



FISCAL YEAR 2005

**ANNUAL PERFORMANCE REPORT
TO THE WHITE HOUSE INITIATIVE OFFICE ON
HISTORICALLY BLACK COLLEGES & UNIVERSITIES**

National Aeronautics and Space Administration
Office of the Chief Education Officer

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

**FISCAL YEAR 2005 ANNUAL PERFORMANCE REPORT TO
THE WHITE HOUSE INITIATIVE OFFICE ON
HISTORICALLY BLACK COLLEGES AND UNIVERSITIES**

Office of Education

NASA Headquarters
Washington, DC 20546-0001

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
 FISCAL YEAR 2005 ANNUAL PERFORMANCE REPORT
 TO THE WHITE HOUSE INITIATIVE OFFICE ON
 HISTORICALLY BLACK COLLEGES AND UNIVERSITIES (HBCU)**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
SUMMARY OF AGENCY AWARDS TO HBCUS BY CATEGORY: FY 2005	3
FY 2005 SUMMARY OF AGENCY AWARDS TO HBCUS BY INSTITUTION	5
AWARDS BY OBJECT CATEGORY.....	8
Research and Development.....	8
Program Evaluation.....	11
Training.....	13
Facilities and Equipment.....	15
Fellowships, Traineeships, Internships, Recruitment, and Arrangements under the Intergovernmental Personnel Act (IPA).....	16
Direct Institutional Subsidies	18
Third-Party Awards	19
Private-Sector Involvement	20
Administrative Infrastructure.....	21
Other Activities	22
AWARDS AND EXEMPLARY PROJECTS	23
University Research Centers (URC).....	23
Curriculum Improvement Partnership Award (CIPA).....	26
Minority University and College Education and Research Partnership Initiative (MUCERPI) in Space Science	28
Harriett G. Jenkins Pre-doctoral Fellowship Program (JFPF).....	30

EXECUTIVE SUMMARY

The National Aeronautics and Space Administration (NASA) is highly committed to ensuring the broadest participation of Historically Black Colleges and Universities (HBCU) in the Agency's research and education programs and its overall mission. The Agency's goals for HBCUs, as stated in its FY 2005 Annual Plan to Assist HBCUs, provide the foundation and guide NASA's planned spending and technical assistance to HBCUs. Executive Order 13256, President's Board of Advisors on HBCUs, requires all Federal agencies to plan and report annually on how they increased the capacity of HBCUs to compete effectively for Federal funding. The NASA programs highlighted in this report are examples of the Agency's strategy for strengthening and expanding research and academic infrastructure development in science, technology, engineering and mathematics (STEM) at HBCUs.

NASA's commitment is evidenced by the significant progress made toward the Agency's FY 2005 Annual Plan to Assist HBCUs. NASA's planned investment for HBCUs in FY 2005 was \$56.2 million. The actual investment in HBCUs for FY 2005 was \$52.6 million. This represents a 6-percent decrease over our projected FY 2005 investment. NASA was unable to meet its projected investment due to covering the cost of Congressionally-Directed Appropriations (CDAs). Some of the funds used to cover the cost of CDAs would have been used to support several solicitations for Minority Institutions.

In FY 2005, NASA continued its college corporate recruitment program begun in FY 2004 for STEM and business management majors. Over 1500 students visited the NASA booths at the Central Intercollegiate Athletic Association (CIAA) (composed of 12 HBCUs) event and the National Society of Black Engineers Annual Conference. Seven students were offered NASA jobs and five accepted. The students participated in individual consultations with NASA Center personnel and informational workshops on careers, scholarships/fellowships, and cooperative education and summer employment opportunities. The recruitment program represented NASA's proactive effort to attract underrepresented and underserved students as potential scientific and technical personnel to replenish and increase the diversity of the workforce.

Evidence of the Agency's funding commitment is seen in the research conducted through the Minority University Research and Education Programs (MUREP). As a result of sustained NASA funding in FY 2005, HBCUs reported 501 publications, 7 patents pending, 6 African Americans received doctoral degrees, 52 African Americans received Master degrees, and 177 African Americans received baccalaureate degrees in STEM disciplines.

An example of an HBCU participating in cutting-edge research is Tennessee State University's (TSU) Center for Automated Space Science (CASS). TSU has developed and now operates seven 10-inch to 32-inch robotic telescopes located in southern Arizona. These telescopes operate automatically every clear night and return their data via the internet to TSU each morning. They are capable of making measurements of stellar brightness changes more precisely, efficiently, and economically than any previous instruments. TSU's completely automated observatory is unique in the world

and is able to contribute to cutting-edge research in many exciting ways. Because of these demonstrated capabilities, TSU has been called upon to provide observations crucial to a wide variety of research projects relevant to NASA's Space Science themes, specifically the astronomical search for origins and planetary systems and the Sun-Earth connection.

