

# Fiscal Year 2015-16 Accountability Report

# **SUBMISSION FORM**

# 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.

#### **AGENCY MISSION**

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. The STEM curriculum is complemented by a very strong set of Humanities and Social Sciences courses.

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.

Please identify your agency's preferred contacts for this year's accountability report.

PRIMARY
CONTACT:
SECONDARY
CONTACT:

| Name                                 | <u>Phone</u> | <u>Email</u>           |
|--------------------------------------|--------------|------------------------|
| Mr. Ernie Boyd Jr., VP<br>Operations | 843-383-3906 | Boyd@gssm.k12.sc.us    |
| Dr. Hector Flores, President         | 843-383-3902 | hflores@gssm.k12.sc.us |

I have reviewed and approved the enclosed FY 2015-2016 Accountability Report, which is complete and accurate to the extent of my knowledge.

AGENCY
DIRECTOR
(SIGN/DATE):
(TYPE/PRINT
NAME):

Dr. Hector Flores, President

BOARD/CMSN CHAIR (SIGN/DATE): (TYPE/PRINT NAME):

Signature in process

Dr. Leroy Davis, GSSM Board Chair

| AGENCY NAME: | Governor's Sc | hool for Science & N | Mathematics (GSSM)            |
|--------------|---------------|----------------------|-------------------------------|
| AGENCY CODE: | H65           | Section:             | <b>Education - GSSM - SDE</b> |

# **AGENCY'S DISCUSSION AND ANALYSIS**

#### S.C. Governor's School for Science & Mathematics:

GSSM performed a Presidential Search and selected new GSSM President in 2015-2016. GSSM new President, Dr. Hector Flores came on April 16, 2016. GSSM has started Strategic Planning with Dr. Flores.

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

Milestone Achievement: In 2015-2016 GSSM admitted its largest Junior class in the history of the institution. GSSM also hired new instructors to teach advanced courses to these first-class students – GSSM's faculty maintains 80% with a PhD in their field, ALL have a Master's degree.

Global Academics: Supported by private funds, GSSM continues an international exchange of high school research students with sister high schools and a university in Germany and a sister high school and university in the Republic of Korea. This takes GSSM's renowned SPRI research program worldwide...

#### Accountability Report Highlights:

GSSM performed a Presidential Search and selected new GSSM President in 2015-2016. GSSM new President, Dr. Hector Flores came on April 16, 2016. GSSM has started Strategic Planning with Dr. Flores.

#### **GSSM** Core Values

- Ethics
- Personal responsibility and accountability
  - We build intellectual and moral character in our students.
  - > We are a team of highly talented individuals pursuing student-centered excellence
  - > And help each other to do so too
- Strong belief in evidence-based learning, questioning and discovering
- Love of beauty, creativity, imagination & each other

#### GSSM is Strong and Growing Stronger – Students and Graduates:

- Led State in SAT and ACT scores highest SAT 1966 and highest ACT 30.9
- 100% attend college
- Seniors offered over \$21 million in scholarships last year
- 70% pursue graduate or professional degrees
- Nearly 80% major in STEM-related disciplines
- About 40% make careers in-state after college
- Growing 2015-2016 saw "full capacity" entry class.

#### Strong – Alumni

- Engineers
- Medical Doctors
- Corporate careers: Google, Microsoft, General Electric, Westinghouse, NASA, Exxon, universities...
- Medical careers examples: MUSC: thirteen medical students, two graduate students, one faculty member

| AGENCY NAME: | Governor's Sc | hool for Science & N | Mathematics (GSSM)     |
|--------------|---------------|----------------------|------------------------|
| AGENCY CODE: | H65           | SECTION:             | Education - GSSM - SDE |

- Entrepreneurs
- Academicians
- Career Services Center: Through partnerships with our Business Leadership Network members, alumni are able to secure internships and jobs with the best companies South Carolina has to offer

#### GSSM Source of Strength - Faculty / Staff

- Credentialed and accomplished (All have Masters, about 80% with PhD's)
- Exemplify excellence and expect it from others
- F/S define their success by students' success
- Shared goals, clear responsibilities
  - Learning and mastery
  - Growth and maturity
  - College and life

# GSSM Statewide Outreach: Reaching thousands of students across S.C.:

- Real Science across the state
- This summer 21 weeks of camps in 15 counties (over 1300 students)
  - √ Week-long camps
  - ✓ Engineering, biology, computer science
  - ✓ GSSM alumni instructors very important
- The Center for Outreach endeavors are developed and delivered with support from the state, SC businesses, and private foundations. We use a model of fees paid by parents and other public and private resources to develop and deliver our STEM educational experiences.

During the 2015-2016 academic year, which includes summer 2016, the Center for Science Education and Outreach team impacted over 5000 students, teachers, and parents through a variety of onsite and offsite STEM educational offerings, some of which included summer camps for students; professional development workshops for teachers; interactive STEM exhibits like the Columbia Urban League STEAM Festival or the Charleston STEM Festival; and onsite STEM days for elementary and middle school students.

### Accelerate Engineering

- ✓ Graduated first class of seniors
- ✓ Admitted Third Class of Sophomores
- ✓ Doubled number of students in the program
- ✓ Expanded dual enrollment agreements with Clemson University to over 40 college credits
- ✓ Increased to 41 the total number of college credits a student can receive
- ✓ Held summer camps at Clemson, USC and GSSM

#### GSSM Foundations for the Future

- Research
  - ✓ France, UK, Austria, Germany, South Korea, Latin America and more
  - ✓ Carnegie Melon, Clemson, USC, Harvard, Johns Hopkins, NASA, MUSC, Stanford, Washington University and more

| AGENCY NAME: | Governor's Sc | hool for Science & N | lathematics (GSSM)            |
|--------------|---------------|----------------------|-------------------------------|
| AGENCY CODE: | H65           | SECTION:             | <b>Education - GSSM - SDE</b> |

