



**FY 2006 PROGRAM PLAN**  
**April 5, 2006**  
**SOUTH DAKOTA SPACE GRANT CONSORTIUM**  
<http://www.sdsmt.edu/space>

**Introduction**

FY 2006 will be the first year that the South Dakota Space Grant Consortium (SDSGC) will operate under its new management system guided by a **Strategic Plan** for the full 12 months of the program year. This will be a significant accomplishment for the management of SDSGC operations because we have never operated under a well-defined Strategic Plan until one was developed in September 2005.

Another first for SDSGC is that we now have guiding documents for evaluation and an outside evaluator to assess the effectiveness of our efforts and provide input that the Management Team can use to keep programs on track with our SMART goals and objectives. Our Consortium will continue to engage in those educational and research activities which have proven successful. Programs that are less effective at achieving compliance with the Strategic Plan will be altered or discontinued.

Vision and Mission

The vision of the SDSGC is to expand opportunities for all South Dakotans through education, research, and public service in the fields of aerospace, earth, and space science. As the link between NASA and the citizens of South Dakota, SDSGC's mission is to instill the spirit of exploration and discovery in students and educators and in the general public, with a special focus on the fields of science, technology, engineering, and mathematics (STEM) that are essential for the development of the nation's workforce.

The SDSGC is committed to excellence in student and faculty research and to promoting STEM education and expanding outreach projects across the state of South Dakota. We specifically seek to include women, Native Americans, and other underrepresented groups in all of the programs and activities supported by the South Dakota Space Grant Consortium.

SMART Goals & Objectives

SDSGC's Management Team has developed this FY 2006 Proposal in alignment with NASA and state priorities focused around SMART (Specific, Measurable, Acceptable, Realistic, Time frame) goals and objectives. At the heart of these goals and objectives are SDSGC's Guiding Principles for Improvement and Sustained Quality:

- **Inclusiveness** — The need to deliver a broad and equitable Fellowship/Scholarship program; to engage all affiliates in Consortium programs; to provide broader input into decision-making; and to recruit more Native American students.
- **Focus** — The need to set realistic goals consistent with available resources; to develop a strategic plan with specific short- and long-term objectives; to prioritize activities based on budget level; to formalize the benefits and expectations of management and affiliates; and to institute a policy to drop inactive affiliates.
- **Alignment** — The need to align the Consortium programs and strategic plan with NASA, state, and affiliate priorities; to recognize the major transformation in NASA direction and make appropriate changes in state programs; and to seek greater guidance from state and industry representatives.
- **Impact** — The need to maintain accurate and consistent measurements regarding programs and participants; to formalize methods for external and self evaluation; to carry on regular assessment of the Strategic Plan, activities, and outcomes; and to recognize and implement needed adjustments to achieve results.

Much of the 2005 Program Year was spent reorganizing the Consortium under Probationary Status, drafting the Program Improvement Report, and developing the Strategic Plan (Dec. 2005). The Strategic Plan remains the primary source of direction for the Consortium's programs, and no major revisions are planned at this time. As determined at the annual performance audit meeting on January 27, 2006, the Consortium successfully met over 70% of the short-term outcomes in the Strategic Plan, most of which are retained as annual performance targets. Despite this progress, and successful advancement out of Probationary Status, the Consortium is cognizant of remaining weaknesses identified in the PIR review, specifically:

- the need to continue to seek a fair and equitable distribution of Consortium resources, and
- the need work harder to engage more affiliates in a meaningful way.

#### Alignment with NASA Education Goals and Outcomes

The goals and outcomes described in SDSGC's Strategic Plan are closely aligned with the following strategic goals and outcomes that NASA has established for Education as described on page 43 of NASA's 2006 Strategic Plan.

