

FY 2007 – 2008

*MISSION RESOURCE
REQUIREMENTS
(MRR)*

SOUTH CAROLINA COMMISSION ON
HIGHER EDUCATION

SOUTH CAROLINA
COMMISSION ON HIGHER EDUCATION

Division of
Finance, Facilities, & Management Information Systems

Ms. Lynn W. Metcalf, Director 737-2265

Mr. Gary Glenn	Associate Director	737-2155
Ms. Camille Brown	Chief Information Officer/Asst. Director	737-2149
Mr. Tony Brown	Auditor	737-3920
Ms. Alyson Goff	Coordinator, Finance and Facilities	737-9930
Ms. Monica Goodwin	Senior Information Resource Consultant	737-2156
Mr. Rao Korrapati	Computer Systems Analyst	737-2259
Ms. Stephanie Reynolds	Research Analyst	737-2152
Ms. Nicole Rowland	Program Assistant	737-2148

MRR TABLE OF CONTENTS

Introduction	4
Guiding Principles for a Performance-Based Funding Model.....	6
Summary of the FY 2007-2008 Mission Resource Requirements Funding Model.....	8
The Mission Resource Requirements Funding Model.....	9

TABLES:

1 – Institutional Sector/Grouping.....	12
2 – Sector I – Research Sector – Student/Faculty Ratios and Faculty Salaries.....	13
3 – Sector II – Teaching Sector – Student/Faculty Ratios and Faculty Salaries.....	14
4 – Sector III – Regional Campus Sector – Student/Faculty Ratios and Faculty Salaries...	15
5 – Sector IV – Technical College Sector – Student/Faculty Ratios and Faculty Salaries...	16
6 – Library & Student Service Expenditures	17
7 – Operation & Maintenance of Plant – Definitions	18
8 – Operation & Maintenance of Plant – Formulas.....	21
9 – CHE 150 Definitions.....	24
10 – Funding Medical and Dental Education.....	26

APPENDIX:

1 – FY 2007-2008 MRR Numeric Calculation by Institution by Step.....	27
--	----

INTRODUCTION

Legislative mandates guide the Commission on Higher Education in the development of budgets and the distribution of funds. These mandates include:

Section 59-103-35. Submission of budget; new and existing programs

All public institutions of higher learning shall submit annual budget requests to the commission in the manner set forth in this section. The State Board for Technical and Comprehensive Education shall submit an annual budget request to the Commission representing the total requests of all area-wide technical and comprehensive educational institutions. The budget submitted by each institution and the State Board for Technical and Comprehensive Education must include all state funds, federal grant, tuition, and fees other than funds derived wholly from athletic or other student contests, from the activities of student organizations, from approved private practice plans, and from the operation of canteens and bookstores which may be retained by the institution and be used as determined by the respective governing boards, subject to annual audit by the State. Fees established by the respective governing boards for programs, activities, and projects not covered by appropriations or other revenues may be retained and used by each institution as previously determined by the respective governing boards, subject to annual audit by the State. The budget request for the public higher education system shall be submitted by the commission to the Governor and appropriate standing committees of the General Assembly in conjunction with the preparation of the annual general appropriations act for the applicable year.

Supplemental appropriation requests from any public institution of higher education must be submitted first to the commission. If the commission does not concur with the requests, the affected institution may request a hearing on the requests before the appropriate committee of the General Assembly. The commission may appear at the hearing and present its own recommendations and findings to the same committee. The provisions of this paragraph do not apply to any capital improvement projects funded in whole or in part prior to July 30, 1996.

No new program may be undertaken by any public institution of higher education without the approval of the commission. The provisions of this chapter apply to all college parallel, transferable, and associate degree programs of technical and comprehensive education institutions. All other programs and offerings of technical and comprehensive education institutions are excluded from this chapter.

In addition to the provisions of Section 59-135-35, the Commission on Higher Education is also directed in Section 59-103-45 and Section 59-135-60 of the 1976 Code as amended as follows:

Section 59-103-45. Additional duties and functions of commission regarding public institutions of higher learning

In addition to the powers, duties, and function of the Commission on Higher Education as provided by law, the commission, notwithstanding any other provision of law to the contrary, shall have the following additional duties with regard to the various public institutions of higher education:

(4)(b) base the higher education funding formula in part on the achievement of the standards set for these performance indicators including base-line funding for institutions meeting the standards of achievement, incentive funding for institutions exceeding the standards of achievement, provided that each institution under the formula until July 1, 1999, must receive at least its fiscal year 1996-1997 formula amount;

(d) develop a higher education funding formula based entirely on an institution's achievement of the standards set for these performance indicators, this formula to be used beginning July 1, 1999. This new funding formula also must be contained in regulations promulgated by the commission and submitted to the General Assembly for its review in accordance with the Administrative Procedures Act.

Section 59-103-60. Recommendations to Governor's Office and General Assembly

The commission shall make such recommendations to the Governor's Office and the General Assembly as to policies, programs, curricula, facilities, administration, and financing of all state-supported institutions of higher learning as may be considered desirable. The House Ways and Means Committee, the Senate Finance Committee, and the State Budget and Control Board may refer to the commission for investigation, study, and report any requests of institutions of higher learning for new or additional appropriations for operating and for other purposes and for the establishment of new or expanded programs.

