

SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION
1984-85 APPROPRIATION FORMULA
FOR CONTINUING OPERATIONS

The Appropriation Formula provides for equitable sharing of state taxpayer support for South Carolina's public colleges and universities. Realistic appropriations are computed impartially by using actual enrollments, proven student/faculty ratios, uniform salary assumptions, and justifiable average percentages to cover the agreed programs (instruction, research, public service, etc.) of the institutions.

1. STUDENT CREDIT HOURS

Use the number of student credit hours produced, by level of instruction and academic discipline, during the fall 1983 semester. Include half credit for contact hours in physical education and remedial courses unless credit hours toward a degree are awarded for such courses. (See CHE Report 14)

2. FTE (FULL-TIME EQUIVALENT) STUDENTS

Divide undergraduate credit hours by	15
professional (law) " "	15
master's level " "	12
and doctoral " "	9

to determine the number of FTE students to be taught. (See CHE Report 3)

N O T E

From Table 1 determine the appropriate Academic Discipline Table 2, 3, or 4 to be used in calculating steps 3, 4a and 4b for your institution.

3. FTE TEACHING FACULTY

To find the number of FTE teaching faculty positions required, divide the number of FTE students at each level and in each academic discipline by an appropriate student/faculty ratio.

4. INSTRUCTION

- a. Compute the cost of teaching faculty salaries by multiplying the FTE teaching faculty by peer group faculty salary average for each discipline and level.
- b. Multiply the cost of teaching faculty salaries for each discipline and level by the corresponding peer group instructional support percentage to obtain total cost for instructional support.

- c. add a and b.
- d. Of the total number of FTE teaching faculty (other than military science) required, determine the proportion to be filled by teaching assistants. (Use the proportion on fall 1982 CHE Report 9, unless justification for a different proportion is presented). Multiply the number of FTE teaching assistants required by \$X,XXX (difference between average salary of faculty other than teaching assistants and average salary of teaching assistants for fall 1982 for your institution), plus improvements of 5 % for 1983-84. (See CHE Report 10)
- e. The difference between 4c and 4d equals total costs for instruction.

5. RESEARCH

25% of prior year sponsored research and non-general fund research expenditures at your institution equals total costs for research.

6. PUBLIC SERVICE

25% of prior year sponsored public service and non-general fund public service expenditures at your institution equals total costs for public service.

7. ACADEMIC SUPPORT - LIBRARIES

10% of total instructional costs (as determined in step 4e) to cover library acquisitions and operations equals total costs for academic support - libraries.

8. ACADEMIC SUPPORT - OTHER

12% of total instructional costs (as determined in step 4e) to cover museums and galleries, educational media services, academic computing support, ancillary support, academic administration, and academic personnel development equals total costs for academic support - other.

9. STUDENT SERVICES

\$150 - 1st 4,000 headcount students, \$125 - 2nd 4,000 headcount students, \$100 - 3rd 4,000 headcount students, \$75 - all over 12,000 headcount students enrolled fall 1982, plus \$4 per student credit hour as determined in step 1 equals total costs for student services.

10. OPERATION AND MAINTENANCE OF PLANT

- a. For physical plant general services, use formula I, Table 5.
- b. For building maintenance, use formula II, Table 5.
- c. For custodial services, use formula III, Table 5.

- d. For grounds maintenance, use formula IV, Table 5.
- e. Add the actual 1981-82 expenditures for utilities (see Table 6 for definitions) plus 6 % per year (14 % for natural gas).
- f. The sum of 10a through 10e equals total costs for operation and maintenance of plant.

11. INSTITUTIONAL SUPPORT

- a. Sub-total steps 4e, 5, 6, 7, 8, 9, and 10.
- b. 15% of this total or \$50,000 (whichever is larger) equals total costs for institutional support.

12. UNIQUE COSTS

Funding to provide for unique costs and to respond to differences which exist among institutions because of different roles and missions, which are not provided for in previous steps, may be requested. Items included should be of such nature as to require subjective analysis and judgment. When requests for such items are included, they must be subjectively justified (to include how the item is unique, special or not included in previous components of the formula) and specific amounts of costs by program must be detailed as to personnel services, equipment and other operating expenses.

13. STATE EMPLOYER CONTRIBUTIONS

Use state employer contributions as calculated by State Personnel Division for personnel included in the programs funded by the Formula.

14. COST OF EDUCATIONAL AND GENERAL OPERATIONS

Add the amounts calculated in Steps 11a, 11b, and 13. From this total subtract the amount of teaching faculty salaries for academic discipline 1800, Military Science, computed in Step 4a. This is the total cost of educational and general (E & G) operations.

