

Criterion 1

The School of Public Health

1.6 Resources

CEPH Criterion

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

CEPH Required Documentation

- a. A description of the budgetary and allocation processes, sufficient to understand all sources of funds that support the teaching, research and service activities of the school. This 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 on the resources available to the school.
- 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 table format as appropriate to the school. See CEPH Data Template A.
- 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.
- d. A concise statement or chart concerning the number (headcount) of faculty in each of the five concentration areas (and any other concentration areas identified in Criterion 2.1) employed by the school as of fall for each of the last three years. If the school is a collaborative one, sponsored by two or more institutions, the statement or chart must include the number of faculty from each of the participating institutions.
- e. A table showing faculty, students, and student/faculty ratios, organized by department or specialty area, or other organizational unit as appropriate to the school for each of the last three years. These data must be presented in table format (see CEPH Data Template B) and include at least the following information: a) headcount of primary faculty who support the teaching programs (primary faculty are those with primary appointment in the school of public health), b) FTE conversion of faculty based on % time or % salary support devoted to the instructional programs, c)

headcount of other faculty involved in the teaching programs (adjunct, part-time, secondary appointments, etc), d) FTE conversion of other faculty based on estimate of % time commitment, e) total headcount of core faculty plus other faculty, f) total FTE of core and other faculty, g) headcount of students in department or program area, h) FTE conversion of students, based on 9 or more credits per semester as full-time, i) student FTE divided by regular faculty FTE and j) student FTE divided by total faculty FTE, including other. 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 4.1.a and 4.1.b.

- f. A concise statement or chart concerning the availability of other personnel (administration and staff).
- g. A concise statement or chart concerning amount of space available to the school by purpose (offices, classrooms, common space for student use, etc.), by program and location.
- h. A concise statement or floor plan concerning laboratory space, including kind, quantity and special features or special equipment.
- i. A concise statement concerning the amount, location and types of computer facilities and resources for students, faculty, administration and staff.
- j. A concise statement of library/information resources available for school use, including description of library capabilities in providing digital (electronic) content, access mechanisms and guidance in using them, and document delivery services.
- k. A concise statement describing community resources available for instruction, research and service, indicating those where formal agreements exist.
- l. A concise statement of the amount and source of “in-kind” academic contributions available for instruction, research and service, indicating where formal agreements exist.
- m. Identification of outcome measures by which the school may judge the adequacy of its resources, along with data regarding the school’s performance against those measures for each of the last three years. At a minimum, the school must provide data on institutional expenditures per full-time-equivalent student, research dollars per full-time-equivalent faculty, and extramural funding (service or training) as a percent of the total budget.
- n. Assessment of the extent to which this criterion is met.

1.6.a. Budgetary and Allocation Processes

Required Documentation: A description of the budgetary and allocation processes, sufficient to understand all sources of funds that support the teaching, research and service activities of the school. This 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 on the resources available to the school.

Key Resources

The school is well positioned from a resource standpoint to maximize its impact on public health in North Carolina and the world. Although there are never sufficient resources to accomplish all that is desired, the school strives effectively to manage, leverage, and invest its resources, so that faculty, students, and staff have full opportunity to learn, grow, and truly make a difference.

The school's annual budget, including expendable resources available to it through the Public Health Foundation, exceeds \$130 million in FY 2009, made up primarily of state appropriations, direct funding from grants and contracts, and gifts. State funding levels have increased substantially since the last CEPH self-study and have grown more than 15% in the last two years, now exceeding \$25 million per year. Much of this recent increase, however, has been due to allocations for special projects or programs such as the Nutritional Research Institute (<http://www.nri.unc.edu/>), special faculty hires, and the conversion of Environmental Sciences and Engineering from 11-month to 9-month faculty appointments. There have been increases in extramural funding as well, with sponsored research awards administered through the school exceeding \$60 million per year. Other research awards administered outside of the school but involving the school's faculty add more than \$40 million annually to the total of extramurally funded research activities. The school's direct cost funding has experienced a slight decrease in the past few years but, overall, the school has fared well during the NIH funding decline.

The school's development activities have produced several large gifts, most notably the recent gift of \$50 million from Dennis and Joan Gillings, which is allowing us to fund higher-risk and high-impact public health projects. The Gillings gift also enhances the school's institutional and educational capacity in several ways, providing professorships to encourage interdisciplinary interaction, diversity, and retention of key faculty; helping the school to improve curricula; and providing resources to encourage exemplary achievement and contributions to public health.

The university, the state, and the school have invested significant capital funds during the last several years to improve the school's physical plant; (see Criterion 1.6.g., Available Space).

In addition, several units within the school operate service centers, providing support and services to campus and off-campus users and sponsors. For example, BIOS runs the Survey Research Unit (<http://sru.sph.unc.edu/>) and the Collaborating Studies Coordinating Center (<http://tinyurl.com/bioscsc>). In addition, the Instructional and Information Systems (IIS) unit provides instructional design and materials creation assistance to other schools on campus in teaching with technology. The North Carolina Institute for Public Health has worked together with IIS to develop survey technologies for assessing workforce skills in the state and using that data to direct public health practitioners to training opportunities in online and in-person contexts. These activities have taken place outside the traditional budget environment and use campus-approved recharge business models to provide funding support.

Allocation Framework

General Administration of the UNC system distributes state funding to its component universities and schools based on enrollment and using a formula that includes weighting based on credit hours, degree level, and cost benchmarks for disciplines. In addition, the system also provides special state appropriations to the Chapel Hill campus for programs. The School of Public Health receives a portion of the university's increase or decrease in state funding based on enrollment changes, as well as adjustments to budgeted state funding based on legislative directives (direct and indirect) and initiatives sanctioned by the provost.