✓ Molecular biology, medical research, engineering, computer science, more

#### Student Research Programs: SPRI & RESP

- 138 GSSM students conducted their summer research under the supervision of 105 research mentors in 29 states, national and international sites. An additional 6 research placements were made for our 6 visiting international RESP scholars, bringing the total number of research placements to 144 for 2016. This number of research placements was a first for GSSM and a significant milestone in the school's history. 11 new SPRI partnership sites were added and 5 of the 105 research mentors were SC SmartState Endowed Chairs.
- GSSM continues to build strong summer research partnerships with the state's 3 research universities and expand the opportunities for GSSM students. 71% of the research placements were with research mentors at Clemson, MUSC, or USC.
- In addition to research placements at Clemson, MUSC, or USC and other SC colleges, 11 new research partner sites were added for 2016 SPRI. Some of these sites included MIT, the Meadors Group in Charleston, One Columbia, 3D Systems in Rock Hill, University of Maryland Baltimore County with the Myerhoff Scholars Biomedical Science program, and the UT Health Science Center at Houston.
- The GSSM Research Experience Scholars Program (RESP), which is an international component of the summer research program and privately funded, includes 3 research sites in Germany (German Cancer Research Institute, German Institute for Artificial Intelligence, and Fraunhofer Institute for Experimental Software Engineering) and 1 research site in South Korea (Korea Advanced Institute of Science and Technology). Talks are underway for expanding the RESP to include a site in France.
- One GSSM senior (CO 2016) collaborated with his summer research mentor to develop a research poster that was accepted for presentation at the Annual Society of Plastics Engineers (SPE) ANTECH Conference in Indianapolis, Indiana in the spring. AS GSSM high school senior, the student won a first place award in the undergraduate poster presentation category at the conference.

#### Summer Center for Outreach Programs:

Over 1300 rising 7th, 8th, 9th and 10th grade students participated in one or more of the GSSM summer satellite or summer residential STEM camp experiences. The details are as follows:

#### GoSciTech Summer Residential Program

• 514 rising 8<sup>th</sup>, 9<sup>th</sup>, & 10<sup>th</sup> students participated in the GoSciTech summer program. These students represent 42 SC Counties.

## iTEAMS Xtreme & Next Generation Satellite Summer Camps

• 631 rising 7th & 8th grade students representing 159 schools participated in 13 camps delivered in 13 SC counties.

# CREATEng Satellite Summer Camp

- 164 rising 8th & 9th grade students representing 60 schools participated. The 5 camps were offered in 5 SC counties.
- Below are several testimonials from students who participated in GoSciTech, iTEAMS or CREATEng and quotes from camp instructors. These quotes provide an indication of the impact the STEM experiences are having on young students.
  - ✓ "I love the summer camp and it is my dream to attend GSSM in 11th and 12th grade. So, I want to spend as much time here as I can before that because I crave the atmosphere."
  - ✓ "I just had the best time at GoSciTech at GSSM in Hartsville in astrobiology. This was a lifechanging experience for me. I learned more in one week than a whole year of G.A.T.E. science. I'm very interested in applying for the Accelerate program."
  - ✓ "It turned out to be fun at times, challenging at times, and all around educational. I loved my
  - √ "One parent thanked me and his daughter learned a lot. He said she is not into STEM but every
    day that week she came home talking about what we did in camp that week. He loved her
    enthusiasm."
  - ✓ "One of the students asked "why can't school be like this all of the time?"
  - ✓ "My favorite part of CREATEng was going on the field trip to Baldor and learning about real life applications of engineering and careers involving manufacturing, mechanical, electrical, and industrial engineering."

| AGENCY NAME: | Governor's School for Science & Mathematics (GSSM) |          |                        |  |  |
|--------------|--|----------|------------------------|--|--|
| AGENCY CODE: | H65  | Section: | Education - GSSM - SDE |  |  |

#### Portable Advanced STEM Exploration (PASE);

- During the 2015-2016 academic year, over **50** middle school math and science teachers across the state participated in multiple PASE professional development sessions. As a result, over **1500** middle school students were engaged in the PASE curriculum labs by the teachers participating in the PASE professional development during the 2015-2016 academic year.
- 26 middle school math and science teachers in the Orangeburg Consolidated School District participated in a 2-day summer professional development program called Portable Advanced STEM Exploration (PASE). The teachers learned science and mathematics content in the context of inquiry-based labs that use a variety of lab-based learning technologies and simulations.

## Virtual Algebra II Honors Course Pilot:

- The Center for Outreach developed and delivered a Virtual Algebra II Honors course pilot at Orangeburg-Wilkinson High School (OWHS) for ninth grade students. The goals were to increase the number of OCSD5 students who are prepared to take advanced mathematics courses and succeed in unique academic opportunities such as the GSSM Accelerate program or the GSSM residential program. The course was being taught virtually by a GSSM Outreach Instructor using the GSSM Accelerate virtual education technology and infrastructure, and it featured a unique bi-monthly interaction between the instructor and students at the high school. This interaction includes hands-on experiences using technology with TI-84 calculator analysis and real-world application of concepts discussed in the lecture portion of the course.19 students participated in the course taught during the fall and spring semesters. 14 of the 19 students applied to the GSSM Accelerate program. 13 of these students were selected to participate in the interview process for Accelerate admissions. 5 students enrolled in the Accelerate engineering program at GSSM.
- Blue Cross BlueShield Economics and Finance Institute
  - ✓ Annual entrepreneurship exploration in Boston, NYC and Silicon Valley
  - ✓ SmartState Endowed chairs partnership
- Alumni Career Services Center, and GSSM Launch program for alumni entrepreneurs
- Added crucial programs
  - ✓ Engineering Residential AND Expanding Statewide Accelerate Engineering Outreach
  - ✓ Mandarin Chinese Foreign Language

# Challenging Environment Creates Opportunities for GSSM

- Slow recovery from recession, high unemployment
- Talent + hard work imperative
- We must think big and go strong
- · And go global

## Summary Benchmark highlights:

- GSSM residential students are 50% male, 50% female, and 33% minority. The newly selected Class represents 37 of South Carolina's 46 counties and 95 high schools across the state. They are primarily 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 every year.
- Nearly 70% of GSSM's Class of 2016 attended college in South Carolina. About 40% of GSSM alumni live and work in S.C. as teachers, doctors, scientists, engineers, computer scientists, and lawyers.
- The College Counseling and Advising program has been restructured to further support the college and career aspirations of GSSM students. A director with extensive experience in enrollment management at the college and high school levels was hired in January 2016 to lead the department.