During the process of implementing Performance Funding, the Commission identified two major components of an overall plan. These components are the determination of a Performance Percentage based on institutional ratings on indicators and the development of a Resource Allocation Plan (RAP). The first component of the RAP is an estimate of the fiscal needs of the institutions. Referred to as the Mission Resource Requirements Funding Model (MRR), this model identifies funding requirements for costs associated with Education and General (E&G) activities of the institutions for which the State is responsible.

GUIDING PRINCIPLES FOR A PERFORMANCE-BASED FUNDING MODEL

<u>Characteristic</u>	<u>Summary Description of Principles</u>
A. Goal-Based	The funding model should incorporate and reinforce the broad goals of Act 359 and the Commission on Higher Education for the State’s system of colleges and universities as expressed through approved missions, quality expectations, and performance standards.
B. Mission-Sensitive	The funding model should be based on the recognition that different institutional missions (including differences in degree levels, program offerings, student readiness for college success and geographic location) require different rates of funding.
C. Adequacy-Driven	The funding model should determine the funding level needed by each institution to fulfill its approved mission.
D. Size-Sensitive	The funding model should reflect the impact that relative levels of student enrollment have on funding requirements.
E. Responsive	The funding model should reflect changes in institutional workloads and missions as well as changing external conditions in measuring the need for resources.
F. Adaptable to Economic Conditions	The funding model should have the capacity to apply under a variety of economic situations such as when the state appropriations for higher education are increasing, stable, or decreasing.
G. Concerned with Stability	The funding model should not permit shifts in funding levels to occur more quickly than institutional managers can reasonably be expected to respond.
H. Simple to Understand	The funding model should effectively communicate to key participants in the state budget process how changes in institutional characteristics and performance and modifications in budget policies will affect funding levels.
I. Equitable	The funding model should provide both horizontal equity (equal treatment of equals) and vertical equity (unequal treatment of unequals) based on size, mission, and growth characteristics of the institutions.

- J. Adaptable to Special Situations The funding model should include provisions for supplemental state funding for unique activities that represent significant financial commitments and that are not common across the institutions.
- K. Reliant on Valid & Reliable Data The funding model should rely on data that are appropriate for measuring differences in funding requirements and can be verified by third parties when necessary.
- L. Flexible The funding model should be used to estimate funding requirements in broad categories; it is not intended for use in creating budget control categories.
- M. Incentive-Based The funding model should provide incentives for institutional efficiency and effectiveness and should not provide any inappropriate incentives for institutional behavior.
- N. Balanced The funding model should achieve a reasonable balance among the sometimes competing requirements of each of the criteria listed above.

SUMMARY OF THE FY 2007-2008
MISSION RESOURCE REQUIREMENTS FUNDING
MODEL

<u>Step</u>	<u>Amount Generated</u>
1. Instruction	\$1,225,337,407
2. Research	90,899,840
3. Public Service	25,321,728
4. Libraries	69,007,430
5. Student Services	160,324,164
6. Physical Plant	185,890,167
7. Administration	353,921,324
<hr/>	
8. Subtotal	2,110,702,059
<hr/>	
9. Target Revenue Deduction	(925,903,170)
<hr/>	
10. Required State Support	\$1,184,798,889

THE MISSION RESOURCE REQUIREMENTS FUNDING MODEL

FY 2007-2008

Step 1: Instruction

The Instruction step of the MRR uses a three-year rolling average of student credit hours. This information is imported from credit hour data reported by the institutions to the Commission on Higher Education Management Information System (CHEMIS) for academic years Fall 2004, Spring 2005, and Summer 2005; Fall 2005, Spring 2006, and Summer 2006; and Fall 2006, Projected Spring 2007, and Projected Summer 2007.

Average student credit hours per discipline are converted to full-time equivalencies (FTEs) and then to the number of faculty per discipline based on student/faculty ratios. The resulting number of faculty is multiplied by regional average salaries, by discipline, by sector. Also, employer contributions of 28% are added to provide for the employer's share of certain taxes, insurance premiums, and retirement contributions. Instructional support is calculated based on respective percentages for each discipline. The sum of faculty costs and instructional support represents total instructional costs.

Salary data is from the College and University Personnel Association (CUPA) as of Fall 2005 for institutions in the region and SREB Faculty Salary Averages for the Two-Year Regional Campuses and Technical Colleges inflated by the appropriate Higher Education Price Index (HEPI) to bring them to the FY 2007-2008 levels. Student/faculty ratios are consistent with those from the previous funding formula.

Step 2: Research

An incentive award of 30% of FY 2005-2006 sponsored research expenditures at the institutions is included to foster the continuation and expansion of research activities.

Step 3: Public Service

An incentive award of 25% of FY 2005-2006 sponsored public service and non-general fund public service expenditures at the institutions is included to foster the continuation and expansion of public service activities.

Step 4: Libraries

This category includes library activities which support the academic functions of the institutions. Base expenditures were updated for 2007-2008 using the most recent IPEDS data for each institutional peer and appropriate HEPI increases. Economy-of-scale was considered so that this computation is now size-sensitive as recommended by MGT of America, Inc. in their evaluation of the MRR. (See Table 6)

Step 5: Student Services

This category includes student service activities which contribute to student's emotional and physical well-being and to their intellectual, cultural, and social development outside the context of the formal instructional program. Base expenditures were updated for 2007-2008 using the most recent IPEDS data for each institutional peer and appropriate HEPI increases. Economy-of-scale was considered so that this computation is now size-sensitive as recommended by MGT of America, Inc. in their evaluation of the MRR. (See Table 6)

Student Services includes expenses for admissions, registrar activities, student activities, cultural events, student newspapers, intramural athletics, student organizations, supplemental instruction outside the normal administration, and student records. Intercollegiate athletics and student health services may also be included except when operated as self-supporting auxiliary enterprises. Information technology expenses related to student service activities may also be include if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in institutional support.)