UNC-Chapel Hill operates through a centralized budget model with regard to its many schools and other academic units. Tuition and fees, state appropriations, indirect cost recoveries, and other resources are collected and managed centrally, with a portion reserved for campuswide services such as facility operation and maintenance, payroll, and accounting.

Each year, the school and its departments receive a separate allocation calculated as a proportion (19.5%) of the indirect cost generated from grants and contracts administered within the school in the previous fiscal year. Of this 19.5% allocation, 15.6% goes directly to the department that administered the research grant, while the remaining 3.9% is reserved for the school's central administration. Research grants administered outside of the school that require significant resources of the school's faculty usually involve a negotiated agreement for some indirect cost recovery sharing between the other unit and the school's department.

Budget Process

State Budget Process

Although the state's fiscal year begins on 1 July, the state legislature typically does not complete the state budget until mid to late summer. After the legislature provides a budget

to the UNC system and the university receives its approved budget from the system, usually in late summer, the provost provides the school with its annual budget allocation, including support for special funding initiatives. Because of this timeline—which is not under the school’s control—the school cannot accurately quantify the effects of the new fiscal year state budget until the end of the first quarter of the fiscal year at best, and most likely after the end of the second quarter. This uncertainty heightens the importance of balancing state funding with nonstate-derived resources, so that the school can continue to operate seamlessly.

Depending on economic circumstances, in any given year the university system’s state budget allocation may be subject to positive and/or negative adjustments, which are then passed on to the system’s component universities, the school, and the school’s departments at any time during the course of the fiscal year. The school determines what amount of these increases or decreases will be allocated to its departments and other units. The dean also retains some unallocated funds to support targeted initiatives, new faculty hires, bridge funding for faculty and their research staff, and central support functions.

School Planning Process

The university’s annual budget planning process provides the framework for the school’s overall budget and resource allocation process. The budget process for any fiscal year involves about 18 months of effort from planning, revising, executing, and closing a fiscal year’s budget. The process begins in the winter preceding the fiscal year when the dean solicits requests for new budget initiatives from the departments and other units. After consultation with the members of the Dean’s Council, the dean and her staff prepare the school’s budget planning document, which summarizes achievements during the past fiscal year, states goals and objectives for the coming year, and identifies future budget year priorities and associated resource requirements. The school also prepares a document that identifies resources required for faculty start-up packages. The school then submits its budget and start-up request documents to the provost for review and consideration.

Within the university framework, the school provides guidance on resource management to its departments, institutes, and centers. The dean, the senior associate dean and the associate dean for business and finance meet with the department chairs and their administrators to discuss department finances several times during the year. In the spring and early summer, participants also review the department’s past performance and future projections, and consider faculty salaries with regards to equity and their relation to benchmarks of the Association of Schools of Public Health, or specific disciplines. Once the annual state allocation to the school is determined, usually in August, the dean and her staff meet again with each department to set the annual budget. The Business and Finance staff works with each department and unit to monitor spending to optimize the use of all resources and end each year in a favorable financial state. They report the yearend financial status of the school to the Dean’s Council and at the Faculty and Staff Meeting in the fall.

The school is continuously seeking better methods and models to assess and allocate funding to promote efficiency and effectiveness in all operations and to ensure adequate funding for state-of-the-art instruction, research, and community outreach. In 2009, the school began the process to strengthen its process for conducting financial and faculty salary reviews with departments and units, and also evaluated new methods for allocating state resources to individual departments and units.

ConnectCarolina

ConnectCarolina is the university-wide effort to replace aging software systems that manage student information, human resources, payroll and finance. The new system is built on PeopleSoft technology and will be implemented in phases. The first phase includes student services: admissions, student records, financial aid, and student finances. Beginning summer 2009, it will support undergraduate admissions, with graduate admissions to follow. The next phase encompasses human resources, payroll, and finance. The project will take several years to complete.

School leaders are engaged in serving on advisory and governance committees that relate to the determination of information needs, business rules, data definitions, data use and security, and technology configuration.

1.6.b. Budget Statement

Required Documentation: *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 table format as appropriate to the school. See CEPH Data Template A.*

Budgets from fiscal years 2000 to 2009 are shown in table 1.6.b (Template A), Sources of Funds and Expenditures by Major Category.

1.6.c. Collaborative Budget Statement

Required Documentation: *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. Concentration Area Faculty

Required Documentation: *A concise statement or chart concerning the number (headcount) of faculty in each of the five concentration areas (and any other concentration areas identified in Criterion 2.1) employed by the school as of fall for each of the last three years. If the school is a collaborative one, sponsored by two or more institutions, the statement or chart must include the number of faculty from each of the participating institutions.*

CEPH defines five concentration areas: biostatistics, environmental health sciences (i.e., environmental sciences and engineering), epidemiology, health services administration (i.e., health policy and management), and social and behavioral sciences (i.e., health behavior and health education). In addition, our school has concentration areas of maternal and child health, nutrition, and public health leadership. Table 1.6.d. shows the number of faculty in each concentration area for academic years 2006-2007 through 2008-2009.

