Agency Name S.C. G	overnor's School for Science & Mathematics			
Date of Submission September 25, 2005				
Agency Director	Dr. Murray Brockman, President			
Agency Contact Person: Mr. Ernie Boyd, VP for Finance & Operations				
Agency Contact's Telephone Number (843) 383-3906 Email: Boyd@gssm.k12.sc.us				



# S.C. Governor's School for Science & Mathematics 2005-2006 Accountability Report

Continuing Excellence in Partial Facilities: And Planning for Growth September 25, 2006

Mr. Les Boles, Director Office of State Budget, Budget & Control Board 1201 Main Street, Suite 950 Columbia, SC 29201

Re: 2005-2006 Accountability Report

Dear Mr. Boles:

It is a pleasure to submit the 2005-2006 Accountability Report for the South Carolina Governor's School for Science and Mathematics (GSSM).

This report covers another extraordinary year – fighting to maintain excellence during the third year in GSSM's partially completed school building. We maintained our normal level of frugality, working to continue important statewide educational outreach programs and enable operations in a partially built and furnished building while simultaneously upholding the highest standards of operation. In addition, we thankfully accepted the possibility of help through unclaimed lottery funds. It was not until one month before the start of the fiscal year that we learned unclaimed lottery funds were confirmed available – allowing us to avoid draconian measures as we move into 2005-2006.

To maximize the benefit from every dollar we spend to educate our students, GSSM is dedicated to incorporating quality management principles and innovation along with public-private partnerships into every facet of our operation. Through the support of hundreds of South Carolina businesses, the GSSM Foundation was able to provide first-ever funds in 2005-2006 from an endowment designed to add to the excellence of our programs through state-of-the-art equipment and support. We have come a long way in striving toward and reaching ever-higher standards for student achievement during the past sixteen years. We are looking forward to forging additional opportunities for bright, hard-working South Carolina students through expansion once our school building is complete. Partial funding of \$2,500,000 was appropriated during the 2005-06 legislative session. We are deeply grateful for this display of continued support from the General Assembly and the Governor, and we look forward to completing the funding so we can begin construction.

As a small agency, we at GSSM regularly use internal staff work, Board reviews, and customer (parent, student and business) input to review and refine our vision and our mission. We set goals, define metrics, and reassess programs, policies and procedures. In order to best deploy our resources to meet our goals, we use a collegial committee structure involving both internal and external organizations, public and private. GSSM designs programs based on a challenging standards-based curriculum to meet identified needs.

The quality management principles detailed in this report have led to GSSM being nationally recognized as one of the premier schools in the nation as measured by the success of graduates of our programs.

Newsweek magazine named the South Carolina Governor's School for Science & Mathematics one of the nation's twenty top "elite" academic high schools.

These long-term successes have arisen from a compelling vision coupled with annual objectives and associated performance indicators. These indicators include: test scores and other academic measures; scholarships offered and accepted; comparisons with benchmark residential schools in other states; the extremely high recruiting priority universities place on our graduates; demand for our outreach services; and the support of business and industry in helping GSSM provide advanced educational opportunities. The steady increase in stature of the school has created the need to expand our student body into purposebuilt facilities.

GSSM is also now into its sixth year of integrating information developed in conjunction with the Education Oversight Committee (EOC) – the school report card system. We maintain excellence in all categories.

Thank you for your time regarding this report and I will be happy to provide additional information and ask that if you have any questions, please call me.

Sincerely,

Dr. Murray W. Brockman President

#### **Section I – Executive Summary**

#### 1. Mission and Values

## **Mission and Values Statement**

#### South Carolina Governor's School for Science & Mathematics

The purpose of the South Carolina Governor's School for Science and Mathematics (GSSM) is to offer the most academically able students of this state a learning environment that strengthens their ability to think critically, stimulates the joy of learning, and fosters the excitement of discovery through scientific research.

GSSM broadens the horizons of the mind, expands intellectual and personal growth, and cultivates the uniqueness of each student. The School builds a strong sense of community among students, faculty and staff in a residential setting.

Emphasizing science, mathematics, and technology, the Governor's School for Science and Mathematics is an educational resource, which serves the State of South Carolina as a model for academic excellence and provides a diverse range of outreach programs and partnerships.

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#### I.2. Major Achievements from past year

## Major Achievements, Status: FY 2005-2006 Accountability Report SC Governor's School for Science & Mathematics (GSSM)

Repeatedly recognized nationally for excellence, GSSM advances academic achievement throughout South Carolina by offering comprehensive residential and exemplary outreach programs for students and teachers.

S.C. Governor's School for Science & Mathematics: Metrics, Benchmarks & Highlights

#### GSSM RESIDENTIAL PROGRAM

- GSSM residential students are 50% male, 50% female, and 31% minority, and represent 32 of South Carolina's 46 counties and 81 high schools across the state. They are selected on merit, including academic talent, interest in science and mathematics, and strong character.
- GSSM has earned **Palmetto Gold** with an "**Excellent**" rating on the SC Annual School Report Card for the third consecutive year.
- Over the years, 51% of graduates attend college in S.C. For 2005-2006, a record 66% of GSSM graduates attended S.C. colleges. About 50% of GSSM alumni seek careers in S.C., working as teachers, doctors, scientists, engineers, computer scientists, and lawyers.
- Strong academic performance is a hallmark of GSSM students. In 2006, seniors led the state again
  with an average SAT score of 1364 (The SC average was 985, and the national average was 1021).
   Twenty-one students have been recognized by the Advanced Placement program with distinctions
  ranging from Scholars to National Scholars.
- In 2006, 13 seniors (21%) were named National Merit Simi-Finalists, up from 4 in the previous year. There are 53 Palmetto Fellows, and all 60 seniors qualified for the Life Scholarship offered by the state. The Class of 2006 received over 7.9 million in scholarship monies.
- Our nationally recognized mentored research program for rising seniors, which is open to all South Carolina students and required for GSSM students, continues to establish new benchmarks.
   For three consecutive years, a GSSM student was named as an Intel Science Competition National Semifinalist. Several students expect to have their research results published in prestigious national scientific journals. For the third year, a senior has received the South Carolina GE Star Award for academic excellence.
- The GSSM Math Team has earned one of the top ten ranks in the nation for five of the last 6 years in the Phi Alpha Mu National Math Competition.

- Extracurricular activities continue to shine. Students did a fantastic production of Romeo and Juliet last year, and the GSSM Chorus' Spring Concert was very well received. Four students earned chairs in the All-Region Band. Each year, GSSM student musicians earn All-Region or All-State honors. 82% of students participate in varsity athletics. The soccer team finished second in the state's Division I, while the tennis team finished 4<sup>th</sup> in the state. The volleyball team won the Regional title and the S.C. High School Sports League named Physics Instructor Dr. Mark Godwin Regional Coach of the Year for the second year in a row. Brian Brooks, Class of '06, placed first at the state track meet for the second year in row in the 1600 and 3200m races.
- GSSM alumni continue to demonstrate excellence in both academics and leadership at the college level. Six GSSM alumni were named Goldwater Scholars over the past 4 years at Clemson, USC, Furman, and the University of Georgia. Currently, the Student Government President (Stephen Gosnell, '02) at Clemson University and NC State (Will Quick, '06) are GSSM alums. For the past three years, a GSSM Alum has been among those named as a prestigious Rhodes Scholars. Last year, two GSSM Alum were nationally recognized as Rhodes Scholars and another as a Gates Scholar, allowing them to pursue, at no cost, a graduate degree at Oxford or Cambridge University
- GSSM Faculty, all holding advanced degrees, continue to receive significant recognition. Physics Instructor Dr. Mark Godwin was selected for a research and teaching fellowship at the prestigious European Center for Nuclear Research in Geneva. Mr. Randy LaCross, Director of the GSSM Center for Excellence, presented results from GSSM's Team GEAR Up program to the National Council for Community and Educational Partnerships. Mr. Coleman's poetry appeared in Windhover and Dr. Flannagan's essays appeared in the Dictionary of Literary Biography. French Instructor, Dr. Lollie Eykyn was one of five French teachers in S.C. to review examinations required for state certification for new French teachers. Mathematics Instructor, Dr. Murray Siegel, serving as Associate Editor of the Statistics Teachers' Network, presented papers to scholarly conferences in Charleston, Phoenix, San Antonio, and Toronto, not to mention leading workshops for AP statistics teachers in St. Louis, MO, Dallas, TX, and Norman, OK.