Step 6: Physical Plant

Physical plant costs are generated using formulas for physical plant general services (insurance and administration of physical plant), building maintenance, custodial services, grounds maintenance, and utilities. These formulas consider the building values based on replacement costs of E&G buildings (using values established by the State Property Management Office); maintenance costs based on type of construction; custodial services costs based on average hourly costs for service wages (using data from the South Carolina Office of Human Resources) and the E&G square footage of buildings; and grounds maintenance including average hourly costs for services wages and the total number of acres of regularly maintained areas.

Step 7: Administration

These costs include activities which are non-instructional in nature but are integral to the operation of the institutions. Examples include institutional and academic administration, non-instructional faculty activities, and academic and institutional support. This step is funded at 25% of MRR steps 1, 4, 5, and 6 (Instructional, Libraries, Student Services, and Physical Plant). Adjustments to the base include the exclusion of fringe benefits from the Instruction step and utility expenses from the Physical Plant step.

Step 8: Subtotal

This amount is the sum of steps 1-7 and represents the projected total costs from steps 1, 4, 5, 6, and 7 and the incentives from steps 2 and 3.

Step 9: Revenue Deduction

This step of the model is required to recognize that a portion of the E&G costs is supported by academic fee revenues from students. Thus, E&G costs must be reduced by these student revenues in order to determine the amount of support required from the State. The Target Revenue for four-year institutions is 50% for in-state undergraduate students and 100% for out-of-state students. Target Revenue for graduate students is 30% for in-state and 100% for out-of-state students. There is an exception to these percentages for the State's two medical institutions. This exception is appropriate as recognition of the high costs associated with medical education. For these institutions, the respective percentages for medical and dental programs are 20% for in-state students and 75% for out-of-state students. The deduction amount is 100% of the target student revenues plus any actual revenues above 120% of the target.

Actual Revenue (Academic Fees) – Institutions submit annually to the CHE staff a listing of all tuition and fees assessed to students. CHE staff and institution finance staff have agreed on items that are appropriate for deduction from tuition and fees. These include fees associated with intercollegiate athletics, waivers/abatements associated with state-mandated tuition and fee reductions, fees associated with continuing education courses, and fees transferred to plant funds for debt service. The resulting amount is referred to as Academic Fees.

Step 10: Required State Support

This amount represents the recurring appropriations which should be provided by the State in support of the approved mission of each institution and the activities that support that mission.

TABLE 1

INSTITUTIONAL SECTOR/GROUPING

Sector I – Research Sector

Clemson
USC Columbia (Includes Medical School)
Medical University of SC

Sector II – Teaching Sector

The Citadel	SC State University
Coastal Carolina University	USC Aiken
College of Charleston	USC Beaufort
Francis Marion University	USC Upstate
Lander University	Winthrop University

Sector III – Regional Campus Sector

USC Lancaster
USC Salkehatchie
USC Sumter
USC Union

Sector IV – Technical College Sector

Aiken	Orangeburg-Calhoun
Central Carolina	Piedmont
Denmark	Spartanburg
Florence-Darlington	Technical College of the Lowcountry
Greenville	Tri-County
Horry-Georgetown	Trident
Midlands	Williamsburg
Northeastern	York

TABLE 2

Sector I – Research Sector
Student/Faculty Ratios & Faculty Salaries

Discipline	CIP Code	Student-Faculty Ratios					Faculty Salaries	Instructional Support Percentage
		Remedial	Undergraduate	Masters	First Prof.	Doctoral		
Agricultural Bus. & Production	0100	0	15	6	0	3	\$84,096	42%
Forestry, Conservation, & Nat. Res.	0300	0	15	6	0	3	76,770	53%
Architecture	0400	0	14	6	0	6	73,667	28%
Area Studies	0500	0	20	12	0	6	72,395	22%
Communications	0900	0	12	9	0	5	69,883	28%
Computer & Info. Tech.	1100	0	18	9	0	7	103,869	57%
Teacher Education	1300	0	16	12	0	9	73,649	33%
Industrial Education	1313	0	13	13	0	10	72,340	59%
Practice Teaching	1399	0	12	12	0	12	62,368	35%
Engineering	1400	0	16	12	0	6	101,026	59%
Industrial / Manufacturing Engineering	1435	0	16	12	0	6	75,465	59%
Engineering Rel. Technologies	1500	0	16	12	0	6	75,465	59%
Foreign Languages	1600	0	17	9	0	5	60,548	25%
Graduate Medicine	1883*	0	2	2	2	2	109,979	35%
Graduate Dentistry	1884*	0	2	2	2	2	103,908	35%
Pharm. Residents	1885*	0	2	2	2	0	85,770	60%
Home Economics	1900	0	17	12	0	12	71,231	32%
Law	2201	0	18	21	21	21	131,297	31%
English Language & Literature/Letters	2300	0	17	11	0	5	58,987	17%
Gen. Liberal Studies	2400	0	17	12	0	6	58,415	15%
Library Science	2500	0	17	13	0	11	72,981	25%
Life Sciences	2600	0	17	9	9	7	82,271	64%
Mathematics	2700	0	18	9	0	7	85,437	20%
Military Technology	2900	0	10	0	0	0	50,457	45%
Interdisciplinary	3000	0	17	12	0	6	69,700	27%
Parks, Recreation, Leisure	3100	0	12	8	0	8	67,919	38%
Philosophy & Religion	3800	0	17	11	0	5	73,215	17%
Physical Science	4000	0	16	10	10	8	89,916	56%
Psychology	4200	0	24	13	0	7	78,800	35%
Protective Services	4300	0	18	14	0	14	72,746	22%
Public Affairs	4400	0	18	12	0	6	70,636	17%
Social Work	4407	0	18	15	0	15	72,646	22%
Social Sciences	4500	0	18	12	0	6	82,273	22%
Visual & Performing Arts	5000	0	12	8	0	8	65,185	28%
Allied Health Sciences	5100	0	7	7	7	8	75,330	30%
Speech Pathology/Audiology	5102	0	9	6	0	6	71,365	23%
Dental Basic Science	5104	0	0	3	3	3	97,149	64%
Dental Clinical Science	5105	0	0	3	3	3	103,908	39%
Medical Technology	5110	0	7	7	0	7	68,727	38%
Medical Basic Science	5112	0	3	3	3	3	98,790	64%
Medical Clinical Science	5114	0	2	2	2	2	109,979	38%
Nursing	5116	0	7	7	0	7	70,316	38%
Pharm-D	5120	0	13	7	7	8	85,770	58%
Public Health	5122	0	17	8	0	8	79,060	23%
Nurse-Midwifery	5198	0	2	2	0	0	63,360	35%
Business & Management	5200	0	18	17	0	12	113,337	29%
History	5400	0	18	12	0	6	74,012	22%