Table 1.6.b. Sources of Funds and Expenditures by Major Category, Fiscal Years 2000 to 2009					
	2000	2001	2002	2003	2004
Sources of Funds					
Tuition & Fees	\$ 5,894,408	\$ 6,637,616	\$ 7,530,587	\$ 8,169,912	\$ 8,404,108
Continuing Education Fees	\$ 1,200,206	\$ 1,143,678	\$ 1,027,476	\$ 1,293,507	\$ 1,402,295
Program Fees & State Subsidy	\$ 11,868,906	\$ 13,211,285	\$ 12,256,538	\$ 10,539,365	\$ 9,510,015
Contracts & Grants Direct Costs	\$ 26,127,540	\$ 30,153,398	\$ 34,522,163	\$ 40,421,859	\$ 45,082,046
Indirect Cost Allocation	\$ 6,617,986	\$ 7,280,230	\$ 7,390,188	\$ 6,524,006	\$ 6,522,451
Restricted & Unrestricted Funds	\$ 8,136,183	\$ 7,739,528	\$ 9,453,821	\$ 10,500,119	\$ 12,721,221
Gift Income	\$ 1,655,343	\$ 2,333,670	\$ 2,232,536	\$ 3,113,479	\$ 3,670,656
Investment & Other Income	\$ 2,060,273	\$ 2,522,797	\$ 2,090,252	\$ 3,082,482	\$ 2,812,350
Auxiliary	\$ 885,131	\$ 1,106,826	\$ 1,622,315	\$ 2,890,654	\$ 2,730,950
Total Sources	\$ 64,445,975	\$ 72,129,028	\$ 78,125,875	\$ 86,789,109	\$ 92,856,092
Expenditures					
Compensation	\$ 39,347,514	\$ 41,894,939	\$ 44,338,849	\$ 48,115,547	\$ 52,438,421
Operations	\$ 13,388,917	\$ 16,152,931	\$ 16,879,957	\$ 21,696,204	\$ 19,888,430
Student Support	\$ 2,390,344	\$ 2,793,538	\$ 3,144,844	\$ 3,890,337	\$ 4,237,847
Net Transfers	\$ (514,819)	\$ (136,286)	\$ (788,944)	\$ 253,725	\$ (214,404)
Total Expenditures	\$ 54,611,955	\$ 60,705,123	\$ 63,574,706	\$ 73,955,813	\$ 76,350,295
Long Term Investment Market Value	\$ 5,165,614	\$ 4,819,969	\$ 6,740,266	\$ 6,900,707	\$ 13,868,732
	2005	2006	2007	2008	2009
Sources of Funds					
Tuition & Fees Returned from State	\$ 8,721,945	\$ 8,969,277	\$ 9,475,993	\$ 8,537,138	\$ 10,425,167
Continuing Education Fees	\$ 2,034,039	\$ 2,379,236	\$ 2,545,726	\$ 1,401,177	\$ 2,084,613
Program Fees & State Subsidy	\$ 10,024,707	\$ 10,508,842	\$ 13,643,804	\$ 21,222,860	\$ 25,133,356
Contracts & Grants Direct Costs	\$ 49,791,701	\$ 49,501,277	\$ 48,588,926	\$ 48,457,683	\$ 58,663,095
Indirect Cost Allocation	\$ 7,617,809	\$ 9,474,179	\$ 9,964,019	\$ 11,842,137	\$ 11,329,029
Restricted & Unrestricted Funds	\$ 14,944,759	\$ 16,951,383	\$ 18,177,236	\$ 19,423,612	\$ 44,345,379
Gift Income	\$ 4,749,238	\$ 5,171,702	\$ 5,082,631	\$ 28,093,856	\$ 5,162,010
Investment & Other Income	\$ 4,731,573	\$ 3,393,045	\$ 4,861,658	\$ 5,414,609	\$ 5,636,593
Auxiliary	\$ 3,137,472	\$ 2,807,300	\$ 2,819,646	\$ 3,914,802	\$ 3,061,406
Total Sources	\$105,753,243	\$ 109,156,242	\$ 115,159,638	\$ 148,307,873	\$ 165,840,649
Expenditures					
Compensation	\$ 57,565,693	\$ 60,195,536	\$ 63,595,463	\$ 66,636,043	\$ 70,006,402
Operations	\$ 23,128,714	\$ 22,556,904	\$ 22,955,831	\$ 26,175,960	\$ 37,906,256
Student Support	\$ 4,677,720	\$ 5,144,977	\$ 4,927,395	\$ 4,170,954	\$ 4,808,928
Net Transfers	\$(2,039,779)	\$ (1,302,816)	\$ (1,014,346)	\$ (697,982)	\$ (1,849,514)
Total Expenditures	\$ 83,332,348	\$ 86,594,602	\$ 90,464,343	\$ 96,284,975	\$ 110,872,072
Long Term Investment Market Value	\$ 15,515,698	\$ 22,661,253	\$ 29,247,135	\$ 48,821,951	\$ 37,693,108

Note: Figures include balances, investments, income and expenditures from School of Public Health University funds and the University of North Carolina Public Health Foundation, Inc.

Core Faculty	2008	2009	2010
Biostatistics	31	30	30
Environment Sciences & Engineering	27	27	26
Epidemiology	45	44	48
Health Behavior & Health Education	19	20	20
Health Policy and Management	30	31	29
Maternal & Child Health	21	19	19
Nutrition	25	27	30
PH Leadership Program	5	6	6
Public Health Nursing	5	4	4
Core Subtotal	208	208	212
Other Faculty			
Other Faculty	2008	2009	2010
Biostatistics	26	30	30
Environment Sciences & Engineering	20	23	35
Epidemiology	102	113	123
Health Behavior & Health Education	51	56	56
Health Policy and Management	80	79	87
Maternal & Child Health	60	74	75
Nutrition	17	23	22
PH Leadership Program	17	17	18
Public Health Nursing	17	14	15
Other Faculty Subtotal	390	429	461
TOTAL Faculty	598	637	673

* Concentration Area is equivalent to department/program

1.6.e. Faculty and Students

Required Documentation: A table showing faculty, students, and student/faculty ratios, organized by department or specialty area, or other organizational unit as appropriate to the school for each of the last three years. These data must be presented in table format (see CEPH Data Template B) and include at least the following information: a) headcount of primary faculty who support the teaching programs (primary faculty are those with primary appointment in the school of public health), b) FTE conversion of faculty based on % time or % salary support devoted to the instructional programs, c) headcount of other faculty involved in the teaching programs (adjunct, part-time, secondary appointments, etc), d) FTE conversion of other faculty based on estimate of % time commitment, e) total headcount of core faculty plus other faculty, f) total FTE of core and other faculty, g) headcount of students in department or program area, h) FTE conversion of students, based on 9 or more credits per semester as full-time, i) student FTE divided by regular faculty FTE and j) student FTE divided by total faculty FTE, including other. 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 4.1.a and 4.1.b.

