks, Blackboard, etc. Online courses are delivered through Blackboard.

The school adheres to the University of South Carolina Honor Code (policy STAF 6.25). It is the responsibility of every student at the university to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in connection with any academic program. Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline, including the possibility of dismissal from the academic program. Syllabi typically contain information about the students' responsibilities under the honor code.

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

This criterion is met.

Strengths:

- Distributed learning format allows the program to provide knowledge and skills not only to working public health professionals who seek to enhance their skills but to professionals in other disciplines who desire to strengthen their knowledge of population health to enhance their own professional practice (disciplines include medicine, nursing, social work and the like).
- The school has a commitment to develop new distance education courses and revise existing online courses to meet DLQR standards. The school benefits from the support of instructional design staff in the Center for Teaching Excellence.
- The MCD program has been in existence for over 20 years and can serve as a model for newer programs.
- Having a designated director to assist the HPEB graduate director is an asset in meeting the growing popularity of the HPEB MPH online program.

Weaknesses:

- The lack of a totally asynchronous program for the HSPM MPH program may discourage health professionals from enrolling, as course times often conflict with work or clinic schedules.
- Approval of out-of-state practicum experiences can be time-consuming, but is greatly facilitated by the practice and placement coordinator.
- To date, the school has had too few students in the MPH distance programs to be able to assess the comparability of the program with other MPH programs in the school.
- Marketing of the HPEB MPH Professional Online program was limited at the program's inception and early stages. An outside vendor was tasked with marketing; however, this did not meet the department's expectations. Marketing this more clearly as a professional program was needed.

Plans:

- The MPH in HSPM is being developed into the asynchronous format following the model of the HPEB MPH, which includes a fixed carousel of 8-week courses that meet all DLQR standards, allowing the program to be completed in 2 years of study.
- The ability to establish the public health practicum/residency for distance learning students is being strengthened through experience with current students. "Best practices" are being developed from experiences to-date, and as the number of distance-learning students graduate, a roster of potential sites is being developed for future students. The practice and placement coordinator will continue to be an important part of this process.
- The director of evaluation and academic assessment will be working with the director of the HPEB MPH online program to establish a process to assess comparability of the program to the HPEB campus-based MPH program.
- HPEB is developing marketing materials and plans to contact professional organizations (e.g. state health departments, agencies, hospitals, etc.) to recruit employees who wish to pursue an MPH.

3.0 Creation, Application and Advancement of Knowledge

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

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

One of the school's primary goals is to *achieve and maintain research excellence as demonstrated by the creation of knowledge of high impact and importance to public health*. To this end, the school promotes faculty, research staff, and student engagement in scholarly activities and works closely with the university to identify and facilitate collaborative research opportunities in areas that support the science and practice of public health.

As evidence of support for research activity in the school, sponsored award research funding to its principal investigators has increased steadily, from $18.7 million in FY 2013, to $27.4 million in FY 2016. Research dollars to the school in FY 2016 were $306,695 per full-time tenure track faculty member, among the highest per capita funding in the university. In FY 2016, the school received more than $13.8 million in National Institutes of Health (NIH) awards, in addition to funding from the Centers for Disease Control and Prevention, other Health and Human Services agencies, National Atmospheric and Oceanic Administration, National Science Foundation, and US Department of Education as well as from a variety of other federal, state, corporate, and private sources. As further evidence of the school's expanding research activity, the unduplicated count of published faculty journal articles increased from 339 in calendar year 2012 to 536 in 2015. With support from these funding agencies and organizations, the school provides a research environment wherein its investigators can be successful at the highest possible levels. Specific faculty research projects are listed in table 3.1.c.

The wide range of funded research expertise within the school is reflected in not only the broad diversity of its faculty scholarship, but also in the learning opportunities available to its students and post-doctoral scholars, locally, nationally, and globally. Studies conducted by Arnold School faculty, which involve students and post-doctoral scholars where possible, investigate such topics as stroke recovery, language acquisition, nanotechnology and pollution remediation, childhood obesity prevention, causes and reduction of food insecurity, tobacco use prevention, cancer prevention and care, aging brain health, oral health strategies, HIV/AIDs prevention, community-based participation, developmental disabilities mitigation, innovations in statistical methodology, access to care, sleep restriction, soil health, ocean and waterway health, diabetes prevention, and energy balance. This range of inquiry continues to broaden as new faculty members join the school and new programs are established.

Highlights of the diversity of current major awards to Arnold School principal investigators include:

- An $11 million NIH P50 award to Dr. Julius Fridriksson (COMD) for the study of post-stroke aphasia recovery.
- A $739,000 NSF Career award to Dr. Sean Norman (ENHS) for the study of ecological interactions between microorganisms and their effects on ecosystem stability during environmental disruption.
- A $29 million CDC U01 award to Dr. Suzanne McDermott (EPID/BIOS) for the promotion of the health of people with disabilities.

- Three NIH R01 awards totaling $7.2 million to Dr. Michael Beets (EXSC) related to healthy eating, physical activity, and childhood obesity prevention.
- A $5.5 million Bill and Melinda Gates Foundation award to Dr. Christine Blake (HPEB) to study food choice in sub-Saharan African and south Asia to ultimately improve food and nutrition security among the poor in these areas.
- A $2.5 million NIH R01 award to Dr. Jan Ostermann (HSPM) to study the effects of HIV counseling and testing method preferences on high-risk populations (in Africa).
- More than $9 million awarded by CDC through a U48 grant to Dr. Sara Wilcox (EXSC, Prevention Research Center) for the ongoing USC Prevention Research Center and its study of the relationship between faith, physical activity, and nutrition in underserved communities.
- A $1.4 million award from the US Department of Agriculture (USDA) to Dr. Sonya Jones (HPEB, Nutrition Center) for the study of childhood obesity prevention in South Carolina communities.

Breakthrough awards. In the past three years, three Arnold School faculty members received Breakthrough Leadership in Research awards and five received Breakthrough Star awards from the university Office of the Vice President of Research (see table 3.1.a). The Breakthrough Leadership in Research award promotes leadership in support of research by recognizing senior faculty who take a multifaceted approach to inspiring excellence in research through mentoring under-represented minorities, collaborating with colleagues across disciplines, reaching out to the community, and engaging in other unique activities. The Breakthrough Stars award recognizes relatively early-career assistant and associate professors who demonstrate considerable contributions to their field in terms of research and scholarly activity while at USC. This recognition can contribute to recipients' career advancement and retention, and helps the university attract the best and brightest young faculty to join USC.

Table 3.1.a Breakthrough awards for faculty

Breakthrough Award	2015	2016	2017
Leadership in Research		James Hébert, EPID/BIOS Angela Liese, EPID/BIOS	Julius Fridriksson, COMD
Stars	Xuemei Sui, EXSC	Michael Beets, EXSC Saurabh Chatterjee, ENHS	Jan Eberth, EPID/BIOS Daniel Fogerty, COMD

Policies, procedures, and practices. All tenure track and research faculty in the school are expected to engage in research and scholarly activities aimed at advancing knowledge that will protect and improve the public's health. The policies of both the university and the school detail expectations for research and scholarly activities for faculty at all ranks. Current university research policies are summarized in section 3 of the Faculty Manual. The Faculty Manual and related tenure and promotion documents at http://www.sc.edu/tenure provide general guidance concerning university expectations for faculty research. More specific school research expectations for tenure track faculty and non-tenure track faculty appear in the faculty affairs section of the school's website. At minimum, the school expects faculty to "demonstrate excellence in research as reflected in developing and conducting independent research, and seeking and receiving extramural funding to support research. Publications are expected to be of high quality and significance to the candidate's field." (Arnold School Tenure and Promotion Guidelines, 2009) The school adheres to all research policies, procedures, and practices established by the university.

University support for research. The University of South Carolina Columbia is one of 81 public universities that have been designated research institutions of "highest research activity" by the Carnegie Classification of Institutions of Higher Education. The Carnegie designation is based on factors

that include the number of faculty engaged in research, research expenditures, and the number of doctoral degrees awarded by the institution.

The *Office of the Vice President for Research* is made up of several units, each serving a different set of specific research-related functions in support of faculty, staff, and student researchers throughout the USC system. These units include the following:

- The *Office of Sponsored Awards Management* serves as the primary research administration office for the university and is responsible for all university-level pre-award activities, including processing outgoing proposals and incoming awards, assisting with budget preparation on large collaborative proposals, negotiating grant and contract budgets on the university's behalf, and issuing subcontracts, among other functions. Each unit within the university, including academic departments and centers, that applies for and receives extramural sponsored award funding is assigned a highly trained staff grants administrator to give guidance on proposal submission and award procedures. Grants administrators compose and sign proposal cover letters on behalf of the university and complete the submission process for Grants.gov and other electronic proposal submission systems.
- The *Office of Research Compliance* provides support for faculty, staff, and student researchers regarding regulatory requirements for scientific research. This office is responsible for university policies related to the use of human subjects in research (Institutional Review Board), conflicts of interest, research integrity, responsible conduct of research, and other regulatory compliance issues.
- *Research and Grant Development* serves USC faculty and staff seeking support, available resources, and guidance during the pursuit of external funding. The unit's one-stop approach to browsing for funding opportunities, limited submissions, campus resources, and collaborative partners makes research resources easier to locate. External funding opportunities can be searched through PIVOT, a continually revised subscription database of funding opportunities from global, US federal, non-profit, and corporate sources, which is available to all USC faculty, staff, and students. In addition, with approval from the Vice President for Research, this office provides an experienced staff member to coordinate multi-million dollar, cross-disciplinary center proposal development and submission. The unit's ongoing Gamecock Research Administrators Network Training (GRANT) program was developed to meet the university's research administration continuing education needs. The fall semester-long workshop series for staff addresses both pre-and post-award policies and procedures. Participants are tested on each module, take a final exam at the end of the series, and receive a certificate of completion upon passing the exam. As follow up, the university maintains a GRANT listserv and hosts twice yearly informational breakfast meetings for GRANT program graduates. Individual GRANT courses have been developed for and are offered to faculty researchers.
- The *Office of Information Technology and Data Management* is responsible for reporting extramural proposal submissions and award funding data for the university. The office developed and maintains technologies such as the electronic research administration proposal routing system and database (USCeRA), online committee review system, and faculty expertise database to integrate and simplify research administration.
- Reporting to the Office of Information Technology, and working in close partnership with the university's Office of Research, the *Research Cyberinfrastructure* program engages faculty and other researchers across multiple colleges and campuses. It works with researchers to improve their project performance and secure computing resources at the university level and beyond.
- The *Animal Resource Facilities* unit of the Office of Research recognizes that laboratory animals are sentient creatures and is committed to meeting the ethical and legal obligations for humane

animal care and handling at the University of South Carolina. This unit provides expert care and maintenance for all animals used by investigators at the university.

The *Office of Contract and Grant Accounting* (C&GA) in the university Division of Administration and Finance is responsible for the post-award accounting and management of all restricted contracts and grants within the university system. For each grant or contract, C&GA prepares invoices, electronic letters of credit transactions, and financial reports. C&GA prepares adjusting journal entries and approves payroll documents and other documentation in compliance with generally accepted accounting principles. Each unit within the university is assigned a C&GA staff liaison to ensure that proper post-award accounting procedures are followed and to assist with timely sponsored award close-outs. University researchers and associated staff members have access to grant and contract accounting activity through the university's Accounting Services Intranet system.

University Flight Operations provides flights in the university's Beechcraft King Air 350 to increase opportunities for faculty, staff, and administrators to conduct official university business with various federal agencies, educational institutions, corporations, and private industry. The availability of quick transportation, especially to and from the Washington, D.C. area, enables researchers to reduce the time and expense often incurred when meeting with federal funding agencies.

The *Office of Economic Engagement* works with business and entrepreneurial interests to leverage the intellectual property owned by the university for the benefit of the university, its faculty, the public, and the State by identifying, protecting, marketing, licensing, transferring, and commercializing the university's creative products.

The *Biostatistics Collaborative Research Core* increases the capacity for health sciences and social sciences research by providing core facilities and expertise across a broad spectrum of disciplines. The group provides collaboration, consultation, and support on biostatistics methods, data management, and data coordination for health sciences and social sciences research at the university as well as for its partner institutions and research clients, while fostering original methodological research.

The university is a member of Health Sciences South Carolina (HSSC), established in 2004 as the nation's first statewide biomedical research collaborative. Today its members include six of the state's largest health systems—Greenville Health System University Medical Center, Palmetto Health, Spartanburg Regional Healthcare System, McLeod Health, AnMed Health, and Self Regional Healthcare—and the state's largest research-intensive universities—Clemson University, the Medical University of South Carolina, and the University of South Carolina. The collaborative was formed with the vision of transforming the state's public health and economic wellbeing through research. It also is committed to educating and training the health care workforce. Primary benefits of HSSC membership include the provision of shared analytics from combined datasets, data and tools to evaluate population health, data mining for patient/cohort identification, on-demand clinical data capture and analysis, and targeting of large research grants for cross-organization collaboration. In addition, HSSC maintains a combined web-based electronic institutional review board (e-IRB) system for managing the human subjects research approval process, which unifies and streamlines IRB operations for participating members.

School support for research. The Arnold School's *Research Support Core* in the Office of Research was established in 2001 to assist faculty, staff, students, and their research partners with activities related to increasing research productivity for the school. Based in the dean's office, the Office of Research is headed by the associate dean for research (50 percent effort). The Research Support Core has a full-time director and three grants coordinators to provide pre-award and post-award services. The Office of Research has primary responsibility for finalizing and implementing research-related policies for the

school. In addition, the Research Support Core disseminates information concerning grant funding opportunities, conducts workshops for faculty and staff, supports interdisciplinary application development teams, arranges pre-submission peer reviews of applications, works closely with the university's Sponsored Awards Management Office to route and track grant applications and contracts, provides support for the Arnold School Research Advisory Council (RAC), and assists the school's faculty, staff, and students with other grant application and contract development support as requested. The Office of Research has grown from processing $52.4 million (88% for research) in sponsored award first/next-year requests in 2012 to $66.5 million (91% for research) in 2016. Extramural requests were awarded $25.9 million (80% for research) in 2012 and increased to $32.3 million (85% for research) in 2016.

Each academic department and center in the school employs pre-and post-award grant support staff. All school staff members who work with grants and contracts have taken or will take the university's GRANT workshop series. To further keep these staff members up to date on policies and procedures, the Research Support Core has created and coordinates a school-level Grants Staff Network to connect staff so that they can get to know one another across programs, centers, and departments; know whom to call for sponsored award-related advice and information; and develop ideas for grant-related presentations, workshops, and trainings for the school. In addition, the Research Support Core produces a monthly e-newsletter that updates school faculty and staff on research-related resources and changes in research policies and procedures. Research Support Core staff members assist USC with teaching its GRANT courses and also present research grant-related information to graduate student classes as requested by school faculty.

In conjunction with the school's Division of Academic Affairs, the Research Support Core organizes and conducts an annual orientation for new faculty members and post-doctoral fellows to acquaint them with university and school research resources, policies, and procedures. The office recently has employed a seasoned grants administrator to conduct a research support needs assessment for the school and to develop and conduct faculty research workshops as well as new staff intensive pre- and post-award training.

The school's Research Advisory Council (RAC) includes a faculty representative from each department and research center and serves in an advising capacity to the associate dean for research. RAC members advise the Office of Research on ways to increase the school's research productivity; recommend specific research topics and directions for development within the school; provide guidance on protocols for research functions; review new research policies and procedures; and serve as a communication link between the Office of Research and faculty and staff within each member's department and/or affiliated unit. Council members serve for one to three years.

The school's Office of Development and Alumni Relations helps faculty and students make connections with major corporate and non-profit funders for support for research and other scholarly pursuits. The Office disseminates funding opportunity announcements from private sources to faculty and staff and assists investigators who pursue these opportunities with proposal development and communications with the funding organizations.

Department/center support for research. Principal investigators who need staff support for proposal development (pre-award) or project budget management (post-award) go first to their designated department or center staff member for assistance. Note that some large grant-funded projects are able to hire support staff who are dedicated to the project, but who are administratively assigned to an academic department or center. If a principal investigator or department/center-level staff member needs additional pre- or post-award guidance or support, staff members in the school's Research Support Core are available to assist them. New pre-and post-award staff are immediately enrolled in the

GRANT program, but since this takes place only in the fall semester, Research Support Core staff begin training new staff members until they can join a university GRANT program cohort in August.

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

As mentioned in criterion 1.4, the school is home to multiple interdisciplinary research centers, institutes, and programs that are actively engaged in community-based and collaborative research. Listed below are descriptions of selected centers and institutes that account for a significant proportion of community-based and collaborative research activities.

The *Cancer Prevention and Control Program* (CPCP) was founded in 2003 to investigate and begin to alleviate the stark health disparities present in South Carolina, especially those resulting in higher cancer incidence and mortality rates in the African-American community in our state. Much of the university's epidemiologic cancer research is conducted at the CPCP, which focuses on modifiable risk factors, such as diet and exercise. The CPCP actively engages community members as equal partners, both in Columbia and across the state, so that those individuals and communities most profoundly affected by cancer are engaged in work that will directly affect their lives.

The *Core for Applied Research and Evaluation* (CARE), part of the school's Office of Research, is a newly formed office arising from the recent integration of two USC research offices in the Arnold School: the Center for Health Services and Policy Research and the Office of Research's Evaluation, Translation, and Community Engagement. This integration yields over 30 years of core methodological expertise in program evaluation, survey development, qualitative research, primary and secondary data analysis, quality improvement methods and consultation, community engagement, strategic planning and organizational development.

The *Center for Research in Nutrition and Health Disparities* (Nutrition Center) seeks to create a local, state-wide, national, and global presence that establishes the USC as a national leader in nutrition and health disparities by engaging with community partners, other research institutions, public agencies, and professional organizations locally and statewide and nationally. The Nutrition Center's research focuses on nutrition policy, communications, and epidemiology; food insecurity; and community engagement with vulnerable populations. In addition to ongoing seminars, the Nutrition Center hosts a Policy and Practice Brief series and an annual spring Symposium.

The *Consortium for Latino Immigration Studies* promotes and coordinates multi-disciplinary research related to Latinos in South Carolina and the southeast. The consortium disseminates its research findings and other information on Hispanic/Latino issues to academic and non-academic users through conferences, symposia, workshops and publications, and fosters translation and application of such findings into practice and policy. The consortium encourages and supports teaching related to Latinos and collaborates with local communities as well as organizations and government agencies that are involved with the state's growing Latino population.

The *Office for the Study of Aging* (OSA) is committed to advancing research and education related to aging issues. As the state's "baby boomer" population grows older, it is expected that they will be more involved in health and long-term care decisions than were their predecessors and will demand more personalized services. OSA seeks to enhance the quality of the lives of these individuals as they age. All services and programs provided through OSA are grounded in research and include:

- Fostering groundbreaking research in Alzheimer's disease and related dementias;
- Facilitating research on aging issues to provide information to SC policy makers;

- Providing education on Alzheimer's disease and related dementias for direct care staff;
- Offering technical assistance for the development of programs for older persons; and
- Providing assistance with the evaluation of programs for elders.

The *Alzheimer's Disease Registry*, housed in the OSA, is a comprehensive statewide registry of SC residents who have been diagnosed with Alzheimer's disease or related disorders (ADRD). As the nation's most comprehensive registry of its kind, the registry has maintained a record of diagnosed cases of ADRD in the state since 1988. The registry comprises multiple data sources, including inpatient hospitalizations, mental health records, Medicaid, emergency departments, memory clinics, chart abstracts, vital records, and long-term care evaluations. The registry is maintained by the school in cooperation with the SC Department of Health and Human Services, the SC Department of Mental Health, the USC School of Medicine, and the SC Department of Administration. The registry provides disease prevalence estimates to enable better planning for social and medical services, identifies differences in disease prevalence among demographic groups, helps those who care for individuals with ADRD, and fosters research into risk factors for ADRD. The registry is a valuable data source for aging and dementia-related research.