#### GSSM CENTER FOR EXCELLENCE

- The **Summer Science Program** completed its **17**<sup>th</sup> **successful year** bringing 280 rising 9<sup>th</sup> and 10<sup>th</sup> graders from around the state together to study calculus, Java script, plant ecology, entomology, etc. The number of students **supported by scholarships** continues at nearly **30%**, thanks to generous support from businesses through the GSSM Foundation.
- GSSM has received an extended GearUP grant for teaching teachers ways to implement the new
  science standards for middle and elementary students. In addition, GSSM has teamed-up with
  Science South to conduct workshops, presentations and instructional modules for students and
  teachers. Over 10,000 middle and elementary students will academically benefit from the above
  activities each year.

#### GSSM FOUNDATION

 Our strong and active Foundation organizes the support of hundreds of businesses from all across the state in support of sustaining excellence at GSSM.

#### I.3. Key Strategic Goals for Present and Future Years

This report reflects the goals of GSSM's programs and operations providing for the following:

- Maintain the excellence that is the hallmark of each GSSM program
- Use funds efficiently and effectively
- Complete GSSM's facilities: Fund Phase II construction & outfitting through capital appropriation (s)

#### **Strategic Goals**

- 1. Continue and strengthen residential and outreach programs, enhancing excellence and meeting opportunities statewide
- 2. Complete and occupy new stand-alone facilities. Phase I Opened in August 2003 Accomplished.
  - a. Finalize Phase 2 Funding Pending capital appropriation Partial Funding
  - b. Finalize Furniture, Fixtures & Equipment requirements and support appropriations request Accomplished for Phase I
- 3. Plan for and double the size of the student body and faculty while maintaining or improving quality and minority enrollment Underway
  - a. Visit school districts present the opportunity, hear feedback
  - b. Analyze alternatives AP, IB, private schools, other. How are we unique?
  - c. Evaluate 10<sup>th</sup> grade admission completed.
  - d. Use the expansion opportunity to review and upgrade curriculum (created Robotics/Engineering Course) ongoing
  - e. Define enhanced math/computer science & technology offering(s)
  - f. Expand Open House days for recruitment information Doubled.
- 4. Spearhead efforts toward leadership in South Carolina science and math education via our outreach programs Underway
  - a. Uncover grant opportunities especially in teacher training
  - b. Obtained new five-year Federal GearUP Grant through CHE partnership
  - c. Expand summer research coordination with higher ed partners: 2005 saw addition of College of Charleston & MUSC
- 5. Enhance the profile of GSSM across the state Underway
  - a. Establish role in SC state initiatives to improve science and math education
  - b. Establish role of parents in the school vision
  - c. Create targeted communications plan for internal and professional implementation underway, articles in business journals, radio efforts, newspaper articles under common branding focusing on excellence of students
- 6. Continue to focus on the development of high character and exceptional skills in our students Accomplished/Ongoing
  - a. Evaluate honor codes at other schools underway
  - b. Review handbook and emphasize principles completed

**I.4. Opportunities and barriers** that may affect the agency's success in fulfilling its mission and achieving its strategic goals (This establishes the basis for the agency's budget request).

#### I.4.a Opportunities:

- 1. By providing advanced facilities equal to the quality of the faculty and students, GSSM can keep our programs on the cutting edge of science and technology to enhance the growing knowledge economy in partnership with the research universities
  - a. When Phase II is funded, we will build state-of-the-art laboratory facilities for instruction.
  - b. Advanced laboratories will enhance our student's preparation to compete globally in scientific research.
  - c. State-of-the-art instructional laboratories will provide a year-round resource center to enable hands-on laboratory experiences for South Carolina science teachers.
- 2. Maintain and extend quality GSSM programs' reach and depth to a "critical mass" of students and teachers, both residential and outreach.
  - a. When Phase II is completed, GSSM's new campus will have space for up to 300 of the state's brightest and most-motivated students to participate in the intensive full immersion of our leading-edge residential program. This larger number will provide opportunities for even more students from every corner of South Carolina to participate. Today, we turn away two out of every three applicants.
  - b. Grant requests are researched and submitted to fund high-quality courses to enhance academic achievement statewide. GSSM developed and obtained with partners a Federal Grant (GearUP) to teach middle school teachers in the sciences. Following our philosophy of building partnerships in order to leverage resources, this grant is part of the larger program involving CHE, school districts, and the business community through the State Chamber of Commerce. Other grant opportunities are being developed.
- 3. Grow the knowledge economy and enhance quality of life throughout South Carolina by providing a larger home-grown supply of high-quality engineers, scientists, doctors, and other professionals who have a strong predilection to seek higher education and then employment in South Carolina
- 4. Raise the pride and awareness South Carolinians have in their young scholars by more extensively communicating the national and world-level achievements our students are producing through challenging GSSM programs both residential and outreach. Awareness campaign underway in 2005 articles appeared in business journals and newspapers.

#### I.4.b. Barriers 2005-2006:

1. Unfinished campus puts growth on "hold" until building can be completed. GSSM now operates without dedicated classrooms or labs and no assembly, gymnasium, presentation or project assembly spaces. These un-built facilities are at the "heart" of GSSM's academic programs. (See diagram on next page.)

Capital construction funds (\$13,178,693 est. for 2006 bidding) sought to build the quality laboratories and classrooms planned for the new campus. \$2,500,000 appropriated.

- a. Every year of delay in funding increases construction costs. complete funding of GSSM's new campus (Phase II and FFE requirements).
  - i. Construction inflation estimated at up to 12.5% for each year of delay.
  - ii. Lease costs for replacing classrooms and laboratories not available until Phase II is constructed. Negotiated with Coker College to lease chemistry laboratories unavailable in Phase I of GSSM's new campus un-recovered cost: \$45,000 annually. Inability of funding building completion during 2005-06 requires –re-negotiation of chemistry laboratory lease.
    - -additional 12.5% construction funds due to steel and raw material increases
- b. Incomplete campus puts programs on "hold" until building is complete.
  - i. No presentation space limits educational conferences, teacher training
  - ii. No gymnasium harms recruitment, reduces effectiveness of wellness model
  - iii. Opportunities for exceptional students in science/math are stunted
  - iv. Electives and new curriculum initiatives limited at current faculty/student size
  - v. Recruitment and retention of stellar faculty more difficult without complete facilities
  - vi. Design and assembly of large-scale engineering projects in prevented
- c. Our current small size inhibits expansion of the curriculum into critical areas we want to introduce into advanced high school instruction
  - i. Finance and economics, hands-on engineering, Asian language instruction and computer science must be developed as national models for early instruction
  - ii. With business and university partners, we must explore international research partnerships
- 2. Misperception that science and mathematics are not a state education priority that South Carolina's economic future does not rest on a highly sophisticated knowledge economy.
- **I.5.** How the accountability report is used to improve organizational performance. Review and compilation by senior staff challenges assumptions about current and future priorities, services, allocation of resources, necessity for measurement and testing validity of data.

## Section II - Organizational Profile

## II.1 Description of major products and services

Increase academic achievement by providing advanced and challenging academic courses and experiences, with an emphasis on science, mathematics and technology, to students and teachers in South Carolina. GSSM features two distinct, yet complimentary, program areas:

- a full-time Residential Program for 11<sup>th</sup> and 12<sup>th</sup> graders and
- statewide outreach programs from elementary through high school.

## II.2 Key Customers

"CUSTOMER"	"PRODUCT"	KEY NEEDS	METRICS
	CONSUMED		
Residential Students,	Advanced coursework,	Advanced curriculum,	College admissions,
Grades 11-12	Full-immersion	Flexible offerings,	Adv. placement,
	residential program	College preparation,	Scholarship offers,
		Faculty w. adv. degrees	Subject mastery
Middle & High School	GearUP Saturday	Advanced curriculum,	Number of students,
Students (7 <sup>th</sup> grade, 9/10 &	Academies	broad-based offerings,	number of schools
11/12)	-Summer Science	capable and flexible	served, number of
	Program	instructors,	disadvantaged
	-Summer Program for		schools served
	Research Interns		
	(Mentored Research)		
Parents	Students' education and	Adv. Curriculum,	College placement,
	character development,	Student Community	scholarship offers,
	Student safety and well-	service, security	safety/security
	being, support		metrics
South Carolina Science and	-Support of academic	Advanced course	Number of teachers
Math teachers	achievement, standards,	content, student content	and students
	menu of opportunities in	programs, certified	participating and
	science & math for	courses, instruction	supported
	students	assistance	
	Non-standard		
	certification,		
	Recertification, content		
	development		
South Carolina school	-Enhance & advance	-Recognition of their	Return of SAT
principals and	interest and achievement	essential role in a	scores, other
superintendents	in science/math tracks,	student's development	tracking indicators,
	-Opportunities for	and achievement	inclusion in
	teachers & students	-Data to enhance	announcements
	-Comparative benchmark	reporting requirements	
	for curriculum offerings		
South Carolina colleges	Advanced students	Highly prepared, able	Attendance in SC
and universities		and motivated students	col. and univ.
SC business community	-Advanced college grads	In-state grads	Graduates employed
	-Enhanced State		in state

	reputation for academics to help recruit/retain professionals.		
SC general public	-Advanced college grads -Pride in academic success of our high school students	-Advancing economy -Enhance quality of life	-Enhance knowledge economy -Perception of pride in education