TABLE 3

Sector II – Teaching Sector
Student /Faculty Ratios & Faculty Salaries

Discipline	CIP Code	Student-Faculty Ratios				Faculty Salaries	Instructional Support Percentage
		Remedial	Undergraduate	Masters	Doctoral		
Agricultural Bus. & Production	0100	0	15	10		\$64,337	32%
Forestry, Conservation, & Nat. Res.	0300	0	15	10		65,732	32%
Area Studies	0500	0	20	12		62,279	22%
Communications	0900	0	12	11		57,218	28%
Computer & Info. Tech.	1100	0	18	9		75,308	57%
Teacher Education	1300	0	16	12	9	60,528	33%
Industrial Education	1313	0	10	12		57,288	59%
Practice Teaching	1399	0	15	15		56,088	35%
Engineering	1400	0	16	10		79,277	59%
Engineering Rel. Technologies	1500	0	16	10		64,877	59%
Foreign Languages	1600	0	17	10		56,672	25%
Home Economics	1900	0	17	10		58,077	32%
Letters	2300	0	17	12		56,882	17%
Gen. Liberal Studies	2400	0	17	12		65,603	15%
Library Science	2500	0	18	11		60,922	25%
Life Sciences	2600	0	17	8		61,580	64%
Mathematics	2700	0	18	10		65,938	20%
Military Technology	2900	0	12	0		62,402	45%
Interdisciplinary	3000	0	17	12		68,894	27%
Parks, Recreation, Leisure	3100	0	12	10		60,338	32%
Philosophy & Religion	3800	0	17	12		62,147	17%
Physical Science	4000	0	16	10		63,423	56%
Psychology	4200	0	24	13		60,914	35%
Protective Services	4300	0	18	14		59,428	22%
Public Affairs	4400	0	18	12		60,064	17%
Social Work	4407	0	15	12		61,037	22%
Social Sciences	4500	0	18	12		62,597	22%
Visual & Performing Arts	5000	0	12	8		57,963	28%
Allied Health Sciences	5100	0	7	6		59,660	38%
Speech Pathology/Audiology	5102	0	8	6		59,084	23%
Medical Technology	5110	0	6	0		67,552	38%
Nursing	5116	0	6	6		60,633	38%
Business & Management	5200	0	18	17		81,365	29%
History	5400	0	18	12		59,491	22%

TABLE 4

**Sector III – Regional Campus Sector
Student/Faculty Ratios & Faculty Salaries**

Discipline	CIP Code	Student-Faculty Ratios		Faculty Salaries	Instructional Support Percentage
		Remedial	Undergraduate		
Area Studies	0500	15	20	\$58,910	22%
Communications	0900	15	12	58,910	28%
Computer & Info. Tech.	1100	15	18	58,910	57%
Teacher Education	1300	15	16	58,910	33%
Engineering	1400	15	16	58,910	59%
Foreign Languages	1600	15	17	58,910	25%
Home Economics	1900	15	17	58,910	25%
Letters	2300	15	17	58,910	17%
Gen. Liberal Studies	2400	15	17	58,910	15%
Library Science	2500	15	18	58,910	25%
Life Sciences	2600	15	17	58,910	64%
Mathematics	2700	15	18	58,910	20%
Interdisciplinary	3000	15	17	58,910	27%
Parks, Recreation, Leisure	3100	15	12	58,910	32%
Philosophy & Religion	3800	15	17	58,910	17%
Physical Science	4000	15	16	58,910	56%
Psychology	4200	15	24	58,910	35%
Protective Services	4300	15	18	58,910	22%
Public Affairs	4400	15	18	58,910	22%
Social Sciences	4500	15	18	58,910	22%
Visual & Performing Arts	5000	15	12	58,910	28%
Nursing	5116	15	7	58,910	38%
Public Health	5122	15	17	58,910	64%
Business & Management	5200	15	18	58,910	29%
History	5400	15	18	58,910	22%