*Outcome ED-1: Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goals through a portfolio of investments*

-- SDSGC Strategic Plan sections 2, 3, 4 (Fellowships, Research Infrastructure, Higher Education)

*Outcome ED-2: Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers, and faculty.*

-- SDSGC Strategic Plan sections 4 and 5 (Higher Education, Precollege)

*Outcome ED-3: Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.*

-- SDSGC Strategic Plan sections 1 and 6 (Management, Informal Education)

#### Description of Report Format of the following FY2006 Program Plan

Goals and objectives for the Consortium's proposed FY 2006 projects are described below in the following six Program Areas: 1) Management, 2) Fellowship/Scholarship, 3) Research Infrastructure, 4) Higher Education, 5) Precollege (K-12) Outreach, and 6) Public Service.

The specific programs, strategies and measurable outcome indicators used to guide the Consortium and track accomplishments are described in the Consortium's Strategic Plan (Appendix A of the enclosed FY2005 Progress Report). The enclosed FY2005 Progress Report includes "Quantitative Outcome Measures Matrix Tables" for each program area. Those tables clearly indicate whether the outcome indicators for the various program areas were either completed, partially completed, or not completed during FY2005. The outcomes completed in FY2005 will be continued in FY2006 and are not repeated here. In the cases where an outcome indicator was partially or not completed last year, we indicate below 1) how and when the outcome will be achieved during FY2006, or 2) whether there has been a change to the desired outcome for FY2006.

The enclosed budget clearly identifies our requested FY2006 funding for the work described herein. Specific Statements of Work and budgets for subawardees SDSU, Augustana College, St. Francis Indian School, and the SD Discovery Center are included. *[Budget note regarding St. Francis Indian School (SFIS): Although the attached workplan and budget for SFIS refers to four programs (i.e., Robotics Summer Camp, Lakota Star World Summer Camp, SOAR, and Other Activities) which total \$60,335, only \$20,000 of NASA Space Grant funding will be provided toward allowable expenses associated with those programs.]* The subcontract budget line item for Project Initiation Grants will be awarded among Consortium affiliates based on competitive proposals for Higher Education, Research Infrastructure, and Precollege programs.

## **1. Management (Administration)**

**Goal:** To ensure quality and fairness in all Consortium programs and alignment with the needs of NASA, the member and affiliate organizations, and the state of South Dakota.

**Objective 1.1:** (Reporting) The Management Team will provide timely reporting and responses to NASA Headquarters regarding Consortium operations and finances.

**Objective 1.2:** (National network) The Management Team will work to strengthen relationships with NASA Centers and the USGS Center for Earth Resource Observation and Science (EROS), the national Space Grant network, and the state's NASA EPSCoR Program.

**Objective 1.3:** (Consortium network) The Management Team will faithfully represent the diverse interests and resources of the Consortium member institutions and affiliates.

**Objective 1.4:** (State government) The Management Team will ensure that Consortium programs are aligned with state priorities.

**Objective 1.5:** (State industry) The Management Team will foster interaction between the Consortium and state industries involved in aerospace and related technologies.

**Objective 1.6:** (Link to public) The Management Team will seek to maintain and improve the effectiveness of the Consortium as the link between the public and NASA in the state.

**Objective 1.7:** (Increase resources) The Management Team will pursue opportunities to increase the resources available to the Consortium, to broaden participation within the state, to collaborate with other state Consortia in areas of mutual interest and capability, and to assure long-term sustainability.

**Objective 1.8:** (Diversity) The Management Team will ensure diversity in all Consortium programs and activities by seeking to include women, underrepresented minorities, and persons with disabilities.

**Objective 1.9:** (Evaluation) The Management Team will continually monitor and seek to improve the quality and effectiveness of the state program.

#### Management Team Structure

During FY2006, the Consortium's Management Team will continue to consist of the following permanent representatives from the SD School of Mines & Technology (SDSM&T), SD State University (SDSU), Augustana College, the USGS National Center for Earth Resource Observation and Science (EROS) and two additional rotating positions filled by affiliate members for a period of two years. During FY 2006 the two rotating positions will be held by representatives from \*Sinte Gleska University and the SD Discovery Center and Aquarium.