The *USC Prevention Research Center* (USC PRC), funded since 1993, is one of 26 CDC PRCs nationwide. The USC PRC receives funding to support its applied public health prevention research project, as well as activities to support collaboration and partnerships; communication and dissemination; training and education; evaluation; and infrastructure. The USC PRC's applied public health prevention research project, titled "Faith, Activity, and Nutrition – Dissemination in Underserved Communities," is conducted in partnership with Fairfield Behavioral Health Services, Fairfield Community Coordinating Council, the State Baptist Young Woman's Auxiliary of the Woman's Baptist Education and Missionary Convention, the South Carolina Conference of the United Methodist Church, and Clemson University. The project will study the dissemination and implementation of Faith, Activity, and Nutrition, using a train-the-trainer model where lay church members are trained to train other churches in their county, district, or region in how to implement the program.

The mission of the *USC Speech and Hearing Research Center* is to meet the needs of a diverse community with regards to the nature, prevention, diagnosis, and to treatment of disorders of communication. The center is committed to excellence in service, teaching, and research and provides a variety of diagnostic and treatment programs for individuals of all ages. Individuals receiving services at the center may be asked to participate in research at any time during their treatment. Therapy is carried out under the direction of certified speech-language pathologists and audiologists and involves graduate-level clinical teaching and research experience for students. The evaluation process aims to identify and describe areas of strength and weakness related to articulation, language, voice, hearing, and fluency as well as those factors that prevent or facilitate effective communication in everyday life. Treatment programs are based on needs identified during the evaluation by capitalizing on an individual's strengths and reducing barriers to effective communication.

The *South Carolina Rural Health Research Center*, one of eight rural health research centers funded by the US Health Resources and Services Administration (HRSA)'s Federal Office of Rural Health Policy, focuses on investigating persistent inequities in health status within the population of the rural US, with an emphasis on inequities stemming from socioeconomic status, race and ethnicity, and access to healthcare services. The center strives to make research findings useful to organizations and individuals working to improve the quality of life for rural residents. The center allows researchers to build on and expand ongoing cooperative research partnerships with other key organizations - government, academia, health services delivery and the rural community who can join our quest to improve the health of rural Americans.

SmartState Centers. As mentioned in criterion 1.7, the Arnold School is home to five SmartState Endowed Chairs. These experts lead Centers of Economic Excellence that work with university and private-sector partners to develop patents and products, commercialize technology, create new companies and jobs, and increase the state's per-capita income. The centers involve post-doctoral scholars and both graduate and undergraduate students in their innovative, cutting-edge research activities. The SmartState Centers receive resources, in part, by an endowment and through additional research funds.

- The *Center for Environmental Nanoscience and Risk*, which investigates the effects and behaviors of manufactured and natural nanoparticles in the environment and subsequent effects on environmental and human health.
- The *Center for Healthcare Quality*, which conducts research to inform the improvement of the safety, effectiveness, and affordability of healthcare in South Carolina.
- The *Center for Effectiveness Research in Orthopædics*, which promotes innovative research that: documents treatment variation in orthopædics, evaluates whether treatment choices are patient-centered, and assesses the comparative effectiveness of treatments using this variation.
- The *SeniorSMART Center*, which focuses on research concerning the fostering of independence for senior citizens through maintaining intellectual activity as well as mobility inside and outside the home.
- The *Technology Center to Promote Healthy Lifestyles* (TecHealth), which focuses on research to develop and evaluate health promotion programs that encourage healthy lifestyles and reduce risk of disease by incorporating technology.

The *Disability Research and Dissemination Center* is a partnership among three principal investigator institutions: the University of South Carolina, the State University of New York Upstate Medical University, and the American Association on Health and Disability. The center is funded through a cooperative agreement from CDC to expand the capacity of the National Center for Birth Defects and Developmental Disabilities in order to identify and fund the best research in the field of birth defects, disabilities, human development, and blood disorders; to foster training of health and public health professionals through fellowships; to complete specific projects to advance disability science and evidence-based practice; and to use progressive mechanisms to disseminate knowledge. The Arnold School is the administrative home of the center and is responsible for the conduct of its research activities.

The *Research Consortium on Children and Families* unites faculty from behavioral, social, and biomedical sciences and related campus units to support research collaboration that builds on existing areas of funding success, nurtures research capacities of promising junior faculty, attracts talented new faculty members, and fosters a multidisciplinary climate that is responsive to funding agency and societal priorities. Although the consortium is housed within the USC Research Foundation, its 84 members, nearly 25% of whom are from the Arnold School, represent nine different academic units.

3.1.c A list of current research activity of all primary faculty identified in Criterion 4.1.a., including amount and source of funds, for each of the last three years. These data must be presented in table format and include at least the following information organized by department, specialty area or other organizational unit as appropriate to the school: a) principal investigator, b) project name, c) period of funding, d) source of funding, e) amount of total award, f) amount of current year's award, g) whether research is community based and h) whether research provides for student involvement. See CEPH Data Template 3.1.1; only research funding should be reported here. Extramural funding for service or

training/continuing education grants should be reported in Template 3.2.2 (funded service) or Template 3.3.1 (funded training/workforce development), respectively.

The primary purpose of a grant or contract (research, service, training, or equipment) is noted by the principal investigator in USCeRA when the application is routed for approval prior to submission. Table 3.1.c, which appears in the ERF, lists research activity (sponsored awards) by Arnold School faculty for the past three years, by academic department. No project has more than one purpose, although many large projects have elements of research, service, and/or training, and often include equipment. Service and training projects are discussed in criteria 3.2 and 3.3, respectively.

Table 3.1.c includes 245 grants and contracts, awarded to 87 faculty members. Among these projects, 55% were considered to be community-based projects and 76% had student involvement. Examples of research awards were listed in section 3.1.a.

3.1.d Identification of measures by which the school may evaluate the success of its research activities, along with data regarding the school's performance against those measures for each of the last three years. For example, schools may track dollar amounts of research funding, significance of findings (eg, citation references), extent of research translation (eg, adoption by policy or statute), dissemination (eg, publications in peer-reviewed publications, presentations at professional meetings) and other indicators. See CEPH Outcome Measures Template.

Key outcome measures for the school's research activity appear in table 3.1.d. Additional research related measures are listed in table 1.2.c under goal 2 (research). As noted in Section 1.2, the school's research productivity reflects growth according to each of these metrics. For example, the total dollar amount of extramural sponsored research awards has increased by 47% since FY2012-13. A large fluctuation in proposal dollar amounts between years usually indicates the submission of a multi-million dollar center or other major grant request.

Table 3.1.d Research activity outcome measures

Indicator	Target	FY2013-14	FY2014-15	FY2015-16
Total dollar amount of extramural sponsored research proposals (first/next year requests)	5% annual increase (baseline = $44,863,735 in FY2012-13)	$59,436,748 + 32%	$53,824,827 -9%	$60,650,909 +13%
Total dollar amount of extramural sponsored NIH proposals (first/next year requests)	5% annual increase (baseline = $29,911,497 in FY2012-13)	$32,119,984 +7%	$31,245,463 -3%	$42,454,188 +36%
Total dollar amount of extramural sponsored research awards	5% annual increase (baseline = $18,731,642 in FY2012-13)	$22,964,874 +23%	$24,006,239 +5%	$27,443,204 +14%
Total dollar amount of NIH awards	5% annual increase (baseline = $10,551,456 in FY2012-13)	$12,732,845 +21%	$11,345,445 -11%	$13,838,949 +22%
Number of peer-reviewed publications with at least one Arnold School author	5% annual increase (baseline 339 in FY 2012-13)	411 +21%	485 +18%	536 +11%
Number of peer-reviewed publications with the collaboration of multiple Arnold School authors	≥ 75% of publications with more than one school author	325 79% of total	378 78% of total	416 78% of total

3.1.e Description of student involvement in research.

The Arnold School's emphasis on mentorship combined with its research-oriented atmosphere results in an abundance of student-faculty partnerships across the school. Students are engaged in faculty research, both as research assistants and through conducting their own research. As noted above, students were involved in 76% of the faculty research in table 3.1.c. Students also collaborate with faculty members on peer-reviewed publications, presentations, grant proposals, and more. Students work alongside faculty to both learn from them and add their own valued contributions. In addition, in the past three years, five doctoral students have directly secured extramural funding for their own research (see table 3.1.e); doctoral students are also successful in competing for internal research funding (discussed below).

Table 3.1.e.1 Doctoral students receiving extramural funding in past three years

Doctoral Student	Sponsor & Award	Project Title	Award Amount
FY 2013-14			
Heberlein, Emily HPEB	AHRQ Dissertation Research (R36)	*Comparative Effectiveness of Group Prenatal Care on Women's Psychosocial Health*	39,704
FY 2014-15			
Hudspeth, Sarah COMD	American Heart Association (AHA)	*Behavioral and Neurophysiological Outcomes Following Intensive Language Action Therapy (ILAT) Using the WHO-ICF Framework*	2,000
Tabung, Fred EPID	National Cancer Institute/NIH Fellowship (F31)	*Dietary Inflammatory Index and Risk of Cancer in Women*	36,802
Puppa, Melissa EXSC	American College of Sports Medicine	*Regulation of Mitochondrial Plasticity by gp130r in Skeletal Muscle after Contraction*	4,711
FY 2015-16			
Hardee, Justin EXSC	American College of Sports Medicine	*The Cachetic Skeletal Muscle Response to Low- and High-Frequency Electrical Stimulation*	4,842

Student research proposals are subject to the same requirements as faculty research proposals. Student research typically is monitored by a faculty advisor who guides the student though appropriate administrative protocols for research activity. Students are encouraged to present their research at the annual Discovery Day (for undergraduates) and Graduate Student Day competitions, where they may receive monetary awards for outstanding oral and poster presentations. This year the university will hold Discover USC, a brand new system-wide showcase that brings together undergraduate and graduate students, postdoctoral scholars, and medical scholars to present research, creative, and scholarly projects to the university community and beyond.

In the past three years, nine students received Breakthrough Graduate Scholar Awards from the Office of the Vice President for Research (see table 3.1.e.2). This award honors outstanding graduate students who demonstrate excellence in the classroom and make considerable contributions to research and scholarly activities in their field.

Table 3.1.e.2 Breakthrough awards for students

2015	2016	2017
Samuel Antwi, EPID Caroline Bergeron, HPEB Suvarthi Das, ENHS	Keith Brazendale, EXSC Diptadip Dattaroy, ENHS Justin Hardee, EXSC Danielle Schoffman, HPEB	Mohammad Rifat Haider, HSPM Morgan Hughey, HPEB

The Arnold School supports student research through the following methods:

- *Research in curriculum*. All academic departments have at least one course that addresses research issues and methodology, either from a general perspective or targeted to discipline-specific issues. These courses primarily are designed for doctoral students, but are often attractive to advanced master's students as well. These courses frequently require writing a complete grant proposal
- *Research assistantships*. A large number and percentage of graduate assistants are classified as graduate research assistants either for faculty research or for work in various community agencies. Shown below is a list of external organizations and agencies at which graduate assistants have been placed in the past three years.

Allen University
ATI Physical Therapy
Blue Cross & Blue Shield of SC
Calhoun County High School
Claflin University
Clarke & Company Benefits, LLC
Colonial Family Practice, LLC
Columbia College
Columbia Eye Clinic, PA
Connecting Health Innovations, LLC
Dorn Research Institute
Drayer Physical Therapy Institute, LLC
Fairfield County School District
Gray Collegiate Academy
Hammond School
Healthy Columbia
Heathwood Hall Episcopal School
International Food Policy Research Institute
Lee County School District
Lexington County Recreation & Aging Commission
Lexington Medical Center
Mexico National Institute of Public Health
Michelin North America, Inc.
Micronutrient Initiative
New Morning Foundation
Newberry County School District
Ortmann Healthcare Consulting Services, LLC
Palmetto Health, Inc.
Providence Hospitals, LLC
Rembert Area Community Coalition
Richland County School District One
Saad Healthcare Services, Inc.
Sackler Institute for Nutrition Science
SC Alliance of Health Plans Foundation
SC Campaign to Prevent Teen Pregnancy
SC Contraceptive Access Campaign
SC Dept. of Agriculture
SC Dept. of Alcohol & Other Drug Abuse Services (DAODAS)
SC Dept. of Health & Environmental Control (DHEC)
SC Dept. of Health & Human Services (DHHS)
SC Farm to School Network
SC Healthy Connections
SC Hospital Association
SC Office of Rural Health
SC Parents Involved in Education
Sisters of Charity Providence Hospitals
Twin Cities Orthopedics
University of Michigan
Vista Consulting, LLC
Vital Energy Wellness and Rehabilitation Center
Yoga Masala

- *Assistance with thesis and dissertation research*. Help with study design, data collection, and data analysis is available to all graduate students in the school upon request. Sponsored by the dean's office and supervised by faculty in the Department of Epidemiology and Biostatistics, a Biostatistics Collaborative Research Core research associate provides this service at no charge to students in the Arnold School.

- The *student travel program*, sponsored by the dean's office, offers at least partial funding for students to present their work at professional meetings or conferences. The school's travel awards are up to $300, with a required match by a department, center, or research grant. Effort is made to spread the travel awards across three application cycles and across the six academic departments. Preference is given to students presenting at national and international meetings. In addition, graduate students may apply for supplemental travel funding through The Graduate School travel grant program, which awards $500 for domestic travel to $800 for international travel.
- The school's chapter of *Delta Omega* recognizes students who excel in service to community and scholarly research. Each year, the school's Mu Chapter selects a winning student abstract for presentation at the annual meeting of the American Public Health Association.

A number of university resources are available to our students through the Office of the Vice President for Research:

- Workshops on the basics of grant proposal writing, designed to prepare graduate students and postdoctoral scholars for developing competitive grant proposals, cover strategies for successful proposal writing strategies and provide guidance on how to develop a grant budget and justification.
- The SPARC (Support to Promote Advancement of Research and Creativity) student grant program provides awards of up to $5,000 for graduate students to fund their research, creative or other meritorious scholarly projects. In Spring 2016, ten SPARC grants totaling $48,638 were awarded to graduate students collaborating with Arnold School researchers, 18% of the total number of recipients.
- Opportunities for all students to take advantage of the office's crowdfunding partnership with Experiment.com. Through this program, the vice president of research matches up to 50 percent of the funds raised for eligible projects that have been approved by the school through USCeRA and funded through Experiment.com.

In addition to resources offered by the Office of the Vice President for Research, other offices also support student research:

- The USC Office of Fellowships & Scholar Programs provides assistance to both undergraduate and graduate students who wish to pursue nationally and internationally prestigious awards for innovative research and educational experiences, including Rhodes, Fulbright, and federal fellowships.
- The Office of Undergraduate Research serves USC faculty, staff, and students on all campuses as a centralized resource for engaging undergraduates in research, scholarly and creative activities across all disciplines. The office assists researchers needing undergraduate research assistants, advises students seeking projects, facilitates a variety of funding programs for students, including the Magellan scholarship programs, and provides opportunities for students to showcase their experiences, such as Discovery Day and Caravel, the undergraduate research journal. Over the past three years, 62 Arnold School faculty mentored 74 undergraduate students through the Magellan scholarship programs.
- In addition to mentoring the university's Magellan scholars, faculty members may work with USC Honors College students on their senior thesis projects. Thirteen Arnold School faculty did so in 2016. In academic years 2015 and 2016, 15 Arnold School of Public Health faculty members mentored 17 Honors College student research projects. The Science Undergraduate Research Fellowships encourages Honors College students to work with a mentor from the science, technology, engineering, or mathematics fields on a joint project in the mentor's discipline area.

The Exploration Scholars Program encourages and facilitates Honors College student scholarship in the arts, music, humanities, journalism, and other fields dealing with qualitative, creative, or exploratory scholarship methods.

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

This criterion is met.

Strengths:

- The Arnold School maintains a broad portfolio of extramurally funded research largely supported by federal agencies and national foundations. The school provides pre- and post-award support services to all faculty members and other researchers through the Research Support Core and support staff in departments and centers, in addition to those services provided at the university level.
- The school and university strongly support student involvement in research as demonstrated the resources listed and by the percentage of research grants on which our students participate.

Weaknesses:

- As the research agenda continues to grow, the school may be challenged to provide sufficient facilities and infrastructure for the increased productivity.
- Individual faculty and groups of faculty have developed many areas of expertise, building national and international reputations in these areas, but the diversity of the school's success also has resulted in a lack of identity or "branding" of the school being a forerunner in research in specific areas.

Plans:

- Planning is underway for a new building (see criterion 1.7) that will incorporate research facilities as well as clinical, instructional, and administrative space.
- The school will encourage professional development for staff to increase capacity for sponsored award administration as needed and will strategically allocate (and advocate for) resources for enhanced support.
- The Associate Dean for Research is in the initial stages of planning several faculty research retreats to be held in late spring and early fall 2017 to develop a new research agenda for the school. As in the past, the research retreat will kick off the formal process of identifying the school's current research strengths and emerging areas of research to pursue to successfully adapt to a changing research environment. Recommendations, including areas of needed new faculty hires, will be made to the school's dean at the conclusion of the process.

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

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

The University of South Carolina has been recognized for both curricular engagement/outreach and partnerships by the Carnegie Community Engagement Classification in 2008 and 2015. This classification underscores the university's commitment to share its resources; hire faculty who support the university's education, research, and outreach missions; and develop the university's infrastructure, leadership, and student involvement in ways that serve the community.

Service permeates all aspects of the public health discipline by virtue of its mission to assure conditions in which people can be healthy; thus, the lines between teaching, research, and service are often blurred. Since much of the research carried out by the school is community-based, and most public health students are trained to work in the community, the school is constantly building relationships with a variety of local, national, and international agencies and organizations for a variety of purposes.

Although it does not have a strong, across-the-board reward system for faculty service, the school does take pride in its faculty members' contributions to the university, community, and profession. Each year at the May hooding ceremony, the school recognizes a faculty member with the Faculty Service Award, which includes a $1,000 honorarium and a commemorative plaque. Nominees for the award are considered according to their exceptional outreach to the community, contribution to the public health practice setting, and leadership in professional organizations and university governance. Nominees may be either full-time research, clinical, or tenure-track faculty.

In addition to faculty participation in service, staff in several units make a significant contribution to the service activities of the school. These units include the Consortium for Latino Immigration Studies, Core for Applied Research & Evaluation (CARE), Office for the Study of Aging (OSA), and PASOs. Specific work of these units is described in 3.2.c.

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

The university demonstrates its commitment to service through multiple policies, procedures, and practices. In accordance with the university's Faculty Manual and related university and school policies, all tenure-track faculty are reviewed annually on their contributions to service in addition to teaching and research. Faculty contribution to service activities beyond the campus is an expectation of the tenure and promotion evaluation throughout the university.

Tenure-track faculty members are reviewed annually on three service-related criteria: service to the university, school, and department; service to or in professional groups/activities; and service in or to the community. Service to the community may include consulting that is related to professional activity; leadership roles in not-for-profit organizations; presentations to community professional groups; service on advisory boards, societies or councils; and work with state agencies that have a public health mission.

Research faculty members are expected to expend most of their effort in the conduct of research; however, their annual reviews may include instructional and professional service activities. Similarly, the school expects clinical faculty to engage in academic, community, and professional service. As evidenced

by the documentation in this section of service to the community and to the profession, many of the school's research- and clinical-track faculty members are actively engaged in service to the community.

3.2.c A list of the school's current service activities, including identification of the community, organization, agency or body for which the service was provided and the nature of the activity, over the last three years. See CEPH Data Template 3.2.1. Projects presented in Criterion 3.1 should not be replicated here without distinction. Funded service activities may be reported in a separate table; see CEPH Data Template 3.2.2. Extramural funding for research or training/continuing education grants should be reported in Templates 3.1.1 (research) and 3.3.1 (funded workforce development), respectively.

Faculty and staff provide technical assistance, consultation, and training to numerous organizations and agencies that address a variety of topic areas. This assistance includes short-term consulting, planning and evaluation expertise, workshop presentations, and membership on organizational boards and advisory committees. Faculty members are called upon to provide expert testimony in legislative and legal hearings and to comment in the media on health-related issues, news stories, and research, especially in the areas of physical fitness, nutrition, aging, health disparities, cancer, and the environment.

Table 3.2.c.1, found in the ERF, contains a list of non-funded service activities conducted by Arnold School faculty members, by academic department, over the past three years (not including service to the school or university). This table lists activities of 89 faculty members. The activities include an array of service activities at the international, national, state, and local levels. Examples include service as an editor or editorial board member for professional journals; an officer in professional organizations; a member of a board of directors or advisory board for professional organizations, government agencies, and non-profits; and/or a consultant for agencies and organizations. Of particular note, a number of Arnold School faculty members serve on the leadership team and workgroups of SCale Down, South Carolina's obesity prevention initiative. Other faculty and staff are members of the State Alliance for Adolescent Sexual Health, the SC Cancer Alliance, or the SC Coalition for Healthy Families. Such service reflects the breadth of public health issues.