#### II.3 Key Stakeholders:

- 1. S.C. Schools and School Districts provide students, teachers, partnerships and support.
- 2. S.C. Universities rely on GSSM for talented science and mathematics students
- 3. S.C. parents provide students and form a key partnership for success
- 4. S.C. businesses rely on GSSM to develop science and engineering talent

#### II.4 Key Suppliers (viewed also as partners & stakeholders)

- 1. S.C. Schools and School Districts provide students, teachers, partnerships and support.
- 2. S.C. Universities provide GSSM with instructors, mentors, and other resources.
- 3. Coker College: Provides majority of leased facilities (chemistry labs, limited athletic fields/courts, gymnasium)
- 4. S.C. parents provide students and form a key partnership for success
- 5. State Engineer's office provides expertise for capital construction
- 6. State offices available to us and other state agencies, e.g. State Budget and Control Board for management support (procurement, capital projects), State Department of Education for personnel/finance administration, etc.

#### II. 5 Operations location(s)

Primary facilities: GSSM's partially completed new campus, Phase I – opened August 2003. Even in the face of severe and ongoing budget reductions, GSSM successfully re-located - lock, stock and barrel - from previous all-leased facilities to our new "purpose-built" Campus.

- -Student support and office space
- -Temporary classrooms
- -Temporary laboratories (except chemistry, see below)
- -Dormitory facilities
- -Dining facilities

Secondary Facilities: Leased chemistry laboratories from Coker College and athletic gym/courts not available in Phase I: \$45,000 per year lease.

GSSM in 2005-06 continued successful operations of Phase I facility – following its opening in 2003. After years of planning, GSSM successfully completed construction and outfitting of Phase I: detailing and purchasing all new systems including phone, fiber-optic network, cabling, dining hall equipment, dormitory furniture, trash cans, alarm systems, computerized zoned door locks using magnetic swipe cards, security including camera systems, maintenance, laboratory furniture and equipment, IT, packing and moving.

Future Facilities Required: Complete Master Campus Plan by building Phase II (\$13,178,693 estimate. for 2006 bidding), \$2,600,000 for outfitting and technology). Phase II contains specialized laboratories, classrooms and student activity space. Timeline for opening Phase II: 24 months after funding is secured. Expansion of student body cannot occur until Phase II is built. Student body growth cannot occur until Phase II is built and operational.

GSSM received \$2,500,000 in capital appropriation toward \$15,780,000 needed to complete campus. While a positive step forward, GSSM cannot move forward until all funding is in place. As necessary, GSSM continues to explore breaking master campus into additional phases (build Student Activity Center separately) distinct from Academic Center. This would increase costs and complexities in programmatic growth.

The complete master campus (shown in rendering next page) includes both Phase I and Phase II.

## South Carolina Governor's School for Science & Mathematics: Master Campus Plan - Phase I & Phase II

## Phase I: Opened in August 2003

- Residential Space for up to 300 Students
- Dining Facilities
- Counseling, Student Support Facilities -Temporary Classrooms
- > Faculty and Support Staff Offices

## Phase II: Waiting on Funding...

- > Academic Center:
  - o Advanced Classrooms
  - o Advanced Laboratories
- > Student Activities Center



II.6 Number of Employees: Full-Time State: 31.00

Classified: 12 (FTE)

Unclassified: 19 (FTE-mostly faculty)

For efficiency and cost containment, GSSM uses contractual services when appropriate. Examples include security guard and janitorial services.

II.7 Regulatory environment under which organization operates.

As a state agency, GSSM operates under the laws and regulations of the state of South Carolina, and within Federal regulations pertaining to student information.

II.8 Key strategic challenges: Maintain excellence and complete funding and construction of building followed by implementation of planned growth of student body.

#### II.9.A Performance Improvement System:

- a. Customer needs and expectations: Identification (parents, students, teachers, educational partners, prospective candidates for programs), data gathering and review (interviews, surveys, and review of metric benchmarks including applications, test scores, scholarship awards and growth into further advanced educational settings).
- b. Financial, regulatory, societal and other potential risks: GSSM conducts comparative analysis of similar institutions on a regular and ongoing basis.
- c. Human resource capabilities and needs. GSSM conducts formal and informal comparative analysis of similar institutions on a regular and ongoing basis.
- d. Operational capabilities and needs. GSSM conducts formal and informal comparative analysis of similar institutions on a regular and ongoing basis and weekly reviews short term results and needs. Consult with other agencies and supervisory agencies regularly.
- e. Supplier/contractor/partner capabilities and needs. GSSM collects and reviews feedback from suppliers and partners on quality of current and potential for future programs.

Administration conducts detailed strategic planning process involving all functional areas and input/direction from GSSM Board of Trustees, reviews data and takes initiatives to improve results.

What are your key strategic objectives? (Address in Strategic Planning Chart). See Section I.3 and Strategic Planning Chart.

II.9.B GSSM develops and implements priorities on an ongoing basis with regular internal meetings and a formal process with our Board of Trustees. Metrics are identified, tracked and reviewed. See EOC Report Card.

- a. What are your key action plans/initiatives? See Section I.3 and Strategic Planning Chart.
- b. How do you communicate and deploy your strategic objectives, action plans and performance measures?

Through Board reports, monthly reports to all Faculty/Staff and administrative reports such as the State Budget Request, State Activity Inventory and this report.

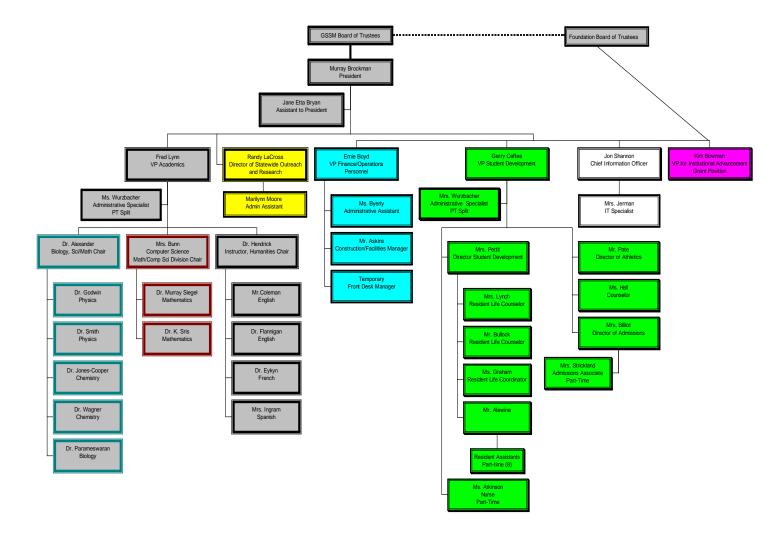
#### II.10 Organizational Structure

GSSM utilizes a "tiered" organization structure, but with open communication between all levels. (See attached organizational chart.) Our governing Board of Trustees, with a school president and four vice-presidents responsible for primary functional areas, lead GSSM's structure. Resource responsibility and authority (both personnel and financial) is placed in the hands of those working most closely with our key customers.

To leverage resources and results, GSSM focuses on a "partnership" model; designing and building programs based on identified needs and shared resources.

On the following page is GSSM's organizational Chart as of February 2006. It shows the creation of both a Computer Science/Mathematics Division within academics and the addition of a Chief Information Officer position.