- Dr. Edward Duke, Director
- Mr. Thomas Durkin, Deputy Director and Outreach Coordinator
- Dr. Daniel Swets, Associate Director at Augustana College
- Mr. Kevin Dalsted, Associate Director at SD State University
- Mr. Gregg Johnson, Senior Scientist at EROS
- Mr. James Rattling Leaf, \*Sinte Gleska University
- Ms. Kristie Maher, Executive Director, SD Discover Center & Aquarium

\* - *Minority Serving Institution*

#### Management Outcomes Partially/Not Completed in FY'05 to be Completed/Revised in FY'06

Twenty-three (77%) of the 30 Management outcomes identified in SDSGC's Strategic Plan were completed in FY2005 (see Management "Quantitative Outcome Measures Matrix Table" in FY2005 Progress Report). Those outcomes will continue to be met in FY2006. The following seven outcomes that were partially or not completed in FY2005 will either be completed or revised in FY2006.

- Strategy/Outcome 1.3.3 will be revised. As a result of effective email communication among Consortium affiliates and other educational entities and teacher groups during 2005, and considering that Space Grant and other NASA educational information often needs to be distributed as soon as it becomes available, email will be used in lieu of a semi-annual electronic newsletter. Beginning in February 2006, SDSGC announcements are posted on the websites of the SD Science Teachers' Association and the SD Mathematics Teachers' Association.
- Per Strategies/Outcomes 1.6.2, 1.9.2, and 1.9.3, the Management Team solicited the assistance of faculty and students in the Department of Computer Information Systems at affiliate Dakota State University (DSU) and entered a subcontract during FY2005 to completely redesign the Consortium's website [www.sdsmt.edu/space](http://www.sdsmt.edu/space) to a more appealing, functional, user-friendly format. A major improvement to the website will be implementation of web-based evaluation and tracking projects, including student longitudinal tracking. DSU students are particularly qualified to design and execute these improvements, and the activity will provide an opportunity for DSU students and faculty to become more involved in the Consortium. The redesign will be completed by November 2006 and control of website content will remain with the SDSGC management.

- Per Strategy/Outcome 1.7.1, a Development Plan that identifies opportunities to increase funding, staffing, and matching for the Consortium’s program will be developed and approved by the Management Team by November 2006.
  - One immediate goal of the Development Plan is to seek industry contributions to support statewide science contests, K-12 teacher professional development, and precollege robotics programs.
  - A second immediate goal of the Development Plan is to seek statewide coordination and cost-sharing benefits through closer collaboration with the various state EPSCoR programs (NSF, NIH, DoD, DOE) and the state’s Science and Technology Entrepreneurship Program.
- In an initial attempt to pursue Strategy/Outcome 1.8.2 regarding diversity and outreach to persons with disabilities in 2005, SDSGC sent two targeted announcements of NASA workshops for the disabled to the superintendents of the SD School for the Deaf and the SD School for the Blind and Visually Impaired in 2005. Although the desired outcome was not met in 2005, SDSGC’s Management Team is not yet sure how fruitful the initial efforts will be. By October 2006, members of SDSGC’s Management Team will conduct discussions with the Directors of SD schools for the deaf and blind with the purpose of increasing NASA and STEM opportunities for the disabled.
- Per Strategy/Outcome 1.9.5, SDSGC’s Advisory Board will convene by September 30, 2006.

## **2. Fellowship/Scholarship Program**

**Goal:** To administer a fellowship/scholarship program that offers educational and research opportunities to students from diverse backgrounds who are pursuing degrees in fields of science, technology, engineering, and mathematics (STEM) that align with NASA’s mission and those of SDSGC members and affiliates.

**Objective 2.1:** (Competitiveness) Ensure the fair distribution of funds to member universities and educational affiliates.