Of unique importance and deserving special mention are those service opportunities driven by urgent, widespread need in the wake of disasters. In October 2015, South Carolina experienced a "thousand-year rainfall event" with catastrophic flooding, which caused numerous deaths, multiple dam breaches, extensive property damage, prolonged drinking water contamination, and devastation to businesses and agriculture. The university community and the surrounding region were severely affected by this event. Students, faculty, and staff all came together to help address the urgent needs by volunteering at local agencies and shelters, distributing supplies to residents in flooded areas, helping coordinate volunteers and the distribution of supplies, and donating time and money to help people deal with the damage. In addition to the outpouring of support offered to those in the community at large, the Arnold School also responded to our own students, staff and faculty who were directly impacted by the storm. The school posted a webpage with links to donation websites to assist those who experienced significant losses during the flood, and targeted efforts were initiated to meet critical needs.

The Arnold School's PASOs program took the lead to provide ongoing relief and recovery efforts to Latino families after the flood (see summary article in the ERF). The PASOs Promotores (neighborhood-based community health workers) created a GoFundMe account to help families, raising $4800 in less than two weeks. They formed a cleaning crew of 75 women from around their neighborhoods to help clean homes impacted by the flood. They also used all available media outlets, including social media, to

share information about available resources to Spanish speaking communities, such as federal disaster assistance, FEMA, and boil water advisories.

The spirit of volunteerism and service that was exhibited by the Arnold School during the 2015 flood is truly reflective of the compassion and community-focus that define public health.

Table 3.2.c.2, which begins on the next page, lists funded faculty service activities. Of the projects listed, 77% were community-based and 71% included student involvement. Research and training projects are discussed in 3.1 and 3.3 respectively.

Table 3.2.c.2. Funded faculty service activity from state fiscal year 2014 to 2016 (by department)†

Project Name	Principal Investigator	Dept	Funding Source	Funding Period	Amount Total	Amount FY 2014	Amount FY 2015	Amount FY 2016	C B	S P
Technical Assistance for Conservation-Related Database Applications	Kloot B	ENHS	NRSA/USDA	9/26/13-12/31/14	31,805	31,805	0	0	N	N
2014 Adult Tobacco Survey	**Eberth J**	EPID/BIOS	SC DHEC	9/26/14-6/30/16	93,569	0	93,569	0	N	Y
A Dissemination Project to Advance Lung Cancer Screening in SC	**Eberth J**	EPID/BIOS	SC Cancer Alliance/SC DHEC/CDC	8/29/14-6/30/16	53,537	0	43,537	10,000	Y	Y
IPA: HRSA-Jihong Liu	**Liu J**	EPID/BIOS	MCH Bur/HRSA	10/1/13-9/30/16	123,406	44,146	37,742	41,518	N	N
Elsevier Editorial contract	**McDermott S**	EPID/BIOS	Elsevier, Inc.	1/1/14-12/31/16	81,000	27,000	27,000	27,000	N	N
Improving the Health of People with Disabilities through State Based Public Health Programs (U59)	**McDermott S**	EPID/BIOS	CDC	7/1/14-6/30/16	899,790	264,363	50,000	249,930	Y	Y
Mental Health and Overall Wellbeing of Boys and Men	**Torres M**	EPID/BIOS	HopeHealth Inc	10/1/15-9/30/16	27,000	0	0	27,000	Y	N
Contract to provide Physical Therapy Clinical Services at Proaxis	**Fritz S**	EXSC	ATI Physical Therapy	7/1/15-6/30/16	33,800	0	0	33,800	N	Y
Contract to provide Physical Therapy Clinical Services in the Geriatric Mobility Clinic at Palmetto Health Richland	**Fritz S**	EXSC	Palmetto Health Richland	1/1/10-12/31/16	315,040	46,800	46,800	46,800	N	Y
Rehabilitation Technician at Palmetto Health Richland	**Fritz S**	EXSC	Palmetto Health Richland	1/1/14-12/31/16	74,880	24,960	24,960	24,960	N	Y
Developing a 2016 U.S. Report Card on Walking and Walkable Communities	Pate R	EXSC	McKing Consulting Corp/CDC	9/28/15-9/27/16	55,000	0	0	55,000	Y	Y
Development of Communication Strategy for Surgeon General's Call to Action on Walking	Pate R	EXSC	McKing Consulting Corp/CDC	3/15/14-9/27/15	50,000	25,000	25,000	0	Y	Y
Physical Activity and Nutrition Standards for Home Childcare - Sub-contract with DHEC	Pate R	EXSC	SC DHEC/CDC	4/1/14-6/30/14	63,989	63,989	0	0	Y	N
DSS SNAP - ED Evaluation	**Jones S**	HPEB	SC DSS/USDA	6/8/15-9/30/16	410,161	0	110,444	299,717	Y	Y

Project Name	Principal Investigator	Dept	Funding Source	Funding Period	Amount Total	Amount FY 2014	Amount FY 2015	Amount FY 2016	C B	S P
Hunger Relief Strategic Plan for Palm Beach - Sub contract to FRAC (Food Research Action Center)	**Jones S**	HPEB	Food Res & Action Ctr/ United Way of Palm Beach Co	4/8/15-12/20/15	40,800	0	10,000	30,800	Y	N
KershawHealth Planning/Evaluation (Planning)	Smith L*	HPEB	Kershaw Health/SCHHS	3/1/14-6/30/15	44,000	0	44,000	0	Y	Y
South Carolina Public Health Consortium - Director	Smith L*	HPEB	SC DHEC	4/10/12-5/28/14	156,823	13,050	0	0	N	N
Evaluation and Training Services for SC DHEC's WISEWOMAN Program	**Kenison K**	HSPM	SC DHEC/CDC	11/16/15-6/30/16	30,385	0	0	30,385	Y	Y
Evaluation of Eat Smart Move More SC Let's Go Community Initiatives	**Kenison K**	HSPM	Eat Smart Move More SC/BC&BS	9/1/15-12/31/17	88,339	0	0	88,339	Y	Y
Evaluation of SC Farm to Institution Program Evaluation for 2015-2016 Year - Phase II	**Kenison K**	HSPM	SC DA/USDA	6/1/16-9/30/16	12,809	0	0	12,809	Y	Y
Evaluation of Farm to Institution Programs (Farm to School)	**Kenison K**	HSPM	SC DA/USDA	1/15/16-9/15/17	16,229	0	0	16,229	Y	Y
Evaluation of Farm to Institution Programs (Specialty Crop Block Grant)	**Kenison K**	HSPM	SC DA/USDA	1/15/16-9/15/16	16,603	0	0	16,603	Y	N
Evaluation of SC DHEC Programs Including SC FitnessGram (BC&BS)	**Kenison K**	HSPM	SC DHEC/ BC&BS Fnd	1/1/15-12/31/16	173,471	20,439	87,240	65,792	Y	Y
Evaluation of SC DHEC Programs Including SC FitnessGram (CDC)	**Kenison K**	HSPM	SC DHEC/CDC	7/1/15-12/31/15	7,938	0	7,938	0	Y	Y
Subaward: A Social Ecological Approach to Encourage And Assist Residents to Eat Smart and Move More in Rural Colleton County	**Kenison K**	HSPM	Clemson/USDA	10/1/14-11/30/15	17,815	0	17,815	0	Y	N
Subaward: Evaluation of SC Farm to School Program (CDC)	**Kenison K**	HSPM	Clemson/SC DA/CDC	10/1/13-11/30/15	6,938	6,938	0	0	Y	N
Subaward:Evaluation of SC Farm to School Program (SC DA)	**Kenison K**	HSPM	Clemson/SC DA	10/1/04-11/30/15	4,900	0	4,900	0	Y	N
Economic Studies of Vaccines and Immunization Policies, Programs, and Practices for Adults	**Khan M**	HSPM	CDC	8/31/14-8/30/16	149,989	0	149,989	0	N	Y
Evaluation of a Case Study of the Impact of the Community Paramedicine Program on Abbeville Area Medical Center	**Probst J**	HSPM	Abbeville Area Med Ctr/Duke Endowment	9/1/13-8/31/14	10,200	10,200	0	0	Y	Y

Project Name	Principal Investigator	Dept	Funding Source	Funding Period	Amount Total	Amount FY 2014	Amount FY 2015	Amount FY 2016	C B	S P
HRSA Oral Health Workforce	**Probst J**	HSPM	HRSA	9/1/12-8/31/15	465,442	0	465,442	0	Y	Y
Medicare Rural Hospital Flexibility (FLEX)	**Probst J**	HSPM	SC Rural Health/HRSA	2/28/14-8/31/18	40,000	20,000	0	17,083	Y	Y
NRHA's Community Health Worker Patient Centered Diabetes Management Program	**Probst J**	HSPM	NRHA/ Verizon Global	1/1/15-6/30/16	100,000	0	100,000	0	Y	Y
OH 2014 Implementation Grant Year Two: Demonstration of COHC Effectiveness	**Probst J**	HSPM	DentaQuest Foundation	11/1/13-12/15/14	187,445	187,445	0	0	Y	Y
SC DHHS Environmental Scan of SC Healthcare Providers' Adoption and Use of Certified EHR Technology	**Probst J**	HSPM	SC DHHS/Ctrs for Medicare and Medicaid	3/1/15-9/30/15	66,148	0	66,148	0	N	N
SC Community Paramedicine Blueprint: Bridging the Gaps - Abbeville Area Medical Center and SCRHRC	**Probst J**	HSPM	Abbeville Area Med Ctr /Duke Endowment	9/1/14-8/31/15	8,224	0	8,224	0	Y	Y
Upper Midlands Regional Health Network 2014-2017	**Probst J**	HSPM	UMRHN/ HRSA	9/1/14-4/30/17	49,276	10,200	21,158	17,918	Y	Y
Impact Physician Training in EMR Use on Physicians' Use of EMR	**Xirasagar S**	HSPM	Sisters of Char Prov Hosp	10/8/14-5/12/15	14,312	0	14,312	0	N	Y
Self-Regional Healthcare Hospital Economic Impact Study	Demir I	HSPM	Self-Regional Healthcare	6/15/16-9/15/16	15,644	0	0	15,644	N	Y
Children's Trust Maternal, Infant, and Early Childhood Home Visiting Program: CT Competitive Formula Project	Radcliff B	HSPM	Children's Trust of SC/HRSA	10/1/15-9/30/16	147,648	0	0	147,648	Y	Y
Children's Trust PAF 2015-2017	Radcliff B	HSPM	Children's Trust of SC/HRSA	7/3/15-7/31/17	219,153	0	0	219,153	Y	Y
MIECHV - Competitive Grant	Radcliff B	HSPM	Children's Trust of SC/HRSA	10/1/15-9/30/16	373,879	0		373,879	Y	Y
AccessHealth SC Qualitative Evaluation	Workman L	HSPM	SC Hospital Res & Ed Fnd	3/18/15-12/31/15	11,000	0	11,000	0	Y	Y
SC DHEC MCH Title V Needs Assessment	Workman L	HSPM	SC DHEC/HHS	1/2/15-6/19/15	36,347	0	36,347	0	Y	Y
Children's Trust Maternal, Infant, and Earl Childhood Home Visiting Program	Hale N*	HSPM	Children's Trust/HRSA	8/1/13-7/31/15	157,247	0	157,247	0	Y	N

Project Name	Principal Investigator	Dept	Funding Source	Funding Period	Amount Total	Amount FY 2014	Amount FY 2015	Amount FY 2016	CB	SP
Children's Trust Support for Expectant and Parenting Teens, Women, Fathers and their Families (PAF) Program Evaluation	Hale N*	HSPM	Children's Trust of SC/HHS	8/1/13-7/31/15	234,425	120,000	114,425	0	Y	Y
MIECHV-Expansion Children's Trust 2014 - 2015	Hale N*	HSPM	Children's Trust of SC/HRSA	10/1/14-9/30/15	476,991	0	476,991	0	Y	Y
The Evaluation of the Expansion of the Maternal, Infant, and Early Childhood Home Visiting Program in S.C.	Hale N*	HSPM	Children's Trust of SC/HRSA	9/1/13-9/30/14	244,850	244,850	0	0	Y	Y
Evaluation of the Maternal, Infant and Early Childhood Home Visitation Program 2013-2014	Martin A*	HSPM	Children's Trust of SC/ HRSA	9/1/13-9/30/14	363,380	184,241	0	0	Y	Y
Feasibility Assessment of Oral Health Programs Supporting State Offices of Rural Health	Martin A*	HSPM	DentaQuest Institute, Inc.	9/16/13-12/31/13	5,000	5,000	0	0	Y	Y
OH 2014 Implementation Grant:Demonstration of COHC Effectiveness	Martin A*	HSPM	DentaQuest Foundation	11/1/12-10/31/13	112,725	0	0	0	Y	N
State Oral Health Plan Technical Assistance	Martin A*	HSPM	SC DHEC/CDC	12/2/13-8/31/14	16,000	16,000	0	0	Y	Y
The SC Oral Health Safety Net Enhancement Portfolio: Improving Access to Care through Innovative Oral Health Workforce Approaches	Martin A*	HSPM	HRSA	9/1/13-8/31/14	968,334	471,432	0	0	Y	N
Faculty Research Award FYs 2014 – 2016 Totals					**7,403,686**	**1,837,858**	**2,252,228**	**1,868,007**		

CB = Community-Based; SP = Student Participation Data Sources: USCeRA & Faculty Self-Report

† Within department, primary faculty (names in **bold** font) are listed first, followed by secondary faculty, then faculty no longer with the school as of fall 2016, indicated by an asterisk (*)

Other service activities. As a service to the public health community, the dean's office organizes the Winona B. Vernberg Lecture Series, which is an annual conference on current public health issues. The school is also a sponsor of the (Representative) James E. Clyburn Health Disparities Lecture. Both of these programs are widely advertised to the local public health community.

As mentioned in 3.2.a, staff principal investigators (PIs) in the Consortium for Latino Immigration Studies, CARE, OSA, and PASOs make significant contributions to the school's service activities. Staff PIs are not included in the tables in 3.2.c, but their contributions are described below. These organizations are described in 3.1.

The Consortium for Latino Immigration Studies promotes and coordinates multi-disciplinary research related to Latinos in South Carolina and the Southeast. In fiscal years 2014 – 2016, the consortium's staff PI was awarded a total of $32,204 through the following service contracts:

- *Puentes ¡Cuídate! Program* – SC Campaign to Prevent Teen Pregnancy/SC DHHS: Weekend bi-lingual classes for Latino youth in five SC counties, teaching participants about reproductive health and teen pregnancy prevention.
- *Tomando Control de su Salud (Taking Care of Your Health) Program* – SC Lt. Governor's Office on Aging/SC DHHS & SC DHEC: A collaboration with community-based clinics in two SC counties to provide healthy lifestyle information to Spanish-speaking individuals (and/or their caregivers) with chronic conditions.

The Core for Applied Research and Evaluation (CARE) in the school's Office of Research was awarded $8,947,977 through service grants and contracts to staff PIs in fiscal years 2014 – 2016:

- *SC DHHS Statewide Business Process Redesign Implementation* (SC DHHS/HHS): Assess overall office operations, conduct strategy and planning sessions with leadership, assist with implementation and post-implementation reviews, and develop and provide supervisor and staff training.
- *KershawHealth Planning/Evaluation* (Kershaw Health/SC DHHS): With Kershaw Health partners, develop and implement action plan, healthcare and public health systems integration plan, human resource training and technical assistance plan, dissemination and communication plan, and evaluation plan for LiveWell Kershaw, a population-based approach to improving health outcomes in Kershaw County, SC, focusing on access to care, obesity prevention, nutrition and physical activity promotion, smoking prevention and cessation, and teen health.
- *Project Merge/SC Works Support Strategies Implementation* (SC DHHS/Ford Foundation): Provide project management and grant administration through facilitation of Stakeholder Advocacy Group meetings, managing and coordinating workgroups as well as other meetings, webinars, and conferences, and producing grant reports. Project Merge is a statewide initiative to align Medicaid, SNAP, and TANF eligibility and renewal processes to reduce the administrative burden and improve the health of families in need of these work supports.
- *Public Health Practice Postgraduate Program* (SC DHEC): Collaboration with the state's lead public health agency to provide planned, supervised, and evaluated practica and residencies for MPH and DrPH students seeking experience as part of a professional public health academic program by experiencing public health principles practiced first hand and applying skills and knowledge obtained in the classroom.
- *SC Free Clinic Association Strategic Planning Process* (SC Free Clinic Association/BC&BS of SC): Lead and facilitate a strategic planning process to develop a three-year plan for the state's Free Clinic Association and develop a governance charter for its Board of Directors.
- *SC Public Health Consortium Director's Contract* (SC DHEC): In partnership with the state's lead public health agency, develop, formalize, and support collaborative practice-based activities to

include a competency-based curriculum, courses, and certificate program for DHEC staff; develop, administer, and maintain a strategic plan; coordinate activities for the SC Public Health Consortium; coordinate placement and orientation of graduate students within DHEC; and provide group facilitation and meeting design services as needed.

- *Statewide Database for Spinal Cord Injury* (Spinal Cord Injury Research fund/MUSC): Develop a database of measured outcomes of individuals with spinal cord injury in the state as they come into the surveillance system and establish a plan for routine follow-ups and a related follow-up surveillance database system.
- *Strategic Planning Services for SC DHEC Health Services Health Priorities Plan* (SC DHEC/CDC): Provide coordination and facilitation for the development of a Health Priority plan for the Division of Health Services at SC DHEC.

The Office for the Study of Aging (OSA) is committed to advancing research and education regarding issues related to an aging population. In fiscal years 2014 – 2016, OSA staff PIs were awarded $2,222,631 in service contracts. Select service activities include:

- *HOME CARE + Healthcare Innovation Challenge Award* (HHS): Work with personal care provider agencies to improve health and health care and to lower costs through these improvements.
- *The SC Vulnerable Adult Guardian ad Litem Program* (SC Lt. Governor's Office on Aging): Direct the operation of the SC Vulnerable Adult Guardian ad Litem Program, including: provide the duties and responsibilities of a guardian ad litem; maintain, update, and evaluate program data; and participate on committees and help to make systemic changes to improve services to vulnerable adults.

The OSA also partners extensively with the SC Healthy Brain Research Network (SC-HBRN), which is affiliated with the USC Prevention Research Center. Through that partnership, OSA supported the "Healthy Aging Forum: A Focus on Brain Health" in December 2015. The forum brought together research and practice partners from across the state's aging network, and featured SC Lt. Governor Henry McMaster as the keynote speaker. The event offered opportunities for collaboration and networking among an array of stakeholders who work on behalf of older adults.

In addition to its work with the SC-HBRN, the USC Prevention Research Center works with a variety of community partners to promote physical activity in South Carolina. As a unique example of their work, the center hosted a seminar in September 2016 on "Engaging Faith-Based Organizations in Health Initiatives." This event brought together faith leaders with leaders of community-based health initiatives to explore collaborative opportunities and strategies for successfully engaging faith-based organizations.

PASOs provides culturally responsive education to Latino families regarding maternal and child health, early childhood development, and positive parenting skills as well as individual guidance for PASOs participants in need of resources. In addition, PASOs partners with health care and social service agencies to help them provide more effective services to the state's Latino community to ensure strong and healthy families. In fiscal years 2014 – 2016, PASOs staff PIs were awarded a total of $1,366,510 in service grants and contracts:

- *Bridges to Health* (Greenville Health System/Duke Endowment): Provide culturally-appropriate prevention services for the uninsured Latino population in SC and create more efficiency and continuity of care for this population within health care systems.
- *Bridging Health and Communities* (Palmetto Health): Increase the number of community-based organizations, including local health departments, tribal health services, nongovernmental organizations, and State agencies, providing population-based, primary prevention services to Latinos in the state.