Table 1.6.e. Faculty, Students and Student/Faculty Ratios by Department, Fall 2006

	HC Core Fac.	FTEF Core	HC Other Fac.	FTEF Other**	Total FAC HC	Total FTEF	HC Students	FTE Non Doc Students*	FTE Doc Students	FTE All Students	SFR by Core FTEF	SFR by Total FTEF
BIOS	34	34	27	1.25	61	35.25	139	46.5	69.25	115.75	3.41	3.29
ESE	29	29	20	0.98	49	29.98	153	80.75	56.25	137	4.73	4.57
EPID	44	44	98	0	142	44	162	36.25	92.25	128.5	2.93	2.93
HBHE	18	18	52	0.51	70	18.51	138	86.5	35.25	121.75	6.77	6.58
HPM	29	29	79	3.2	108	32.2	368	259	51.5	310.5	10.71	9.65
MCH	18	18	57	0.8	75	18.8	80	52.25	19.25	71.5	3.98	3.81
NUTR	25	25	19	4.09	44	29.09	110	58	46.75	104.75	4.19	3.61
PHLP	10	10	32	1.41	42	11.41	168	130.25	0	130.25	13.03	11.42
Schoolwide	207	207	384	12.24	591	219.24	1318	749.50	370.50	1120	5.42	5.11

*Public Health Nursing has been combined into Public Health Leadership Program for this table

**FTEF Other does not include FTE counts for adjunct other teaching faculty occasionally used for single lectures and student committees, FTE counts for these faculty are not recorded

Table 1.6.e. Faculty, Students and Student/Faculty Ratios by Department, Fall 2007

	HC Core Fac.	FTEF Core	HC Other Fac.	FTEF Other**	Total FAC HC	Total FTEF	HC Students	FTE Non Doc Students*	FTE Doc Students	FTE All Students	SFR by Core FTEF	SFR by Total FTEF
BIOS	31	31	26	1.8	57	32.8	133	38.25	70.5	108.75	3.51	3.32
ESE	27	27	20	0.4	47	27.4	137	71	56.25	127.25	4.72	4.65
EPID	45	45	102	0.8	147	45.8	171	28.75	105.5	134.25	2.99	2.94
HBHE	19	19	51	0.5	70	19.5	129	83	32.75	115.75	6.1	5.94
HPM	30	30	80	2.9	110	32.9	411	289.25	55	344.25	11.48	10.47
MCH	21	21	60	0	81	21	81	54.75	20.75	75.5	3.6	3.6
NUTR	25	25	17	3.3	42	28.3	124	77.5	43.5	121	4.84	4.28
PHLP	10	10	34	2	44	12	205	146	0	146	14.6	12.17
Schoolwide	208	208	390	11.70	598	219.70	1391	788.50	384.25	1172.75	5.64	5.34

*Public Health Nursing has been combined into Public Health Leadership Program for this table

**FTEF Other does not include FTE counts for adjunct & other teaching faculty occasionally used for single lectures and student committees, FTE counts for these faculty are not recorded

Criterion 1.6

The School of Public Health: Resources

Table 1.6.e. Faculty, Students and Student/Faculty Ratios by Department, Fall 2008

	HC Core Fac.	FTEF Core	HC Other Fac.	FTEF Other**	Total FAC HC	Total FTEF	HC Students	FTE Non Doc Students*	FTE Doc Students	FTE All Students	SFR by Core FTEF	SFR by Total FTEF
BIOS	30	30	30	4.05	60	34.05	146	41.75	75.75	117.5	3.92	3.46
ESE	27	27	23	2.11	50	29.11	151	81.25	56.75	138	5.12	4.75
EPID	44	44	113	5.7	157	49.7	172	24.75	111.5	136.25	3.1	2.75
HBHE	20	20	56	2.26	76	22.26	120	8.125	27.27	108.5	5.43	4.88
HPM	31	31	79	5.68	110	36.68	449	312	59	371	11.97	10.12
MCH	19	19	74	2.7	93	21.7	85	58	19.5	77.5	4.08	3.58
NUTR	27	27	23	5.43	50	32.43	135	84.25	46	130.25	4.83	4.02
PHL	10	10	31	1.75	41	11.75	207	150.25	0	150.25	15.03	12.79
Schoolwide	208	208	429	29.68	637	237.68	1465	833.50	395.77	1229.25	5.91	5.18

*Public Health Nursing has been combined into Public Health Leadership Program for this table

**FTEF Other does not include FTE counts for adjunct & other teaching faculty occasionally used for single lectures and student committees, FTE counts for these faculty are not recorded

Table 1.6.e. Faculty, Students and Student/Faculty Ratios by Department, Fall 2009

	HC Core Fac.	FTEF Core	HC Other Fac.	FTEF Other**	Total FAC HC	Total FTEF	HC Students	FTE Non Doc Students*	FTE Doc Students	FTE All Students	SFR by Core FTEF	SFR by Total FTEF
BIOS	30	30	30	4.05	60	34.05	146	47.00	72.75	119.75	4.00	3.52
ESE	26	26	35	6.61	61	32.61	170	94.25	61.00	155.25	5.98	4.77
EPID	48	48	123	8.25	171	56.25	183	26.00	118.75	144.75	3.02	2.58
HBHE	20	20	56	3.25	76	23.25	120	78.25	30.75	109.00	5.45	4.69
HPM	29	29	87	6.53	116	35.53	478	340.00	54.75	394.75	13.62	11.12
MCH	19	19	75	3.45	94	22.45	92	65.75	19.75	85.50	4.50	3.81
NUTR	30	30	22	7.05	52	37.05	131	87.00	39.50	126.50	4.22	3.42
PHL	10	10	33	2.65	43	12.65	209	147	0.00	147.00	14.70	11.63
Schoolwide	212	212	461	41.84	673	253.84	1529	885.25	397.25	1282.50	6.05	5.06