15. REVENUE TO BE GENERATED BY THE INSTITUTION IN SUPPORT OF EDUCATIONAL AND GENERAL OPERATIONS

Multiply the amount calculated in Step 14 by .17 (S.C. State .07). Multiply the resulting amount by 1.XXX (Where .XXX equals the percent of out-of-State students enrolled in Fall 1982). This is the total revenue to be generated by the institution for E & G operations.

16. STATE FUNDS REQUIRED TO SUPPORT EDUCATIONAL AND GENERAL OPERATIONS

Subtract the amount calculated in Step 15 from the amount calculated in Step 14, and add the amount calculated in Step 12. This is the amount of total State funds required for educational and general operations.

TABLE 1

APPROPRIATION FORMULA INSTITUTION GROUPS

GROUP I

Institutions conferring the doctoral degree as the highest degree awarded:

Clemson University
U.S.C. - Columbia

GROUP II

Institutions conferring the bachelor's or master's degree as the highest degree awarded:

College of Charleston
Francis Marion College
Lander College
S.C. State College
The Citadel
U.S.C. - Aiken
U.S.C. - Coastal
U.S.C. - Spartanburg
Winthrop College

GROUP III

College level 2-year branches of 4 year institutions:

U.S.C. - Beaufort
U.S.C. - Lancaster
U.S.C. - Salkehatchie
U.S.C. - Sumter
U.S.C. - Union

INSTITUTION GROUP 1

 TABLE 2
 S. C. COMMISSION ON HIGHER EDUCATION
 ACADEMIC DISCIPLINE DATA

	STUDENT/FACULTY RATIOS				SUPPORT PERCENTAGES	
	U/G	G-1	G-2	U/G	G-1	G-2
0000 ARCHITECTURE	13 : 1	06 : 1	09 : 1	20,606	.20	.20
0000 BUSINESS & MANAGEMENT	26 : 1	17 : 1	12 : 1	32,632	.30	.30
1300 TEACHING EDUCATION	11 : 1	12 : 1	09 : 1	26,020	.30	.35
1399 PRACTICE TEACHING	11 : 1	00 : 1	00 : 1	17,685	.00	.00
1700 NURSING (ASSOC.)	07 : 1	00 : 1	00 : 1	17,685	.00	.00
1800 SPEECH PATHOLOGY & AUDIOLOGY	09 : 1	00 : 1	06 : 1	33,599	.23	.23
1811 NURSING DATA & ANALYSIS	07 : 1	07 : 1	07 : 1	22,503	.35	.35
1811 NURSING DATA & ANALYSIS	15 : 1	00 : 1	00 : 1	27,646	.60	.60
1811 NURSING DATA & ANALYSIS	17 : 1	00 : 1	00 : 1	33,599	.60	.60
1900 PUBLIC HEALTH	09 : 1	00 : 1	00 : 1	25,029	.25	.25
1900 HUMAN ECONOMICS	16 : 1	12 : 1	12 : 1	35,426	.35	.31
2200 LAW	09 : 1	27 : 1	00 : 1	31,599	.25	.25
2500 LIBRARY SCIENCE	19 : 1	00 : 1	00 : 1	31,599	.00	.00
2600 MILITARY SCIENCE	19 : 1	00 : 1	00 : 1	31,599	.00	.00
3000 TEXTILE SCIENCE	06 : 1	00 : 1	04 : 1	32,364	.95	.95
3101 CRIMINAL JUSTICE	19 : 1	15 : 1	15 : 1	29,354	.22	.22
3607 FINE & APPLIED ARTS	19 : 1	15 : 1	15 : 1	29,354	.22	.22
5000 FINE & APPLIED ARTS	13 : 1	09 : 1	09 : 1	25,963	.29	.29
0900 COMMUNICATIONS	20 : 1	12 : 1	06 : 1	26,639	.30	.30
1600 FOREIGN LANGUAGES	20 : 1	12 : 1	06 : 1	25,963	.25	.25
2300 LETTERS STUDIES	20 : 1	12 : 1	06 : 1	25,963	.15	.15
3000 INTERDISCIPLINARY STUDY	20 : 1	12 : 1	06 : 1	20,810	.00	.00
3200 PSYCHOLOGY	20 : 1	12 : 1	06 : 1	29,232	.35	.35
4000 PUBLIC AFFAIRS & SERVICES	20 : 1	12 : 1	06 : 1	26,630	.20	.20
4500 SOCIAL SCIENCES	20 : 1	12 : 1	06 : 1	29,354	.18	.18
1100 COMPUTER & INFORMATION SCIENCE	22 : 1	09 : 1	07 : 1	31,685	.60	.60
2600 BIOLOGICAL SCIENCES	22 : 1	09 : 1	07 : 1	31,685	.70	.70
2700 MATHEMATICS	22 : 1	09 : 1	07 : 1	28,734	.19	.19
4000 PHYSICAL SCIENCES	22 : 1	09 : 1	07 : 1	32,364	.60	.60
0200 AGRICULTURE	17 : 1	08 : 1	03 : 1	20,811	.45	.45
0305 PARKS & RECREATION MGT.	17 : 1	08 : 1	03 : 1	20,811	.60	.60
3103 PARKS & RECREATION MGT.	17 : 1	08 : 1	03 : 1	29,354	.40	.40
1400 ENGINEERING	19 : 1	11 : 1	06 : 1	32,353	.60	.60