TABLE 5

**Sector IV – Technical College Sector
Student/Faculty Ratios & Faculty Salaries**

Discipline	CIP Code	Student-Faculty Ratios		Faculty Salaries	Instructional Support Percentage
		Remedial	Undergraduate		
Agricultural Bus. & Production	0100	14	15	\$55,520	42%
Forestry, Conservation, & Nat. Res.	0300	14	15	55,520	42%
Communications	0900	14	12	55,520	28%
Communications Tech.	1000	14	12	55,520	28%
Computer & Info. Tech.	1100	14	18	55,520	57%
Personal & Misc. Services	1200	14	18	55,520	22%
Teacher Education	1300	14	16	55,520	33%
Engineering	1400	14	16	55,520	59%
Engineering Rel. Technologies	1500	14	16	55,520	59%
Foreign Languages	1600	14	17	55,520	25%
Home Economics	1900	14	17	55,520	25%
Law	2200	14	18	55,520	22%
Letters	2300	14	17	55,520	17%
Gen. Liberal Studies	2400	14	17	55,520	17%
Life Sciences	2600	14	17	55,520	64%
Mathematics	2700	14	18	55,520	20%
Military Technology	2900	14	12	55,520	45%
Interdisciplinary	3000	14	17	55,520	27%
Parks, Recreation, Leisure	3100	14	12	55,520	22%
Developmental	3200	14	14	55,520	25%
Citizenship Activity	3300	14	17	55,520	27%
Interpersonal & S	3500	14	17	55,520	27%
Philosophy & Religion	3800	14	17	55,520	17%
Physical Science	4000	14	16	55,520	56%
Science Technologies	4100	14	16	55,520	56%
Psychology	4200	14	24	55,520	35%
Protective Services	4300	14	18	55,520	22%
Public Affairs	4400	14	18	55,520	22%
Social Sciences	4500	14	18	55,520	22%
Construction Trades	4600	14	12	55,520	59%
Mechanics & Repairers	4700	14	12	55,520	59%
Precision Prod. Workers	4800	14	12	55,520	59%
Transportation Workers	4900	14	12	55,520	59%
Visual & Performing Arts	5000	14	12	55,520	28%
Allied Health Sciences	5100	14	7	55,520	38%
Business & Mgt.	5200	14	18	55,520	29%
History	5400	14	18	55,520	22%
Occupational Training (SBTCE)	59101*	14	15	27,760	58%
Apprenticeship (SBTCE)	59102*	14	15	27,760	58%
Industrial Training (SBTCE)	59103*	14	15	27,760	58%
Sponsored Training (SBTCE)	59104*	14	15	27,760	58%
Adult Basic/GED (SBTCE)	59105*	14	15	27,760	58%

* Pseudo coding used for purposes of the MRR

TABLE 6

Library and Student Service Expenditures
Using IPEDS Data
(Inflated by HEPI to FY 2007-2008 Amounts)

Libraries

	<u>Student Headcount</u>			
	<u>1,500</u>	<u>3,500</u>	<u>5,000</u>	<u>10,000</u>
	<u>Base Amount</u>	<u>@ 98%</u>	<u>@ 96%</u>	<u>@94%</u>
Land Grant	\$712	\$698	\$684	\$669
Health Center	2,156	2,113	2,070	2,027
Univ. with Med	927	908	890	871
Sector II	349	342	335	328
Sector III	204	200	196	192
Sector IV	139	136	133	131

Student Services

	<u>Student Headcount</u>			
	<u>1,500</u>	<u>3,500</u>	<u>5,000</u>	<u>10,000</u>
	<u>Base Amount</u>	<u>@ 98%</u>	<u>@ 96%</u>	<u>@94%</u>
Land Grant	\$820	\$804	\$787	\$771
Health Center	1,868	1,831	1,793	1,756
Univ. with Med	978	958	939	919
Sector II	1,083	1,061	1,040	1,018
Sector II w/AMCs	1,934	1,895	1,857	1,818
Sector III	647	634	621	608
Sector IV	805	789	773	757

TABLE 7

Operation and Maintenance of Plant - Definitions

- I. **Physical Plant General Services** – Salaries, wages, supplies, travel, equipment, and other operating expenses required 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** –
 - (a) Acquisition and repair of general classroom and laboratory furniture (Does not include office furniture)
 - (b) Central receiving and storage of supplies and equipment
 - (c) Safety - Includes fire, occupational, radiation, and 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** – Salaries, wages, supplies, materials, equipment, services, and other expenses necessary to keep buildings in good appearance and usable condition and prevent the building from deterioration once it has been placed in first-class condition for that type and age of building. Auxiliary Enterprise buildings are not included.

Common activities include: 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, windows 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** – Salaries, wages, supplies, materials, equipment, services, and other expenses necessary to keep buildings in a clean and sanitary condition. Auxiliary Enterprise buildings are not included.

Common activities 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 chalk boards, 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, replenishing supplies for restrooms; emptying and cleaning the 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** – 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. Ground Maintenance begins after site improvements are complete.

Common activities include:

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; 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) Nonstructural improvements – Walls, fences, fountains, campus furniture, others.
 - d) Ancillary enterprise – Nursery, greenhouse, areas for special academic study.

- V. **Utilities** – 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. Utilities for Auxiliary Enterprise buildings are not included. Supportable estimates may be included for new buildings or for buildings which have been out of service or otherwise not included in prior years. Salaries associated with the purchase, manufacture, and delivery of utility services are included in the General Services component of the Physical Plant step.