#### S.C. Governor's School for Science & Mathematics - February, 2006



## II.11 Expenditures/appropriations chart

#### **Accountability Report Appropriations/Expenditures Chart**

#### **Base Budget Expenditures and Appropriations**

	1	FY 04-05 Actu	al Ex	penditures	FY 05-06 Actu	ial E	xpenditures	FY 06-07 Appr	opria	ations Act
Major Budget Categories	T	otal Funds		General Funds*	Total Funds		General Funds*	Total Funds		General Funds* **
Personal Service	\$	1,632,474	\$	1,400,774	\$ 1,616,365	\$	1,520,365	\$ 1,851,566	\$	1,639,066
Other Operating	\$	1,682,172	\$	870,816	\$ 2,066,719	\$	1,479,020	\$ 1,985,536	\$	1,506,536
Special Items										
Permanent Improvements	\$	66,000			\$ 34,000					
Case Services										
Distributions to Subdivisions								\$ 13,200		
Fringe Benefits	\$	489,832	\$	437,974	\$ 484,910	\$	456,109	\$ 432,378	\$	390,578
Non-recurring										
Total	\$	3,870,478	\$	2,709,564	\$ 4,201,994	\$	3,455,494	\$ 4,282,680	\$	3,536,180

<sup>\*</sup>Includes \$150,000 earmarked & required for Master Lease re-payment for campus Furniture, Fixtures & Equipment

\*\*Start of Year Assignments

#### Other Expenditures

Sources of Funds	FY 04-05 Actual Expenditures	FY 05-06 Actual Expenditures*
Supplemental Bills		
Capital Reserve Funds	\$ -	\$ 92,000
Bonds		

\*\$553,000 was encumbered through Campus A-1 process to:

Add two classrooms
Design Security Fencing
Create Security Fencing/Landscaping
Upgrade Security Systems

<sup>\*</sup>Excludes EIA Teacher Supplements

### II.12 Major Program Areas Chart

Program	Major Program Area		FY 04-05		FY 05-06			Key Cross
Number	Purpose	Budg	get Expenditures**		Bud	dget Expenditures		References for
and Title	(Brief)							Financial Results*
		State:	1,230,460.00		State:	1,539,606.00		EOC Report Card
		Federal:			Federal:			(III.7.1a, page 30). SAT
#1 (813)	Academic Instruction	Other:	102,000.00		Other:	57,400.00		Averages (III.7.2, p. 31)
		Total:	1,332,460.00		Total:	1,597,006.00		Faculty Qualifications:
		% of Tota	al Budget:	39%	% of Total	al Budget:	38%	Report Card, p. 30
		State:	1,168,531.00		State:	1,306,155.00		
		Federal:			Federal:			EOC Report Card
#2 (814)	Life in Residence	Other:	132,500.00		Other:	155,140.00		(III.7.1a, p30) Major
		Total:	1,301,031.00		Total:	1,461,295.00		Acheivements p.6-7.
		% of Tota	al Budget:	38%	% of Total	al Budget:	35%	Program Demand, p.35.
		State:	193,484.00		State:	322,704.00		
		Federal:	41,250.00		Federal:			
#3 (815)	Statewide Outreach/Research	Other:	358,794.00		Other:	520,260.00		Major Acheivements p6-7.
		Total:	593,528.00		Total:	842,964.00		Program Demand, p. 34.
		% of Tota	al Budget:	17%	% of Total	al Budget:	20%	Partnerships, p 36-37.
		State:			State:			
		Federal:			Federal:			
		Other:			Other:			
		Total:			Total:			
		% of Tota	al Budget:		% of Total	al Budget:		
		State:	•	•	State:		·	
		Federal:			Federal:			
		Other:			Other:			
		Total:			Total:			
		% of Tota	al Budget:		% of Tota	al Budget:		

Below: List any programs not included above and show the remainder of expenditures by source of funds.

a) Administrative support (detail through Accountability Inventory to match categories (816)

Remainder of Expenditures:	State:	217,089.00	,	State:	287,028.00	
	Federal:		l l	Federal:		
	Other:	10,550.00	(	Other:	13,700.00	
	Total:	227,639.00		Total:	300,728.00	
	% of Tot	tal Budget:	7%	% of Tota	al Budget:	7%

<sup>\*</sup> Key Cross-References are a link to the Category 7 - Business Results. These References provide a Chart number that is included in the 7th section of this document.

<sup>\*\*</sup> Excludes unclaimed lottery funds received late in FY

#### Section III - Elements of Malcolm Baldridge Award Criteria

#### III.1 Category 1 – Leadership

How do senior leaders set, deploy and communicate:

#### a) Short and long term direction?

GSSM takes advantage of the small size of the organization to involve all members of faculty and staff in setting long and short-term direction. The Board of Trustees and key customers, including students and parents, are also critical components of the decision-making process.

Faculty and staff are consulted monthly via a "President's Report." Senior staff participates in ongoing strategic planning efforts and meet weekly to discuss management and policy issues. The Board receives regular updates in writing, and Board committees take an active role in review and setting direction for specific areas of school administration, including Facilities, Personnel, Organizational Enhancement, and Distance Learning. Parents are consulted through GSSM's Parents Advisory Council (PAC). The PAC provides regular updates on school issues, accomplishments, and changes. Students participate in direction setting via weekly Student Council meetings. The Chair of the Student Council meets regularly with the President and attends Board of Trustee meetings when held in Hartsville at the school. All parents and legislators receive the annual School Report Card, which indicates strategic direction as well as results.

#### b) Performance expectations

GSSM uses both the state Employee Performance Management System (EPMS) and a specialized faculty evaluation instrument. In addition, specific expectations are set with teaching faculty regarding student achievement via one-on-one discussions with the Academic Vice President.

#### c) Organizational Values

Values are communicated by our Vision and Mission statements, which are reviewed annually. In addition, faculty, staff and students regularly meet in a context where values are emphasized and openly discussed.

#### d) Empowerment and Innovation

Because of the small size of the agency, the President and all senior administrators maintain an effective open door policy, encouraging the free flow of ideas and empowering all staff and students to implement ideas with minimal barriers and appropriate oversight.

#### e) Organizational and employee learning

All faculty members belong to at least one professional organization, and several are or have been officers of national organizations. All faculty members undertake professional development annually. Staff personnel receive training whenever new programs or technology are researched and/or implemented.

#### f) Ethical behavior and quality character development

Faculty, staff, and students participate in annual reviews of the Student Handbook. Faculty and students participate in the Honor Council. Faculty and staff participate in the Judicial Council. Awareness and instruction into "ethics" is a focal point for all of GSSM, with presentations, readings and discussions conducted throughout the school year incorporated into activities and school seminars.

#### III.1.2 How do senior leaders establish and promote a focus on customers?

All senior staff members serve as advisors, club or sport sponsors or teach at some point during the school year. In addition, they work directly with GSSM program partners and participants.

Gauging satisfaction for customers involves demand for GSSM programs and demonstrable achievements during their participation. Examples include: scholarships offered, continued academic participation and success measurements such as SAT scores, acceptance rates into future quality academic programs and being implemented this school year an internet-based student satisfaction survey. For teachers, development of and participation in programs, and use of improved skills and knowledge in the classroom to enhance student achievement measure satisfaction.

III.1.3 How does the organization address the current and potential impact of its products, programs, services, facilities, and operations, including associated risks?

We survey parents and students annually, collect achievement data (test scores, scholarships) and track alumni. We also identify and obtain possible local, regional and national benchmarks for comparison.

#### III.1.4 How do senior leaders maintain fiscal, legal and regulatory accountability?

GSSM leadership maintains fiscal, legal and regulatory accountability through a series of authorization chains, reviews and balances. These include:

- Oversight and advice from an active Board of Trustees
- Annual audit through State Department of Education (SDE) which serves as GSSM's fiscal agent (payroll, purchasing, personnel, benefits, state chart of accounts).
- Ongoing authorization, reporting protocols and review from supervisory agencies including:
  - State Engineer's Office (New Campus Planning & construction)
  - SDE's School Planning and Construction (New Campus Planning/construction)
  - State and local Fire Marshall's and safety inspections
  - BCB Materials Management (Procurement, bids, contracts)
  - BCB Capital Projects (Permanent Improvements, Bond)
  - BCB Budget Office (Reports, Legislative Allocations)
  - State Activity Inventory report
  - State Treasurer's Office (Master Lease Program)
  - Hiring legal support on an "as-needed" basis
  - Internal priority identification and requisition systems.
  - Ongoing reviews of priorities, actions and results

III.1.5 Leadership cont.: What key performance measures do your senior leaders regularly review?

Performance metrics are listed in section 7 and include application information, demographic and grade data, test results, discipline and program participation results. Customer surveys are taken and the results analyzed. Survey instruments are now internet-based for higher returns and ease of compilation.

III.1.6 How do senior leaders use organizational performance review findings and employee feedback to improve their own leadership effectiveness and the effectiveness of management throughout the organization?

The small size of the agency permits regular informal and formal feedback at and around all levels of the organization. Students fill out feedback forms at the end of each semester, and classes are regularly audited.

III.1.7 How do senior leaders promote and personally participate in succession planning and the development of future organizational leaders?

Because our staff is so small, opportunities for internal succession are minimal. Still, we conduct ongoing formal and informal meetings to assist in evaluations and suggestions for improvement. Ethics and shared values are consistently reinforced and refined during small meetings. GSSM supports close review of internal candidates for advancement. Senior staff chair personnel recommendation committees (committees make a recommendation for employment to the President) in which every staff member will participate over time. Senior staff also serves as support resources for Board of Trustee committees, providing input on all issues, including succession planning.