- *CBCAP-Parenting Program* (Children's Trust of SC/HHS): Provide staffing, administration, programming, and training for the implementation of federally approved, community-based child abuse prevention models through the Positive Parenting Program in Richland and Lexington Counties.
- *Choose Today a Healthy Tomorrow* (UNC-CH/Kellogg Foundation): Provide culturally appropriate maternal, child and reproductive health information to the Latino community in SC through a series of radio programs led by teams of Promotores (community health workers) and collaborate with local radio stations in two counties with large Latino populations, Charleston County and Beaufort County, to host bi-monthly educational radio programs with support and assistance from the team of Community Ambassadors (grassroots leaders) in Richland and Lexington Counties engaged in this work.
- *Expanding the Puentes Model to Improve the Health and Leadership Skills of Latino Immigrant Families in SC* (Sisters of Charity Foundation): Recruit and train at least 10 additional Level One Promotores in the Charleston and Newberry regions to help with outreach events, resource navigation, and recruitment for health education classes; train and advance the skills of 15 Promotores to Level Two so they are able to facilitate the health education classes, provide radio-based education, and dialogue with health and social service organizations; and prepare all Promotores to assist with evaluation efforts, including the recording of program activities and their impact.
- *First Steps to School Readiness* (SC First Steps to School Readiness): Provide cultural competence and capacity building training and technical assistance for First Steps in planning for the Early Head Start grant and its participating childcare sites to better meet the needs of Latino families statewide.
- *Latino Best Start Initiative* (Center for New Communities/Urban Strategies/Kellogg Foundation): A program that combines education, support, and systems change to promote exclusive breastfeeding in the Latino community through breastfeeding classes and troubleshooting offered by specially trained Promotoras, breastfeeding-focused cultural competence training for medical professionals, and community-wide breastfeeding education through Spanish-language radio broadcasts.
- *Healthy Latino Babies - PASOs in SC* (March of Dimes Foundation, SC): Develop and implement a best practice model to engage Latino families in making healthy choices regarding pre-conception, perinatal, and family health.
- *Making Connections* (HopeHealth, Inc.): One-year planning grant focusing on boys and men who are African-American, Latino, and/or veterans to address issues that make boys and men vulnerable to hardships related to mental health and overall wellbeing, including isolation, trauma, and lack of access to mental health care in a five-county area in the state.
- *Latino Parent Leadership Initiative* (Lipscomb Family Foundation): Support for Latino parents in promoting positive child development and to prevent child abuse and neglect in Richland and Lexington counties. The program consists of 15 hours of interactive education over a course of five weeks, with three additional follow-up phone calls.
- *Maternal, Infant and Early Childhood Home Visiting (MIECHV) Contract* (Expansion & Formula Funding, Children's Trust of SC/HHS): Cultural competence and capacity building for MIECHV sites through training and technical assistance so that they are better able to meet the needs of Latino families in their communities, with the aim of increasing organizational, community, and regional capacities to optimize long-term outcomes for Latino children.
- *Pregnancy Assistance Fund (PAF) Grant Contract* (Children's Trust of SC): Conduct a needs assessment of the four PAF grant-funded counties to review services currently being provided to

the Hispanic population and identify gaps in resources and service provision; areas of need for Hispanic adolescents and young adults that are pregnant and/or parenting; and strategies of how current funding can support the efforts of local communities to better serve young Hispanic families.

- *Palmetto Project Affordable Care Act (ACA) Navigators* (Palmetto Project/HHS): Train SC PASOS staff as Certified Navigators to deliver outreach and education to the Latino population in SC about the ACA and assist those who are interested with enrollment, and provide enrollment, outreach, and education data to Palmetto Project.
- *Partnerships for Improved Interconception Health* (March of Dimes Foundation): Provide interconception community education for Latina women at risk for poor pregnancy and/or birth outcomes to assist them in making positive behavior changes that will impact the health of future pregnancies and births.
- *Parenting Skills for Latino Families* (Hootie and The Blowfish Foundation/Central Carolina Community Foundation): Parenting skills program consisting of 15 hours of interactive education over a course of eight weeks in a two-county area.
- *Pasitos Adelante: Stepping Forward for Latino Children* (BC&BS of SC): Outreach to the Latino population about purchasing health insurance coverage through the Health Insurance Marketplace as well as signing up for coverage through Medicaid and the Children's Health Insurance Program through the use of culturally and linguistically-tailored strategies.
- *PASOs ACA Specialist Salary Funding* (Greenville Hospital System Center for Pediatric Medicine): Staff support to plan, develop, market and deliver public health education regarding the Affordable Care Act to local health program participants and community groups and facilitate enrollment of eligible participants in health plans by establishing linguistically and culturally appropriate comprehensive ACA education.
- *PASOs and Greenwood Genetic Center contract* (Greenwood Genetic Center): Provide folic acid education, culturally appropriate outreach services, and consultative services to the Greenwood Genetic Center/ SC Birth Defects Prevention Program.
- *PASOs and WIC (Women, Infants, and Children) Partnership Agreement* (SC DHEC/USDA): Educate and engage Latino families about WIC, with a focus on enrollment of children up to the age of five and also on postpartum and breastfeeding women in a four-county area. Conduct cultural competency training for service providers.
- *PASOs for Parents Triple P Program* (Children's Trust of SC/HHS): Provision of parenting classes for Latino families.
- *PASOs Midlands Parenting Program* (Children's Trust of SC/HHS): Provision of parenting classes for Latino families.
- *PASOs Oral Health Initiative* (SC DHEC/CDC): Through trained community health workers, provide oral health interventions to Latino families of children ages 0 – 5 in the Midlands of SC, including home visits.
- *Reach Out and Read* (Reach Out and Read, Inc.): Preparation of children in low-income communities to succeed in school by partnering with doctors to prescribe books and encourage families to read together in a whole-child approach to helping children reach their full potential. In addition, on an organizational level, provide technical assistance to improve the quality of culturally-appropriate care provided in the hospital.
- *The Puentes Project* (Sisters of Charity Foundation): Developing the skills of community health workers to help Latino immigrants navigate the health care system, enroll in prenatal care, and address barriers to accessing health care resources.

- *The Puentes Project: Reproductive Health and Latinos in South Carolina* (RWJF): Establish a firm and sustainable presence among Latino communities, health care services (health care systems, direct providers, administrators and policymakers), and local organizations dedicated to addressing reproductive health issues as well as local funding partners.

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

As part of the strategic planning process that accompanied this self-study process, the Community Engagement Workgroup defined community engagement as "a bi-directional process of practice that works collaboratively, in a culturally appropriate manner, with groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of all people." The workgroup recognized that the school lacks a comprehensive tracking system for service opportunities and projects as well as a clear, consistent way to communicate our community engagement and service activities. The university's Coordinating Office for Community Engagement and Service (COCES) is working on a university-wide tracking system, and the committee recommended that the school work with that office to find tracking methods that will serve our needs. The committee also recommended that a webpage be developed to provide a central place for communicating about our current service work and potential for future efforts.

Table 3.2.d lists outcome measures for community engagement and service. The school will continue to work to identify and develop better methods to track and communicate the work we do in this area.

Table 3.2.d Outcome measures for community engagement and service

Indicator	Target	Year 1	Year 2	Year 3
Percentage of research projects conducted with community engagement	≥ 65% by FY2019-20	FY2013-14 49%	FY2014-15 56%	FY2015-16 57%
Percentage of funded service projects with community engagement	≥ 75% by FY2019-20	FY2013-14 71%	FY2014-15 70%	FY2015-16 74%
Percentage of funded service projects conducted with student participation	≥ 75% by FY2019-20	FY2013-14 67%	FY2014-15 74%	FY2015-16 78%
Percentage of tenure-track/tenured faculty who report at least one professional service activity on the faculty annual review report	≥ 90% report at least one professional service activity	CY2014 96%	CY2015 99%	CY2016 99%
Percentage of tenure-track/tenured faculty who report at least one community service activity on the faculty annual review report	≥ 75% report at least one community service activity	CY2014 75%	CY2015 68%	CY2016 70%

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

For four decades, the school has focused on providing solutions to the major public health challenges important to individuals, families, and communities alike. From healthy babies to healthy aging, Arnold School students have worked with faculty and staff to address a full spectrum of public health concerns. As the state's only school of public health, the school has distinguished itself as a valuable resource for producing both new discoveries and new professionals. Arnold School students have access to a variety of community service opportunities through volunteerism, service learning programs, internships,

participation in faculty-led community-based research projects, and external graduate assistantships. As mentioned above, 71% of the funded service projects included student involvement.

The undergraduate programs in the school work closely with USC Connect, which is the university's comprehensive initiative to enhance undergraduate education by promoting student opportunities to engage beyond the classroom and to synthesize and apply learning across experiences. The signature program of this initiative is Graduation with Leadership Distinction, which recognizes undergraduate students for significant engagement and learning. The Arnold School leads the university in the percentage of students who graduate with leadership distinction. The school also offers a number of courses that are classified as service learning courses, such as EXSC 563: *Physical Activity and the Physical Dimensions of Aging* and HPEB 502: *Applied Aspects of Human Nutrition.*

The Dean's Student Advisory Council (DSAC) organizes several school-wide service events each year, from collecting donations for community causes to encouraging registration in the National Bone Marrow Donor Program through its Be the Match program. Service activities conducted in the last two academic years are listed in Table 3.2.e.

Table 3.2.e DSAC-sponsored service activities, AY2014-15, AY2015-16

Event	Date	Attendance/Donations
Be The Match Registry Drive	4/9/2014	57 donors registered
Adopt-a-Family	11/2014-12/2014	Christmas gifts for a family of six (multiple clothing items per person, toys for kids, toiletries, household goods)
Clothesline Project Paint Party	4/7/2015	Over 15 shirts painted for Sexual Assault Awareness
Relay For Life	4/17/2015	Raised over $1,000
Sistercare Household Products & Toiletry Drive	10/2015-11/2015	Household products & toiletry items collected for local women's shelter (Sistercare)
Adopt-a-Family	11/2015-12/2015	Christmas gifts for a family of six (multiple clothing items per person, toys for kids, toiletries, household goods)
Clothesline Project Paint Party	4/5/2016	Over 20 shirts painted for Sexual Assault Awareness
Relay For Life	4/15/2016	Raised over $1,400
Books For Africa Book Drive	4/4/16-4/18/16	Collected nine boxes of books

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

This criterion is met.

Strengths:

- The school's faculty, staff, and students engage in a broad scope of service activities in partnership with university and community partners.

Weaknesses:

- Currently, the school has no centralized system for tracking information about specific public health-related service activities.
- The school has no clear, consistent approach to communicating about and/or promoting its community engagement and service activities.

Plans:

- The director of evaluation and academic assessment is working with COCES to develop procedures for tracking service activities. She will also work with the Evaluation Committee, the associate dean for faculty affairs and curriculum, and the associate dean for operations and

accreditation on this effort. This process will also be informed by the 2016 CEPH criteria and will involve input from key community partners.

- The director of workforce development (who was part of the Community Engagement Workgroup) will work with the associate dean for operations and accreditation and the web development team to design and implement a web presence for the school's community engagement and service work, to provide information about current activities and resources for the community.

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

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

The Arnold School partners with the South Carolina Department of Health and Environmental Control (SC DHEC) and other agencies and organizations to periodically assess the needs of the public health workforce. This assessment is done both formally and informally.

In 2012, with funding provided by HRSA through the SC Public Health Training Center grant, the South Carolina Public Health Consortium administered a Workforce Assessment Survey to SC DHEC Health Services employees. The instruments assessed level of core competency, based on the Council on Linkages Between Academia and Public Health Practice Core Public Competencies. The instrument followed the same format as the SC Workforce Survey conducted in 2003, with modifications to improve collection of demographic data to better enumerate the workforce and represent needs regarding training and development options. One addition was modification to the three tiers of the Council on Linkages competencies, adding a pre-Tier 1 level to assess the skills of management support personnel.

The SC PHC's Curriculum Workgroup used findings from the assessment as the basis for a comprehensive competency-workforce development plan of governmental practitioners. The workgroup completed the following activities:

- Reviewed and compiled a brief overview of important points from the SC Workforce Assessment
- Discussed and created a rough draft of an analysis of Strengths, Weaknesses, Opportunities, and Threats
- Reviewed pertinent state policies on educational initiatives for state employees
- Reviewed the core public health courses and MPH degree programs at the Arnold School
- Reviewed current continuing education courses

A copy of the survey and summary report are included in the ERF. Findings from this assessment included the following recommendations:

- Maintain delivery of the continuing education *Introduction to Public Health* and modify of the five courses of the continuing education certificate to update content.
- Convert the continuing education courses to completely self-paced delivery. Until 2015, the school offered a continuing education certificate in public health consisting of five synchronous courses provided via distance education with a facilitator. The program was initially targeted to SC DHEC Health Services employees. Assessment data indicated that SC DHEC employees rarely have time to follow a synchronous course. In 2015 the courses were converted into five 3-hour self-directed courses. Now, in addition to SC DHEC staff, the courses are taken by students who want to strengthen their core competency skills.
- Continue the Certificate of Graduate Study in Public Health, an academic-credit bearing post-baccalaureate certificate (described in section 3.3.b).

The *Continuing Education Certificate in Public Health Practice* is a direct result of the workforce assessment conducted in 2003 and was revised based on the assessment conducted in 2012. The courses are based on the public health core functions and the Council on Linkages Core Public Health Competencies. Although there are a few other continuing education-based public health certificates now, the Arnold School's certificate was the first among accredited schools of public health. The

program is monitored and maintained by the director of workforce development. *Introduction to Public Health* is a prerequisite for the certificate and there are five required courses (see table 3.3.b.2 for participation figures):

- Evidence-Based Public Health: Program Planning and Evaluation
- Date Skills for Public Health
- Community Engagement
- Financial Management
- Public Health Policy and Advocacy

In addition to the continuing education certificate courses, the school developed 68 QuickLearn modules. These are short sections (3-10 minutes in length) of the larger courses of the CE Certificate in Public Health Practice. Development was supported by HRSA funding for the SC Public Health Training Center, which ended in 2014. The modules are meant for practitioners who need a quick "How to" refresher. Priority was given to creation of short subjects found to be a priority competency training need identified though the most recent needs assessment and also through issues identified through the Curriculum Workgroup of the SC Public Health Consortium. The most popular Quicklearns relate to financial management, data skills and evidence-based public health. These modules are available through the Virtual Campus and can be found on YouTube. Since the courses address specific subjects and skills, such as "What is a Cohort Study" and "How to Write an Issue Statement," they have a long shelf life and only need to be reviewed periodically. See table 3.3.b.2 for participation figures.

The school recognizes the need to provide for the non-traditional public health workforce. In June 2015, the SC Institute for Medicine and Public Health released *Creating Direction: A Guide for Improving Long-term Care in South Carolina*. Within the report was a specific recommendation to establish a Long-Term Care Workforce Development Consortium to "ensure the development of a sufficient workforce of health care professionals and unlicensed workers with competencies in long-term services and supports." This consortium will be facilitated by the school's Office for the Study of Aging and will be the driving force behind assessment and training in this area.

Working with the director of workforce development over the past year, the Office for the Study of Aging developed 10 online courses for care coordinators in the state's Healthy Connections Prime Medicare-Medicaid Plan. Healthy Connections Prime is a Medicare-Medicaid plan, in which care coordinators are the central point of contact for plan members. The courses focus on such issues as improving transitional care, working with multi-disciplinary teams and abuse and neglect screening. The online courses include training on transition planning, working with multi-disciplinary groups, recognizing abuse and neglect. See table 3.3.b.2 for participation figures for OSA delivered training.

The Arnold School also identifies training needs through informal academic-practice linkages, as well as national studies such as *Framing the Future*, particularly the section on training the governmental workforce. The Council on Linkages core competencies are reviewed every two years by the council's Core Competency Committee, made up of academics and practitioners, in order to identify emerging training needs. The revisions are put out for public comment. The school's director of workforce development is the co-chair of the Core Competency Committee, and thus, is in constant contact with other public health workforce experts around the assessment of emerging training needs.

3.3.b A list of the continuing education programs, other than certificate programs, offered by the school, including number of participants served, for each of the last three years. Those programs offered in a distance-learning format should be identified. Funded training/continuing education activities may be reported in a separate table. See CEPH Template 3.3.1 (Optional template for funded workforce development activities). Only funded

training/continuing education should be reported in Template 3.3.1. Extramural funding for research or service education grants should be reported in Templates 3.1.1 (research) or 3.2.2 (funded service), respectively.

Internal and external funding to faculty and staff have allowed the school to provide continuing education and training (both in person and online) to a variety of audiences, such as communication disorders specialists, elder care coordinators, and public health professionals. Table 3.3.b.1 below lists faculty projects that were explicitly funded to provided training and continuing education programs. This table is followed by a description of other funded training projects delivered by CARE and PASOs. Finally, table 3.3.b.2 lists attendance figures for training and continuing education projects delivered by Practice and Workforce Development staff and faculty, the Office for the Study of Aging, COMD, ENHS, and EXSC. Research and service activities are discussed in criteria 3.1 and 3.2 respectively.

Table 3.3.b.1 Funded training/continuing education activity (faculty PIs)†

Project Name	Faculty	Dept	Funding Source	Funding Period	Amount Total	Amount FY 2014	Amount FY 2015	Amount FY 2016	CB	SP
Project CREATE	**Apel K**	**COMD**	SC Dept. of Ed./US Dept. of Ed.	7/1/12-9/30/16	323,099	121,965	145,047	56,087	Y	Y
2013-2014 Advancing Academic-Research Career Award	**Werfel K**	**COMD**	Amer. Speech-Language-Hearing Assoc.	8/1/13-3/28/15	5,000	5,000	0	0	N	Y
Leaders in Environmental Action Pilots	**Porter D**	**ENHS**	SC DHEC/ EPA	12/5/13-6/30/14	19,000	19,000	0	0	Y	Y
International Year of Soils: Video Outreach from NSSC	Kloot B	ENHS	NRSA/USDA	9/15/14-3/31/16	50,000	0	25,000	25,000	N	N
Public Health Research Completion Award Program for Daffodil International University Masters of Public Health Students	**Chakraborty H**	**EPID/BIOS**	Daffodil International University	1/1/16-12/31/21	252,500	0	0	252,500	Y	Y
Promotores Curriculum & Cultural Competency Training for Providers	**Torres M**	**EPID/BIOS**	SC Tobacco Collaborative/SC DHEC/ CDC	3/1/14-6/30/15	103,015	103,015	0	0	N	Y
Global Energy Balance Network	Hand G*	EXSC	The Coca-Cola Company	5/1/14-6/30/16	507,000	507,000	0	0	N	Y
SC Public Health Training Center Non-Competing Continuation Year 4	Smith L*	HPEB	HRSA	9/1/13-8/31/14	111,329	111,329	0	0	Y	Y
HPV-Mediated Cancer mHealth Prevention Education for Women Living with HIV Pilot Study (K01)	Wigfall L*	HSPM	NIH	9/13/13-8/31/18	711,544	142,073	142,272	142,385	Y	N
Training Totals					**2,082,487**	**1,009,382**	**312,319**	**475,972**		

CB = Community-Based; SP = Student Participation Data Sources: USCeRA & Faculty Self-Report

† Within department, primary faculty (names in **bold** font) are listed first, followed by secondary faculty, then faculty no longer with the school as of fall 2016, indicated by an asterisk (*)

In fiscal years 2014 – 2016, CARE staff PIs were awarded a total of $87,453 in training grants and contracts:

- *Quality Improvement (QI) Training and TA for the SC Adolescent Reproductive Health Leadership Institute* (SC Campaign to Prevent Teen Pregnancy/BC&BS of SC): Conduct quality improvement and training in quality improvement methodology.
- *VA Nursing Modules for Evaluation Education and Training (MEET)* (US Dept. of Veterans Affairs): Provide the Office of Nursing Service at the Dorn VA Medical Center with evaluation training for staff who will initiate new projects that impact VA nursing initiatives.