*Public Health Nursing has been combined into Public Health Leadership Program for this table

**FTEF Other does not include FTE counts for adjunct & other teaching faculty occasionally used for single lectures and student committees, FTE counts for these faculty are not recorded

1.6.f. Other Personnel

Required Documentation: *A concise statement or chart concerning the availability of other personnel (administration and staff).*

Table 1.6.f. indicates the categories of the school’s “other personnel,” and the number of employees in each category.

Table 1.6.f. Availability of Other Personnel, AY 2006-07, 2007-08, 2008-09			
	AY 2006-07	AY 2007-08	AY 2008-09
Full-Time	421	389	402
Part-Time	20	18	17
Student Temporary	384	398	452
Other Temporary	108	110	105
Other Personnel Total	933	915	976

1.6.g. Available Space

Required Documentation: *A concise statement or chart concerning amount of space available to the school by purpose (offices, classrooms, common space for student use, etc.), by program and location.*

The majority of the school is housed in four buildings located in the health affairs complex on the Chapel Hill campus. The four buildings (Rosenau Hall, McGavran-Greenberg Hall, Baity Laboratories, and the Michael Hooker Research Center [MHRC]) comprise over 377,000 gross square feet (sf), of which approximately 207,000 sf are assignable space. The largest building is Rosenau Hall, originally built in 1945 and added to in 1962, which has 72,071 assignable square feet (asf). McGavran-Greenberg Hall and Baity Laboratories were both built in 1991 (with 62,299 asf and 4,559 asf, respectively). The MHRC, with 63,149 asf, is the most recent addition to the school’s building complex, completed and occupied in April of 2005. Miller Hill (4,598 asf), completed in 1942, is a short walk from the other four buildings and has housed the Environmental Resource Program since 1999. In addition, the school occupies approximately 70,600 additional asf in multiple off-campus locations through leasing, university-owned properties, or other arrangements. The majority of off-campus locations are necessary to meet space needs that the school cannot otherwise satisfy on campus. However, some off-campus locations provide unique or enhanced research capabilities, such as the Orange County Water and Sewer Authority (OWASA) Wastewater Treatment Plant, where the school occupies a building to support wastewater-related research.

The MHRC was built to accommodate the expansion of wet laboratory research at the school, and to replace aging, outmoded laboratories in Rosenau; the state-of-the-art facility also provides space for teaching, service, and events. MHRC includes an atrium that joins the laboratory wings to the rest of the School of Public Health complex and provides internal

connections among the school's three major buildings. The atrium acts as the school's "living room" and provides, for the first time in the school's history, a gathering space capable of facilitating both formal and informal interaction among the school's nine separate academic, service, and administrative units. In addition to food service and open seating, the atrium provides access to seven separate centrally scheduled conference and meeting rooms ranging from 12 to 25 seats, as well as the 100-seat teleconference-capable Blue Cross Blue Shield Auditorium.

The oldest of the school's four buildings, Rosenau Hall, underwent a major renovation, completed in 2008, which has improved instruction delivery and research capabilities, and provided more functional administrative work spaces. The upgrade included replacement of all building-wide mechanical systems, as well as reprogramming space use and limited floor plan reconfiguration. As a result of the renovations, Rosenau Hall now offers an expanded range of teaching facilities, including two new 56-seat classrooms, a renovated 258-seat auditorium, an open 55-station computer lab that includes a 20-seat computer-based instruction room, a 30-seat teaching kitchen for Nutrition, and a reconfigured 30-seat teleconference facility with a control room that can remotely operate the 100-seat teleconference facility in MHRC.

Both McGavran-Greenberg and Baity have undergone some renovation since the last CEPH self-study. Capital improvement projects completed at McGavran-Greenberg include renovation of an existing laboratory to operate at biological safety-level three (BSL-3), replacement of the building-wide fire alarm and life safety systems, rebalancing of HVAC systems in the laboratory wing, and replacement of corridor ceilings and lighting in the research and teaching half of the building. The school anticipates making classroom improvements during FY 2009-2010. At Baity, the fire alarm system was replaced at the same time as that of McGavran-Greenberg; during construction of MHRC, Baity also underwent replacement of a series of exhaust fans and ducting used for air quality research.

Plans are underway to construct a new building on the proposed Carolina North campus to provide much needed space for the NCIPH. Although planning is in early stages, the Institute needs a site that provides training and conference space as well as proximity to transportation facilities. In addition to enabling future expansion of the school, the new facility will allow the school to return to campus several programs that currently reside in off-campus leased facilities.

Table 1.6.g., based on data as collected by the university, shows a breakdown of the school's space by purpose and location.