III.1.8 How do senior leaders create an environment for performance improvement, accomplishment of strategic objectives and innovation?

In addition to communication structure described in III.7 above, GSSM senior leaders review, discuss and set or revise priorities on an ongoing basis. This process identifies improvement areas and goals, focuses resources and reinforces the need for innovation.

III.1.9 How does senior leadership and the agency actively support and strengthen the community?

Senior staff are all members of key civic organizations and regularly interact with local elected officials. Staff and faculty are encouraged and serve on community committees serving local non-profits and economic development areas. Students must each provide 83 hours of work service annually, of which about 25% is outside the school in the community.

#### III.2 Category 2 – Strategic Planning

Strategic Planning at GSSM is an on-going process with formal committee structures created within and between divisions (and Board of Trustees) and informal discussions and recommendations solicited and welcomed at any time. Formal review and planning sessions are scheduled at the beginning and end of each school year.

III.2.1 What is your Strategic Planning process, including KEY participants, and how does it account for:

- a) Customer needs and expectations: Identification (parents, students, teachers, educational partners, prospective candidates for programs), data gathering and review (interviews, surveys, and review of metric benchmarks including applications, test scores, scholarship awards and growth into further advanced educational settings).
- b) Financial, regulatory, societal and other potential risks: GSSM conducts comparative analysis of similar institutions on a regular and ongoing basis.
- c) Shifts in technology or the regulatory environment: Process identified need for discreet senior staff position of Chief Information Manager to review, assess and plan integration of technology effectively among GSSM's academic, residential and outreach components.
- d) Human resource capabilities and needs. GSSM conducts formal and informal comparative analysis of similar institutions on a regular and ongoing basis.
- e) Opportunities and barriers. Strategic planning identified the need for GSSM's growth and priorities for expanding the student body housed in quality facilities. The planning instructs budget requests and guides business partnerships in supporting GSSM results.
- f) Business continuity in emergencies. Safety is a key block in strategic planning and daily operations at GSSM. We have a number of safety and security systems and procedures, practiced and evaluated regularly. GSSM has recently implemented an Armed Intruder Lockdown procedure, joining our full school evacuation plans. We have data storage backup systems to restore operations efficiently in case of emergency.
- g) Your ability to execute the strategic plan. Plan matches resources with goals and requires senior staff to assess existing capabilities to achieve results or define and seek additional resources.

Administration conducts detailed strategic planning process involving all functional areas and input/direction from GSSM Board of Trustees.

-What are your key strategic objectives (address in planning chart)
-What are your key action plans/initiatives (address in planning chart)

## **Strategic Planning**

Program	Supported Agency	Related FY 05-06	Key Cross
Number	Strategic Planning	Key Agency	References for
and Title	Goal/Objective	Action Plan/Initiative(s)	Performance Measures*
1) Academic /Instruction (813)	Maintain Excellence -Operate effectively under reduced budgets and in partially completed facilities	Faculty/Student Ratio, Highly Qualified Teachers, Test Score Results, AP Test Results, SAT Averages. National benchmarks in publications and comparisons with like institutions.	EOC Report Card (7.1a, p29) -SAT Average (7.2a p. 29) -Faculty qualifications EOC Report Card (7.1a, p30)
2) Life in Residence (814)	Maintain Excellence: including quality of College applications and acceptances, support social learning and adjustments, support ethics and good citizenship and -operate effectively under reduced budgets and in partially completed facilities	-Conduct College application process -Conduct Life & Leisure -Conduct wellness model initiatives -Expand Open House events for prospective students & parentsEnhance PSAT student test training and support	In-state College Attendance by Graduates, (7.1a, p34.) -Program Demand (application range), (7.2b, p. 34) - EOC report Card Data and metrics EOC Report Card (7.1a, p28)
3) Statewide Outreach - Academic Advancement (815)	Provide Advanced Science Opportunities for 7th, 8th, 9th, 10th, 11th and 12 graders. Support Professional Development for teachersOperate effectively under reduced budgets and in partially completed facilities	-Leverage partnerships for effectiveness -Continue GearUp academies for hundreds of low-income 7th graders throughout South CarolinaConduct Summer Science Program for 9th & 10th graders at GSSM's New Campus. Continue acclaimed SPRI advanced mentored research program for rising 12th gradersConduct professional development workshops at GSSM campus in advanced digital instruction for teachers.	SSP Attendance (7.2b, p. 35) -SPRI Mentor Partners, (p 35) GearUp Participation (p. 36)
4) Administrative (816)	-Operate effectively under limited budgets and in partially completed facilities. Complete Unfinished Master Campus Plan: seek funds to build Phase II (Academic Center & Student Activity Center)Seek additional grants and partnerships top leverage results	-Refine growth plans, options and	EOC report Card EOC Report Card (7.1a, p28 Systems specified, procured and operational. (7.2.e, p39)

- III.2.4 How do you develop and track action plans that address your key strategic objectives? Note: Include how you allocate resources to ensure accomplishment of your action plans. GSSM develops priorities and budgets on an ongoing basis with regular internal meetings and a formal process with our Board of Trustees. Metrics are identified, tracked and reviewed. See EOC Report Card.
- III.2.5 How do you communicate and deploy your strategic objectives, action plans and related performance measures? Through Board reports, monthly reports to all Faculty/Staff and administrative reports such as the State Budget Request, State Activity Inventory and this report and evaluations
- III.2.6 How do you measure progress on your action plans? GSSM develops priorities and budgets on an ongoing basis with regular internal meetings and a formal process with our Board of Trustees. Metrics are identified, tracked and reviewed. See EOC Report Card.
- III.2.7 How do your strategic objectives address the strategic challenges you identified in your Organizational Profile? Resources, budget and staffing are based on strategic priorities.
- III.2.8 If agency's strategic plan is available to the public through the agency's internet homepage, please provide address. Not available at this time.

#### III.3 Category 3 – Customer Focus

GSSM key "customers" are the students and teachers of South Carolina – and our partners in education and industry. GSSM concentrates on "raising the bar" of academic achievement: challenging and motivating students to take advanced courses and put in the hard work necessary to successfully complete the curriculum. There is no grade inflation, but merit based on achievement. We believe South Carolina's future economic prosperity requires students well versed in science and mathematics supported by an excellent foundation in the humanities. These are the courses necessary for entry and success into higher education, as a prerequisite for professional success. GSSM is a leader in both setting achievement standards and integrating "education standards" into modules for students and teachers.

1. How do you determine who your customers are and what their key requirements are?

Our mission directs us toward defining specific customer groups. Ongoing communication, formal and informal, with stakeholders, educational partners and current participants identifies key requirements.

2. How do you keep your listening and learning methods current with changing customer/business needs?

Ongoing communication, formal and informal, with stakeholders, educational partners and current participants informs our methods. Our change to email communication with Parents is one example – both an internal, technological and societal change.

3. How do you use information from customers/stakeholders to keep services or programs relevant and provide for continuous improvement?

Weekly, monthly and annual formal reviews are ongoing, plus staged planning.

4. How do you measure customer/stakeholder satisfaction?

Personal conversations, surveys, test scores, graduation rates, scholarships offered and accepted, applications, drop-out rates are all included. Please see EOC School Report Card for additional categories.

5. How do you build positive relationships with customers and stakeholders? Indicate key distinctions between different customer groups.

Set and achieve high expectations for GSSM involvement based on highest ethical standards. Key customers all share desire to improve academics in South Carolina – some (businesses) to hire quality employees, others (other schools/universities) to bolster student body quality and students through offering challenging academic and residential path to achieve their goal of academic excellence.

#### III.4 Category 4 – Measurement, Analysis and Knowledge Management

III.4.1. How do you decide which operations, processes and systems to measure?

The decision on which operations, processes and systems to measure comes from internal and external review and recommendations. Internally, GSSM tracks student achievement on many levels including scholarships earned and recruitment by colleges and universities. Externally, GSSM works with educational organizations setting "report card" standards and other criteria.

III.4.2 How do you use data/information analysis to provide effective support for decision-making?

In addition to the required statewide reporting under educational accountability (report cards), GSSM uses internal data collections to both identify possible measurements and to collect the data. GSSM also collects and compares data with similar programs in the state, region, and nation.

III.4.3. What are your key measures: These include: test scores, graduation rates, scholarships offered and accepted, applications, dropout rates, faculty retention and turnover. Please see Section III, Category 7 – Business Results portion of this report for a comprehensive list.

III.4.4 How do you select and use comparative data and information?

Internal discussions on the type, source, validity and applicability of data lead to selection, rejection or a process to collect additional data or change methodology of collection. Budget decisions are based on directing appropriate resources to priority areas.

III.4.5 How do you ensure data quality, reliability, completeness and availability for decision-making?