INSTITUTION GROUP 11

 TABLE 3
 S. C. COMMISSION ON HIGHER EDUCATION
 ACADMIC DISCIPLINE DATA

	STUDENT/FACULTY RATIOS					AVG SAL	SUPPORT PERCENTAGES	
	U/G	G-1	G-2	U/G	G-2		G-1	G-2
0600 BUSINESS & MANAGEMENT	24 : 1	17 : 1	00 : 1	20	20	26,780	20	00
1300 DENTAL EDUCATION	21 : 1	12 : 1	00 : 1	25	25	23,057	25	00
1310 MEDICAL EDUCATION	11 : 1	00 : 1	00 : 1	20	20	23,057	20	00
1399 MEDICAL TEACHING	11 : 1	00 : 1	00 : 1	20	20	23,057	20	00
1700 NURSING (ASAC+)	07 : 1	00 : 1	00 : 1	25	25	20,969	25	00
1901 NURSE PATHOLOGY & AUDIOLOGY	07 : 1	00 : 1	00 : 1	40	40	22,632	40	00
1911 NURSING (HA & ABOVE)	07 : 1	00 : 1	00 : 1	35	35	21,628	35	00
1900 HOME ECONOMICS	14 : 1	12 : 1	00 : 1	25	25	21,302	25	00
2000 NUTRITION	19 : 1	11 : 1	00 : 1	25	25	21,018	25	00
2300 NUTRITION SCIENCE	16 : 1	10 : 1	00 : 1	25	25	21,520	25	00
3301 CRIMINAL JUSTICE	12 : 1	12 : 1	00 : 1	10	10	20,664	10	00
4A07 SOCIAL WORK	15 : 1	12 : 1	00 : 1	10	10	20,664	10	00
5000 FINE & APPLIED ARTS	13 : 1	08 : 1	00 : 1	24	24	23,610	24	00
0900 COMMUNICATIONS	20 : 1	12 : 1	00 : 1	25	25	20,204	25	00
1600 FOREIGN LANGUAGES	20 : 1	12 : 1	00 : 1	20	20	23,052	20	00
2300 LETTERS	20 : 1	12 : 1	00 : 1	20	20	23,052	20	00
2499 GENERAL STUDIES	20 : 1	00 : 1	00 : 1	19	19	20,612	19	00
3000 INTERDISCIPLINARY STUDY	20 : 1	12 : 1	00 : 1	30	30	24,785	30	00
4200 PSYCHOLOGY	20 : 1	12 : 1	00 : 1	20	20	24,051	20	00
4400 PUBLIC AFFAIRS & SERVICE	20 : 1	12 : 1	00 : 1	18	18	20,051	18	00
4500 SOCIAL SCIENCES	20 : 1	12 : 1	00 : 1	18	18	24,363	18	00
1100 COMPUTER & INFORMATION SCIENCE	22 : 1	09 : 1	00 : 1	43	43	25,376	43	00
2600 PHYSIOLOGICAL SCIENCES	22 : 1	09 : 1	00 : 1	43	43	25,353	43	00
2700 MATHEMATICS	22 : 1	09 : 1	00 : 1	25	25	23,038	25	00
4000 PHYSICAL SCIENCES	22 : 1	09 : 1	00 : 1	43	43	25,120	43	00
1400 ENGINEERING	10 : 1	11 : 1	00 : 1	45	45	27,127	45	00