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|--------------|--|----------|-------------------------------|--|--|
| AGENCY CODE: | H65  | Section: | <b>Education - GSSM - SDE</b> |  |  |

- The Division of Student Development added a new position this school year, Director of Student Engagement, to support students in their leadership development and overall engagement in the campus and local community. This position is also responsible for promoting cultural programming to further educate our students and colleagues on matters of diversity within our school and society. Plans began for initiating a NAACP chapter at GSSM and HOSA (Future Health Professional), which also has a national affiliation, was established. These groups join a significant list of student clubs and organizations to support their holistic growth.
- Our nationally recognized mentored research program for rising seniors continues to expand its international research component and produce significant results. The number of students participating in the 2015-16 Research Experience Scholars Program (RESP) included GSSM students who conducted research at the German Cancer Research Center in Heidelberg, Germany. RESP is privately funded.
- Newly installed classroom technologies support GSSM's advanced and increasingly world-wide curriculum. All classrooms are equipped with a base level of technology that includes video conferencing, digital interactive whiteboards, and media players.
- GSSM computer science students go well beyond the basics of programming. Courses explore Java, Python, C++, Linux, Visual Design, Artificial Intelligence, Robotics and Game Design. GSSM's Robotics teams continually perform well in state and national competitions.
- The Accelerate Engineering program recruited sixty students into the Class of 2019, 45% female. These students represent 14 high schools across the state.
- GSSM Accelerate installed the fourth and fifth virtual classrooms, including one equipped for physics laboratory instruction.
- GSSM alumni continue to demonstrate excellence in both academics and leadership at the college level, as well as in their careers. In 2016, Joey Wilson, '13 was named Student Body President at Clemson University and Amy Chang, '12 was named one of the 16 most interesting students at Yale. More than a dozen GSSM alumni are now with the Medical University of South Carolina, in positions ranging from first year medical student to professor.
- Athletics: Even while taking a heavy & advanced load in all academic areas, approximately 75% of GSSM students participate in inter-scholastic sports at some level. A new comprehensive intramural sports system created providing even more athletic opportunities for GSSM students.
  - The Swim Teams had 23 participants with three swimmer qualifying for the State championship.
  - The Cross Country Team had 26 runners with both the boys and girls teams qualifying for the State Championship. GSSM had six female All-Region runners and eight mail All-Region runners.
  - The Girls Tennis Team ended their season 10-0 and ended with the top two players in the Region.
  - Track continued with pole vaulting and added additional field events this season.
  - The Volleyball Team finished the regular season as Region champions. One of the players was named to the All-State Volleyball Team.
  - The Girls and Boys Soccer Teams made it to the playoffs. The Boys Team made it to the Lower State Championship.
  - GSSM Athletics garnered the Outstanding Sportsmanship Award for our Region recognizing student athletes outstanding leadership and sportsmanship in this area of inter-scholastic sports

#### **Academic Highlights**

- 1. For the 2015-2016 school year, Accelerate Engineering faculty crossed over and taught in the residential Engineering, Chemistry and English departments.
- 2. For the 2015-2016 school year, Accelerate Engineering added new instructors in Chemistry, Mathematics and Physics to accommodate the expanded Junior class and Senior class.
- 3. For 2015-2016, 148 juniors were admitted, up from 128 juniors the previous year. This is a "full-capacity" junior class.

| AGENCY NAME: Governor's School for Science & Mathematics (GSSM) |     |          |                        |
|---|-----|----------|------------------------|
| AGENCY CODE:  | H65 | SECTION: | Education - GSSM - SDE |

- 4. For 2015-2016, Accelerate Engineering had 99 total students, up from 61 in 2014-2015.
- 5. Dual Enrollment Agreement signed: Clemson University is providing up to 41 dual enrollment credits for students in Accelerate Engineering.
- 6. Articulation agreements with Clemson, College of Charleston and the University of South Carolina were revised to add courses that were added to the GSSM curriculum and to include a Challenge Exam criteria in order to earn college credit should a student apply and be accepted to one of the universities.
- 7. Course offerings
  - a. 81 courses offered as semester or year-long courses
  - b. 47 STEM courses
  - c. 18 College Board approved AP courses
  - d. 21 courses for which an AP course is a pre requisite.
- 8. New course offerings
  - a. Abstract Algebra
  - b. Programming Interaction and Visual Design
  - c. Game Design, Prototyping and Production
  - d. Introduction to Engineering Design
  - e. Engineering: Electronics
  - f. Engineering: SolidWorks
- 9. New Year-long advanced Research courses, Scientific Investigation I and II were piloted successfully and will continue in both the fall and spring terms for juniors and seniors.
- 10. Launchpad
  - a. Summer program for a targeted number of rising juniors admitted to GSSM was expanded to two weeks and enhanced with hands-on laboratory experience
  - b. Program helps students be more prepared to handle the rigors of the academic program at GSSM, especially in the areas of Math, English and Science labs.
  - c. Program also includes a transitional piece to help students adjust to living in a residential setting
- 11. Accelerate Engineering Statewide Virtual/Blended Program for 10<sup>th</sup>, 11<sup>th</sup> & 12<sup>th</sup> Graders.