GSSM reviews and assesses the validity of both data collection devices (standardized tests, internal tests) and the results based on comparisons with other states and comparative institution results (such as classwork, class test results vs. standardized tests, etc.).

III.4.6 How do you translate organizational performance review findings into priorities for continuous improvement?

GSSM staff, during formal and informal weekly, monthly and annual meetings share relevant issues, data, results and plans between departments. This includes sharing comprehensive Board reports between functional areas with each administrative director.

III.4.7 How do you collect, transfer and maintain organization and employee knowledge?

GSSM staff, during formal and informal weekly, monthly and annual meetings share relevant issues, data, results and plans between departments. This includes sharing comprehensive Board reports between functional areas with each administrative director.

#### III.5 Category 5 – Human Resource Focus

III.5.1. How do you organize and manage your work?

GSSM implements a collegial process of high expectations for employees, bolstered by on-going communications both formal (assigned committees on topics, evaluations, weekly functional meetings) and informal meetings.

- III5.2 How do you evaluate and improve your organization's human resource related processes? Review turnover rates and reasons. Assess exit interviews. Assess ability to hire identified top candidates in various areas. Assess market competitiveness in salaries, benefits and work satisfaction.
- III.5.3. How do you identify and address key developmental and training needs, including job skills training, performance excellence training, diversity training, management/leadership development, new employee orientation and safety training?

GSSM supports continuing education for employees and has implemented a grant-supported Professional Staff Training and Development program for faculty. GSSM holds training sessions at the beginning of every semester and wrap-up sessions at the end of the school year. Safety training occurs at the beginning of the school year with drills and follow-up sessions scheduled monthly or as needed.

III.5.4. How does your employee performance management system, including feedback to and from employees, support high performance?

GSSM utilizes ongoing daily communications, EPMS, supervisor interviews and internal teacher evaluation systems to formalize communications and both identify priority work issues and also clarify results and expectations.

III.5.5 How do you motivate employees to develop and utilize their full potential? GSSM implements a collegial process of high expectations for employees, bolstered by on-going communications both formal (assigned committees on topics, evaluations, weekly functional meetings) and informal meetings. We encourage consideration of internal promotion.

III.5.6 What formal and/or informal assessment methods and measures do you use to determine employee well being, satisfaction and motivation?

Being a small agency with open lines of communication, GSSM staff is in constant communication with one another, so problems are quickly identified. Formally, we also use EPMS and our teacher evaluation system, plus turnover rates, which have been low, compared to similar schools by position.

#### III.5.7 How do you maintain a safe and healthy work environment?

Constant communication is foremost method with immediate follow-up to any safety issue, plus formal reviews, scheduled training and practice drills conducted as required or needed. A number of safety procedures are also in place and practiced, including: Fire Alarm drills and system testing, visitor signin procedures, swipe-card area zones, "Go to a Safe Place" procedure and drills and "Evacuation" procedures and drills. GSSM employs a part-time nurse and has a faculty member designated as science safety officer. During 2005-06 we have coordinated local police training in our facility and finalized development of an Armed Intruder Lockdown policy for implementation in 2006-07.

#### **III.6** Category 6 – Process Management

III.6.1 What are your key support processes that produce, create or add value for your customers and your organization and how do they contribute to success?

GSSM sets clear and high expectations and provides the time and quality support necessary for achievement.

GSSM focuses on providing highly qualified instructors the time, materials and support they need to spend time teaching motivated and qualified students. The result is demonstrable achievement in academics, which is the key to future success.

For Life in Residence, there is an emphasis on the "wellness model" for student support services – a comprehensive approach to allocate departmental and institutional resources - was developed through our strategic planning processes.

In statewide outreach programs, including our GearUP middle school initiative, Summer Science program for 9<sup>th</sup> and 10<sup>th</sup> graders and our research and development of new campus plans for GSSM and what resources are needed to properly serve the students and teachers throughout South Carolina.

GSSM's state budget requests and private fund-raising activities are based on strategic goals, measurement of current programs and customer demand.

III.6.2 How do you incorporate organizational knowledge, new technology...into process design and delivery?

Informal and formal (committee) communications processes are another key support process. GSSM during 2005-06 created a Chief Information Officer position (begun in third quarter of year) to assess and design internal data collection systems allowing efficient collection and assessment of data. Data is collected and analyzed annually, as part of our accountability report process.

Strategic planning, as discussed above, results in GSSM focusing programmatic dollars and time (personnel) resources to accomplish specific results.

The nature of our product is the inherent human trait of students and teachers to desire to know more about the world around them, and develop this natural inquisitiveness into academic and scientific rigor. Our products and services, from classroom to residential, outreach to expectations, are designed to encourage disciplined exploration and discovery, while incorporating skills of communications and citizenship. This creates a learning community, which challenges individuals but rewards participation and results.

The "process" is based on teaming an "expert" with content knowledge and communication expertise in a specific area (discipline) with students in an environment where expectations are high. Technology is sought to enhance communication, feedback, streamline repetitive tasks and offer alternative learning methods. Novel advances in technology are themselves subject to inclusion in the curriculum and are regularly sought out by faculty members in consultation with our industry and university partners.

III.6.3. How does your day-to-day operations of key production/delivery processes ensure meeting key performance requirements?

Daily interaction allows review of short and long-term goal accomplishment (or delays). We keep class and dormitory attendance rolls and quickly follow-up any absences by students.

III.6.4 How do you systematically evaluate and improve your key product and service related processes? Measurement and assessment of benchmarks as indicated through our Strategic Plan and specific indicators listed through the school report card and highlights page (i.e., SAT scores, national merit awards, AP test results, demand for program entry, etc.).

III.6.5 What are your key support processes? Unique to GSSM is the highly specialized knowledge of a scientist-instructor being conveyed to a motivated student by ensuring ample quality time for instruction. For example, GSSM has lab periods of several hours in length regularly scheduled as necessary to complete advanced experiments.

Support processes emphasize such interaction where learning occurs and seeks to eliminate extraneous and burdensome activities, which detract from quality time, spent teaching. For example, streamlined purchasing request processes and ongoing prioritization of needs.

#### III. Category 7 – Results

III.7.1 What are your performance levels and trends for the key measures of mission accomplishment and organizational effectiveness?

#### Two sides of One Coin: GSSM's Residential and Statewide Outreach/Academic Advancement

GSSM designs and operates all programs to support one another and offer "steps" of greater involvement and learning appropriate to the individual student or organization. All staff and faculty at GSSM participate in and support both the residential and outreach programs of the school.

It is difficult to differentiate our "residential" program from Statewide Outreach & Academic Enrichment when acceptance as a residential student is a source of pride and feedback to the home school the student originally attended. The availability of GSSM programs encourages students, teachers and schools to participate in and develop challenging courses.

The GSSM residential program, for report purposes, can be subdivided into two equally supportive branches: Academic and Life in Residence. Both areas are critical to success at GSSM and are therefore interdependent.

#### III.7.2 Performance levels and trends for key measures

III.7.2.a A primary measure of GSSM customer satisfaction is reflected in the school's ongoing School Report Card rating =

## THE STATE OF SOUTH CAROLINA

<b>Annual School</b>	2006
Report Card	_000

## ABSOLUTE RATING: EXCELLENT

The school's performance substantially exceeded the standards for progress toward the 2010 SC Performance Goal.

## IMPROVEMENT RATING: EXCELLENT

The school's improvement rating was excellent because of maintenance of Excellent absolute status.

## ADEQUATE YEARLY PROGRESS: YES

This school made adequate yearly progress.

This measurement captures a wide-range of data and comparatives and was designed in conjunction with the Education Oversight Committee. The 2005-2006 report card data listed on the following pages is a final draft submitted to EOC, but minor changes and that group's assessment will be included prior to its official release.

#### SOUTH CAROLINA GOVERNOR'S SCHOOL FOR SCIENCE AND MATHEMATICS

PERFORMANCE	TRENDS OVER	A.VEAR PERIOR	)

	Absolute Rating	Improvement	Adequate Yearly
		Rating	Progress
2003	Excellent	Excellent	N/A
2004	Excellent	Excellent	Yes
2005	Excellent	Excellent	Yes
2006	Excellent	Excellent	Yes

PERFORMANCE	Data

Advanced placement (AP) Pass Rate	86.3%
Graduates' College Freshman GPA (In-state Colleges)	3.70
SAT Average (High Verbal/High Math)	1365

#### **AP Test Score Distribution**

Score	5	4	3	2	1	Total
30010	0		0	_		i Otai

# of students (%) 49(19%) 87(33%) 90(34%) 29(11%) 7(3%) 262(100%)

#### College Freshman GPA

GPA	3 5-4 0	3 3-3 5	3 1-3 3	2.9-3.1	< 29	Total
UIA	3.5-4.0	J.J <sup>-</sup> J.J	J. I-J.J	Z. /-J. I	<b>\</b> Z./	rotai

# of Students (%) 19(73%) 2(8%) 2(8%) 1(4%) 2(8%) 26(100%)

#### SAT Scores

	Middle	50%	Range		
SAT Verbal	620	730	510	800	
SAT Math	650	740	490	800	

#### **A Special Note on Performance**

Every student at Governor's School completes a research course requirement that is a distinctive learning and maturing experience. Senior research begins with at least six full weeks of research in the summer following the junior year. Most of the students conduct their research at university or industrial research facilities under the mentorship of professional scientists or engineers. Students work with their research mentors and Governor's School advisors during the senior year to compile and analyze their research findings, prepare formal research papers, and present their work at a school-sponsored colloquium and at the SC Junior Academy of Science annual meeting.