**Objective 2.2:** (NASA and EROS ties) Offer hands-on, tangible research experiences to student research fellowship awardees at NASA Centers and EROS.

**Objective 2.3:** (Industry ties) Offer hands-on, tangible research experiences to student research fellowship awardees at aerospace and related science and technology industries.

**Objective 2.4:** (Mentoring and professional development) Provide mentoring and professional development experiences to student researchers, which will develop skills that contribute to the future workforce.

**Objective 2.5:** (Diversity) Ensure funding for fellowships and scholarships to women, underrepresented minorities, and persons with disabilities.

**Objective 2.6:** (Longitudinal tracking) All students who have received significant fellowship or scholarship assistance from SDSGC will be longitudinally tracked through first employment or beginning of advanced degrees.

**Objective 2.7:** (Evaluation) The Consortium will develop methods to document, measure, and assess the impact of the fellowship and scholarship programs in conjunction with its implementation of an overall evaluation strategy (see 1.9).

### Amount of FY2006 Funding

A fair and balanced distribution of funds to individuals at member universities and educational affiliates will be ensured through SDSGC's centralized, consortium-wide fellowship/scholarship program. Total undergraduate, graduate, and faculty development stipends during FY 2006 will be \$100,000 of NASA Space Grant funds. With \$9,000 in matched fellowships from Augustana College, the total for fellowship/scholarship stipends increases to \$109,000 for FY 2006.

### Longitudinal Tracking

SDSGC student fellows will be longitudinally tracked through their undergraduate and graduate degree programs and first employment via student surveys. Web-based survey instruments are planned to be part of the redeveloped Consortium website that was initiated during FY 2005 and will be completed by November 2006. Student Fellows will be longitudinally tracked on the following criteria: ACT and GRE scores, GPA, advancement to graduate school, career placement, and additional tracking criteria desired by NASA. Details of the survey will be developed in cooperation with Malcom Phelps, NASA's Director of Performance Measurement, to ensure consistency with Agency-wide tracking measurements. SDSGC will award a FY2006 fellowship to a graduate student trained in evaluation and assessment methods, and this student will assist the Management Team in the development of the student surveys. SDSGC's student survey instrument will be submitted to NASA for review and comment by July 2006 and incorporated into the Consortium's redesigned website for student access by the end of the Fall 2006 semester.

### Fellowship/Scholarship Targets for Underrepresented Minorities and Women

Per Strategy/Outcome 2.5.1, awards to women and minorities equal or exceed 10% to minorities and 40% to females. Native Americans are the largest minority in South Dakota, making up 8.3% of the population (The Chronicle of Higher Education). The state's public universities had an overall Native American student enrollment of 2.02% in 2005 (SD Board of Regents, Fact Book 2006). When considering all degree-granting institutions in South Dakota, including Tribal Colleges, the Native American enrollment increased to 6.9% (National Center for Education Statistics: Digest of Education Statistics, 2003). However, when considering only institutions that offer STEM degrees, the Native American enrollment is closer to 2%. Regardless, the target percentage of SDSGC fellowship funds to be awarded during FY2006 to Native American students exceeds both enrollment percentages. The state's public universities had an overall female enrollment of 56% in 2005 and a similar 54% at STEM degree-granting institutions. While SDSGC's target of 40% for women is below this percentage, it is realistic considering the demographics of our Space Grant fellowship/scholarship applicants during the past two years.

### Fellowship Outcomes Partially/Not Completed in FY'05 to be Completed in FY'06

Ten (71%) of the 14 Fellowship outcomes identified in SDSGC's Strategic Plan were completed in FY 2005 (see Fellowship "Quantitative Outcome Measures Matrix Table" in FY2005 Progress Report). Those outcomes will continue to be met in FY2006. The following four outcomes that were partially or not completed in FY2005 will be completed in FY2006.