In fiscal years 2014 – 2016, PASOs staff PIs were awarded a total of $238,170 in training grants and contracts:

- *Affordable Care Act Specialist* (SC Office of Rural Health/The Benefit Bank): Plan, develop, market and deliver public health education regarding the Affordable Care Act (ACA) instruction to local health program participants and community groups. Facilitate enrollment of eligible participants in health plans and establishes linguistically and culturally appropriate comprehensive education of ACA.
- *Bridging Health and Communities* (Palmetto Health): Increase access to quality services for the Latino community through developing and implementing educational sessions using methodology based on peer education whereby the Community Ambassadors have extensively researched and prepared for the most appropriate activities and culturally-based health messages to take into the Latino community, including: "STIs and HIV," "Teen Pregnancy Prevention," "Domestic Violence Prevention," "Rights and Resources," "Breastfeeding," "Prenatal Health," and "Family Planning".
- *Bridging Health and Communities* (Sisters of Charity Foundation): Increase access to quality services for the Latino community through developing and implementing educational sessions using methodology based on peer education.
- *Children's Trust & PASOs EXPANSION* (SC Children's Trust): Collaboration between PASOs and the Consortium for Latino Immigration Studies to develop and coordinate an initiative to address the needs of Latino families with young children to prevent and mitigate the effects of pediatric toxic stress, promote overall child wellbeing, and help optimize long-term outcomes.
- *Early Childhood Comprehensive Systems-PASOs Partnership* (SC DHEC/HRSA): Support for training of manager for PASOs Early Childhood Initiative to work across early childhood services sectors to organize core training for regional PASOs promotores as well as to establish collaborative referral processes with Help Me Grow SC to utilize ongoing developmental screening support for families with young children.
- *Technical Assistance in Service Provision for Latino Families* (Family Connections of SC): Provide support, education, and information to families of children with asthma.

Table 3.3.b.2 Participation in training and continuing education programs

Training/continuing education programs	Participant Count			Distance Learning
	FY13	FY14	FY15	
Practice and Workforce Development - Public Health Continuing Education Certificate Courses *Audience: SC DHEC and other public health and clinical professionals*				
Community Assessment (synchronous)	8			Y
Community Engagement (self- study)		28	22	Y
Community Engagement (synchronous)		7		Y
Community Engagement in SC Part 1	9	4		Y
Community Engagement Part 2	2	10		y

Training/continuing education programs	Participant Count			Distance Learning
	FY13	FY14	FY15	
Data Skills for Public Health (self-study)			19	Y
Data Skills for Public Health (synchronous)		6		Y
Evidence-Based Public Health (self-study)		41	31	Y
Evidence-Based Public Health (synchronous)	7	18		Y
Introduction to Public Health (self-study)		25	82	Y
Public Health Data 101 (self-study)			19	Y
Public Health Data 101 (synchronous)		29		Y
Public Health Finance (self-study)			20	Y
Public Health Finance (synchronous)	40			Y
Public Health Policy and Advocacy (self-study)		43	38	Y
Public Health Policy and Advocacy (synchronous)	9	12		Y
Practice and Workforce Development - QuickLearn Modules *Audience: SC DHEC and other public health and clinical professionals*				
Levels of Measurement	1,780	1,095	792	**Y**
Defining Community Assessment	506	1,012	1,887	Y
A Simple Logic Model	780	1,507	1,693	Y
Case Control Studies	1,792	1,055	1,224	Y
CDC Evaluation Framework	311	808	865	Y
Cohort Studies	2,292	1,551	1,079	Y
Community Assessment mini-tutorials	143	2,208	2,110	Y
Cross Sectional Studies	4,009	3,657	4,422	Y
Evaluating Evidence	174	366	450	Y
Health Data Types	59	315	566	Y
Levels of Measurement	1,782	1,095	799	Y
MAPP Overview	163	432	483	Y
Quantitative vs. Qualitative Data	22,348	28,515	45,100	Y
Smart Objectives	951	979	1,187	Y
Trend Analysis	1,089	1,089	995	Y
Types of Communities	430	618	526	Y
What Is Data	971	841	1,602	Y
What is Evaluation	379	480	778	Y
Writing a Goal Statement	447	528	502	Y
Ten Essential Services Achievements of Public Health	397	733	1,079	Y
Ten Greatest Public Health Achievements	211	146	234	Y
Practice and Workforce Development - Other Training *Audience: SC DHEC and other public health and clinical professionals*				
Quality Improvement (Florence)			18	N
Quality Improvement (Greenville)			20	N
Quality Improvement (Walterboro)			32	N
SCAPHA Winter Conference	83			N
Southern Hospital Association Symposia Conference	300			N
Success Story Training	60	21		Y
Webinar 1: Community Engagement & Organizing for Success & Partnership Development		22		Y
Webinar 3: Three Key Assessments		20		Y
Webinar 4: Identifying and Prioritizing Strategic Issues		12		Y
Webinar 5: Formulating Goals and Strategies		18		Y
Webinar 6: Action Cycle	2	22		Y

Training/continuing education programs	Participant Count			Distance Learning
	FY13	FY14	FY15	
Audience: SC DHEC central and regional staff				
ToP Facilitation Training		21	47	N
ToP Strategic Planning		22		N
Mastering ToP Part 3		11		N
Office for the Study of Aging *Audience: Elder Care Coordinators*				
Healthy Connections Prime: Adult Protective Services: Working Together Is Better			7	Y
Healthy Connections Prime: Consumer Direction Training Part II			34	Y
Healthy Connections Prime: Dealing with Difficult People			9	Y
Healthy Connections Prime: Determinants of Abuse: Neglect and Safety Concerns			7	Y
Healthy Connections Prime: Essentials of Effective Care Planning			10	Y
Healthy Connections Prime: Essentials of Effective Care Planning (PRIME) Specific			5	Y
Healthy Connections Prime: Improving Transitional Care Practices		40	6	Y
Healthy Connections Prime: Improving Transitional Care Practices Part 2			3	Y
Healthy Connections Prime: Overview of Special Populations		40	10	Y
Healthy Connections Prime: The Impact of Multi-Disciplinary Teams in a Care Coordination Model			8	Y
Healthy Connections Prime: Understanding Multi-Disciplinary Teams 2016			6	Y
All About Alzheimer's		150		Y
Caring Connection Conference at Winthrop University	330			N
Dementia Dialogues		293	70	Y
Dementia Dialogues Train the Trainer		13		Y
Elder Care in the US / Honors College	17	40		Y
Home Again			5	Y
Home Care + Conference			40	Y
NASW Upstate Chapter/Spartanburg	34			Y
Nurse Aid Training Workshop		198		N
Reasons Behind Resistance		40		Y
Regional SC Vulnerable Adult Guardian Ad Litem Training		4		N
SC Vulnerable Adult Guardian Ad Litem	163	240	36	N
SC Vulnerable Adult Guardian Ad Litem training				N
SCAIIDD Conference in Myrtle Beach	100			N
South Carolina Community Residential Care	24			N
COMD *Audience: Communication disorders specialists*				
Brain Injury Basics	20			N
Ealy Development in Fragile X and Autism	24			N
Infantile Spasms & Treatment of Oropharyngeal Dysphagia			14	N
Is It Sensory or Behavior?	27			N
SC AG Bell I Heard That Fall Conference 2013	75			N

Training/continuing education programs	Participant Count			Distance Learning
	FY13	FY14	FY15	
SC AG Bell: Coping with Deafness			85	N
SC Assistive Technology Expo 2014	700			N
South Carolina Assistive Tech. Expo		837		N
Stroke Evaluation for Rehabilitation Professionals	**25**			N
Treatment of Severe Feeding Aversion: Dealing with "No!"		50		N
Ped. Hearing Loss & Auditory Neuropathy Spectrum Disorder		50		N
ENHS *Audience: Environmental health professionals*				
9th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials		120		N
SC Env. Justice Academy	22			N
EXSC *Audience: Exercise scientists*				
Advances in Knee and Shoulder Rehabilitation			17	N
Combined Sections Meeting		198		N
Educational Leadership Conference			15	N
Educational Leadership Institute			164	N
Audience: Early Childhood Educators				
SHAPES: Supporting Health and Activity in Preschool Environments			172	Both

3.3.c Description of certificate programs or other non-degree offerings of the school, including enrollment data for each of the last three years.

The Arnold School offers two Certificate of Graduate Study programs: one in public health and one in health communications.

The *Certificate of Graduate Study in Public Health* is an 18-hour certificate designed for individuals interested in pursuing studies in public health but who are not interested in or whose career trajectories do not require an MPH. The purposes of the certificate are twofold: 1) to offer students working in other degree programs academic training in the fundamental concepts of public health, and 2) to provide a life-long learning opportunity on the foundations of core public health concepts for practitioners who do not wish to seek a public health degree. Earning the certificate involves a focused learning experience in the fundamentals of public health, in which candidates must complete three fundamental courses of the core public health disciplines and three elective public health courses consistent with the student's background and interests. Students may have advanced degrees in other disciplines or bachelor degrees and are seeking academic training in public health. See table 3.3.c for enrollment and graduation data for this program.

The *Certificate of Graduate Study in Health Communication* is an interdisciplinary certificate administered by the HPEB; the School of Journalism and Mass Communications (JOUR); and the School of Library and Information Science (SLIS). This is an 18-hour post-bachelor's program which provides students with opportunities to strengthen their knowledge of health communication content, research methods, and application. Students select health promotion, education, and behavior; journalism and mass communications; or library and information science as an interest area. The program consists of 18 graduate credit hours comprised of a three-course core of courses from HPEB, SLIS, and JOUR; two elective courses from an approved list, reflecting each student's interests and approved by the student's

faculty advisor; and, a three-credit practicum or project in the student's home department. See table 3.3.c for data on enrollment and graduation data for this program.

Table 3.3.c Graduate certificate program enrollment and graduation, 2014-2016

	Number of Students Enrolled			Number of Graduates		
	Fall 2014	Fall 2015	Fall 2016	AY 2013-14	AY 2014-15	AY 2015-16
Public Health	8	8	4	5	2	5
Health Communication	4	8	7	5	4	4

The school also participates in graduate certificate programs in Gerontology and in Drug and Addiction Studies offered through the College of Social Work. The *Certificate of Graduate Study in Gerontology* addresses the educational needs of full-time and part-time students who will be engaged in planning, administration, and provision of services for older adults. Students who are earning master's or doctoral degrees in related disciplines are offered the opportunity to obtain specialized preparation for career paths in the expanding fields of gerontology and geriatrics. The *Certificate of Graduate Study in Drug and Addiction Studies* provides post-baccalaureate students with opportunities to develop broad competencies in preparation for employment in a range of fields that addresses alcohol and drug-related problems. Students may pursue the certificates independently or in conjunction with another graduate course of study. Both programs are interdisciplinary and involve faculty and courses from several academic disciplines, including public health.

3.3.d Description of the school's practices, policies, procedures and evaluation that support continuing education and workforce development strategies.

Continuing and professional education is an essential function of the Arnold School. As a unit within the University of South Carolina and as the only accredited school of public health in the state, the school is tied directly to the university's mission of service to its community, state, nation, and the world in such areas as public health, education, social issues, economic development, and family support systems.

At the campus level, all noncredit continuing education activities and programs are governed by three policies: ACAF 1.70 Continuing Education and Conferences, ACAF 1.71 Noncredit Certificate Programs, and ACAF 1.72 Continuing Education Units. Copies of these policies are included in the ERF. All continuing education activity, regardless of type, must be documented and reported to Continuing Education and Conferences to ensure university compliance with SACS Principles of Accreditation. The school reports continuing education activities as continuing education unit (CEU) activities and non-CEU activities. This campus office also assists with registration, program development, publicity, and all other aspects of program implementation as required or requested.

In practice, continuing education and workforce development activities take place in the school's offices and centers, academic departments, and collaborative entities through courses, seminars, conferences, brownbag lunches, and workshops offered via traditional and distance modalities.

The school has a full time director of workforce development in the Practice and Workforce Development group, which reports to the associate dean for faculty affairs and curriculum. The director collaborates with partners such as SC DHEC, along with centers and institutes within the school to assess competency-based training needs, develop and/or link practitioners to appropriate training, and conduct workforce development research.

Finally, the Practice and Workforce Development group works with the Web Development Core to manage MySPH, a site that includes a virtual campus. This learning management system houses the public health certificate courses and the QuickLearn courses mentioned in 3.3.a.

Evaluation. The certificate of graduate study programs described in section 3.3.c include the same courses completed for other degree programs. These courses therefore are subject to the same evaluations of teaching as utilized for other programs. In addition, the academic program assessment process coordinated by the university's Office of Institutional Research, Assessment, and Analytics (OIRAA) includes these certificates of graduate study programs, so student achievement of learning outcomes is also evaluated.

Evaluation methodologies for less formal offerings are selected and used according CEU requirements. Methods commonly include:

- Satisfaction forms
- Pre- and post-course competency self-assessments

Most online courses require that the learner complete the post-course evaluation prior to receiving a completion certificate. The evaluations are conducted using Kirkpatrick Training Impact Evaluation Level 2, which measures competency improvement based on the course objectives. These evaluation activities assist in the development, enrichment, and continuous quality improvement of programs and serve as a means to award continuing education units for general and discipline-specific purposes.

Practice and workforce development courses are created and evaluated based upon the Council on Linkages Core Competencies. The SC Department of Health and Human Services reviews and approves all of the Healthy Connections Prime courses, which are evaluated by learners. The data are monitored by Healthy Connections Prime staff. The Department of Communication Sciences and Disorders follows the evaluation criteria outlined by the American Speech Language & Hearing Association (ASHA). Continuing education courses are evaluated using self-assessment of the identified learning objectives.

3.3.e A list of other educational institutions or public health practice organizations, if any, with which the school collaborates to offer continuing education.

The Arnold School has numerous educational and practice partners with which it collaborates in offering continuing education. Significant partnerships exist with several USC colleges and schools as well as with key state agencies and a number of non-profit organizations. SC DHEC serves as a long-standing collaborative partner through the SC Public Health Consortium. The Consortium is a formal structure established by the school and agency to engage academic and practice partners in strengthening collaborative activities and focusing on shared priorities in research, training and service. A specific focus of the Consortium is to ensure the availability of continuing education opportunities to meet the needs of the existing public health workforce. (Note: The memorandum of agreement supporting the SC Public Health Consortium expired in December 2016 and is currently being renewed.)

Examples of the Arnold School's collaborative partnerships in providing trainings, conferences, and professional exchange are shown in table 3.3.e.

Table 3.3.e Collaborations for continuing education

Partner	Collaboration Activity
Governmental	
SC Department of Health and Environmental Control (SC DHEC)	Public health workforce assessment and training
SC Department of Health and Human Services (SC DHHS)	Community Health Worker and Elder Care Coordinator Trainings

Partner	Collaboration Activity
Other USC Schools	
USC School of Social Work	Certificate of Graduate Study in Drug and Addiction Studies Certificate of Graduate Study in Gerontology
USC School of Journalism and Mass Communications	Certificate of Graduate Study in Health Communication
USC School of Library and Information Science	Certificate of Graduate Study in Health Communication
Non-Profit Organizations	
SC Public Health Association	Spring and Winter conferences
Healthy Columbia	Community Health Worker Training
SC Primary Care Association	Community Health Worker Training
SC Hospital Association	Community Health Worker Training

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

This criterion is met.

Strengths:

- Through the director of workforce development, the school maintains a direct relationship with the Council on Linkages.
- The school has staff with the skills to create professional development programs including online programs.

Weaknesses:

- Formal activities are narrowly focused and reflect minimal departmental involvement other than the Certificate of Graduate Study programs.

Plans:

- Increase the visibility of continuing education offerings and seek to enhance departmental involvement by working with department chairs and key faculty and staff contacts.
- Increase the number of students accessing the online core competency courses.

4.0 Faculty, Staff and Students

4.1 Faculty Qualifications. The school shall have a clearly defined faculty which, by virtue of its distribution, multidisciplinary nature, educational preparation, practice experience and research and instructional competence, is able to fully support the school's mission, goals and objectives.

4.1.a A table showing primary faculty who support the degree programs offered by the school. It should present data effective at the beginning of the academic year in which the self-study is submitted to CEPH and should be updated at the beginning of the site visit. This information must be presented in table format, organized by department, specialty area or other organizational unit as appropriate to the school and must include at least the following: name, b) title/academic rank, c) FTE or % time, d) tenure status or classification*, g) graduate degrees earned, h) discipline in which degrees were earned, i) institutions from which degrees were earned, j) current instructional areas and k) current research interests. See CEPH Data Template 4.1.1. *Note: classification refers to alternative appointment categories that may be used at the institution.

As mentioned in criterion 1.7, there are currently 128 primary faculty. The primary faculty is comprised of full-time university faculty with 100% appointments to the Arnold School. Teaching and mentoring students is a fundamental component of primary faculty's expectations. Among the primary faculty, 47 (37%) are tenured (including 26 full professors), 38 (30%) are tenure track, and 43 (34%) are non-tenure track, clinical and instructional faculty. Table 4.1.a in the ERF contains background data on primary faculty by department.

4.1.b If the school uses other faculty (adjunct, part-time, secondary appointments, etc.), summary data on their qualifications should be provided in table format, organized by department, specialty area or other organizational unit as appropriate to the school and must include at least the following: a) name, b) title/academic rank, c) title and current employment, d) FTE or % time allocated to the school, e) highest degree earned (optional: schools may also list all graduate degrees earned to more accurately reflect faculty expertise), f) disciplines in which listed degrees were earned and g) contributions to the school. See CEPH Data Template 4.1.2.

Table 4.1.b in the ERF provides background data on the other faculty by department. This list includes 20 secondary faculty plus 55 part-time instructors who teach on a regular basis. The secondary faculty includes two tenured faculty with appointments in other schools, 5 part-time faculty, and 13 full-time research faculty. Two additional faculty members have appointments in EPID/BIOS, but their salaried appointments are not in the Arnold School (University President Harris Pastides and Vice Provost and Dean of Graduate School Cheryl Addy). These two faculty are not included in table 4.1.b or in the headcount/FTE calculations in table 2.7.b.

4.1.c Description of the manner in which the faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if used by the school. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

Faculty members integrate practice into all major activities of the school (teaching, research, and service), and public health practitioners serve as instructors, lecturers, research collaborators, and student preceptors. Teaching modalities by which students are acquainted with the realities of public

health practice include guest lectures, case study methods, off-campus site visits, special projects for public health organizations, and independent studies on selected aspects of public health practice. Many research projects are directly related to practice and many are collaborations with public health organizations. The importance of practical research is recognized in tenure and promotion decisions by according equal weight to applied scholarly works as to theoretical works. As mentioned in criteria 3.1 and 3.2, students are involved in many of the school's research and service projects.

In addition to their academic experience, most tenure-track and tenured faculty work with broad networks and partnerships with public health practice setting and individuals. These networks provide a web of linkages among practice, research, teaching, and service opportunities in the school. Each faculty member who supervises students performing practice projects and internships also typically works with a non-faculty mentor (preceptor) to provide on-site supervision of student activities in the community.

Among our primary and secondary faculty, 26 have an MPH and 5 have a DrPH degree. Clinical faculty appointments are made to contribute to the clinical, teaching, administrative, and community service work of the school. A few of the public health faculty with extensive practice experience include:

- Dr. Lee Pearson, associate dean for operations and accreditation, served for 10 years as deputy director and then director of the SC Institute of Medicine and Public Health (and the SC Public Health Institute, as it was known between 2007 and 2011).
- Dr. Geoffrey Scott, chair of ENHS, has over 37 years of practice experience in marine toxicology. He served for 13 years as Director of the Center for Coastal Environmental Health & Biomolecular Research (CCEHBR) with laboratories in Charleston, SC and Oxford, MD. Prior to that he was acting director of the Hollings Marine Laboratory in Charleston (2 years) and branch chief of the Marine Ecotoxicology Branch of CCEHBR for 10 years. He also worked at EPA as an Aquatic Toxicologist for 5 years working on oil spills and water chlorination products and directed toxicology studies at Research Planning Institute for 3 years and the Arnold School for over 3 years.
- Dr. Mike Byrd, graduate director for the PUBH MPH program, worked for SC DHEC for 38 years, first as a social worker, then as bureau director for the Bureau of Home Health and Chronic Disease. He served for ten years as the state chronic disease director for SC DHEC. He was a board member of the National Association of Chronic Disease Directors and board chair for the South Carolina Cancer Alliance, the South Carolina Tuberculosis Association, and Palmetto SeniorCare.
- Dr. Kelli Kenison, graduate director for the HSPM MPH program, has more than 20 years of public health programming and leadership experience at both the county and state level and at three organizations, SC Department of Health and Environmental Control, Lexington-Richland Alcohol and Drug Abuse Commission, and the American Cancer Society.
- Dr. Bankole Olatosi, graduate director for the HSPM MHA program, was a field investigator for the Care System Assessment Demonstration Project, a federally funded project to explore barriers to care faces by historically marginalized populations living with HIV/AIDS in the US in 2003. He also served for two years as program manager of a USAID/JHU funded HIV/AIDS hotline that provided 24-hour confidential information and referral and counseling services to clients.
- Dr. Jan Probst, director of the SC Rural Health Research Center, worked as a scientist for research consulting firms in the Washington DC area before beginning an academic career. Major research clients included the National Institute of Arthritis and Musculoskeletal

Diseases, the Department of Labor (Job Corps health services units), and the National Highway Traffic Safety Administration.