#### **Abbreviations for Missing Data**

BUANT A CONTRACTOR OF THE STATE	11/0 11 10 11	110 1 110 1	
N/A Not Applicable N/AV Not Available N/C Not Collected	N/R Not Reported	I/S Insufficient Sample	
TWA NOT Applicable TWAV NOT Available TWO NOT Collected	IWIX INOLITEDUITED	I/J IIISUIIGGII Saripic	

SCHOOL PROFILE
INDICATORS OF SCHOOL PERFORMANCE

		Our School	Change from Last Year
STUDEN	TS (n=127)		
*	Retention rate	0	Same
*	Attendance rate	98.3%	Down from 99.1%
*	With disabilities other than speech	0	Same
*	Older than usual for grade	0	Same
*	Out-of-of school suspensions or expulsions for	N/A	Same
·	violent &/or criminal offenses		
*	Annual dropout rate	N/A	Same
*	Students in residence	128	Same
*	National Achievement Semifinalists/Finalists	0%/0%	Down from 50%/50%
*	Seniors Completing Science Research Project	100%	Same
*	Community Service-hr./student	83	Same
*	Graduating attending college Seniors eligible for LIFE Scholarship	100% 100%	Same Same
*	Total scholarship offered	\$7,920,170	Down fm \$8,712,921
*	Number of seniors	\$7, <del>9</del> 20,170	Down from 62
*	National Merit Semifinalists/Finalists	7%/7%	Down from 16%/16%
	RS (n=14)	776,776	2011111011111011110110
*	Teachers with advanced degrees	100%	Same
*	Highly qualified teachers	N/A	N/C
*	Teachers with emergency or provisional	N/A	N/C
•	certificates	IV/A	TW/C
*	Teachers returning from previous year	100%	Up from 93%
*	Teacher attendance rate	98.6%	Up from 98.1%
*	Average salary	\$57,564	Up from \$55,649
*	Professional development days per teacher	6	Same
*	Teachers with Doctorates	79%	Same
*	Years teaching experience-middle 50%	14 to 32	Up from 13 to 31
SCHOOL		14 (0 32	op IIoIII 13 to 31
*		5	Un from 4
*	President's years at the school Student-teacher ratio in core subjects	10 to 1	Up from 4 Same
*	Prime instructional time	96.2%	Down from 97.2%
*	Dollars spent per pupil	\$15,186a	Up from \$12,985
*	Percent of expenditures for teacher salaries	59.1%	60.8%
*	Opportunities in the arts	NA	Same
*	Parents attending conferences	55.1%	Up from 38.5%
*	SACS accreditation	N/A	N/A
*	University/Industrial Partners in Research Mentor		
	Program	12	Down from 16
*	Mentors in Research Program	67	Down from 70
*	Student clubs and organizations	39	Same
*	Students active in clubs/societies	98%	Down from 99%
* *	Varsity sports teams	9 82%	Same
*	Students participating in varsity sports Students returning to home high school	82% 3.9%	Same Same
•	o other schools:	J. <b>7</b> 70	Saille
Oulleach i	Middle school students in Saturday Academies	N/A <sup>b</sup>	Final yr: 685
*	Students in Summer Science Program (SSP)	278	Up from 259
*	University Partners in SSP	10	Up from 9
*	6 week summer research positions for other HS	12	Down from 13

 $<sup>{</sup>a\atop }^{D} Costs \ for \ academic \ program \ including \ summer \ research, \ but \ not \ residential \ life.$ 

#### REPORT OF PRESIDENT

From its founding in 1988 by a visionary Act of the General Assembly on the initiative of Governor Carroll Campbell and businessman Charles W. Coker, Sr., GSSM has served as a portal through which talented students from throughout South Carolina have embarked on a lifetime of exploration, discovery and growth. The mission of this unique school emphasizes developing the scientifically astute and ethically aware leaders needed for our expanding knowledge-based economy. This year, we concentrated on preparing to complete our new campus while continuing to celebrate the accomplishments of our students and faculty.

GSSM's curriculum is second to none in the state in its scope, depth and challenge, most notably in science and math, but also in the humanities. Our students continue to perform at the highest levels in both our Residential and Outreach programs, with minor annual variations, reflecting the individual talents of these remarkable young people. The significant achievements of the students in residence in Hartsville (1365 average SAT, highest in the state; \$7.9 million in scholarship offers to 62 seniors; the average student completed more than four Advanced Placement tests, with an 86% pass rate) are crowned by their completion of a mentored individual research project at one of South Carolina's research universities or industrial laboratories.

Appropriate emphasis on extracurricular activities for all students (82% participated in varsity sports) continues to build strong school spirit. Soccer, volleyball, swimming, tennis, and cross-country teams advanced to the state playoffs, as did track, including the state champion one-and two-mile boy runner.

Students serve their community and school by working 83 hours each year, supplementing instruction on ethics and character development. Perhaps best of all, students report great satisfaction, forming "friendships for life".

GSSM's Outreach shares exemplary programs statewide to improve science achievement. Building on the just-completed federal GEAR UP program, we opened a new partnership with ScienceSouth to provide standards-based science instruction for disadvantaged middle schoolers. Our Summer Science Program encouraged 9<sup>th</sup> and 10<sup>th</sup> graders to explore "real" science, math and computer science.

The move to our new campus provides a highly visible affirmation of South Carolina's commitment to excellence in education. We expect to receive funding in the coming year to complete the campus and enter a new phase of growth, doubling our enrollment and revamping our curriculum in advanced technology.

Murray W. Brockman, President

#### EVALUATIONS BY STUDENTS, TEACHERS, AND PARENTS Students\* Teacher Parents\* Number of surveys returned 63 14 46 Satisfied with learning environment 90.5% 100% 95.7% Satisfied with social and physical environment 88.9% 89.1% 100% Satisfied with home-school relations 86.4% 100% 82.6%

DEFINITIONS OF SCHOOL RATING TERMS

Excellent - School performance substantially exceeds the standards for progress toward the 2010 SC Performance Goal.

Good – School performance exceeds the standards for progress toward the 2010 SC Performance Goal. Average – School performance meets the standards for progress toward the 2010 SC Performance Goal.

Below Average – School is in jeopardy of not meeting the standards for progress toward the 2010 SC Performance Goal.

Unsatisfactory - School performance fails to meet the standards for progress toward the 2010 SC Performance Goal.

#### DEFINITIONS OF ADEQUATE YEARLY PROGRESS

As required by the United States Department of Education, adequate yearly progress specified that the statewide target is met for all students and for each subgroup of students: racial/ethnic, economic, disability, limited English proficiency and migrant status.

\*11<sup>TH</sup> grade students and parents were surveyed.

## SOUTH CAROLINA GOVERNOR'S SCHOOL FOR SCIENCE AND MATHEMATICS

401 Railroad Avenue Hartsville, SC 29550

Website: www.scgssm.org

**GRADES** 11 – 12

**ENROLLMENT** 128 students

PRESIDENT Dr. Murray W. Brockman 843-383-3900

BOARD CHAIR Dr. Raymond S. Greenberg 843-792-2211

## THE STATE OF SOUTH CAROLINA

<b>Annual School</b>	2006
Report Card	2000

## ABSOLUTE RATING: EXCELLENT

The school's performance substantially exceeded the standards for progress toward the 2010 SC Performance Goal.

## IMPROVEMENT RATING: EXCELLENT

The school's improvement rating was excellent because of maintenance of Excellent absolute status.

## ADEQUATE YEARLY PROGRESS: YES

This school made adequate yearly progress.

(End of GSSM School Report Card.)

#### **III.7.2b** continued: Key Performance Measures: Academic Residential School:

<u>Quality of Academic Program:</u> •Average SAT score for class of 2005 = **1365.** Trend over time – consistent with minor variations (2004=1397). (Benchmark Comparison: State HS Average, Higher Education Freshman SAT averages.)