  Participants can earn up to 41 hours of college science, English, mathematics and engineering credits through Clemson University in 2015-2016.
  - Finished 3<sup>rd</sup> year of instruction; had first program graduates! All are attending college in 2016-2017. Thirteen of fourteen remained in state. Fourth group in place •
  - Program Growth continues:
    - 2015-2016: 99 students at 15 virtual sites around the state
    - Adding five new sites in 2016-17
  - Instructor hiring for 2016-17 completed
  - Summer Camps for existing and new students planned Curriculum integration continues: focusing on senior courses and summer activities Planning for 10 courses per semester for Fall 2016: four for seniors, four for juniors, two for sophomores.
  - Intensive Math preparation has improved retention
  - First Summer Camp for rising seniors at Clemson in June
  - Summer Base Camp for new students in July at GSSM
  - Summer Camp at USC in July for rising seniors coordinating with the EE and ChE researchers
  - Saturday experiences Spring 2016: design workshop for the Sophomores Arduino robotics for the Juniors, final project presentation for the seniors.
  - Seniors given assistance locating industry internships for the summer after graduation.
  - Chemistry labs at GSSM facilities continued in Fall and Spring. Physics laboratories occurred on GSSM campus and at Clemson in coordination with their physics department. Senior curriculum finalized to include Engineering Physics and a college literature course:
- 12. Standardized test scores

Strategic Planning Template

|      |      |                 |        |  | Strategic Planning Template   |
|------|------|-----------------|--------|--|---|
| Туре | Goal | Item #<br>Strat | Object | Associated Enterprise Objective            | Description   |
| G    | 1    |                 |        | Education, Training, and Human Development | Provide the best advanced education for S.C.'s most selective students  |
| S    |      | 1.1             |        | *  | Provide the best credentialed and most experienced teachers in all subjects   |
| 0    |      |                 | 1.1.1  |  | Hire teachers with minimum Master's degrees, PhD's preferred in their areas - appropriate to full-capacity growth of student body.  |
| 0    |      | -               | 1.1.2  |  | Maintain Excellent Rating on State School Report Card   |
| 0    |      |                 | 1.1.3  |  | Maintain low student to teacher ratio   |
| 0    |      | -               | 1.1.4  |  | Maintain and expand challenge exam agreements with leading in-state Universities  |
| 0    |      | - 3             | 1.1.5  |  | Ensure 100% of GSSM grads attend undergraduate school   |
| 0    |      | -               | 1.1.6  |  | Support and track scholarship and grant attainment by GSSM graduates  |
| 0    |      |                 | 1.1.7  |  | Track # and % of in-state and out-of-state University attendance by GSSM grads  |
| S    |      | 1.2             |        |  | Continually advance curriculum offerings, coordinating with Universities and Business Sector  |
|      |      |                 |        |  | Create and implement Accelerate Engineering - a statewide virtual/blended program for 10th, 11th & 12th graders. Design and implement with Industry, business, University and |
| 0    |      | -               | 1.2.1  |  | school partners in S.C.   |
| 0    |      |                 | 1.2.2  |  | Continue to infuse Economics & Finance into GSSM curriculum offerings.  |
| 0    |      | -               | 1.2.3  |  | Continue to enhance Engineering offerings residential program at GSSM   |
| S    |      | 1.3             |        |  | Provide a safe and supportive teaching environment with technology  |
| 0    |      |                 | 1.3.1  |  | Schedule campus teaching spaces with zero teaching downtime for facility repair   |
| 0    |      |                 | 1.3.2  |  | Upgrade IT networks and in-classroom/lab IT to support instruction  |
| 0    |      |                 | 1.3.3  |  | Implement Public Safety department with armed Law Enforcement Officers, review, revise and practice public safety drills (fire, Tornado, Armed Intruder Lockdown)             |
| G    | 2    |                 |        |  | Operate a residential campus supportive of students in activities, character development and safety   |
| S    |      | 2.1             |        |  | Conduct Athletic Programs appropriate to an academically-focused residential high school  |
| 0    |      |                 | 2.1.1  |  | Create athletic teams supportive of student interests and abilities   |
| 0    |      |                 | 2.1.2  |  | Create expanded intramural athletic program supportive of student interests and abilities   |
| S    |      | 2.2             |        |  | Create arts and music programs supporting students interests and talents  |
| 0    |      |                 | 2.2.1  |  | Maintain specialized art and music instructors to foster student development in art & music   |
| S    |      | 2.3             |        |  | Ensure physical and mental health of students   |
| 0    |      |                 | 2.3.1  |  | Provide mental health professional at doctoral level to assess student body via individuals at improving emotional quotient awareness   |
| 0    |      |                 | 2.3.2  |  | Provide extensive qualified nursing services to include medication management   |
| G    | 3    |                 |        |  | Focus Support and Admin services on cost containment and freeing-up instruction, Outreach & Student Development Functionality   |
| S    |      | 3.1             |        |  | Minimize support & admin functions - no increase during Growth phases, distributing to functional areas   |
| 0    |      |                 | 3.1.1  |  | Support functional areas by creating minimally necessary reporting and administrative tasks - mainly self-created tasks.  |
| 0    |      |                 | 3.1.2  |  | Implement and access Growth plans in phases per outlined excellence benchmarks (teacher qualifications, ratios, etc.)   |
| G    | 4    |                 |        | Company of the same of the same of         | Expand Academic opportunities and achievement statewide via GSSM Outreach Programs, focus on private funding  |
| S    |      |                 |        |  | Maintain and expand GSSM's advanced research program for residential students through growth - via University Partners.   |
| 0    |      |                 | 4.1.1  |  | Provide quality research placements at universities or industrial sites, while increasing student body  |
| 0    |      |                 | 4.1.2  |  | Expand International Research Opportunities and placements for GSSM students, learn from exchanges  |
| S    |      | 4.2             |        |  | Expand quality GSSM Academic Outreach programs for more students of different grades, in more locations throughout South Carolina.  |
| 0    |      |                 | 4.2.1  |  | Increase programs targeted to specific age groups, sites & availability and participation in Statewide Outreach.  |
| 0    |      |                 | 4.2.2  |  | Increase Outreach partners, both at schools & districts, and with business partners.  |

| Fiscal Year 201   | L6- <b>17</b> |
|-------------------|---------------|
| Accountability Re | port          |

Agency Name: Governor's School for Science & Mathematics (GSSM)