Building	Class-rooms	Teaching Labs	Open Labs	Research Labs	Academic Offices	Conference / Meeting	Study	Assembly / Exhibit	Other Academic Space	Total ASF*
Baity Lab				4,153	406					4,559
Hooker Research Center	2,035	1,079		39,356	9,614	4,811	184	4,843	1,227	63,149
McGavran-Greenberg Hall	7,637			13,779	35,261	1,317	2,199		2,106	62,299
Miller Hall				317	3,804	315	162			4,598
Rosenau Hall	4,806	1,200	1,419	7,065	47,635	5,799	2,064		2,083	72,071
Off-campus/ Leased space**	-	-	-	5,811	64,788	-	-		-	70,599
Totals	14,478	2,279	1,419	70,481	161,508	12,242	4,609	4,843	5,416	277,275

*Assignable square feet

**Includes space for the North Carolina Institute for Public Health

1.6.h. Laboratory Space

Required Documentation: *A concise statement or floor plan concerning laboratory space, including kind, quantity and special features or special equipment.*

The school’s combined facilities include a total of approximately 61,000 asf of wet lab space, including two BSL-3 laboratories overseen by the university’s Department of Environment, Health and Safety; (see table 1.6.h.). MHRC, completed in 2005, significantly increased the school’s modern laboratory space (approximately 40,000 of the 67,000 asf are located in Hooker); a total of approximately 17,000 asf were built in 1991 in McGavran-Greenberg and Baity, while approximately 4,000 asf of newly renovated wet lab space is located in Rosenau. Laboratory space is divided among three departments—ENVR, EPID, an NUTR. In addition, the school built and maintains an approximately 1,700 cubic foot rooftop smog chamber that researchers use to analyze the effects of sunlight on hydrocarbon exhaust emissions. The school is unique in that it maintains its own 3,000 asf instrument shop that fabricates custom equipment and provides specialized research tools to support experimental and field research, as well as a smog chamber in Pittsboro NC (approximately ten miles from Chapel Hill)..

Table 1.6.h. Laboratory Space					
Laboratories	McGavran-Greenberg	MHRC	Rosenau	Baity	Total ASF*
Instrument Shop	-	-	3,035	-	3,035
BSL III	784	457	-	-	1,241
Wet Labs	12,995	39,978	4,037	4,153	61,163
Dry Labs	-	-	2,619	-	2,619
Totals	13,779	40,435	9,691	4,135	73,869

*Assignable square feet

1.6.i. Computer Facilities and Resources

Required Documentation: *A concise statement concerning the amount, location and types of computer facilities and resources for students, faculty, administration and staff.*

School Computing Resources

Technology Infrastructure

The school’s Instructional and Information Systems (IIS) group provides central computing systems for administrative, instructional, and research activities, and manages the provision of desktop computing services. IIS also coordinates the school’s data management and information technology needs with those of the campus.

IIS’s central technology infrastructure includes forty servers running Red Hat Enterprise Linux, Microsoft Windows Server, and Citrix XenServer Enterprise server operating systems,

connecting to Fibre Channel and iSCSI storage area networks. This infrastructure supports the wide and local area networks, data repositories, streaming media, and collaboration tools including Adobe Connect, in addition to providing Internet services to students, faculty, and staff.

The school uses a large switched network for data communications among the three main buildings, buildings across campus, and beyond. All of the 1,760 network ports in the school provide at least 100-megabit connections with most connections running at 1 Gbps in occupied spaces in Rosenau and Hooker. Secure wireless networking is available in the majority of public spaces and in all classrooms in the building complex. A total of 39 wireless access points have been installed, with future plans for additional coverage in McGavran-Greenberg. Guest wireless access is available within the complex. The school also has eleven servers residing in its academic departments for research and administrative purposes. Approximately 900 desktop computers are active on the school's network daily, supplemented by 170 network printers and other devices.

Media technology is available in 17 classroom facilities throughout Rosenau, McGavran-Greenberg, and Hooker. Each room is equipped with a computer with Internet access, a mounted LCD projector, a DVD/VCR playing unit, and connections for a laptop. The larger classrooms include document cameras. Users control the devices through push-button controls on the lecterns and wall interfaces. Additionally, an equipment check-out service allows students, faculty, and staff to borrow media equipment, including audio kits, digital cameras, camcorders, speaker phones, laptops, DVD/VCRs, and LCD projectors.

The W. Fred Mayes Telecommunications Center facilitates the school's videoconferencing activities. Established in 1993, the Mayes Center averages more than 100 video conference sessions each year, serving more than 10,000 participants. The center includes tiered classroom-style seating with a lectern, camera, display, and microphones to conduct classes, seminars, and meetings, as well as a cutting-edge control room that operates each session. Multiple sites are bridged through the center's Multipoint Control Unit (MCU). Videoconference sessions are typically connected but not limited to CDC, the state's Public Health Training and Information Network, the North Carolina Research and Education Network, and the North Carolina Information Highway data networks using H.323, H.264 or Internet Protocol (IP) Video. The center offers on-demand webcasting services and has the ability to downlink both Ku and C band satellite programming. In addition, the Mayes Center currently houses a postproduction suite to provide nonlinear digital editing as well as a narration booth to record voiceovers.

IIS is a founding partner, with the Schools of Medicine, Dentistry, and Pharmacy, of the UNC Adobe Connect collaborative, hosting and providing web-based audio, video, chat, and screen-sharing capabilities for teaching, meetings, and presentations.

Technology Staff

The school's Instructional and Information Systems (IIS) staff has expertise in a number of different technologies; its six functional subgroups focus on IIS administration, end user support, systems, instructional media, online instruction, and software development. Each subgroup serves as a primary leader in a set of services and technologies that it is uniquely skilled to provide, but also works with other subgroups in a matrix of interrelated technologies.

The *Administration group* provides leadership coordination and business functions for the IIS subgroups. It manages a set of recharge models used by the subgroups that provides a forecasting and feedback model for current services throughout the fiscal year, and coordinates with school and campus officials and groups to understand larger and strategic issues.

The *End User Support group* provides support for Windows desktop and laptop machines as well as personal digital assistants and some Macintosh OSX machines, leveraging the campus Remedy Ticket system for reporting and tracking end user problems. Assistance can be in the form of in-person hands-on support or secure remote desktop support. The End User group also provides support for the school's security systems, acting as security consultants, implementing patch solutions, and working with the Systems group to define and implement security policies.