Savings Realized From Energy Conservation

The certified annual savings produced by an energy conservation measure are added to utility costs for a specified number of years. The adjustment period is determined by the lesser of the projected life of the measure or the simple payback period plus five years. The maximum adjustment period is 10 years after implementation of the measure.

TABLE 8

Operation and Maintenance of Plant – Formulas

I. GENERAL SERVICES = SW x ([HC + FTES]) x 3.90 + (E&G RCB x .0028)

Definitions of terms used in the formula:

1. **SW** is the median hourly wage from the SC Office of Human Resources (OHR) pay bands for Building/Grounds Specialists (Bands 1 – 3) plus the current year Cost of Living Adjustment (COLA). The calculated wage is then increased by the fringe benefits percentage (FBP) to determine the total hourly service wage.

$$SW = \$24,272 / 2,080 = \$11.67 \times 3\% \text{ (COLA)} \times 28\% \text{ (FBP)} = \$15.38.$$

2. **HC** is the three-year Average Student Headcount.
3. **FTES** is the full-time employees (all employees, not just E&G) enrolled in the State Retirement System as of January 1, 2006.
4. **3.90** is the estimated administrative cost.
5. **E&G RCB** is the calculated cost to replace the educational & general portion of buildings. RCB values are established by the South Carolina Budget & Control Board and reported annually by the institutions through the Commission on Higher Education Management Information System (CHEMIS).
6. **.0028** represents the insurance factor on buildings.

II. BUILDING MAINTENANCE = MCF x E&G RCB

Definitions of terms used in the formula:

1. **MCF** is the maintenance cost factor, based on type of construction, as shown below:

	Wood Frame Construction (2)	Masonry Wood Construction (3)	Masonry Concrete (4)
Air Conditioned	1.90%	1.45%	1.25%
Non-Air Conditioned	1.75%	1.30%	1.10%

2. **E&G RCB** is the calculated cost to replace the educational & general portion of buildings. RCB values are established by the South Carolina Budget & Control Board and reported annually by the institutions through the Commission on Higher Education Management Information System (CHEMIS).

III. CUSTODIAL SERVICES = SW x (E&G SF/22,400)x 2,080 x 1.2

Definitions of terms used in the formula:

1. **SW** is the median hourly wage from the SC Office of Human Resources (OHR) pay bands for Building/Grounds Specialists (Bands 1 – 3) plus the current year Cost of Living Adjustment (COLA). The calculated wage is then increased by the fringe benefits percentage (FBP) to determine the total hourly service wage.

$$SW = \$24,272 / 2,080 = \$11.67 \times 3\% \text{ (COLA)} \times 28\% \text{ (FBP)} = \$15.38.$$

2. **E&G SF** is the total educational and general square feet (E&G square footage plus the common space associated with E&G) of educational, general, and service buildings.
3. **22,400** is the estimated number of square footage maintained by a person
4. **2,080** is the number of hours worked in one year based on 40 hours per week.
5. **1.2** is the vacation and sick time factor.

IV. GROUNDS MAINTENANCE = SW (.70P + 122A + .5HC) + AMC

Definitions of terms used in the formula:

1. **SW** is the median hourly wage from the SC Office of Human Resources (OHR) pay bands for Building/Grounds Specialists (Bands 1 – 3) plus the current year Cost of Living Adjustment (COLA). The calculated wage is then increased by the fringe benefits percentage (FBP) to determine the total hourly service wage.

$$SW = \$24,272 / 2,080 = \$11.67 \times 3\% \text{ (COLA)} \times 28\% \text{ (FBP)} = \$15.38.$$

2. **P** is the total linear feet of the perimeter of **all** campus buildings including academic, office, service, administration, etc.
3. **.70** hours is the time needed to maintain 1 foot of perimeter with shrubs.
4. **A** is the total number of acres of lawns and regularly maintained areas (malls, flower beds, parking lots, sidewalks, streets, etc.). Exclude all building, street areas, and areas covered under organized activities (i.e., college farms).
5. **122** represents the number of hours to maintain 1 acre of lawn per year.

6. **HC** is the three-year Average Student Headcount.
 7. **AMC** is a surcharge added for Additional Military Costs associated with maintenance of Summerall Field at the Citadel.
- V. **UTILITIES** – Actual utility expenditures for FY 2005-2006 are reported by the institutions on the CHE 150 Report. Utility expenditures are augmented by any applicable certified energy cost savings and the energy inflation factor.

TABLE 9

CHE 150 Definitions

Research – This category should include all expenditures for activities specifically organized to produce research outcomes, whether commissioned by an agency external to the institution or separately budgeted by an organizational unit within the institution. Subject to these conditions, it includes expenditures for individual and/or project research as well as those of institutes and research centers. This category does not include all sponsored programs (training grants are an example) nor is it necessarily limited to sponsored research, since internally supported research programs, if separately budgeted, might be included in this category under the circumstances described above. Expenditures for departmental research that are separately budgeted specifically for research are included in this category.

Public Service – This category should include funds expended for activities that are established primarily to provide non-instructional services beneficial to individuals and groups external to the institution. These activities include community service programs (excluding instructional activities) and cooperative extension services. Included in this category are conferences, institutes, general advisory services, reference bureaus, radio and television, consulting, and similar non-instructional services provided to particular sectors of the community.