Agency Code: H65 Section: Education - SCDE

Strategic Planning Template

| Туре  | Item # Associated Enterprise Objective Goal Strat Object | Description  |
|-------|--|--|
| 0     | 4.2.3  | Continue to grow Accelerate Engineering Statewide program: moved to mostly state support, to allow S.C. HS students to earn full first-year credits in in-state University Engineering programs. Provided statewide to partner schools/districts. Instruction provided via very high quality virtual video conferencing. |
| 000   |  |  |
| S.#3. |  |  |
| 0     | 4.2.4  | Increase Academic achievement  |

| Fiscal  | Year   | 20  | 15-1 | 6  |
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Agency Name: Governor's School for Science & Mathematics (GSSM)

Agency Code: H65 Section: Education - SCDE

**Performance Measurement Template** 

| ltem | Performance Measure                               | Target Value                          | Actual Value  | Future Target<br>Value   | Time Applicable                   | Data Source and Availability                                      | Calculation Method          | Associated Objective(s)  |
|------|---|---------------------------------------|---|--|-----------------------------------|---|-----------------------------|--|
| 1    | Growth in Student Body                            | 225                                   | 265   | 288  | 3 years, Annually after 2015-2016 | GSSM Admissions   | Admissions - Count          | G1: 1.1.3, 1.1.4,1.1.5,<br>1.1.6: G2, 2.1, 2.2,<br>2.2.1, 2.3, 2.3.1, 2.3.2                      |
| 2    | Growth in Excellent Residential Faculty           | 31                                    | 31  | 31   | On-going based on course demand   | Staffing  | Count                       | G1: 1.1.3, 1.1.4,1.1.5,<br>1.1.6, G2, 2.1, 2.2,<br>2.2.1,2.3, 2.3.1, 2.3.2,<br>3.1, 3.1.1, 3.1.1 |
| 3    | Maintain % of Faculty with Masters                | 100%                                  | 100   | 100%   | Annual                            | Staffing  | Count                       | S 1.1: O1.1.1, 1.1.4,<br>1.1.7   |
| 4    | Maintain % of Faculty with PhD                    | 80%                                   | 80%   | 80%  | Annual                            | Staffing  | Count                       | S 1.1: O1.1.1, 1.1.4,<br>1.1.7   |
| 5    | Maintain "EXCELLENT" Rating on School Report Card | Excellent                             | Excellent*  | Excellent  | Annual                            | S.C. School Report Card* Official release cycle currently delayed | Various Benchmarks          | \$1.2: O1.3.2, G3, \$3.1, 3.1.1, 3.1.1   |
| 6    | Major Curriculum Addition(s)                      | Econ-Finance & Accelerate Engineering | Maintained  | Various,<br>depending on<br>University and/or<br>Business Demand   | Major addition<br>every 2-3 years | GSSM Academics  | Maintain and track results, | O1: S1.1, 1.1.4, 1.1.5, 1.1.6, 1.1.7   |
|      |   |                                       | Implemented<br>Year-Round<br>Advanced Science<br>Research | Continue to build<br>and enhance on-<br>campus research<br>program | Annual                            | Academics   | Maintain and track results, | O1: S1.1, 1.1.4, 1.1.5, 1.1.6, 1.1.7   |
|      |   |                                       | Increased<br>engineering<br>residential<br>opportunities  | Continue to increase engineering residential opportunities         | Annual                            | Academics   | Maintain and track results, | O1: S1.1, 1.1.4, 1.1.5, 1.1.6, 1.1.7   |

Agency Code: H65 Section: Education - SCDE

Performance Measurement Template

| The same | D. (  | Towns Volum    | actual Value                                     | Future Target  | Time Applicable      | Data Source and Availability      | Calculation Method                       | Associated Objective(s)   |
|----------|---|----------------|--|--|----------------------|-----------------------------------|--|---|
| Item     | Performance Measure   | Target Value   | Actual Value                                     | Value  | Time Applicable      | Data Source and Availability      | Calculation Wethoo                       | Associated Objective(s)   |
| 7        | Challenge exam agreements with Universities   | 3 Universities | 3 Universities                                   | Continue to expand agreements                                    | two years            | GSSM Academic Profile             | Maintain and track results,              | G1: 1.1.3, 1.1.4,1.1.5, 1.1.6, G2, 2.1, 2.2, 2.2.1,2.3, 2.3.1, 2.3.2, 3.1, 3.1.1, 3.1.1                                 |
| 8        | % of GSSM Grads to Undergraduate<br>College   | 100%           | 100%   | 100%   | Annual               | College Counseling                | Report                                   | 1.1.2, 1.1.6,   |
| 9        | New Junior Year Seminar Series  | 1              | 1  | Maintain   | two years            | Student Development and Academics | Student Development and Academic Affairs | G2: S2.3, 2.3.1, 2.3.2, 1.1.2, 1.1.6  |
| 10       | # of GSSM Outreach Participants = summer and during academic year. Includes students and teachers for 2015-16 | 2351           | 5304   | Expand as<br>resources allow<br>Capacity,<br>maintain quality    | Annual               | GSSM Admissions/Outreach          | Admissions - Count                       | G4: S4.2, O4.2.1, 4.2.2, 4.2.3  |
| 11       | # of Outreach Sites Provided  | 22             | 31   | Reasonable<br>Growth w/quality<br>maintained                     | Annual               | GSSM Outreach                     | Admissions                               | G4: S4.2, O4.2.1, 4.2.2, 4.2.3  |
| 12       | Research Scientists as GSSM Mentors,<br>University and Industry Partners                                      | 111            | 105  | Match w/growth   | Annual               | GSSM Outreach                     | GSSM Outreach/Universities               | G1: 1.1.3, 1.1.4,1.1.5,<br>1.1.6, G2, 2.1, 2.2,<br>2.2.1,2.3, 2.3.1, 2.3.2:<br>G4: S4.2, O4.2.1, 4.2.2,<br>4.2.3, 4.2.4 |
| 13       | Accelerate Engineering - Statewide<br>Outreach Virtual/Blended Program for<br>10th, 11th & 12th graders       | Pilot Program  | # of Schools/Sites<br>= 15<br># of students: 102 | For 2016-17:<br>Expand to 120<br>students at 15<br>schools/sites | 3 year program cycle | Accelerate Engineering<br>Program | Accelerate Engineering Program           | G4: S4.2, O4.2.1, 4.2.2, 4.2.3 G1: 1.1.3, 1.1.4,1.1.5, 1.1.6, G2, 2.1, 2.2, 2.2.1,2.3, 2.3.1, 2.3.2:, 4.2.4             |
| 14       | % of Grads attending In-State Universities  | 61%            | 64%  | 50% +  | Annual               | College counseling                | Admissions                               | 1.1.4, 4.1, r.1.1   |

| Agency Name: | Governor's School for | Science & Mathematics | (GSSM)           |
|--------------|-----------------------|-----------------------|------------------|
|              |                       |                       |                  |
| Agency Code: | H65                   | Section:              | Education - SCDE |