- Per Strategy/Outcome 2.3.2, at least two student awardees of the state's Science and Technology Entrepreneurship Program (STEP) fellowships were to receive supplemental funding through SDSGC in FY2005. Because efforts to combine announcements for

STEP and Space Grant fellowships are currently underway, it is expected that appropriate STEP fellows with NASA-related entrepreneurial interests will receive supplemental Space Grant funding in the Fall 2006 and/or Spring 2007 semester.

- Per Strategy/Outcome 2.4.2, the majority of FY2005 student researchers funded through NASA South Dakota Space Grant presented their results to campus peers, professional organizations, precollege students, or civic groups in order to highlight their research and raise the level of awareness of NASA in the community. Research presentations will be made a higher priority for all student fellows receiving FY2006 Space Grant funding.
- Strategies/Outcomes 2.6.1 and 2.7.1 address student longitudinal tracking and will be achieved through the Consortium's website improvements currently underway and according to the timetable described above under Management Strategies/Outcomes 1.6.2 and 1.9.3.

### 3. Research Infrastructure

**Goal:** To promote the improvement of research programs and capabilities of institutional and affiliate members with an emphasis on the fields of aerospace, earth science, and supporting STEM disciplines.

**Objective 3.1:** (Research proposals) Increase the number of research proposals submitted by SDSGC institutions in fields aligned with NASA's mission.

**Objective 3.2:** (Research support) Support new and developing research, especially multidisciplinary and collaborative projects, in fields aligned with NASA's mission.

**Objective 3.3:** (Collaborations) Build research collaborations both within and outside the state.

**Objective 3.4:** (Facilities) Promote acquisition of new facilities and shared use of existing resources.

**Objective 3.5:** (Integrate research and education) Foster research groups and engineering design teams that integrate education, research, and development.

**Objective 3.6:** (Diversity) Increase the participation of women and underrepresented groups in statewide research programs and facilitate their subsequent entry into STEM careers.

**Objective 3.7:** (Evaluation) The Consortium will develop methods to document, measure, and assess the impact of the research infrastructure programs in conjunction with its implementation of an overall evaluation strategy (see 1.9).

#### Research Infrastructure Targets for Underrepresented Minorities and Women

Per Strategy/Outcome 3.6.2, to assist in the placement of students from underrepresented groups in projects that provide hands-on research or design experience, SDSGC fellowship/scholarship funds for research or design experiences at SDSGC academic institutions, EROS, and NASA Centers will equal or exceed 10% to minorities and 40% to females.

#### Research Outcomes Partially/Not Completed in FY'05 to be Completed/Revised in FY'06

Fifteen (75%) of the 20 Research Infrastructure outcomes identified in SDSGC's Strategic Plan were completed in FY 2005 (see Research "Quantitative Outcome Measures Matrix Table" in FY2005 Progress Report). Those outcomes will continue to be met in FY2006. Some of those outcomes that were partially met and had either Management or Fellowship components are

addressed above. The following outcomes that were partially or not completed in FY2005 will either be completed or revised in FY2006.

- Per Strategy/Outcome 3.3.3, an initial research needs and capabilities assessment of SDSGC academic institutions was to be completed by June 2006 in an effort to promote research collaboration among the state's academic institutions with an emphasis on programs that link faculty at institutions with limited research infrastructure (including Tribal Colleges) and faculty at research-intensive institutions. The Consortium's Management Team will bring this item before the Advisory Board during FY2006 to solicit advice on whether this outcome is a priority considering the Governor's 2010 Initiative and the limitations of SDSGC's research infrastructure resources.
- Per Strategy/Outcome 3.4.2, work was initiated in 2005 to develop and maintain at least three remote sensing test sites using imagery from the NASA-USGS EO-1 satellite (Hyperion and Advanced Land Imager sensors). Two of the selected sites were located to support Tribal College research projects at affiliate institutions Oglala Lakota College and Sinte Gleska University and all three sites will promote long-term interdisciplinary research and training collaborations among SDSGC institutions and attract collaborations from external partners. These sites will be fully established by July 2006.
- Per Strategy/Outcome 3.5.2, in order to encourage public and private partnerships to sponsor pre-college engineering design teams such as robotics teams, SDSGC industrial and state government affiliates were to be contacted in FY2005 regarding the needs and benefits of pre-college engineering design programs. This desired outcome will be addressed through the development of SDSGC's Development Plan by November 2006 as discussed above under Management Strategy/Outcome 1.7.1.
- Per Strategy/Outcome 3.7.1, simple before-and-after surveys of faculty and students involved in research infrastructure activities were to be taken to assess their knowledge and attitudes about the Consortium, NASA, and STEM careers in order to adjust the research infrastructure program to strengthen activities that are working and drop or improve activities that are not having the intended impact. This partially completed item will be further developed by November 2006 through the efforts of the graduate fellow specializing in evaluation and assessment and will be incorporated into SDSGC's web-based survey capabilities within the redesigned website discussed above under Management Strategies/Outcomes 1.6.2 and 1.9.3.