The *Systems group* provides both the hardware and the administrative and networking skills to keep the school's varied servers online and functional. This group also supports virtualization efforts as the school moves to become more agile and connected with globally based clients.

The *Instructional Media* group offers support in videoconferencing. This includes expertise in analog and digital satellite links, DS-1, DS-3, H.320, and H.323 technologies to link school electronic classrooms to anywhere on the planet with appropriate equipment. The group also manages instructional technology in the school's classrooms.

The *Online Instruction group* includes instructional designers with years of experience in computer-assisted instruction and web-based learning. The group supports collaborative learning and provides interactive exercises and assessments in online graduate training. IIS's instructional designers also provide instructional consulting for the school's partners on campus.

Finally, the *Software Development group* hosts and supports a 10,000⁺-page web site (<http://www.sph.unc.edu>) for the school. To maintain the web site, the group has implemented and supports a Content Management System with over 60 departmental, center, and program content managers participating. The group also supports the

Management Information System used across the school to understand current financial status and make projections for planning.

Campus Computing Resources

IIS coordinates closely with other information technology resources on campus, including the central Information Technology Services (ITS). ITS offers 24-hour telephone support to the UNC community and assists with planning, provision, and management of data and video communications services to the campus, including campus network support.

ITS operates public computer labs across campus. The ITS Computer Lab housed in the School of Public Health includes 60 Intel CPU machines running Windows XP. In addition to Office 2007, these systems run a variety of graphical, modeling, and statistical software appropriate for public health students. All machines have network access to external services such as the MEDLINE system and the Internet, and connections to shared space on central servers providing substantial and secure data storage. The ITS Computer Lab provides laser printing on site.

UNC's Renaissance Computing Institute (RENCI) facilities provide high-performance computing (<http://www.renci.org/about/>). This facility includes a 128-processor SGI Altix (Cedar/Cypress), a 1024-processor Dell Linux cluster (Topsail), a 352-processor Beowulf Linux cluster (Emerald), and a 32-processor IBM P690 (Happy/Yatta). The RENCi facilities support programming, software and applications for science, GIS, mathematics and statistics, and scientific visualization.

1.6.j. Library and Information Resources

Required Documentation: A concise statement of library/information resources available for school use, including description of library capabilities in providing digital (electronic) content, access mechanisms and guidance in using them, and document delivery services.

In terms of expenditures, collections, and staff, the Health Sciences Library ranks among the top ten of the 130-plus U.S. and Canadian medical school libraries. The library is located in the medical complex directly across the street from the School of Public Health. It currently contains over 333,000 total volumes, over 4,000 electronic books and receives 4,116 serial titles, most of which (3,460, or 84%) are available electronically. The library also houses 7,400 audiovisual programs, 45,000 microform pieces, and a fine rare books collection. The library has over 2800 print books (published since 2000) specifically for public health across several disciplines.

The original six-story Health Sciences Library was completed in 1982. In 2005, the library underwent extensive renovation, expanding the seating capacity from 600 to 716. The building now has full wireless access, 42 public computer workstations, 19 small group study rooms, 2 teaching labs with a total of 45 workstations, a campus-equipped computer lab

with 28 workstations, and a café for informal study and group meetings. Two Media Design Studios offer a range of multimedia and GIS software. The library's advanced technology also includes a high performance computing center with large-scale computing applications and a display wall for enhanced visualization of research projects. Additionally, several of the classrooms and conference rooms have videoconference capabilities to enrich cross-discipline collaboration.

There are 70.25 FTE library staff in the Health Sciences Library, including one FTE public health librarian who serves as a dedicated liaison between the Health Sciences Library and the school. The public health librarian proactively seeks opportunities to help students and faculty improve the quality of their scholarship through a variety of innovative services, including student and faculty research consultations, teaching seminars for research assistants and students, interdisciplinary database training, and development and production of research posters. Library instruction is a key part of students' orientation, and the librarian teaches over 30 classes each year. The classes are routinely praised as informative, efficient, and "the most enjoyable part of orientation." The public health librarian holds weekly Librarian Office Hours in the school, serving as a mobile reference desk to meet students' needs on their own turf. The library's research consult service is extremely popular, with almost 200 consultations for students and faculty every year. Two faculty members and one student from the school serve as school representatives on the Library Advisory Committee; the committee enlists suggestions for new services and responds quickly to recommendations for purchases from all users.

Library users can easily access a variety of electronic periodicals and over 204 databases and bibliographies, including PubMed, Global Health, Global Health Archive, Global Infectious Disease and Epidemiology Network, CINAHL, ISI Citation Databases, ERIC, BIOSIS, PsycINFO, Rand Publication Database, LexisNexis, and Environmental Sciences and Pollution Management. The library subscribes to electronic journals and databases such as the *American Journal of Tropical Medicine* Legacy Archive, *Health Care Policy and Management* Backfiles, and hundreds of electronic books. The library purchased 266 print books specifically for public health students and faculty in FY 2007-08. The books span topics such as global health, water management and engineering, epidemiology, maternal and child health, health behavior, minority health, biostatistics, health policy and management, and nutrition.

Electronic document delivery (InterLibraryLoan) is available for items the library does not own, and the library is a full member of DOCLINE. The School of Public Health is the second largest requestor of InterLibraryLoan materials, with almost 200 requests per year. All UNC students, staff, and faculty may request free book delivery from the libraries at Duke University, North Carolina State University, and North Carolina Central University. This network makes available over 13 million volumes of combined library resources, which can be easily accessed through a computerized, online search platform. The campus libraries have aggressively added full text electronic resources and jointly licensed them in cooperation with campus and regional area libraries. (See <http://www.trln.org/>) Users may

also employ the “Request A Copy” service—a fee-based, copy service for materials owned by the library.