Fiscal Year 2015-16
Accountability Report

#### Performance Measurement Template

| Item | Performance Measure                         | Target Value | Actual Value | Future Target<br>Value     | Time Applicable | Data Source and Availability      | Calculation Method             | Associated Objective(s)  |
|------|---|--------------|--------------|----------------------------|-----------------|-----------------------------------|--------------------------------|--|
| 15   | Dual Enrollment Agreement with Universities | 41 credits   | 41 creds     | maximize college<br>credit | 3 years program | Accelerate Engineering<br>Program | Accelerate Engineering Program | G4: S4.2, O4.2.1, 4.2.2,<br>4.2.3 G1: 1.1.3,<br>1.1.4,1.1.5, 1.1.6, G2,<br>2.1, 2.2, 2.2.1,2.3, 2.3.1,<br>2.3.2: |

Fiscal Year 2015-16
Accountability Report

Agency Code: Governor's School for Science & Mathematics (GSSM)

Agency Code: H65 Section: Education - SCDE

Program Template

|                            |   |    |           | EV 2015 1 | 6 Expenditur | oc (Actual)            |           |    | EV           | 2016-17 Expendit | ures (Projected) |                 | Program Templa   |
|----------------------------|---|----|-----------|-----------|--------------|------------------------|-----------|----|--------------|------------------|------------------|-----------------|--|
| Program/Title              | Purpose   |    | General   | Other     |              | es (Accuai)<br>Federal | TOTAL     | (  | General      | Other            | Federal          | TOTAL           | Associated Objective(s   |
| Academics                  | Provide the highest quality instruction to S.C.'s best/most motivated High School students  | \$ | 3,825,620 | \$ 82     | 2,029        | \$                     | 3,907,649 | \$ | 4,048,226 \$ | 82,029           | \$               | 4,130,255       | G1, S1.1, O: 1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6, 1.1.7 S1.2: O: 1.2.1, 1.2.2, 1.2.3: S1.3: O1.5 1.3.2, 1.3.3 |
| . Life In Residence        | Support the 24/7 residential campus and development in all areas outside of the classroom   | \$ | 2,999,736 | \$ 15:    | 3,022        | \$                     | 3,152,758 | \$ | 3,166,142 \$ | 153,022          | \$               | 3,319,164       | G2, S 2.1, O, 2.1.1, S 2.<br>O: 2.2.1, S 2.3, O: 2.3.1<br>2.3.2  |
| II. Support Admin Services | Allow functional areas to focus and achieve -<br>Complete State Reports & Requirements  | \$ | 379,561   |           |              | \$                     | 379,561   | \$ | 397,561      |                  | \$               | 397,561         | . G3 S 3.1: O: 3.1.1,3.1   |
|                            |   | _  |           |           |              |                        |           |    |              |                  |                  | - 1 - 2 - 2 - 2 | The second second  |
| /. Statewide Outreach      | Raise the academic bar across the entire state, elementary through high school and improve prospects for universities and businesses in S.C. Expand Statewide Accelerate Engineering Program for 10th, 11th and 12th graders. | \$ | 2,086,152 | \$ 37     | 1,449 \$     | 140,000 \$             | 2,597,601 | \$ | 3,006,462 \$ | 371,449          | 140000 \$        | 3,517,911       | G 4, S 4.1, O: 4.1.1, 4.<br>S, 4.2, O: 4.2.1, 4.2.2,<br>4.2.3, 4.2.4   |

Fiscal Year 2015-16
Accountability Report

Governor's School for Science & Mathematics (GSSM)

Agency Code: H65 Section: Education - SCDE

Agency Name:

**Legal Standards Template** 

|        | Lava New Jose  | Iiadianian   | Tuna aftau  | Statuary Requirement and/or Authority Granted  | Legal Standards Templa<br>Associated Program(s |
|--------|--|--------------|-------------|--|--|
| Item # | Law Number   | Jurisdiction | Type of Law | Statuary Requirement anu/or Authority Granteu  | Associated Flogram(s                           |
|        | Enabling Legislation CHAPTER 48. HISTORY: 1987 Act No. 170, Part II, Section 23. |              |             |  |  |
|        | SECTION 59 48 20.  |              |             |  |  |
| 1      | SPECIAL SCHOOL OF SCIENCE AND MATHEMATICS  | State        | Statute     | Establish School and Governing Body 1987   | All  |
|        | SECTION 59 48 10. Establishment of school.                                       |              |             |  |  |
| 2      | Proviso 1.7  | State        | Proviso     | 1.7. (SDE: Governor's School for Science & Math) Any unexpended balance on June thirtieth of the prior fiscal year of funds appropriated to or generated by the Governor's School for Science and Mathematics may be carried forward and expended in the current fiscal year pursuant to the direction of the board of trustees of the school.   | All  |
| 3      | Proviso 1.27   | State        | Proviso     | <b>1.27.</b> (SDE: Governor's School Leave Policy) The South Carolina Governor's School for the Arts and Humanities and the South Carolina Governor's School for Science and Mathematics are authorized to promulgate administrative policy governing annual and sick leave relative to faculty and staff with the approval of their respective board of directors. This policy shall address their respective school calendars in order to comply with the instructional needs of students attending both special schools.  |  |
| 4      | Proviso 1.35   | State        | Proviso     | 1.35. (SDE: Governor's Schools' Fees) The South Carolina Governor's School for the Arts and Humanities and the South Carolina Governor's School for Science and Mathematics are authorized to charge, collect, expend, and carry forward student fees as approved by their respective Board of Directors. The purpose and amount of any such fees will be to maintain program quality in both academics and residential support. No student will be denied admittance or participation due to financial inability to pay. The respective Board of Directors shall promulgate administrative policy governing the collection of all student fees. Both schools shall conspicuously publish a fee schedule on their respective websites. | All  |