#### **4. Higher Education**

**Goal:** To build interdisciplinary programs related to NASA's mission and goals at the state's institutions of higher education and to support related programs that serve to strengthen STEM education in South Dakota.

**Objective 4.1:** (Curriculum and NASA content) Contribute aerospace and earth science materials to the higher education community in South Dakota.

**Objective 4.2:** (NASA and EROS ties) Enhance faculty and undergraduate/graduate student development through planning visits, internships, and fellowships at NASA Centers and EROS.

**Objective 4.3:** (State government) Establish and maintain linkages between SDSGC and higher education and state government.

**Objective 4.4:** (Industry involvement) Establish and maintain linkages between SDSGC



and higher education and industry in South Dakota.

**Objective 4.5:** (Diversity) Increase the participation of women and underrepresented groups in all aspects of SDSGC's higher education program and facilitate their subsequent entry into STEM careers.

**Objective 4.6:** (Evaluation) The Consortium will develop methods to document, measure, and assess the impact of the higher education programs in conjunction with its implementation of an overall evaluation strategy (see 1.9).

#### Higher Education Targets for Underrepresented Minorities and Women

Per Strategy/Outcome 4.5.1, to engage women and members of underrepresented groups in all aspects of the SDSGC higher education programs, fellowships will be advertised to encourage minority and women applicants. Participation by women and minorities will equal or exceed 10% to minorities and 40% to females.

#### Higher Education Outcomes Partially/Not Completed in FY'05 to be Completed in FY'06

Six (67%) of the nine Higher Education outcomes identified in SDSGC's Strategic Plan were completed in FY 2005 (see Higher Education "Quantitative Outcome Measures Matrix Table" in FY2005 Progress Report). Those outcomes will continue to be met in FY2006. Some of those outcomes that were partially met and had either Management or Fellowship components are addressed above. The following outcome that was partially completed in FY2005 will be completed in FY2006.

- Per Strategy/Outcome 4.6.1, simple before-and-after surveys of selected faculty and students were to be taken to assess their knowledge and attitudes about the Consortium, NASA, and STEM careers in order to adjust the higher education program to strengthen activities that are working and drop or improve activities that are not having the intended impact. This partially completed item will be further developed by November 2006 as part of SDSGC's web-based survey capabilities within the redesigned website discussed above under Management Strategies/Outcomes 1.6.2 and 1.9.3.

### **5. Precollege (K-12) Outreach**

**Goal:** To increase student awareness and access to education and career opportunities in aerospace, earth science, and supporting STEM disciplines.

**Objective 5.1:** (NASA dissemination) Disseminate information on NASA and SDSGC precollege activities and opportunities to teachers and students statewide.

**Objective 5.2:** (Partnerships) Facilitate partnerships for grant applications that aim to strengthen precollege STEM education.

**Objective 5.3:** (In-service teacher training) Increase teacher capacity to effectively incorporate aerospace and earth science into the curriculum.