In addition, many of the faculty in the allied health professional programs come from and continue to work a practice setting. A complete list of public health and allied health faculty with practice experience is included in the ERF.

4.1.d Identification of measurable objectives by which the school assesses the qualifications of its faculty complement, along with data regarding the performance of the school against those measures for each of the last three years. See CEPH Outcome Measures Template.

The Arnold School has a strong faculty complement, with a mix of tenured, tenure track, research, and clinical faculty (see table 4.1.d). Between fall 2015 and fall 2016, the number of primary faculty grew from 116 to 128. This included a net increase of two tenured/tenure track faculty and ten non-tenure track faculty. This growth was partly due to the transfer of the athletic training program from the College of Education to the Arnold School. Faculty teaching skills are rated highly by students on course evaluations and exit surveys and by their peers in the peer reviews (discussed in criterion 4.2). Faculty have high research productivity, as shown by the measures below and in criterion 3.1.

Table 4.1.d Outcome measures of faculty qualifications

Outcome Measure	Target	Year 1	Year 2	Year 3
Percentage of primary faculty who are tenure-track or tenured	75% by 2020	Fall 2014 72% of 116	Fall 2015 72% of 116	Fall 2016 67% of 128
Average rating of faculty teaching effectiveness on student course evaluation	≥ 4.3 (out of 5)	AY13-14 4.3	AY14-15 4.3	AY15-16 4.2
Average rating of faculty preparation for teaching on exit questionnaire (converted to 5 point scale)	≥ 4.3 (out of 5)	AY13-14 4.0	AY14-15 4.1	AY15-16 4.3
Percentage of faculty receiving satisfactory or above ratings on peer review of teaching	≥ 90%	AY13-14 97% of 33	AY14-15 97% of 39	AY15-16 90% of 39
Percentage of tenure-track/tenured faculty serving as PI on NIH or NSF grant	30% by 2020	FY2013-14 38%	FY2014-15 34%	FY2015-16 35%
Number (percentage) of faculty members (all tracks) peer-reviewed publication by calendar year	≥ 80%	CY2013 105/129 (81%)	CY2014 114/138 (83%)	CY2015 113/138 (82%)
Number (percentage) of tenure-track/tenured faculty with at least 3 peer-reviewed publications by calendar year	≥ 80%	CY2013 67/82 (82%)	CY2014 66/83 (80%)	CY2015 72/83 (87%)

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

This criterion is met.

Strengths:

- Each department has a core faculty representing many disciplines and universities with expertise appropriate to instructional responsibilities and research interests. The school has an appropriate mix of research, clinical and tenure-track junior faculty, progressing toward tenure and promotion, and senior tenured faculty with specialized teaching or research responsibilities.
- In addition to the practical experience represented among primary faculty, the other faculty also bring extensive practical experience to the school by serving as instructors, lecturers, mentors, and collaborators.

- Several faculty members have been recognized nationally for their expertise and at the community level for their contributions to public health practice.
- The school has long-standing collaborative relationships for teaching and research with other colleges and schools at the university and with academic colleagues and practitioners throughout the community and state.

Weaknesses:

- Because of the success of this faculty complement, the school faces recurring challenges of retention of the strongest faculty.

Plans:

- The school continually strives to address concerns of faculty to make the Arnold School a better place to work. The school fosters a supportive environment and offers opportunities for faculty professional development, collaboration, and networking. In addition, the school is able to offer both additional compensation and research incentives to retain highly productive faculty who are recruited elsewhere.
- To identify those factors related to retention the associate dean for faculty affairs will gather information from individual conversations with faculty, department chairs, deans, and from exit interviews with departing faculty.

4.2 Faculty Policies and Procedures. The school shall have well-defined policies and procedures to recruit, appoint and promote qualified faculty, to evaluate competence and performance of faculty, and to support the professional development and advancement of faculty.

4.2.a A faculty handbook or other written document that outlines faculty rules and regulations.

Rules and regulations regarding faculty employment are found in the USC Faculty Manual, which includes information about tenure and promotion and the university's affirmative action policy. Recruitment and hiring policies for faculty are also found in the USC Policies and Procedures Manual (e.g., ACAF 1.00: Recruitment and appointment of tenured, tenure-track, and non-tenure-track faculty; ACAF 1.01: Recruitment and appointment of academic administrators; ACAF 1.16 Non-tenure-track faculty). Policies in section EOP of the USC Policies and Procedures Manual cover equal opportunity, affirmative action, complain processing, sexual harassment, discriminatory harassment, and non-discrimination.

School procedures and criteria are created and maintained to be consistent with university policy. Procedures and criteria for faculty appointment and tenure and promotion, as well as faculty review procedures (annual review, third-year and post-tenure review, and peer review of teaching are available on the school's faculty affairs web page and in the ERF. Each new faculty member is provided with an orientation to the faculty policies and procedures as well as the school and university infrastructure for research activities. The third-year review for tenure-track faculty was implemented in the fall 1995 and the post-tenure review was implemented in fall 1999, following university policy.

The Arnold School has developed similar review procedures and criteria for research and clinical faculty. The criteria and procedures require similar documentation to that for tenure-track faculty, but the procedures acknowledge there are unique profiles of responsibilities that must be met by non-tenure-track faculty. The Arnold School is a campus leader with regard to developing policies and procedures for the review and promotion of non-tenure-track faculty. The school is proactive in addressing issues such as multi-year rather than annual term appointments, voting rights, and rights to direct student research and practice.

Faculty recruitment is discussed with regard to affirmative action in the USC Policies and Procedures Manual (ACAF 1.00: Recruitment and appointment of tenured, tenure-track, and non-tenure-track faculty; ACAF 1.01: Recruitment and appointment of academic administrators; and EOP 1.00: Equal opportunity and affirmative action). In a document entitled Faculty Search Policy, the school provides guidelines, a summary of university policies, and a checklist for use by school faculty search committees. In addition to tenure-track faculty, the school has numerous part-time, adjunct, clinical, research faculty, instructors, and lecturers. The policies related to such appointments are found in the USC Policies and Procedures Manual (ACAF 1.06: Academic titles for faculty and unclassified academic staff positions; ACAF 1.16: Non-tenure-track faculty) and on the school's faculty affairs web page.

The USC Faculty Manual and the USC Policies and Procedures Manual are available to all faculty on the university website and, in the case of any contradiction, supersede any stated or implied policy of the Arnold School.

As part of recruiting the most qualified faculty candidates, the Arnold School and academic departments commit to new faculty member start-up costs. Start-up commitment allowable expenses typically include summer salary (if not otherwise covered by receipt of extramural funding), support of graduate assistants and/or research staff, equipment, supplies, travel, and memberships. The university also has a

set of family-friendly policies, including support for spousal hires, one-year extension of the tenure clock for birth or adoption of a child or other extenuating circumstances, and modified duty allowances.

4.2.b Description of provisions for faculty development, including identification of support for faculty categories other than regular full-time appointments.

A Faculty Development Workgroup, with representation from all six departments in the Arnold School, was convened in 2015 and continues to meet to focus on faculty development. In spring 2016, the committee conducted a faculty development survey to assess interest in faculty development activities intended to enhance professional growth and development among the faculty (see copy of survey and report in ERF). Results are being used to make improvements in the school's approach to faculty development, such as enhancing current offerings, adding new offerings, and ensuring better connection to University resources to support faculty development. In addition, survey results revealed a need to focus on mid-career faculty in addition to newly hired and tenure-track faculty.

Current provisions for faculty development include the following:

- The school's Office of Faculty Affairs and Curriculum and the Office of Research coordinate about three faculty development activities each semester, including the new faculty orientation, a meeting of mentors and mentees, and workshops discussing the tenure and promotion procedures, the annual review process for all faculty, various research topics and other topics of interest. The new faculty orientation is open to all faculty and provides an overview of school organization and general procedures as well as information about faculty mentoring and other professional development opportunities at the school and campus level.
- Every new tenure-track faculty member is assigned at least one faculty mentor who is of more senior rank. Often the faculty member is assigned a team of mentors.
- Funds for attending professional conferences, meetings, and workshops are available through department resources and incentive programs sponsored by the dean's office.

The university also offers resources for faculty development:

- The Center for Teaching Excellence (CTE), with sponsorship of the provost's office, offers monthly teaching seminars with presentations by recent teaching award recipients or external experts. The CTE also offers and administers small internal grants for instructional development, for example, to incorporate service learning into a course. Many teaching-related resources are available on the CTE website, and the Center includes instructional design professionals to support course development, especially for distributed learning. The CTE also conducts a new faculty orientation in August before the fall semester begins, and all new Arnold School faculty are encouraged to attend.
- A new initiative of the Office of the Provost is the New Faculty Academy, run by the CTE. It is designed to launch the careers of new faculty on a positive and productive trajectory by providing a series of professional development, networking and mentoring activities during their first year at USC. All first-year full-time faculty members on the USC Columbia campus are eligible to participate.
- The Office of the Provost has two leadership development programs, offered through the Division of Human Resources. The Pipeline for Academy Leaders Fellowship Program is a year-long, invitation-only program for emerging campus leaders who are ready to take their already considerable talents to the next level while addressing USC's capacity-building needs. The SEC Academic Leadership Development Program Fellows are generally tenured faculty with demonstrated leadership abilities, have had administrative assignments and have held positions

requiring leadership skills. The university's Division of Human Resources offers a wide variety of additional training and professional development programs that are open to faculty and staff.

- The university's Office of Research offers the Gamecock Research Administrators Network Training (GRANT) for faculty and staff. Faculty workshops discuss the latest procedures and regulations of the National Science Foundation and National Institutes of Health, basic proposal writing skills, and other pertinent topics.
- The university recently purchased an institutional membership to the National Center for Faculty Development and Diversity, a nationally recognized organization that provides online career development and mentoring resources for faculty. They deliver a variety of web-based services including webinars, workshops, and discussion forums that cover topics such as grant writing, time management, and conflict resolution. Additionally, the organization provides faculty, post docs, and graduate students with opportunities to broaden their external mentoring and professional networks.
- Sabbatical leave is available to tenured associate professors or tenured professors after each six year period of full-time service. The university administration grants approval contingent on workloads, budgets, and the ability to provide course coverage. During the leave period, the university provides half pay for a full academic year, or full pay for a semester. Since spring 2013, nine faculty have completed semester-long sabbaticals. Leaves of absence can be approved for specialized study, research, and scholarly writing activities at other institutions.

4.2.c Description of formal procedures for evaluating faculty competence and performance.

Each spring, all faculty members, regardless of rank, submit annual review documents summarizing their accomplishments in teaching, research, and service for the previous calendar year. A copy of the annual review template is included in the ERF. Department chairs review these reports and evaluate the extent to which each faculty member has addressed the appropriate criteria for the faculty member's track. Evaluative metrics for non-tenure-track faculty vary by department depending on and the context of the particular department's needs and expectations. Strengths, weaknesses, and goals for the next year are discussed with the faculty members by their chairs. These evaluations are used by the school administration for retention and merit raise decisions.

The annual reports of tenure-track faculty and tenured faculty under the rank of professor are also reviewed annually by the school Tenure and Promotion Committee. The committee sends letters assessing progress toward tenure and/or promotion to each reviewed faculty. In addition to annual reviews, the school Tenure and Promotion Committee reviews untenured faculty after their first two years at the university (third year review), and tenured faculty every six years (post-tenure review). Department chairs review annual review documents for research and clinical faculty, in consultation with a center/institute director if appropriate for a specific appointment.

The most critical review of faculty performance is the assessment of faculty tenure and promotion applications. The school is the tenure and promotion unit and has a single set of criteria for evaluating candidates for tenure and promotion. Untenured assistant professors have a seven-year probationary period, while untenured associate professors have a six-year probationary period. Faculty can choose to apply for tenure early and can apply for an extension of the probationary period based on the campus family-friendly policies. An applicant for tenure, promotion, or both must submit a file containing required evidence of performance in teaching, research, and service, plus supporting materials. Materials related to teaching performance include student and peer teaching evaluations, and summaries of courses taught and students advised. Evidence of research and scholarship includes a compilation of peer-reviewed papers, other publications, research grant production, and presentations

at scientific meetings. Also, at least five external reviews of the candidate's research are obtained from well-known scholars in the candidate's field. In addition, the file includes evidence of service to the school, the university, the community, and the candidate's profession.

Initially, the file is reviewed by the school Tenure and Promotion Committee, which consists of all tenured faculty members in the school. Applications for tenure alone are reviewed by committee members at or above the current faculty member's rank, and applications for promotion are reviewed by committee members at or above the rank sought. Per Arnold School criteria, tenure at or promotion to associate professor requires that the candidate be rated excellent in scholarship, and at least good in teaching and service. Tenure at or promotion to professor requires that the candidate be rated excellent in scholarship, excellent in either teaching or service, and good or excellent in the other category. All committee members are required to vote by written ballot with a written justification of their vote; these ballots and justifications are added to the file. The candidate's department chair either votes as a faculty member or writes a letter of evaluation to the file. All written materials are forwarded to the dean, and the dean must write a letter of evaluation for inclusion in the file. The entire file is forwarded to the provost's office.

Beyond the school, tenure and promotion review procedures are described in the USC Faculty Manual and the Guide to Criteria and Procedures. The Office of the Provost sets two annual tenure and promotion cycles each year. The regular cycle (September submission for May decision) is intended for untenured faculty with August hire dates; the mid-year cycle (February submission for December decision) is intended for faculty with January hire dates and for promotion of tenured faculty to professor (regardless of hire date). The application is reviewed by the provost; the USC Committee on Tenure and Promotion, composed of 24 tenured full professors representing various academic units on the USC Columbia campus; and then the university president. The president may then recommend the candidate for approval to the Board of Trustees. If the application is not approved at any stage of the process, appeals procedures are available to the candidate.

4.2.d Description of the processes used for student course evaluation and evaluation of instructional effectiveness.

At the conclusion of each semester, the director of evaluation and academic assessment oversees a student evaluation of all courses and instructors. The purpose of these assessments is to obtain feedback from students regarding specific criteria. Course evaluation is required by the university under policy ACAF 1.04: Student evaluation of courses. The course evaluation survey (see ERF) is an online assessment of the instructor's methods, availability, effectiveness, interactions with students, grading, and course materials. The questionnaire consists of 31 questions with Likert scale responses (1=strongly disagree to 5=strongly agree), plus questions regarding respondent's grade expectation, department, and school/college, and five additional questions allowing for open-ended written response or comments. Thirteen of these questions are required by university policy ACAF 1.04. The evaluations are administered through the university's Class Climate Online Evaluation/Survey System. Students are notified that surveys are available through email and Blackboard. Reminders are sent repeatedly to those who do not respond, until the deadline date is reached. Faculty are encouraged to explain the value of the surveys and to promote survey completion. Once the surveys are complete, quantitative data are summarized, and returned to the departments and the course instructor along with the student comments. Course instructors are expected to utilize the summaries to modify and improve the content of their course(s). The data are also used by the departments and by the school's Tenure and Promotion Committee. Summaries for fall 2015, spring 2016, summer 2016, and fall 2016 are included in the ERF.

In addition, each tenure-track faculty instructor's classroom teaching is evaluated by a peer at least once each year, as described in Arnold School Faculty Policies and Procedures; tenured faculty are reviewed every two to three years, and non-tenure-track faculty instructors are reviewed periodically or by request of the faculty or department chair. In addition, all teaching materials (classroom evaluations, advisement, student research supervision, etc.) submitted with a tenure and promotion application are assessed by a peer reviewer chosen by the chair of the school's Tenure and Promotion Committee and the associate dean for faculty affairs and curriculum in consultation with the candidate. The reviewer writes a thorough evaluation of the candidate's teaching effectiveness including comparative data for student course evaluations, which is added to the candidate's file. Thus, both student and peer evaluations play important roles in faculty tenure and promotion reviews.

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

This criterion is met.

Strengths:

- The school is a campus leader for developing fair and objective policies and procedures for clinical and research faculty.
- Faculty review criteria are viewed as among the most rigorous on campus.
- The university offers effective professional development training in modern pedagogy for all faculty through the Center for Teaching Excellence, New Faculty Academy, etc.

Weaknesses:

- With tenure and promotion processes at the school level, it can be challenging to apply criteria uniformly across disparate disciplines and across time.
- The school provides formal training for faculty in grantsmanship but does little in-house training in pedagogy, deferring to central campus resources.

Plans:

- There is a renewed focus on providing and promoting faculty development opportunities at the school and campus levels. To improve faculty performance in research and teaching, the Arnold School plans to conduct biannual "boot camps" run by accomplished teachers and researchers in the school.
- The associate dean for faculty affairs will be working with the faculty to enhance the annual review policies and procedures to better distinguished criteria across the career tracks, to apply rigor consistently across departments and review stages, and to communicate the assessment results more effectively to the faculty members.

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

4.3.a Description of the school's recruitment policies and procedures. If these differ by degree (eg, bachelor's vs. graduate degrees), a description should be provided for each.

Undergraduate recruitment. The University Office of Admissions oversees and provides all student recruitment and matriculation at the undergraduate level. However, faculty and advisors participate in campus activities for both prospective and current students and respond to individual requests for information or presentations. USC's Admissions Office coordinates 5-6 on-campus recruitment events each academic year for high school students, admitted but not committed students, and admitted scholars/honors students. Some of the events run for two days and faculty advisors from the school's undergraduate programs participate. For three of the events, current undergraduate students participate in a panel discussion to answer questions and interact with admitted students and their families. Additionally, numerous on-campus recruitment events are hosted during the academic year by Student Affairs, Student Life, Admissions, and the Office of the Provost, such as "change of major" fairs, USC Connect fair, Gamecock Gateway (bridge program to 4-year degree) majors fair, and Trio/Opportunity Scholars fair.

Graduate recruitment. Recruitment activities for most of the graduate programs within the Arnold School are coordinated through the Office of Graduate Student Services (OGSS). Graduate recruitment takes place on international, national, regional, and state levels through a variety of ongoing activities, including regular recruitment at scientific and professional meetings, college graduate school/career fairs, email, chat-room, Skype correspondence, and the Internet via school webpage and social media outlets.

Most colleges and universities host graduate school recruitment fairs in the fall semester (late September through early November). Each year, representatives from the OGSS participate in recruiting trips to universities located in Georgia, North Carolina, and South Carolina and attend the national American Public Health Association (APHA) conference. OGSS also attends the Association of Schools and Programs of Public Health (ASPPH) "This is Public Health" recruitment events held in conjunction with ASPPH/SOPHAS meetings (SOPHAS is the Schools of Public Health Application Service). In recent years, the number of in-person recruitment activities has decreased due to the discontinuation of graduate school fairs at many colleges and universities; the increase of electronic communication with potential applicants; and the communication of admissions information and forms via websites.

In fall 2015, the school hosted a group of juniors and seniors from a local Historically Black College/University (HBCU) and provided an overview of our graduate programs and tours of research labs. OGSS and the academic departments are working with the new associate dean of diversity, equity, and inclusion to develop strategies to improve our recruiting among qualified underrepresented minority students.

To supplement attendance at in-person recruitment fairs, OGSS has an annual contract with CareerEco, a company that coordinates online chat rooms to serve as a virtual graduate school or career fair. The contract includes four SOPHAS fairs (July, September, November, and January) in which each participating school or program has a chat room on the same day(s). The OGSS staff manages an admissions chat room and each SOPHAS participating program in the Arnold School is asked to host a one-hour chat session in a separate chat room. In addition, OGSS purchased the "unlimited chat"

feature which allows all of our programs to host additional virtual sessions throughout the year. Our PHYT program hosts regular virtual information sessions (with live-feed presentations) throughout the year, and HPEB and EPID hosted virtual advisement/information sessions for new students in July 2015 and 2016. We hope to expand the use of chat rooms for recruitment and information sessions for all programs.