| 5 | Proviso 1.55   | State | Proviso | 1.55. (SDE: Governor's Schools Residency Requirement) Of the funds appropriated, the Governor's School for the Arts and the Humanities and the Governor's School for Science and Mathematics are to ensure that a parent(s) or guardian(s) of a student attending either the Governor's School for the Arts and the Humanities or the Governor's School for Science and Mathematics must prove that they are a legal resident of the state of South Carolina at the time of application and must remain so throughout time of attendance. The Governor's School for the Arts and the Humanities and Governor's School for Science and Mathematics may not admit students whose parent(s) or guardian(s) are not legal residents of South Carolina.  | Residential |
|---|----------------|-------|---------|---|-------------|
| 6 | Proviso 1.85   | State | Proviso | 1.86. (SDE: Governor's Schools Informational Access to Students) For the current fiscal year, school districts must permit both the Governor's School for the Arts and Humanities and the Governor's School for Science and Mathematics to collaborate with individual schools and their staff to share information with students and families about the educational opportunities offered at the respective Governor's Schools, through avenues including school visits, informational presentations, and posters. By June 30, 2015, the Governor's School for the Arts and Humanities and the Governor's School for Science and Mathematics must report to the Chairman of the Senate Finance Committee and the Chairman of the House Ways and Means Committee the results of these Informational Access efforts. Further, the two Governor's Schools will work with districts, the Department of Education and School Report Card administrators, to ensure that SAT scores of current Governor's Schools' students are included in the School Report Card of those students' resident schools and districts | Residential |
| 7 | Proviso 117.50 | State | Proviso | 117.50. (GP: Facility Rental Fee) The Governor's School for the Arts and Humanities, Governor's School for Science and Mathematics, Wil Lou Gray Opportunity School, and John de la Howe School are authorized to charge, collect, expend and carry forward fees charged for facility and equipment rental and registration   | All         |

8 Proviso 117.16 State Proviso

117.16. (GP: Allowance for Residences & Compensation Restrictions) That salaries paid to officers and employees of the State, including its several boards, commissions, and institutions shall be in full for all services rendered, and no perquisites of office or of employment shall be allowed in addition thereto, but such perquisites, commodities, services or other benefits shall be charged for at the prevailing local value and without the purpose or effect of increasing the compensation of said officer or employee. The charge for these items may be payroll deducted at the discretion of the Comptroller General or the chief financial officer at each agency maintaining its own payroll system. This shall not apply to the Governor's Mansion, nor to guards at any of the state's penal institutions and nurses and attendants at the Department of Disabilities and Special Needs, and registered nurses providing clinical care at the MUSC Medical Center, nor to the Superintendent and staff of John de la Howe School, nor to the cottage parents and staff of Wil Lou Gray Opportunity School, nor to full-time or part-time staff who work after regular working hours in the SLED Communications Center or Maintenance Area, nor to adult staff at the Governor's School for Science and Mathematics and the Governor's School for Arts and Humanities who are required to stay on campus by the institution because of job requirements or program participation. Any state institution of higher learning may provide complimentary membership privileges to employees who work at their wellness centers. The presidents of those state institutions of higher learning authorized to provide on-campus residential facilities for students may be permitted to occupy residences on the grounds of such institutions without charge.

| Agency Code:                | H65 Section:  | Education - SCDE  |                         | Customer Template  |
|-----------------------------|---|---|-------------------------|--|
| Divisions or Major Programs | Description   | Service/Product Provided to Customers                                   | Customer Segments       | Specify only for the following Segments: (1) Industry: Name; (2) Professional Organization: Name; (3)  Public: Demographics.   |
| Academics                   | Advanced Curriculum and Training  | Advanced Educational Programs   | School Districts        | GSSM serves the entirety of South Carolina, through partnerships with schools, districts, principals, teachers and higher education.   |
| Academics continued         |   |   | Industry                | GSSM partners with industry across the State, including, but not limited to: Boeing, Google, BMW, Sonoco Products Company and many others.   |
| Academics continued         |   |   | General Public          | Public (Demographics): General Public and subsections to include families with school-age children appropriate for GSSM program Participation.   |
| Life in Residence           | Provide Residential Environment for Well-being and development of students staying oncampus   | Provide Residential Environment for Wellbeing and development           | School Districts        | GSSM serves the entirety of South Carolina, through partnerships with schools, districts, principals and higher education. Professional Organizations include: All Higher Educational Partners (USC, Clemson, S.C. State, Citadel, College of Charleston, MUSC, etc.), plus Federal Dept. of Education, Science, Math, Humanities and other Teacher Organizations. Public (Demographics): General Public and subsections to include families with school-age children appropriate for GSSM program Participation |
| Outreach                    | Statewide Educational Programs for students and Teachers, to include Engineering, Summer Camps, 9th grade Algebra II, Professional Development for Teachers and Distance Education in Advanced Courses. | Advanced Educational Programs - Statewide grades 7-12, Teacher Training | <sup>2</sup> , Industry | GSSM partners with industry across the State, including, but not limited to: Boeing, Google, BMW, Sonoco Products Company and many others.   |
| Outreach continued          |   |   | General Public          | Public (Demographics): General Public and subsections to include families with school-age children appropriate for GSSM program Participation.   |

| Outreach continued |                                      |                                      | Industry                        | GSSM partners with industry across the State, including, but not limited to: Boeing, Google, BMW, Sonoco Products Company and many others.                                |
|--------------------|--------------------------------------|--------------------------------------|---------------------------------|---|
| Outreach continued |                                      |                                      | Professional Organization       | GSSM partners with educational, economic development, civic and other Professional Organizations to advance academic achievement and awareness throughout South Carolina. |
| Administration     | Meet Reporting and Stewardship Needs | Meet Reporting and Stewardship Needs | Executive Branch/State Agencies |   |
|                    |                                      |                                      | Legislative Branch              |   |
|                    |                                      |                                      | School Districts                |   |