**Objective 5.4:** (Science and education events) Support programs that expose K-12 students to hands-on experiences and to educational and career opportunities in the fields of aerospace, earth science and technology.

**Objective 5.5:** (State standards) SDSGC will promote and support programs that align with state and national education standards.

**Objective 5.6:** (Diversity) Inspire and motivate women, underrepresented minorities, and persons with disabilities into STEM careers.

**Objective 5.7:** (Evaluation) The Consortium will develop methods to document, measure, and assess the impact of the precollege education programs in conjunction with its implementation of an overall evaluation strategy (see 1.9).

NASA Explorer Schools (NES): In follow-up to the successful FY2005 selection of the first two NES schools in South Dakota, both at Tribal Schools on the reservation with near 100% Native American student population, at least one additional school (Kadoka Middle School) has applied for 2006 NES selection. SDSGC will continue supporting the NES schools in our state during FY2006 by augmenting NASA's NES program resources with Space Grant support staff, teacher-training coordination through AESP, and NASA Educator Resource Center materials.

Precollege Outcomes Partially Completed in FY'05 to be Completed/Revised in FY'06  
Seven (64%) of the 11 Precollege outcomes identified in SDSGC's Strategic Plan were completed in FY 2005 (see Precollege "Quantitative Outcome Measures Matrix Table" in FY2005 Progress Report). Those outcomes will continue to be met in FY2006. One of the outcomes that was partially met and had either Management, Fellowship, Research, or Higher Education components are addressed above. The following three outcomes that were partially completed in FY2005 will be met in FY2006.

- Per Strategies/Outcomes 5.3.1 and 5.7.1, surveys of selected participants of Space Grant-supported precollege programs were to be taken to assess their geospatial needs and their knowledge and attitudes about the Consortium, NASA, and STEM careers in order to adjust the precollege education program to strengthen activities that are working and drop or improve activities that are not having the intended impact. This partially completed item will be further developed by November 2006 as part of SDSGC's web-based survey capabilities within the redesigned website discussed above under Management Strategies/Outcomes 1.6.2 and 1.9.3.
- Per Strategy/Outcome 5.4.1, at least 1,000 people were expected to attend "South Dakota Space Day at the Black Hills Pow Wow: Merging Technology and Tradition" on Oct. 7, 2005 in Rapid City. Only about 250 Native American students were reached because the event date had to coincide with the Black Hills Pow Wow in order to reach the goal of linking Space Day with the Pow Wow. Beyond anyone's control, the date happened to fall on a teacher in-service day and the public schools were closed. SD Space Day typically reaches 2,000 – 7,000 students and will achieve this outcome again in October 2006 when it will be held in Pierre, the state capitol.

## 6. Public Service

**Goal:** To enhance public scientific literacy in aerospace and earth science; to complement community efforts in STEM education; and to inspire citizens of diverse backgrounds through the excitement of scientific exploration and discovery.

**Objective 6.1:** (NASA dissemination) The SDSGC will increase public awareness of the Space Grant program and its activities and engage the public in the excitement of NASA missions.

**Objective 6.2:** (Science and education events) The SDSGC will support activities of scientific discovery across the state.

**Objective 6.3:** (Diversity) SDSGC will seek to inspire and motivate women,

underrepresented minorities, and persons with disabilities through the excitement of NASA missions.

**Objective 6.4:** (Evaluation) The Consortium will develop methods to document, measure, and assess the impact of the public service program in conjunction with its implementation of an overall evaluation strategy (see 1.9).

Public Service Outcomes Partially/Not Completed in FY'05 to be Completed/Revised in FY'06

Four (57%) of the seven Public Service outcomes identified in SDSGC's Strategic Plan were completed in FY 2005 (see Public Service "Quantitative Outcome Measures Matrix Table" in FY2005 Progress Report). Those outcomes will continue to be met in FY2006. The three outcomes that were partially met and had either Management or Precollege components and are addressed above under those program areas.