<u>Program Demand:</u> •Qualified applicants continue to outnumber openings in the range of 3 applications for every 1 opening.

GSSM Graduates Attending In-State/Out-of-State Colleges & Universities. GSSM encourages students to attend in-state universities by promoting campus visits, conducting visits to in-state major educational institutions and inviting/encouraging seminars, classes and courses taught by in-state university faculty members. We are encouraged by the efforts in-state schools are making to recruit our graduates. Trend over time - about 50/50, with some annual fluctuations.

2005-2006	66%	34%
2004-2005	51%	49%
2003-2004	51%	49%
2002-2003	50%	50%
2001-2002	63%	37%
2000-2001	50%	50%
1999-2000	39	61
1998-99	55	45
1997-98	55	45
1996-97	41	59
1995-96	47	53

## III.7.2c Performance Indicators Outreach: Research Intern Program (SPRI Mentored Research)

- •Demand By Students: Over 100 student (non-GSSM) inquiries, with 35 applications for the 12 available summer placements. Trend over time fluctuates, dependent on funding availability for both recruitment and # of positions available.
- •Quality: Academic Honors: At both the S.C. Junior Academy of Science Annual Conference and professional national conferences such as the American Association of Chemical Engineers, participants in Mentored Research Program continue to win honors and recognition for their research including publication in professional journals. Trend over time: growing recognition. (Benchmark comparison: Off-the-scale at this level of involvement we are still searching for a comparison.)
- •Number of Participants 76. Trend over time steady with a little fluctuation, lower as funding is reduced. Placements will contract if additional budget reductions are made, increase as additional funding and contributors come on-line.
- •Mentor Partners: 68 scientists from S.C. higher education and industry participated this year, at 12 partner research sites. A milestone was reached this year as both the College of Charleston and the Medical University of South Carolina joined the program as formal partners. Statewide, GSSM has identified 276 scientists at over 50 sites available to mentor at this high level. Business partners have included DuPont, Michelin, Roche Carolina, Westvaco, and Sonoco. Trend over time growing, participation depends largely on student scholarship availability. (Benchmark comparison: Higher Education's Performance Indicators IV B and VIII C.)

#### **III.7.2d Performance Indicators Outreach: Summer Science Program:**

Attendance: 278 9<sup>th</sup> and 10<sup>th</sup> graders. Trend over time: Variable 220 to 300 maximum.

- •Number of SSP Sections Offered 19. Trend over time Varies upon demand/availability.
- •Number of S.C. Higher Education Partners, offering Ph.D. instructors: 13. Trend: varies on availability (last report = 10).
- •Grants/In-Kind. Value of donated time of Ph.D. instructors estimated at over \$39,000. \$54,050 in donated scholarship support helped students participate. Trend over time variable dependent upon grant sources. Future increases sought.

#### III7.2d Program Area: GSSM Partnerships for Statewide Academic Improvements.

Strategic Goal: Leverage resources to improve science and mathematics achievement throughout South Carolina by creating efficient and effective partnerships.

- 1) GearUP Gaining Early Awareness for Undergraduate Programs. (a partnership of higher education, CHE, Businesses, SDE, ETV and schools and teachers).
  - GSSM is part of a five-year grant, to develop and deliver professional development for science teachers in the 22 S.C. GearUP cohort (low SES) schools, beginning in 2006-2007.

# of Middle and Elementary Teachers and Students taught annually through new partnership initiatives:

Qty	Activity	Teachers	Students
3	One-week Summer	60	5100
10	ScienceSouth Science	50	2000
2	One-day	40	3400
2	Science Discovery		150
	Total	150	10,650

- 2) ScienceSouth partnership: to conduct Saturday Academies for teacher and student participants on GSSM campus and other educational sites around state.
- 3) Local Partnership grant with the Citadel (GearUP grant). Conduct hands-on science for 100 middle school students and their parents.
- 4) USC partner in improving teacher quality (through CHE funding). GSSM provided direct instruction for 23 teachers during the summer: impacting an estimated 2,300 students.

#### **III.7.2.e** Support Services and Administration Performance Indicators:

#### Maintain Quality of Program: See Program area Indicators including:

- •Faculty Qualifications: Maintain minimum Masters with over half of faculty having terminal degrees.
- •Demand for Participation in GSSM Programs (3 to 1 ratio for residential openings)
- •Manage budget while maintaining programs and quality.

•New Facilities: Operation continues in partially completed facilities, opened in 2003. Maintaining system functions within reduced budgets, tracking operational costs and trends. Delay preventive maintenance until funds available. An additional \$13,178,693 (for 2006 bidding) is required to complete construction and outfit Phase II (which includes Academic/Science Center). Once facility is complete, expanding the student body (beginning in 2009?) will require operational increases for faculty/staff and student support. GSSM received \$2,500,000 in capital appropriated funds during the 2005-2006 legislative session. This is about half the cost of the Student Activity Center, but is a positive partial step toward completion of Phase II funding and growth.

Each year of delay in funding for Phase II results in higher construction costs (additional construction inflation estimate is now projected at over \$3,000,000), plus disruptions to our program such as moving students between new campus and leased facilities off-site.

Unfinished buildings include classrooms, laboratories and Student Activity areas (see diagram on next page). GSSM has made every effort to maintain program quality without full facilities. This includes teaching physics in the music room, history in one lobby area and mathematics in the other lobby. Without Phase II's science labs and classrooms, additional leased costs are required in addition to outfitting charges.

Private funds of over \$6,000,000 toward a private endowment goal designed for future programmatic enrichment have been obtained from business and individual donors through the GSSM Foundation. The land for GSSM's new campus in Hartsville was donated, along with landscaping assistance including an irrigation system.

## South Carolina Governor's School for Science & Mathematics: Master Campus Plan - Phase I & Phase II

## Phase I: Opened in August 2003

- > Residential Space for up to 300 Students
- Dining Facilities
- ➤ Counseling, Student Support Facilities -**Temporary Classrooms**
- > Faculty and Support Staff Offices

## Phase II: Waiting on Funding...

- > Academic Center:
  - o Advanced Classrooms
  - Advanced Laboratories
- > Student Activities Center



### III.7.3 What are your performance levels for the key measures of financial performance?

2005-2006 is a transition year, due to increased operating appropriation, moving GSSM toward minimum base program funding. Grant support is increasing. A private endowment drive – designed to support GSSM's margin of excellence in our programs - endowment campaign now has more than \$6,000,000 committed in pledges for future programmatic support. Hundreds of S.C. companies have joined us as partners through the GSSM Foundation's Business Advisory Council.

Through recent years of state budget reductions, GSSM has been able to maintain all functional areas as reflected in our performance statistics. However, all options for expansion of programs have been eliminated and repairs (replacement) of necessary educational or residential materials (equipment) were not available.

- No lawsuits against agency (ever).
- GSSM works with and meets EOC reporting requirements (Report Card, EIA).
- GSSM works with and complies with BCB reporting requirements (Budgeting, Activity Inventory, Permanent Improvement Project process, etc.)
- GSSM has addressed recent budget cuts while maintaining quality outcomes and demonstrated flexibility, frugality and discipline in managing the uncertain unclaimed lottery fund support during FY 2004-2005. These funds became "real" toward the end of the 2004-2005 FY, in May.

Partnerships with Business and Industry have dramatically increased: GSSM, through its Foundation, has recruited hundreds of "Business Advisory Council" partners to support the school both financially and with program support such as communication enhancement, research sites and providing mentor opportunities. This increase reflects the awareness that the results GSSM is achieving in advanced education directly impact the economic competitiveness of South Carolina. Trend over time: growing.

The overall trend for future state funding indicates the possibility of capital fund offerings necessary to complete GSSM facilities and fulfill the commitment to expand the student body size. Obtaining this capital resource is an ongoing commitment and priority necessary to complete the school and expand advanced academic opportunities and achievement to even more students and teachers throughout South Carolina.

III.7.4 What are your performance levels and trends for the key measures of Human Resource Results?

Staff turnover rates – consistently low over time. No injuries on-the-job – consistent over time. While all employees at GSSM serve critical functions, teacher turnover rates are particularly telling – because faculty are the key to quality academic results and there is a general teacher shortage both in South Carolina and in the nation. GSSM meets or exceeds turnover rates at similar residential specialized schools.

- 7.5. What are your performance levels and trends for the key measures of regulatory/legal compliance and community support? Trends: consistent over time for positive meeting of reporting requirements.
  - -No lawsuits against agency (ever).
  - -GSSM works with and meets EOC & SDE reporting requirements (Report Card, EIA).
  - -GSSM works with and complies with BCB reporting requirements (Budgeting, Activity Inventory, Permanent Improvement Project