Research & Public Service:

1. No expenditures from an institution's state appropriation and tuition and fees (General Funds) are to be included in the Research or Public Service expenditures. Competitive State Grants¹ from funded sources other than state general funds can be included.
2. Expenditures from Research and/or Public Service sponsored programs must have a sponsor (government, private industry, private foundations, and/or voluntary agencies.) No self-generated dollars shall be included.
3. There are two basic types of instruments – grants and contracts. The institution must have a grant or contract to support the Research or Public Service program reported.
4. Expenditure detail must be submitted with the CHE Report 150. The detail should list the account number, the program name, the sponsor, and the expenditure amount. The detail should support the amount of Research and Public Service expenditures reported on the CHE Report 150.

¹ Competitive State Grants are defined as grants/contracts for which all state public institutions have the opportunity to compete.

5. Funds received from other state agencies are not eligible for inclusion. These funds are not allowed even if the original funds are non-State, unless documentation can be provided which clearly supports the fact that the funds were received by the other agency with the intention of passing those funds through to the reporting institution. Also, if an institution performs the work, it can claim those expenditures regardless of whether that institution is named in the primary grant or contract proposal as a subrecipient or subcontractor for a particular portion of the grant or contract proposal. Funds paid to subcontractors are not includable as expenditures. In no instance can the primary recipient and a subrecipient/subcontractor report the same expenditures.
6. Equipment donations for a specific project are includable. Donations for general improvement should not be included. Only general equipment donations that are used for a specific research project can be claimed.
7. Indirect costs should be included and claimed with the qualifying direct expenditures of the original grant.

Number of Employees Enrolled in the Retirement System:

This number represents the count of full-time employees (all employees, not just E&G) enrolled in the State Retirement System as of **January 1, 2006**.

Actual Utilities Expenditures (E&G):

Report actual E&G utilities for 2005-2006. Do not include utilities associated with auxiliary enterprises.

Number of Acres Regularly Maintained:

This number represents the total number of acres of lawns and regularly maintained areas (malls, flower beds, parking lots, sidewalks, etc.) Exclude the acreage associated with building footprints, natural areas, street areas (actual curb and asphalt) and areas covered under organized activities (i.e. college farms, athletic fields, etc.).

TABLE 10

Funding Medical and Dental Education

Headcount enrollment for medicine and dentistry is allocated to Clinical Science and Basic Science using 70% of total headcount enrollment for clinical science and 30% for basic science. This allocation is based upon American Medical Association (AMA) funding standards adopted when the MRR was first developed.

When computing faculty FTEs for academic programs at the University of South Carolina Medical School and the Medical University of South Carolina, standard conversions are used for all disciplines except medicine and dentistry. For these disciplines, student credit hour data is replaced with the 70/30 split noted above. Residents and interns are not included in the FTE count.

Residents and interns are funded at 40% of a headcount for regular graduate medical doctors and 60% per headcount for family practice residents. The rationale is that graduate medical doctors spend 40% of their time receiving instruction while 60% of the more intensive family practice discipline is spent receiving instruction. The remainder of their time is spent providing patient services.