**Partner Template** 

|                                    | Town of Double on Emiliar  | Description of Partnership   | Partner Tel Associated Objective(s)     |
|------------------------------------|----------------------------|--|---|
| Name of Partner Entity             | Type of Partner Entity     | Description of Partnership   | Associated Objective(s)                 |
| Clemson University                 | Higher Education Institute | Teach Engineering Statewide to 10th, 11th, and 12th graders in GSSM's Accelerate Engineering Program. Articulation agreements for course credit. Summer Advanced Research placements of GSSM students on campus and with University Scientists. Agreements for course credit for Residential students. |   |
| University of South Carolina       | Higher Education Institute | Articulation agreements for course credit. Summer Advanced Research placements of GSSM students on campus and with University Scientists   | G1: 1.1.3, 1.1.4,1.1.5, 1.1.6<br>1.1.7: |
| School Districts in South Carolina | K-12 Education Institute   | Provide Teacher Training and Outreach Programs for teachers and students. Recruit and partner on educational Initiatives, such as Accelerate Engineering (10th, 11th and 12th grades) and virtual Algebra II for 9th grade.  | G1: 1.1.3, 1.1.4,1.1.5, 1.1.6           |
| MUSC                               | Higher Education Institute | Articulation agreements for course credit. Summer Advanced Research placements of GSSM students on campus and with University Scientists   | G1: 1.1.3, 1.1.4,1.1.5, 1.1.6<br>1.1.7: |
| S.C. State                         | Higher Education Institute | Summer Advanced Research placements of GSSM students on campus and with University Scientists. Teacher Training and Engineering partnerships   | G1: 1.1.3, 1.1.4,1.1.5, 1.1.6<br>1.1.7: |

| College of Charleston          | Higher Education Institute    | Articulation agreements for course credit. Summer<br>Advanced Research placements of GSSM students on campus<br>and with University Scientists                       | G1: 1.1.3, 1.1.4,1.1.5, 1.1.6<br>1.1.7: |
|--------------------------------|-------------------------------|--|---|
| S.C. Middle Schools            | K-12 Education Institute      | Provide STEM Teacher Training and Outreach Programs for teachers and students. Recruit and partner on educational Initiatives  | G1: 1.1.3, 1.1.4,1.1.5, 1.1.6<br>1.1.7: |
| S.C. Elementary Schools        | K-12 Education Institute      | Provide Teacher Training and Outreach Programs for teachers and students. Recruit and partner on educational Initiatives   | •                                       |
| Business/Industry Partnerships | Private Business Organization | Outreach and Residential efforts and support to include Accelerate Engineering, Economics and Finance, Mandarin Chinese Foreign Language Instruction and many others | G4: S4.2, O4.2.1, 4.2.2, 4.2.<br>4.2.4  |

| Fiscal Yea   | r 2015-16 |
|--------------|-----------|
| Accountabili | ty Report |

| Agency Name: | Governor's School | Tor Science & Mathematics (G | 55IVI)           |
|--------------|-------------------|------------------------------|------------------|
| Agency Code: | H65               | Section:                     | Education - SCDE |

|                         |  |                               |       | Frequency | (MM/DD/YYYY)          |  |  |
|-------------------------|--|-------------------------------|-------|-----------|-----------------------|--|--|
| State Ac                | countability Report                                | Dept. of Admin                | State | Annually  | 1st Quarter           | Metrics and assessment of prior year priorities and outcomes               | Chair and President Review - electronic, hard copies for Board and on-li |
|                         | uman Affairs Commission Report<br>General Assembly | S.C. Human Affairs Commission | State | Annually  | 2nd Quarter           | Hiring and Minority Employment Assessment                                  | Posted on Agency Website or via direct request - sent to Board member    |
| State Bu                | udget Request                                      | Executive Budget Office       | State | Annually  | 2nd Quarter           | Budget Priorities and Justifications                                       | Posted on Agency Website or via direct request                           |
| Annual State Audit      |  | Governing Board               | State | Annually  | June of each year     | Budget Priorities and Justifications - For Approval                        | Posted on Requesting Agency Website or via direct request                |
|                         | State Audit  | State Auditors Office         | State | Annually  | Dec-March             | Policies and Procedures review, Variances in Line Items,<br>Justifications | Posted on Agency Website or via direct request                           |
| S.C. School Report Card |  | Education Oversight Committee | State | Annually  | September-<br>October | Benchmarks and metrics in comparison to public schools                     | Posted on Agency Website or via direct request                           |

| Agency Name: | Governor's | S School for Science & Mathe | ematics (GSSM)   |
|--------------|------------|------------------------------|------------------|
| Agency Code: | H65        | Section:                     | Education - SCDE |

State

S.C. School

**Report Card** 

**Education Oversight Committee** 

Fiscal Year 2015-16
Accountability Report

Posted on Agency Website

|   |   |                |  | Oversight Review Templa                                   |  |
|---|---|----------------|--|---|--|
| ltem  | Name of Entity Conducted Oversight Review | Type of Entity | Oversight Review Timeline (MM/DD/YYYY to MM/DD/YYYY) | Method to Access the Oversight Review Report              |  |
| Accountability<br>Report                                      | Board of Trustees                         | State          | Previous Fiscal Year                                 | Chair review and signature - Subcommittee Review          |  |
| Purchasing<br>Audit(s)  | P-Card Audit                              | State          | As Scheduled by SDE                                  | Posted on Requesting Agency Website or via direct request |  |
| State Human Affairs Commission Report to the General Assembly | S.C. Human Affairs Commission             | State          | Annually - for Fiscal Year                           | Posted on Agency Website or via direct request            |  |
| •   | GSSM Board of Trustees                    |                |  |   |  |
| Annual State<br>Audit   | State Auditor's Office                    | State          | Annually for Previous Fiscal Year                    | Posted on Agency Website or via direct request            |  |

**Previous School Year**