INSTITUTION GROUP III

 TABLE 4
 S. C. COMPARISON ON HIGHER EDUCATION
 ACADEMIC DISCIPLINE DATA

SUPPORT PERCENTAGES

STUDENT/FACULTY RATIOS

	U/G	G-1	G-2	AVG SAL	U/G	G-1	G-2
0600 BUSINESS & MANAGEMENT	24 : 1	00 : 1	00 : 1	17,539	20	00	00
1300 EDUCATION	22 : 1	00 : 1	00 : 1	17,000	20	00	00
1700 NURSING (ASSOC.)	07 : 1	00 : 1	00 : 1	17,000	15	00	00
1811 NURSING SCIENCE	07 : 1	00 : 1	00 : 1	21,628	35	25	00
2500 ENGINEERING	19 : 1	00 : 1	00 : 1	22,018	25	00	00
3000 FINE & APPLIED ARTS	13 : 1	00 : 1	00 : 1	18,359	15	00	00
0900 COMMUNICATIONS	20 : 1	00 : 1	00 : 1	15,545	25	00	00
1600 FOREIGN LANGUAGES	20 : 1	00 : 1	00 : 1	17,272	20	00	00
2300 LETTERS STUDIES	20 : 1	00 : 1	00 : 1	17,902	20	00	00
3000 LIBRARY STUDY	20 : 1	00 : 1	00 : 1	19,160	18	00	00
4200 PSYCHOLOGY	20 : 1	00 : 1	00 : 1	18,200	30	00	00
4500 SOCIAL SCIENCES	20 : 1	00 : 1	00 : 1	18,982	20	00	00
				19,297	18	00	00
1100 COMPUTER & INFORMATION SCIENCE	22 : 1	00 : 1	00 : 1	17,876	43	00	00
2400 BIOLOGICAL SCIENCES	22 : 1	00 : 1	00 : 1	10,560	43	00	00
2700 MATHEMATICS	22 : 1	00 : 1	00 : 1	19,314	25	00	00
4000 PHYSICAL SCIENCES	22 : 1	00 : 1	00 : 1	20,435	43	00	00
1400 ENGINEERING	10 : 1	00 : 1	00 : 1	22,783	45	00	00

TABLE 5

1984-85

SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION
FORMULA FOR OPERATION AND MAINTENANCE OF PLANT

$$I. \text{ GENERAL SERVICES*} = SW ([FTES + (2 \times FTEE)] \times 3.90) + (RCB \times .0028)$$

Definitions of terms used in the formula:

1. SW is the average hourly earnings for services (adjusted) for January, 1983, as shown in the Survey of Current Business published by the Bureau of Economic Analysis of the U.S. Department of Commerce.
2. FTES is the full-time equivalent students determined in step 2.
3. FTEE is the full-time employees enrolled in the State Retirement System as of January 1, 1983.
4. RCB is the replacement cost of buildings which shall be determined by applying the factors for the specific classes of construction, as shown on Markel's Handy Appraisal Chart¹ to the original construction costs of each education, general, and service building.

* * * * *

$$II. \text{ BUILDING MAINTENANCE*} = MCF \times RCB$$

Definitions of terms used in the formula:

1. MCF is the maintenance cost factors designated as follows (factors expressed as percentage figures):

	<u>Wood Frame Construction</u> ²	<u>Masonry-Wood Construction</u> ³	<u>Masonry-Concrete Construction</u> ⁴
Air Conditioned	1.90	1.45	1.25
Non-Air Conditioned	1.75	1.30	1.10

2. RCB is the replacement cost of buildings as calculated in the formula for Physical Plant General Services.

¹Published by Markel Appraisal Chart Company, 4108 North Ave., Cincinnati, Ohio 45236, as of January and July each year. Use the January 1983 issue for budget submission.

²Designated as "Frame" on Markel's Handy Appraisal Chart.

³Designated as "Semi-Fireproof" on Markel's Handy Appraisal Chart.

⁴Designated as "Fireproof" on Markel's Handy Appraisal Chart.

TABLE 5
(Continued)

$$\text{III. CUSTODIAL SERVICES*} = \text{SW} \times \text{I} \times \frac{\text{GSF}}{22,400} \times 2080 \times 1.2$$

Definitions of terms used in the formula:

1. SW is the average hourly earnings for services (adjusted) for January, 1983, as shown in the Survey of Current Business published by the Bureau of Economic Analysis of the U.S. Department of Commerce.
2. I represents labor and material inflation factor. For fiscal year 1984-85 this factor is 1.06.
3. GSF is the gross square feet (outside dimensions) of educational, general, and service buildings.