The OGSS coordinates with The Graduate School regarding attendance at graduate school fairs to minimize duplication of effort. The Graduate School's associate director of recruitment and special events, who attends graduate school fairs to promote all programs at the university, works with all schools to improve their recruiting efforts. He also enters information from every student who expresses an interest in USC and a particular department into a database. OGSS and our program directors have access to these data and provide follow-up with any prospective students expressing interest in one of our programs.

Academic department faculty and staff members also represent their programs at discipline-specific recruiting events and professional meetings. Academic institutions throughout the state and region often invite faculty to present seminars; these presentations are effective recruiting activities. The core public health disciplines (ENHS, EPID, BIOS, HPEB, and HSPM) actively participate in the SOPHAS Virtual Fairs. All program directors and support staff have direct interaction with potential students by way of emails, phone calls, campus visits and tours, and Skype. In addition, EXSC hosts prospective student open-house events. EPID and EXSC benefit from recruiting efforts by a special interdisciplinary research training grant program, the University of South Carolina Behavioral-Biomedical Interface Program (BBIP). HPEB collaborates with Academic Partnerships, Inc. to advise and contribute to their marketing and recruiting efforts in South Carolina for the Professional Online MPH program.

The school has also benefited from participating in SOPHAS, the online centralized application service for accredited schools and programs of public health. SOPHAS has made it easier for students to learn about the Arnold School, since it provides a search engine of all schools of public health and the degrees they offer. Due to the broad marketing and outreach of this service, we presume the school has received applications from students who would otherwise not have considered the university. Similar benefits are derived from participation in other program specific centralized application services, such as CSDCAS (Communication Sciences and Disorders Centralized Application Service) and PTCAS (Physical Therapist Centralized Application Service).

The Arnold School offers a number of financial incentives for prospective graduate students, including public health traineeships and fellowships, including the Arnold Fellowships (see list in ERF). Many students also receive assistantships, which include a stipend and automatically qualify students for in-state tuition, reducing tuition cost by approximately 50 percent. Most departments also provide a tuition supplement to offset some of the remaining expenses. The Graduate School provides a variety of fellowships ranging from a one-time award of $1000 to a four-year Presidential award of $8000 per year. These awards typically require a departmental match, which can be any combination of additional fellowship, graduate assistantship, and/or tuition supplement. The school's students are eligible for a variety of national fellowships, and all graduate directors are encouraged to inform students of such opportunities.

Recruitment materials and student handbooks are available in the ERF.

4.3.b Statement of admissions policies and procedures. If these differ by degree (eg, bachelor's vs. graduate degrees), a description should be provided for each.

Undergraduate admissions. Applications to the undergraduate programs are processed centrally through USC's Office of Undergraduate Admissions ("Admissions"), which handles the entire admissions process. Specific admissions criteria by student type (e.g., freshmen, transfer, military, bridge program, and international students) can be found at the office's webpage.

Admissions mails acceptance letters to students with the associate dean of undergraduate student affairs contact information included. Students and parents/family members are encouraged to call our undergraduate student affairs if they desire additional information and/or have questions. The associate dean receives a list of accepted students (via secure intranet) from Admissions each term for the following term's enrollment. The list is continually updated by Admissions as students submit their enrollment deposits. Students are required to register for new student orientation during the summer (or fall) prior to their enrollment. Undergraduate student affairs conducts new student orientation (for freshmen and transfer students) three times per year: summer, fall and spring (see section 4.4.a).

Graduate admissions. All applications to various graduate programs are submitted electronically through one of the portals shown in table 4.3.b. Applications are then processed by the OGSS for the appropriate department, with the exception of COMD and PHYT which process applications internally. OGSS communicates with applicants about any missing information, compiles complete applications, and forwards electronic copies to the departments' graduate directors through the school's graduate application system (PHGRAD). Staff in COMD and PHYT follow similar application procedures as those used by OGSS, and they track students through PHGRAD.

Table 4.3.b Areas of study, degrees, and application portals used

Area of Study	Degree	Application
Advanced Athletic Training	MS	USC Graduate School
Biostatistics	MPH, MSPH, PhD, DrPH	SOPHAS
Communication Sciences & Disorders	MSP, MCD (Distance Format)	CSDCAS
	PhD	USC Graduate School
Environmental Health Sciences	MPH, MS, PhD	SOPHAS
Epidemiology/Environmental Health Sciences	dual PhD	SOPHAS
Epidemiology	MPH, MSPH, PhD	SOPHAS
Exercise Science	MS, PhD	USC Graduate School
General Public Health	MPH	SOPHAS
	MD/MPH, Preventive Medicine/MPH, PharmD/MPH	USC Graduate School
Health Promotion, Education, and Behavior	MPH, MSPH, DrPH, PhD	SOPHAS
	MPH Professional Online Program, MSW/MPH	USC Graduate School
Health Services Policy and Management	MPH, MPH-Distance Format, MHA, DrPH, PhD	SOPHAS
	MSW/MPH, JD/MHA	USC Graduate School
Physical Activity and Public Health	MPH	SOPHAS
Physical Therapy	DPT	PTCAS

Completed applications consist of: appropriate standardized test scores (typically the GRE, but in some cases the Graduate Management Admissions Test (GMAT) or Medical College Admissions Test (MCAT) will be accepted), a resume or curriculum vitae, statement of intentions, at least two letters of recommendation (three preferred for most master's and all doctoral programs), and an official transcript from all colleges attended. International applicants must also submit scores from the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS), and

those who received degree(s) from institutions outside of the United States must have their transcripts evaluated through the World Education Services – International Academic Credential Evaluation (WES). Detailed information about admissions procedures is outlined on the school's website. This site contains a table listing each degree offered by the Arnold School and links to the correct admissions procedures and requirements. (Note: COMD and PHYT also have supplementary applications.)

Each of the school's six departments has at least one faculty member who serves as graduate director; several have two or three because of distinct degree programs. A list of current graduate directors is found on the school's website and in the ERF. Each graduate director reviews the applications processed by OGSS and oversees their department's admissions review committee. While each department individually handles admissions for its majors, the process is essentially the same across the school. Based on grades, test scores, letters of recommendation, relevant experience, and the applicant's personal statement, the program's admissions committee determines the acceptability of each applicant's file. In some departments the committee's recommendations are voted on by the full department faculty. Due to the large number of applications received each year and program accreditation requirements, several degree programs have enrollment caps (e.g., DPT, MSP, MCD, and MHA). Most programs do not have an absolute minimum requirement for grades or GRE scores beyond what is recommended by the USC Graduate School. Rather, an applicant's overall rating is a composite consideration of the multiple aforementioned metrics. Accept/decline recommendations for each applicant are entered in a university-wide Admissions Action Recommendation form (AAR) in Graduate Management System via the USC Graduate School web portal. Upon review of the AAR, USC Graduate School staff notifies the applicant of their official decision by emailing a letter of offer or rejection. OGSS staff receives a copy of the AAR and letter via Banner Document Management System, records the admissions status and uploads a PDF copy of the letter to PHGRAD.

Applicants who are not native English speakers and who have not received a degree from an institution in the United States are required to submit an official TOEFL or IELTS score. The university's minimum score on the TOEFL is 570 paper-based, 230 computer-based, and 80 Internet-based; the minimum for the IELTS International Academic Course Type 2 exam is 6.5. In addition, these students must complete a diagnostic test in English upon arriving on campus. Students must receive an acceptable score on this diagnostic test before being allowed to work as teaching or instructional assistants in any class. The university's English Program for Internationals is a nationally-recognized program that provides students who have English language deficiencies with an opportunity for further proficiency development in reading, writing, and speaking English.

4.3.c Examples of recruitment materials and other publications and advertising that describe, at a minimum, academic calendars, grading and the academic offerings of the school. If a school does not have a printed bulletin/catalog, it must provide a printed web page that indicates the degree requirements as the official representation of the school. In addition, references to website addresses may be included.

The university's bulletins are the official documents of record concerning academic programs and regulations. The bulletin consists of three sections – the undergraduate studies bulletin, the graduate studies bulletin, and the policies and regulations bulletin. The undergraduate and graduate studies bulletins provide information about program requirements and programs of study. The policies and regulations bulletin contains information about academic standards, grading, records, graduation, etc. that are common across all undergraduate and/or graduate programs.

In addition to the bulletin, detailed information for each program is found on the school's website under the study link and in student handbooks. Links to the handbooks are found on the individual program

study pages. In addition to the detailed information available on the website, the OGSS uses printed brochures when going on in-person recruiting trips. This includes a general brochure that briefly describes all Arnold School graduate programs and individual, program-specific fact sheets. The brochures are available in PDF format and may be emailed to prospective students. Copies of the handbooks and brochures are included in the ERF.

The official university calendar, schedule for examinations, and a variety of other information are available through the registrar's website. The master schedule of courses for each semester is available through Self Service Carolina and the schedule of tuition and fees is available at the bursar's website. The Graduate School maintains an extensive library of electronic forms for various curricular and student-related approvals.

4.3.d Quantitative information on the number of applicants, acceptances and enrollment, by concentration, for each degree, for each of the last three years. Data must be presented in table format. See CEPH Data Template 4.3.1.

Table 4.3.d displays data on the number of students who applied, were accepted, and subsequently enrolled for the past three academic years. Undergraduate programs are listed first, following by public health programs, then allied health programs. Of particular note is the large increase in applications and new enrollments in the undergraduate programs. The school is also beginning to successfully recruit our undergraduate PUBH students into our graduate programs.

Table 4.3.d Applicants, acceptances, and new enrollments

Program	Status	2013-14	2014-15	2015-16
Undergraduate				
BA/BS PUBH	applied BA/BS*	367	469	504
	accepted BA/BS*	223	304	304
	enrolled BA	82	118	92
	enrolled BS	17	42	52
BS EXSC	applied	960	1059	1159
	accepted	631	676	708
	enrolled	316	358	294
Public Health Master's				
MPH BIOS	applied	10	9	8
	accepted	1	5	3
	enrolled	0	0	0
MPH ENHS	applied	20	12	11
	accepted	13	8	7
	enrolled	3	1	3
MPH EPID	applied	58	54	35
	accepted	17	23	6
	enrolled	0	4	2
MPH General	applied	25	22	30
	accepted	4	5	6
	enrolled	1	2	3
MPH HPEB	applied	130	87	91
	accepted	97	61	56
	enrolled	24	17	15

Program	Status	2013-14	2014-15	2015-16
MPH HPEB Distance	applied	53	55	48
	accepted	44	24	20
	enrolled	12	21	14
MPH HSPM	applied	71	42	40
	accepted	61	38	27
	enrolled	23	24	11
MPH HSPM Distance	applied	18	9	2
	accepted	17	9	1
	enrolled	9	6	0
MPH PAPH	applied	28	20	19
	accepted	21	13	19
	enrolled	9	7	9
MSPH BIOS	applied	22	25	17
	accepted	17	15	9
	enrolled	4	3	2
MSPH EPID	applied	32	37	31
	accepted	24	27	24
	enrolled	9	6	11
MSPH HPEB	applied	5	9	8
	accepted	1	3	4
	enrolled	0	1	1
MS ENHS	applied	4	5	6
	accepted	4	5	4
	enrolled	2	1	3
Public Health Doctoral				
DrPH BIOS	applied	2	6	3
	accepted	0	1	2
	enrolled	0	0	0
DrPH HPEB	applied	15	13	11
	accepted	1	3	3
	enrolled	0	3	3
DrPH HSPM	applied	7	10	9
	accepted	4	5	3
	enrolled	3	2	2
PhD BIOS	applied	26	23	23
	accepted	12	11	11
	enrolled	3	3	3
PhD ENHS	applied	17	16	17
	accepted	11	12	11
	enrolled	5	8	5
PhD EPID	applied	31	49	50
	accepted	14	15	14
	enrolled	8	7	6
PhD HPEB	applied	22	38	18
	accepted	7	16	7
	enrolled	3	11	4

Program	Status	2013-14	2014-15	2015-16
PhD HSPM	applied	33	32	32
	accepted	23	19	17
	enrolled	9	7	9
Joint Public Health Degrees				
MD/MPH General	applied	1	0	1
	accepted	1	0	1
	enrolled	1	0	1
MSW/MPH HPEB	applied	3	15	5
	accepted	3	6	2
	enrolled	2	5	1
MSW/MPH HSPM	applied	10	4	2
	accepted	6	3	1
	enrolled	3	3	1
PharmD/MPH General	applied	4	9	1
	accepted	4	9	1
	enrolled	0	7	1
PhD EPID/ENHS	applied	5	2	2
	accepted	1	1	0
	enrolled	1	0	0
Allied Health Master's				
MCD COMD	applied	94	74	88
	accepted	50	47	50
	enrolled	37	34	28
MSP COMD	applied	231	238	346
	accepted	74	71	79
	enrolled	38	28	38
MS EXSC	applied	39	51	50
	accepted	21	26	28
	enrolled	15	8	11
MHA HSPM	applied	64	80	97
	accepted	59	54	53
	enrolled	21	21	17
Allied Health Doctoral				
PhD COMD	applied	5	4	4
	accepted	3	3	4
	enrolled	2	1	4
PhD EXSC	applied	16	19	28
	accepted	10	7	14
	enrolled	9	4	10
DPT PHYT	applied	231	275	195
	accepted	52	35	63
	enrolled	18	18	18
Joint Allied Health Degrees				
JD/MHA	applied	0	0	2
	accepted	0	0	1
	enrolled	0	0	1

[*] *undergraduate PUBH application and acceptance counts cannot be separated by degree*

In the physical therapy program, the number of applications decreased in 2015-16 because more and more DPT programs are using PTCAS, so fewer were applying outside that system to individual programs. When the program switched to PTCAS in 2016-2017, it had 700 applicants, accepted 62, and enrolled 22. This program is in the process of increasing its enrollment cap from 18 to 30 by 2018.

The BS in athletic training and MS in advanced athletic training are not included in table 4.3.d because they were in the College of Education until fall 2016.

In summer 2016, The Graduate School created a recruitment steering committee, which is composed of five faculty members across the university including one representative of the Arnold School. The charge of this committee is to help The Graduate School move towards best recruiting practices while striving to meet the needs and desires of individual academic programs and departments. During the first meeting, our representative learned that the university's biggest problem in graduate student recruitment in general is that too many accepted applicants fail to accept their offer. One of the reasons discussed was the lack of funding.

4.3.e Quantitative information on the number of students enrolled in each specialty area identified in the instructional matrix, including headcounts of full- and part-time students and a full-time- equivalent conversion, by concentration, for each degree, for each of the last three years. Non-degree students, such as those enrolled in continuing education or certificate programs, should not be included. Explain any important trends or patterns, including a persistent absence of students in any degree or specialization. Data must be presented in table format. See CEPH Data Template 4.3.2.

Fall enrollment data for the past three years are shown in table 4.3.e. Overall, the school is experiencing continued growth in the undergraduate programs and steady enrollment in the graduate programs. A few programs, like the BIOS and EPID MPH programs and the DrPH programs. Although the dual degree programs have small enrollments, they are managed with the home department's MPH program. For example, the general MPH program serves students in the PharmD/MPH and MD/MPH programs.

Table 4.3.e Student enrollment data

	Fall 2014		Fall 2015		Fall 2016	
Degree	**HC**	**FTE**	**HC**	**FTE**	**HC**	**FTE**
Undergraduate Programs						
BA PUBH	384	381.8	425	420.0	454	448.7
BS PUBH	158	155.0	226	224.8	249	247.6
BS EXSC	1207	1187.8	1146	1137.8	1118	1108.9
BS Athletic Training*					201	199.3
Public Health Master's						
MPH BIOS	0	0.0	0	0.0	0	0.0
MPH ENHS	4	4.0	4	4.0	6	5.7
MPH EPID	6	3.1	2	1.4	4	2.7
MPH General	4	2.3	7	7.0	7	5.2
MPH HPEB	42	39.4	28	25.6	29	27.7
MPH HPEB Distance	21	16.3	37	30.0	40	26.7
MPH HSPM	22	20.3	26	24.4	16	14.0
MPH HSPM Distance	13	10.3	7	5.0	5	2.7
MPH PAPH	13	12.7	12	12.0	15	14.7
MSPH BIOS	9	7.6	10	7.2	5	3.8
MS ENHS	3	1.2	4	3.1	6	4.8
MSPH EPID	22	14.8	22	18.0	25	22.0

	Fall 2014		Fall 2015		Fall 2016	
Degree	**HC**	**FTE**	**HC**	**FTE**	**HC**	**FTE**
MSPH HPEB	1	1.0	2	2.0	2	1.7
Public Health Doctoral						
DrPH BIOS	1	0.7	1	0.7	0	0
DrPH HPEB	12	8.6	12	7.6	3	1.44
DrPH HSPM	9	5.2	7	3.9	5	2.3
PhD BIOS	12	8.2	12	7.2	12	7.0
PhD ENHS	21	17.3	25	16.4	34	22.6
PhD EPID	39	23.3	32	19.7	31	20.8
PhD HPEB	38	25.1	36	18.9	43	29.0
PhD HSPM	37	23.3	42	26.1	51	31.3
Joint Public Health Degrees						
MD/MPH General	1	1.0	1	1.0	1	1.0
MSW/MPH HPEB	8	6.8	5	5.0	6	6.0
MSW/MPH HSPM	7	7.0	7	7.0	5	5.0
PharmD/MPH General	11	8.3	15	13.7	11	9.7
PhD EPID/ENHS	1	0.8	1	0.7	1	1.0
Allied Health Master's						
MCD COMD	109	91.3	111	85.9	104	73.8
MSP COMD	69	69.0	66	66.0	67	66.8
MS Advanced Athletic Training*					43	43.0
MS EXSC	25	21.1	19	15.4	19	16.8
MHA HSPM	55	51.0	47	44.7	34	33.1
Allied Health Doctoral						
PhD COMD	7	4.8	6	4.4	5	3.4
PhD EXSC	43	22.7	37	18.3	41	23.2
DPT PHYT	68	67.0	71	67.9	75	69.9
Joint Allied Health Degrees						
JD/MHA HSPM	1	1.0	0	0.0	2	2.0
Total	**2483**	**2321.3**	**2511**	**2352.8**	**2785**	**2621.2**

* *The BS and MS in ATEP moved into the Arnold School beginning AY2016-17*

4.3.f Identification of measurable objectives by which the school may evaluate its success in enrolling a qualified student body, along with data regarding the performance of the school against those measures for each of the last three years. See CEPH Outcome Measures Template.

The Arnold School is proud of the quality of the student it enrolls at the undergraduate and graduate levels, as shown in table 4.3.f.

Table 4.3.f Outcome measures for a qualified student body

Outcome Measure	Target	AY 2013-14 Fall 14	AY 2014-15 Fall 15	AY 2015-16 Fall 16
Undergraduate SAT scores	1225 by AY2019-20	1180	1177	1174
Master's student admissions data:				
Average undergraduate GPA	≥ 3.3	3.4	3.4	3.4
Average GRE-verbal	≥ 60th percentile by fall 2020	153.3 (61st percentile)	152.6 (58th percentile)	153.1 (60th percentile)

Outcome Measure	Target	AY 2013-14 Fall 14	AY 2014-15 Fall 15	AY 2015-16 Fall 16
Average GRE-quantitative	≥ 50th percentile by fall 2020	152.1 (47th percentile)	152.4 (48th percentile)	151.8 (46th percentile)
Doctoral student admissions data:				
Average undergraduate GPA	≥ 3.3	3.3	3.4	3.3
Average graduate GPA	≥ 3.5	3.8	3.7	3.7
Average GRE-verbal	≥ 65th percentile by fall 2020	152.7 (59th percentile)	153.5 (62nd percentile)	154.4 (66th percentile)
Average GRE-quantitative	≥ 55th percentile by fall 2020	155.2 (60th percentile)	154.1 (55th percentile)	155.4 (61st percentile)

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

This criterion is met.

Strengths:

- The school operates under robust policies and procedures for student recruitment and retention that result in a strong field of qualified individuals across all departments.
- The Arnold School has representation on The Graduate School's steering committee aimed at improving recruitment across campus based on best practices.