APPENDIX 1 – FY 2007 – 2008 MRR NUMERIC CALCULATION BY INSTITUTION BY STEP

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8			Step 9	Step 10
Sector / Institution	Instruction	Research	Public Service	Libraries	Student Services	Physical Plant	Administration	Total E & G Steps 1, 4, 5, 6, & 7	Incentives Steps 2 & 3	Sub-Total	Target Revenues	Required State Support
Research Universities												
Clemson	\$169,651,899	\$18,489,827	\$3,351,981	\$11,744,232	\$13,526,088	\$30,631,303	\$46,687,371	\$272,240,894	\$21,841,808	\$294,082,701	\$147,384,686	\$146,698,015
USC Columbia (Inc. Med. Sch)	249,924,162	24,967,455	12,213,753	23,650,585	24,953,411	52,178,431	71,153,746	421,860,335	37,181,208	459,041,543	195,828,941	263,212,603
Medical University of SC	127,834,415	43,130,986	6,042,602	5,332,985	4,620,641	25,503,053	33,279,948	196,571,043	49,173,588	245,744,631	60,381,530	185,363,102
Subtotal	\$547,410,476	\$86,588,268	\$21,608,336	\$40,727,803	\$43,100,141	\$108,312,787	\$151,121,066	\$890,672,272	\$108,196,603	\$998,868,876	\$403,595,156	\$595,273,720
Teaching Universities												
The Citadel	\$21,036,461	\$49,727	\$121,280	\$1,155,402	\$6,402,328	\$8,956,355	\$7,611,743	\$45,162,289	\$171,006	\$45,333,295	\$29,028,882	\$16,304,413
Coastal Carolina Univ.	41,878,434	284,187	144,488	2,578,435	8,001,440	7,941,713	12,627,372	73,027,394	428,675	73,456,069	44,751,299	28,704,770
College of Charleston	64,168,152	1,190,607	139,666	3,849,999	11,948,609	11,807,018	19,128,727	110,902,504	1,330,273	112,232,777	71,303,905	40,928,871
Francis Marion Univ.	21,072,171	40,773	10,134	1,353,534	4,199,547	5,589,646	6,698,451	38,913,349	50,907	38,964,256	19,099,826	19,864,430
Lander Univ.	16,211,171	9,154	77,979	957,042	2,969,494	4,238,020	5,129,388	29,505,115	87,133	29,592,249	14,818,955	14,773,294
S.C. State Univ.	28,822,296	2,271,538	1,778,529	1,506,636	4,674,521	9,661,144	8,877,939	53,542,537	4,050,067	57,592,603	28,920,441	28,672,162
USC Aiken	18,978,486	87,273	106,824	1,157,910	3,592,655	4,602,463	5,944,862	34,276,376	194,097	34,470,473	17,341,156	17,129,317
USC Beaufort	5,616,062	22,638	67,684	463,239	1,437,502	1,698,539	1,908,442	11,123,785	90,322	11,214,106	5,843,888	5,370,219
USC Upstate	28,974,816	69,168	486,360	1,545,168	4,794,061	4,348,722	8,359,730	48,022,497	555,529	48,578,025	25,151,721	23,426,305
Winthrop Univ.	35,211,715	243,031	572,002	2,191,622	6,800,587	10,882,440	11,460,796	66,547,159	815,032	67,362,192	32,927,658	34,434,534
Subtotal	\$281,969,764	\$4,268,095	\$3,504,945	\$16,758,987	\$54,820,744	\$69,726,061	\$87,747,450	\$511,023,005	\$7,773,040	\$518,796,045	\$289,187,730	\$229,608,315
USC Regional Campuses												
USC Lancaster	\$4,439,337	\$3,966	\$69,420	\$226,984	\$719,895	\$1,649,200	\$1,464,022	\$8,499,438	\$73,386	\$8,572,824	\$3,554,079	\$5,018,745
USC Salkehatchie	2,453,507	22,656	100,037	160,684	509,620	1,041,508	886,164	5,051,483	122,693	5,174,176	2,035,985	3,138,191
USC Sumter	4,115,183	16,855	20,418	214,200	679,350	1,463,539	1,342,345	7,814,617	37,273	7,851,889	3,231,530	4,620,359
USC Union	1,310,381	0	18,573	74,120	235,077	478,804	444,147	2,542,529	18,573	2,561,102	1,053,400	1,507,702
Subtotal	\$12,318,408	\$34,007	\$208,447	\$675,988	\$2,143,942	\$4,633,050	\$4,136,679	\$23,908,067	\$251,924	\$24,159,992	\$9,874,994	\$14,284,997
Technical Colleges Sector												
Aiken	\$12,316,924	0	0	\$341,055	\$1,976,512	\$0	\$3,520,182	\$18,154,673	\$0	\$18,154,673	\$7,316,157	\$10,838,516
Central Carolina	13,675,064	0	0	432,175	2,505,142	0	3,941,962	20,554,342	0	20,554,342	8,283,178	12,271,165
Denmark	6,777,047	0	0	194,971	1,129,147	0	1,481,985	2,017,580	0	11,600,730	4,911,564	6,689,166
Florence-Darlington	22,159,081	0	0	568,401	3,295,457	0	6,216,405	32,239,345	0	32,239,345	13,079,237	19,160,108
Greenville	61,012,862	0	0	1,818,829	10,546,079	0	17,194,440	90,572,209	0	90,572,209	38,668,119	51,904,091
Horry-Georgetown	25,709,996	0	0	721,031	4,181,317	0	7,189,704	37,802,048	0	37,802,048	16,999,933	20,802,116
Midlands	49,651,098	0	0	1,451,593	8,423,955	0	13,589,496	73,116,141	0	73,116,141	30,026,501	43,089,641
Northeastern	5,120,607	0	0	144,606	837,468	0	1,522,691	7,625,372	0	7,625,372	3,064,808	4,560,564
Orangeburg-Calhoun	13,316,963	0	0	336,023	1,947,319	0	3,637,325	19,237,629	0	19,237,629	7,849,731	11,387,898
Piedmont	23,781,421	0	0	622,529	3,609,479	0	6,451,111	34,464,541	0	34,464,541	13,981,485	20,483,056
Spartanburg	23,000,948	0	0	583,951	3,385,666	0	6,367,254	33,337,819	0	33,337,819	13,608,987	19,728,832
Technical Coll. of the Lowcountry	8,158,082	0	0	239,599	1,387,918	1,736,284	2,434,817	13,956,701	0	13,956,701	5,820,046	8,136,654
Tri-County	23,096,853	0	0	644,017	3,734,141	0	6,359,239	33,834,250	0	33,834,250	13,966,852	19,867,399
Trident	51,096,827	0	0	1,568,270	9,098,190	0	14,294,193	76,057,480	0	76,057,480	32,103,165	43,954,315
Williamsburg	2,618,743	0	0	80,713	467,437	0	811,008	3,977,901	0	3,977,901	1,591,160	2,386,740
York	20,012,895	0	0	564,503	3,272,839	0	5,634,565	29,484,802	0	29,484,802	11,974,367	17,510,435
Subtotal	\$361,505,411	0	0	\$10,312,264	\$59,798,066	\$3,218,270	\$101,181,972	\$536,015,984	\$0	\$536,015,984	\$223,245,290	\$312,770,694
SUBTOTALS	\$1,203,204,060	\$90,899,840	\$25,321,728	\$68,475,042	\$159,862,893	\$185,890,167	\$344,187,167	\$1,961,619,328	\$116,221,567	\$2,077,840,896	\$925,903,170	\$1,151,937,726
		Research	Public Service	Libraries	Student Services	AHEC Administration	AHEC Adm. Support	Subtotal				
AHEC	\$22,133,347	0	0	\$532,388	\$461,271	\$3,161,924	\$6,572,233	\$32,861,163		\$32,861,163		\$32,861,163
TOTAL	\$1,225,337,407	\$90,899,840	\$25,321,728	\$69,007,430	\$160,324,164	\$185,890,167	\$353,921,324	\$1,994,480,491	\$116,221,567	\$2,110,702,059	\$925,903,170	\$1,184,798,889