* * * * *

$$\text{IV. GROUNDS MAINTENANCE*} = \text{SW} (.70\text{P} + 122\text{L} + .50\text{E})$$

Definitions of terms used in the formula:

1. SW is the average hourly earnings for services (adjusted) for January, 1983, as shown in the Survey of Current Business published by the Bureau of Economic Analysis of the U.S. Department of Commerce.
2. P is the total linear feet of perimeter of all campus buildings including academic, office, service, administration, etc.
3. L is the total number of acres of lawns and regularly maintained areas (malls, flowerbeds, parking lots, sidewalks, streets, etc.). Exclude all buildings, street areas, and areas covered under organized activities (i.e., college farms).
4. E is the Fall Semester 1983 Headcount Enrollment.

* See Table 6 for definition.

TABLE 6

OPERATION AND MAINTENANCE OF PLANT

DEFINITIONS

- I. Physical Plant General Services - Salaries, wages, supplies, travel, equipment, and other operating expenses to carry out the duties of physical plant administration, planning, and general services. Examples of the activities included are:
 1. Administration - Salaries, wages, travel, equipment, and other operating costs required to administer one or more functional units of the Physical Plant.
 2. Planning - Salaries, wages, travel, equipment, and other costs required to prepare architectural and engineering plans and specifications, for the expansion, renovation, and rehabilitation of physical plant facilities, excluding fees for new construction.
 3. Other General Services, including -
 - (a) Acquisition and repair of general classroom and laboratory furniture. Does not include office furniture.
 - (b) Central receiving and store of supplies and equipment.
 - (c) Safety, including fire, occupational, radiation, health and sanitation safety.
 - (d) Garbage and trash disposal.
 - (e) Hauling, moving and storing.
 - (f) Property Insurance
 - (g) Truck and Automobile expense in general service of the institution.
- II. Building Maintenance - Costs, including salaries, wages, supplies, materials, equipment, services, and other expenses, necessary to keep building in good appearance and usable condition and prevent the building from deteriorating once it has been placed in first class condition for that type and age of building. Does not include Auxiliary Enterprise buildings. Building Maintenance includes minor repairs and alterations, costs of materials, hire of personnel, and other necessary expenses for the repair and/or painting of the following: roofs, exterior walls, foundations, flooring, ceilings,

partitions, doors, windows, plaster, structural ironworks, screens, window shades, venetian blinds, plumbing, heating and air conditioning equipment within or a part of the building, electric wiring, light fixtures (including the replacement of lamps), washing of all outside window surfaces, built-in shelving and other related items.

- III. Custodial Services - Costs including salaries, wages, supplies, materials, equipment, services, and other expenses necessary to keep the buildings in a clean and sanitary condition. Does not include Auxiliary Enterprise buildings. These services include care of the floors, stairways and landings, and restrooms; cleaning chalkboards, inside of windows, walls, and room furniture and fixtures; assigned dusting, removal of waste paper and refuse and other related duties.

Common operations include: Mopping, sweeping, waxing, renovating of floors (sanding and refinishing of floors are excluded); dusting, polishing of furniture and fixtures such as venetian blinds, partitions, pictures, maps, radiators, etc.; cleaning of chalkboards, chalk trays, erasers, and replacement of chalk; washing and dusting of walls, cleaning and disinfecting commodes and urinals, cleaning and washing other fixtures, walls and partitions, and replenishing supplies for restrooms; and emptying and cleaning of waste receptacles, and dusting and cleaning of windows, and other glass surfaces; sweeping and cleaning of entrances, and opening and/or closing of buildings, doors, and windows.

- IV. Grounds Maintenance - Costs including salaries, wages, supplies, materials, equipment, services, and other expenses relating to the upkeep of all lands designated as campus property (improved and unimproved) not occupied by actual buildings, including any court, patio, and/or garden or court enclosed by buildings. Grounds Maintenance begins after the site improvements are complete.

Phases of Grounds Maintenance are:

1. Land Improvements
 - (a) Permanent - Lawns, trees, shrubs, etc.
 - (b) Seasonal - Flowers, bulbs, etc.
2. Circulation Systems
 - (a) Vehicular - Streets and roads - improved and unimproved; parking areas - improved and unimproved; traffic controls - signal lights, signs, and barriers.
 - (b) Pedestrian - Walks and paths - improved and unimproved.
3. Other Activities
 - (a) Campus lighting
 - (b) Irrigation Systems
 - (c) Non-structural improvements - Walls, fences, fountains, campus furniture, others.

TABLE 6
(Continued)

- (d) Ancillary enterprises - Nursery, Greenhouse - areas for special academic study.
- V. Utilities - All costs of purchase, manufacture and delivery of utility services, including: electricity, steam heat, water (hot, cold or chilled), sanitary sewers, and gas for heating, cooling and lighting. Does not include costs of utilities for Auxiliary Enterprises.