In addition to the Health Sciences Library, users can access the university’s extensive library system with 39 branch locations. The central Walter Royal Davis Library holds collections in the humanities and social sciences (over 2.2 million volumes). Key branch libraries include the Brauer Library (mathematics, statistics, computer science, and operations research), the Chapin Library (city and regional planning), the Law Library, the School of Government Library (North Carolina public law and government), the Carolina Population Center Library (worldwide population studies), the Zoology Library, the Odum Institute Library (statistics, SAS, GIS), and the Highway Safety Research Center Library. Together, these libraries offer over 5,000,000 volumes; 4,000,000 microforms; nearly 2,000,000 government publications; 20,000,000 manuscripts; hundreds of thousands of audiovisuals, maps, and photographs; and thousands of electronic titles. (See <http://www.lib.unc.edu/aboutlib.html>)

1.6.k. Community Resources

Required Documentation: *A concise statement describing community resources available for instruction, research and service, indicating those where formal agreements exist.*

Across the School of Public Health, in every department, in the Office of Global Health (OGH), in the North Carolina Institute of Public Health (NCIPH), and in a number of other centers and institutes, the school has deep, longstanding relationships with a variety of community groups and agencies that provide critical resources for teaching, research, and service. Community resources are made available through the multitude of community-based participatory projects conducted by the school’s faculty and students, and with community members providing expertise and resources through every stage of research. Such connections often subsequently lead to community members participating in advisory groups and research teams, reviewing grant proposals, speaking to classes, developing educational materials such as real-life case studies, serving as preceptors for practicum placements, mentoring students and junior faculty, and providing opportunities for students and faculty to work in communities or sometimes just to observe. Many instructors for the school’s continuing education programs are local practitioners or state public health staff. All formal agreements are documented in the Resource File.

1.6.l. “In-Kind” Contributions

Required Documentation: *A concise statement of the amount and source of “in-kind” academic contributions available for instruction, research and service, indicating where formal agreements exist.*

Examples of “in-kind” contributions to the school from external sources are predominantly the kinds of resources noted in Criterion 1.6.k. In other words, expertise available through

the many relationships established by the school is often directed toward classroom teaching, student mentoring, faculty research opportunities, and the like, at no cost.

Internally, the school is fortunate to have well-developed relationships with other units on campus, and these also often provide in-kind resources to support the school's mission. For example, the Dissemination Core and the Biostatistics Core at the Lineberger Comprehensive Cancer Center both offer services to investigators and their research teams; neither core charges for services delivered during the proposal development phase. The Dissemination Core also provides services for selected projects at no charge, its goal being to build the field of dissemination research, at no charge. Lineberger also offers consultation to local Komen Foundation grant applicants to help them choose and adapt evidence-based approaches. All formal agreements are documented in the Resource File.

1.6.m. Outcome Measures

Required Documentation: *Identification of outcome measures by which the school may judge the adequacy of its resources, along with data regarding the school's performance against those measures for each of the last three years. At a minimum, the school must provide data on institutional expenditures per full-time-equivalent student, research dollars per full-time-equivalent faculty, and extramural funding (service or training) as a percent of the total budget.*

Table 1.6.m. Outcome Measures Related to Adequacy of Resources				
OUTCOME MEASURES/METRICS	Target	2006-2007	2007-2008	2008-2009
Institutional Expenditures per Student FTE				
Total Expenditures	Increase	\$ 90,464,343	\$ 96,284,975	\$110,872,072
Enrollment FTE	Increase	1120.00	1172.75	1229.25
Expenditures / FTE	Increase	\$ 80,772	\$ 82,102	\$ 90,195
Research Dollars/Faculty FTE*				
Research Expenditures	Increase	\$ 48,588,926	\$ 48,457,683	\$ 58,663,095
Research Core Faculty FTE	Increase	207	208	208
Research Expenditures / Core Faculty FTE	Increase	\$ 234,729	\$ 232,970	\$ 282,034
Research Expenditures / Total Faculty FTE	Increase	\$ 221,624	\$ 220,563	\$ 246,815
Extramural Funding for Service and Training as a Percent of Total Budget**				
Total Extramural Funding	Increase	\$ 23,902,485	\$ 18,555,270	N/A
Budget Sources	Increase	\$ 115,159,638	\$ 148,307,873	\$ 165,840,649
Percent	Increase	21%	13%	N/A

* Contracts & Grants for School PI's at campus research centers are included

** Training & Service Contracts & Grants includes Grants for Student Support, from ASPH Annual Reports for FY2007 & FY2008; figures for the Training & Service Contracts & Grants values are not available (N/A) for FY2009 until ASPH reports are completed in September of 2010; training & Service Contracts & Grants are expenditure figures & do not include direct costs

1.6.n. Assessment of Resources

Required Documentation: <i>Assessment of the extent to which this criterion is met.</i>
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Strengths

- The school has sufficient physical resources on campus for its research and teaching missions. Improvements to the physical plant of Rosenau Building and the addition of the MHRC greatly strengthened the school's resources. We are improving classrooms in McGavran-Greenberg, and these changes will add substantially to the teaching resources in that building.
- The school resides in a rich environment of information and technology resources across campus
- Strong relationships with centers across campus add immeasurably to our research resources

Challenges

- Achieving the school's mission in the context of the current economic situation and resulting state budget changes
- Providing sufficient and appropriate space for training and outreach programs (until Carolina North becomes a reality)
- Providing contiguous space for interdisciplinary collaborations
- Providing continued funding so that information and technology resources remain cutting edge

Future Directions

- Full participation in the planning, development, and implementation of ConnectCarolina, a large enterprise administrative system
- Continue renovations of the classrooms in McGavran-Greenberg 1301 and 2301

This Criterion is met.