Weaknesses:

- Increased undergraduate student enrollment numbers have created a need for more staff to support student services and instruction. This is discussed further in criterion 1.7 and 4.4.
- Several of our degree programs currently have small enrollments. Possible reasons include reduced demand for these degrees and a lack of student funding.
- Over time, the school has seen a drop in demand for the DrPH programs. A significant number of DrPH students transfer from the DrPH to the PhD early in their program of study. The most common reasons provided for this change include relevance of the PhD for the student's intended career path and relative "prestige" of the degree titles.

Plans:

- The school will continue to focus on improving electronic communications with potential applicants by regularly ensuring that website information is up-to-date, providing timely responses to emails from applicants (within 24-48 hr. presently), and hosting virtual information sessions quarterly.
- The school has begun a process of reviewing its public health programs in light of the 2016 CEPH criteria. In the process of this review, program directors will determine which programs should be discontinued and/or revised.

4.4 Advising and Career Counseling. There shall be available a clearly explained and accessible academic advising system for students, as well as readily available career and placement advice.

4.4.a Description of the school's advising services for students in all degree programs, including sample materials such as student handbooks. Include an explanation of how faculty are selected for and oriented to their advising responsibilities.

Undergraduate student orientation and advising. Orientation for undergraduate students is coordinated by the university Office of Admissions, but Arnold School faculty and staff members participate in sessions focusing on programs and specific academic procedures within the Arnold School. The university holds 2-day orientation/advising sessions for incoming freshmen and their parents/family members several times during the year, depending on when students choose to enroll at the university. Summer is the most active time for freshmen orientation and is spread over several weeks. Additional orientations are scheduled in November and January for students entering in spring and summer respectively. During the new student orientation process, students are advised for their first semester. Each semester after this first advisement, students meet regularly with undergraduate faculty and advisors regarding their registration process.

In addition, students may transfer from other colleges and departments within the university. In these cases, individual advisement sessions are scheduled and completed with a focus on the upcoming semester. Once a student declares public health or exercise science as a major, academic advisors work with the student to ensure that s/he satisfies all academic program requirements and has access to university services as needed.

The Arnold School is moving to a hybrid model of undergraduate academic advising which includes full-time professional advising staff and faculty advisors. Faculty selected for undergraduate advising are master- and doctoral-level in higher education, public health and/or related fields. In addition to their advising responsibilities, faculty advisors also teach courses in their respective major degree programs. All newly hired undergraduate advisors (faculty and professional advising staff) spend a minimum of one month observing experienced advisors in their department (PUBH or EXSC) and learning the curriculum. In addition, USC's University Advising Center requires that all undergraduate advisors complete online modules developed around national best-practices. The advising center also offers an annual conference and monthly forums on selected advising topics.

As part of the new model, the school is using first year professional advisors, who are assigned to the same cohort of new "first year" students (i.e., freshmen) for three terms through their first sophomore semester. Typically this means they will advise in summer for the 1st fall semester, in fall for spring semester, and in spring for summer and/or fall semester. Students will then be assigned to an advisor who will work with them for the duration of their time at the school.

Undergraduate advisors in the Arnold School maintain wide availability to students. As the student advances, advisement increasingly focuses on the student's goals for career choice and, if required, further educational needs and planning. Generally, all undergraduate programs direct students to the published academic bulletin for information about the program and applicable university policies.

The University Advising Center has adopted the best practice recommendation for undergraduate advising at a ratio of 300 students per full-time advisor. The Arnold School is hiring staff to meet that ratio for professional advisors and 150 students per faculty advisor (who also teaches). Two new faculty advisors were hired in fall 2016 and three new staff positions have been advertised along with a replacement faculty advisor position. When these positions are filled, the school will have 10 faculty

advisors and 4 staff advisors (one of whom is hired by the University Advising Center and assigned to the Arnold School).

Graduate student orientation and advising. Since most of the school's graduate programs start in the fall, the initial advisement occurs in conjunction with the new student orientation held each August; although many students seek advice from their graduate director and/or faculty advisor prior to actual matriculation at USC. School-wide orientation for all new graduate students is held in August each year, prior to the beginning of the fall semester. Accepted students are notified about orientation via email and are referred to a page on the school's website for new students. This page contains detailed information about the university, the school, and a schedule of events for orientation. Departments provide formal and/or informal orientation sessions for students admitted to the school during the spring or summer semesters.

The August orientation is an all-day event consisting of two parts. The morning program is coordinated by OGSS with assistance from the Dean's Student Advisory Council. This session begins with a welcome message from the dean and an overview of expectations of new graduate students including guidelines for academic integrity, respect for diversity, and student safety. The remainder of the session familiarizes students with the university and school (e.g., parking, ID cards, library resources, fitness and wellness programs, student organizations, registration instructions, important dates, etc.) and gives them the opportunity to ask general questions. Afternoon breakout sessions are conducted by chairs and graduate directors of each academic department and include an introduction of their faculty and staff, an overview of departmental policies and procedures, and assistance completing advisement forms for students to register for their first semester of courses.

Since 2015, EPID and HPEB master's programs have utilized the CareerEco chat service to host a virtual advisement session for new students in July. This allows the OGSS to process registration approvals earlier in the summer, which decreases the number of students with registration holds or restrictions at the beginning of the fall semester. In addition to being notified and resolving holds earlier, students are able to use the chat to get to know each other prior to arriving on campus. Finalizing course schedules ahead of orientation also allows departments more time to discuss student handbooks and policies during the afternoon breakout sessions in August. The OGSS has encouraged other departments to host virtual advisement sessions prior to orientation.

Some programs have separate orientations prior to or following the school-wide orientation. For example, the advanced athletic training program has an intense 2.5 week orientation to prepare students not only to USC, the school, and the program, but also to the community where they are providing patient care in athletic settings. The allied health professional programs conduct group advising for the first year during their orientation sessions since the students go through the programs as a cohort, taking a pre-determined set of courses each semester, with few electives.

Each graduate student is assigned a faculty academic advisor with whom he or she typically works for the entire program of study. Efforts are made to assign students, especially doctoral students, to a faculty advisor with similar interests, although there is no requirement that students work with their academic advisors for their practicum or research project. Students meet with their academic advisors at least once each semester to plan their comprehensive program of study and course work for the following semester. Students are advised concerning appropriate courses, sequencing of courses, independent study topics, thesis or project/practicum topics, graduate assistantships, and any additional work appropriate for preparing the student to meet career objectives. Each department in the school has its own graduate student handbook, which contains policies, procedures, and academic requirements (included in the ERF). Detailed information about the school's programs and the university in general is available in the Graduate Studies Bulletin and on the Arnold School of Public

Health website. The graduate directors in each department/program provide oversight to the advising process and make information available to faculty to ensure our graduate students receive timely, quality advisement. The methods used vary by department, but include faculty meetings and training for new faculty.

The OGSS supports the advising process for most departments by processing advisement forms, removing advisement holds, and assigning special permissions for restricted courses online via the Registrar's portal – Self Service Carolina. OGSS staff assure that students do not sign up for courses without their advisors' or the instructors' consent and often assists students with resolving advisement holds. Once approval is processed, the staff member emails the student a copy of the advisement form with proper Course Registration Numbers listed. A copy is also loaded into the student's academic progression table in PHGrad. Students then use Self Service Carolina to register online. A laptop is available in the OGSS so staff may assist students with the registration process if needed. A few departments (e.g., EXSC and COMD) handle this approval process internally. The OGSS also assists departments with documenting student academic progression in PHGrad (e.g., program of study approval, qualifying and comprehensive exam completion, application for degree, and graduation) and reminding students of various submission deadlines.

Copies of orientation agendas and advising materials for undergraduate and graduate programs are included in the ERF.

4.4.b Description of the school's career counseling services for students in all degree programs. Include an explanation of efforts to tailor services to specific needs in the school's student population.

The University Career Center provides career counseling services and assistance to all degree-seeking students in the critical areas of resume writing, developing cover letters for job applications, and interviewing skills. They also offer online tip-sheets and videos about topics such as searching for a job, writing a resume, interviewing, and applying to graduate school. As an additional service, the Career Center gives students the option of maintaining a placement file to facilitate applications to multiple jobs. The center also has a dedicated career development coach who focuses on nursing and public health and an employer relationship manager who works the employers for the health professions. The undergraduate and graduate student services offices have worked closely with the Career Center to establish a job fair specifically for health sciences majors (i.e., public health, social work, pharmacy, and nursing). The first Health Sciences Career Fair, held in October 2014, was very well attended, and the Career Center has made this an annual event. Undergraduate and graduate/professional students in the health sciences are invited and attend this fair. The Career Center has also worked with individual departments speak to students in classes and workshops on topics such as resume and cover letter preparation, employability and professional behavior, medical terminology, perfecting an elevator speech, and effective interviewing.

Undergraduate and graduate students are apprised of various educational, professional, and service opportunities through bulletin boards, departmental student listservs, and personal contact with faculty. The school's practice and placement coordinator manages the MySPH Opportunity Manager, an online portal to search for and apply to available positions. Most postings in the Opportunity Manager are for practicum and internship placement, but employment opportunities are also included.

Career counseling is a critical component of the academic advising process for **undergraduate students**. Students are required to attend an individual advising session each semester to discuss degree progression, future goals, and other topics of interest to the student. Academic advising

overlaps with career counseling in several ways, whether the student is interested in attending graduate school post-graduation or heading straight into the workforce. For students who are interested in a career that requires additional education beyond the baccalaureate degree, prerequisite courses and other requirements such as clinical hours, internships, and relevant experience are discussed in the advising appointment. Similarly, for students who are interested in going into the workforce after graduation, advising appointments are an opportunity to discuss areas of interest in the field of public health and the types of career options available. Another key topic of discussion is the importance of beyond-the-classroom experiences and how to find such opportunities. Several professional development seminars are conducted each year for undergraduate students with topics such as applying to graduate school, interviewing, and starting a new job; sometimes baccalaureate alumni are invited to come back for a panel.

For **graduate students**, career counseling is provided primarily at the department level. This includes individual mentoring and advising by the student's academic advisor and/or thesis or dissertation chair, along with the program's graduate director. Departments offer seminars (some for credit) that include professional development sessions on topics such as resume writing, job searching, interviewing, etc. Some seminars include guest speakers who talk about their work in the field and discuss potential opportunities in the field. For example, HPEB 704 hosts panels of alumni and faculty to share their own career development experiences. In fall 2016, ENHS held its first round-table discussion on career opportunities for women in environmental health. The Center for Environmental Nanoscience and Risk (CENR) has a professional development program designed to prepare graduate students and postdoctoral fellows for career success as innovative future researchers, and ensure students have the skills they need to succeed professionally as well as academically. This program has been focused specifically on students and postdoctoral fellows working in CENR. This year it will be expanded to support all students in ENHS. Departments also encourage students to attend regional and national conferences to network and learn more about their field.

Practicum preceptors may also participate in career counseling. Often students working with the practice and placement coordinator find that the practice and assistantship placements may lead to full-time employment. With the advice and assistance of the Dean's Student Advisory Council, OGSS has coordinated professional development seminars for students, such as resume writing, interviewing skills, and post-doctoral position searches. Students are apprised of job opportunities through student email listservs and departmental bulletin boards. The school's website provides links to numerous relevant job search sites.

The Graduate School recently increased its investment in professional development for graduate students. Dr. Heather Brandt, a faculty member of HPEB, was recently named associate dean for professional development. This position was created to enhance and strengthen professional development opportunities for master's and doctoral students in areas ranging from grant writing and financial literacy to intellectual property and work-life balance. This fall, The Graduate School initiated Professional Development Fridays. Each week of the academic year they post on various professional development topics using Facebook, Twitter, Instagram, YouTube videos, and blogs. They send out a simple note about this to graduate directors and graduate students about twice a semester. Flyers from fall 2016 and spring 2017 are included in the ERF.

4.4.c Information about student satisfaction with advising and career counseling services.

Each semester undergraduate public health majors are asked to complete an online **undergraduate advising satisfaction survey** immediately following their advising appointment. The survey contains seven Likert-type questions (1=extremely unsatisfied; 5=extremely satisfied) and three open-ended

questions. On average, students have consistently rated their advisors and advising experience above 4.3 for all seven questions. The mean response to the item "To what degree are you satisfied with your overall advising experience in public health?" has ranged from 4.3-4.7 of 5.0. Qualitative results from the survey often highlight advising and advisors' strengths as well as identify areas for improvement. Undergraduates are not asked explicitly about their experiences with career counseling, but career counseling is mostly conducted in the context of the advising process. Students have consistently answered at least 4.0 out of 5.0 on the item assessing satisfaction with the advisor's ability to answer their questions. In the qualitative report, students often complement the knowledge of the advisors regarding graduate school, extracurricular activities, and career options.

The **undergraduate exit survey** asks students the extent to which they agree with the statement "Advisement was adequately provided throughout my program" and "My advisor has been supportive of me during my program." (Response options: 1=strongly disagree to 4=strongly agree). In AY2015-16, the average response to each question was 3.4 out of 4, which is consistent with the responses to the undergraduate advising satisfaction survey.

The **graduate exit survey** also asks students the extent to which they agree with the statement "Advisement was adequately provided throughout my program." (Response options: 1=strongly disagree to 4=strongly agree). In AY2015-2016, the average response for all students was 3.2 of 4.0 (3.13 for master's students; 3.40 for doctoral students). Responses to these questions and comments from students in particular suggest some variability in the quality of advisement across programs, with special challenges in the dual degree programs. Students in the MSW/MPH programs, for example were finding a lack of communication between the social work and public health and felt a lot of confusion about the practicum requirements. These comments have become fewer since the MPH programs began working more closely with the practice and placement coordinator.

The **graduate alumni survey** asks graduates three questions related to advising and career services provided by the Arnold School (see table 4.4.c). Satisfaction with these services is generally higher among doctoral than master's students. The lowest ratings were for satisfaction with assistance in finding employment. In SC and elsewhere the jobs landscape in most baccalaureate and masters-level professions has not been abundant since the 2008 recession; but it is improving.

Table 4.4.c. Alumni satisfaction with advising and career services provided by the school (AY2014-15 graduates)

Question	Master's Alumni	Doctoral Alumni	All Alumni
In general, how satisfied are you with the Arnold School with regard to the following:			
Advising and other student services	3.0	3.3	3.1
Assistance by faculty in pursuing your career (e.g., mentoring)	3.0	3.6	3.2
Assistance in finding employment	2.6	3.4	2.8

Response options: 1=strongly disagree to 4=strongly agree

Copies of all surveys and reports mentioned above are included in the ERF. The exit and graduate alumni surveys are discussed in more detail in criterion 2.7.

4.4.d Description of the procedures by which students may communicate their concerns to school officials, including information about how these procedures are publicized and about the aggregate number of complaints and/or student grievances submitted for each of the last three years.

Undergraduate public health and exercise science students may and do communicate their concerns through their academic advisors and can communicate anonymously by completing the online Advising

Satisfaction Survey administered twice per academic year by the Office of Undergraduate Student Affairs.

The Dean's Student Advisory Council (DSAC) is charged as a liaison between students and the dean. The associate dean of faculty affairs and curriculum meets monthly with this group. The dean and other associate deans meet with the group at least once per semester. A standing agenda item is discussion of any student concerns. Issues raised in this setting are typically those that impact a larger number of students; some are departmental or school issues, but many extend to the entire university. Examples include: parking, building improvements/student lounge space, access to buildings after hours, pedestrian safety, computer lab access on weekends, software and printing options in our computer lab, and academic policy changes.

The Arnold School follows university policies and procedures regarding student grievances, appeals, and petitions, as outlined in policies maintained by the USC Division of Student Affairs and Academic Support (STAF 6.27 Student Grievance Policy – Non-Academic and STAF 6.30 Academic Grievance Policy). As described in STAF 6.27, student ombudsmen are also available to help students resolve grievances and maintain policy compliance. Arnold School policy and procedures for student complaints, concerns and grievances are communicated to students through their academic advisors, the school's website, and the offices of undergraduate and graduate student services. The associate dean for undergraduate student affairs administers the grievance process for undergraduate students and meets with students to support them through the appropriate university reporting mechanisms.

Petitions and appeals. Student petitions request waivers of or exceptions to school, department, or program regulations and/or requirements (e.g., waive residency requirement or request course substitution). Student appeals request decisions made at a lower level of authority (e.g., program suspension or dismissal) be reversed or modified. A student's disagreement with the mark or grade placed on a work is not the basis for a grievance, petition or appeal. Grade concerns are discussed by the student and instructor, with final decision authority remaining with the instructor.

Graduate students wishing to file a petition or appeal follow the procedures described below for grievances. Undergraduate students wishing to file a petition or appeal must complete the Undergraduate Student Academic Petition form, which they can request from their academic advisor or the Office of Undergraduate Student Affairs. Once the form is completed and signed, it is reviewed by the undergraduate student services. If the petitioner is applying for readmission to the Arnold School due to missing a fall or spring semester, s/he must contact USC's Undergraduate Admissions Office to submit an additional application for re-admission consideration.

Grievances. An academic grievance is a complaint by a student concerning any alleged violation of teaching responsibility policies as described in the Faculty Manual, or any violation of policies on protection of freedom of expression, or protection against improper disclosure (see STAF 6.28 Academic Freedom). A non-academic grievance is a complaint by a student about an alleged action by a university employee that adversely affects the status, rights or privileges of the student. Grievances relating to discrimination by reason of age, color, gender, disability, national origin, genetics, race, religion, sexual orientation, or veteran's status are referred by the school to the Office of Equal Opportunity Programs. In addition, the USC director of Student Disability Services assists students with disabilities with university grievance procedures. For purposes of this policy, harassment is considered a type of discrimination.

Any student in the Arnold School who wishes to submit a grievance is advised to first seek resolution with the faculty or staff member in question. If no satisfactory resolution is achieved, the student may pursue the matter further with the department chair. The student must follow any additional

procedures established by the program or department for this level of review; these procedures are not specified in school policy and may require a written statement or other documentation from the student. If not satisfied with the resolution at the program/department level, the student may seek resolution through the Arnold School's Office of Faculty Affairs and Curriculum. The associate dean meets with the student and tries to facilitate an informal resolution, if appropriate. If not satisfied with the informal resolution at the school level, the student may submit the grievance, appeal or petition in writing to the Office of Faculty Affairs and Curriculum. Grievances, petitions and appeals are heard by the school's Scholastic Standards and Petitions Committee. This committee includes faculty members from each department and student representation; the dean cannot be a member of this committee. This committee will hear a complaint only after the procedures outlined above have been exhausted and upon request of the student or faculty member concerned. The student should provide any documentation relevant to the grievance, appeal or petition. The Scholastic Standards and Petitions Committee may request additional documentation from the student and from the program/department. The committee may schedule a meeting with the student if needed to discuss the grievance, appeal or petition and to clarify the documentation provided. All parties are bound by the committee's decisions unless either chooses to appeal the grievance further (e.g., appeal to USC Graduate Council). Committee findings are distributed in writing to all concerned and a copy is filed with the Office of Faculty Affairs and Curriculum within seven calendar days of the meeting.

Only one formal appeal has been logged in the Arnold School in the past three academic years. Based upon a review of the circumstances and the school's policies and procedures, that appeal was denied after consideration by the school's Review Committee for the Scholastic Standards and Petition Committee.

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

This criterion is met.

Strengths:

- Undergraduate advising and career counseling are well-regarded by the students, as evidenced by their response to the undergraduate advising satisfaction survey. In particular, we believe the development of the University Advising Center and its training and networking resources along with the first year advisors have already improved our ability to advise and mentor our growing undergraduate student body more effectively and efficiently.
- Graduate students are generally pleased with advising, but have noted inconsistencies in the advising process.
- Career advising is supported by the Health Sciences Career Fair and the strong partnership with the university's career center, especially for undergraduate students.

Weaknesses:

- As mentioned in criterion 1.7, undergraduate advisors have to see a large number of students (200 to 300 students per advisor).
- Data collection about graduate student satisfaction with advising and career counseling occurs only in the exit and alumni surveys, which may be too late to address issues in a timely fashion.

Plans:

- As mentioned in the text, new undergraduate academic advisors are being hired to reduce the undergraduate student:advisor ratios.

- Graduate programs are using results of exit and alumni surveys to make improvements in advising and career counseling, e.g., PAPH MPH, HSPM MHA, and HSPM MPH.
- The director of evaluation and academic assessment will work with the Evaluation Committee to review data collection regarding student satisfaction with advising and career counseling. This process will also take the 2016 CEPH criteria into consideration.