CASS will have extensive involvement with NASA Projects, such as Gravity Probe B satellite, the Space Infrared Telescope Facility (SIRTF), and the Space Interferometry Mission (SIM).

SUMMARY OF AGENCY AWARDS TO HBCUs BY CATEGORY: FY 2005

1. Agency: National Aeronautics and Space Administration

2. Agency Representative: Angela Phillips Diaz
Acting Associate Administrator
for Education

(Signature/ Date)

3. Total Funds for Institutions of Higher Education (IHE): \$1,153,711,113

DISCRETIONARY AWARDS

<i>CATEGORY</i>	<i>AWARDS TO IHEs+</i>	<i>AWARDS TO HBCUs*</i>	<i>AWARDS TO HBCUs AS % OF TOTAL AWARDS TO IHEs</i>
1. Research & Development		\$32,898,388	
2. Program Evaluation			
3. Training		\$8,070,738	
4. Facilities and Equipment		\$42,115	
5. Fellowships, Traineeships, Internships, Recruitment, and Arrangements under the Intergovernmental Personnel Act (IPA)		\$1,970,430	
6. Student Tuition Assistance, Scholarships, and Other Aid		\$2,096,246	
7. Direct Institutional Subsidies			
8. Third-Party Awards		\$4,995,942	
9. Private-Sector Involvement		\$2,500,000	
10. Administrative Infrastructure			
11. Other Activities			
TOTAL	\$1,153,711,113	\$52,573,859	4.5%

Michael D. Griffin

Administrator

(Signature)

+ IHE=Institutions of Higher Education

* HBCUs=Historically Black Colleges and Universities

**TOTAL FY 2005 AWARDS TO
HISTORICALLY BLACK COLLEGES AND UNIVERSITIES**

	<i>Institutions of Higher Education</i>	<i>Historically Black Colleges and Universities</i>
DISCRETIONARY AWARDS:	\$1,153,711,113	\$52,573,859
LEGISLATED AWARDS:	\$0	\$0
TOTAL AWARDS:	\$1,153,711,113	\$52,573,859

State/Institution	R&D	PE	Training	F&E	Fellows	STA	DIS	TPA	PSI	AI	Other	Grand Total
Tennessee												
Fisk University	\$160,000		\$252,533									\$412,533
Tennessee State University			\$207,060		\$129,810	\$510,270						\$847,140
Texas												
Prairie View A&M University	\$428,543		\$58,910			\$34,395						\$521,848
Texas Southern University	\$1,269,538											\$1,269,538
Wiley College			\$125,000									\$125,000
Virgin Islands												
University of the Virgin Islands			\$150,000									\$150,000
Virginia												
Hampton University	\$15,251,760		\$551,000		\$608,100							\$16,410,860
Norfolk State University	\$1,762,000		\$511,928									\$2,273,928
Washington, DC												
Howard University	\$270,000				\$53,000	\$34,396						\$357,396
University of the District of Columbia			\$376,000									\$376,000
West Virginia												
West Virginia State University			\$100,000		\$126,110							\$226,110
Other HBCU Awards												
American Society for Engineering Education (ASEE) - Helen T. Carr Fellowship								\$50,000				\$50,000
Central Intercollegiate Athletic Association (Scholarship Fund)								\$100,000				\$100,000
Enterprise for Innovative Geospatial Solutions (EIGS)								\$134,045				\$134,045
NASA Space Grant College Fellowship Program								\$511,897				\$511,897
United Negro College Fund Special Programs, Inc. - Harriett G. Jenkins Predoctoral Fellowship Program								\$1,750,000				\$1,750,000
United Negro College Fund Special Programs, Inc. - Curriculum Improvement Partnership Awards (CIPA)								\$1,200,000				\$1,200,000
United Negro College Fund Special Programs, Inc. - NASA Administrator's Fellowship Program (NAFP)								\$1,250,000				\$1,250,000
NASA Research and Education Support Services (NRESS)									\$2,500,000			\$2,500,000
GRAND TOTAL	\$32,898,388		\$8,070,738	\$42,115	\$1,970,430	\$2,096,246		\$4,995,942	\$2,500,000			\$52,573,859

ABBREVIATIONS KEY	
R&D	Research & Development
PE	Program Evaluation
TRAINING	Training
F&E	Facilities and Equipment
FELLOWS	Fellowships, Traineeships, Internships, Recruitment, and Arrangements under the Intergovernmental Personnel Act (IPA)
STA	Student Tuition Assistance, Scholarships, and Other Aid
DIS	Direct Institutional Subsidies
TPA	Third-Party Awards
PSI	Private-Sector Involvement
AI	Administrative Infrastructure
OTHER	Other Activities

AWARDS BY OBJECT CATEGORY

Research and Development

STATE	INSTITUTION	DESCRIPTION	AWARD
AL	Alabama A&M University	Center for Hydrology, Soil Climatology, and Remote Sensing (HSCaRS)	\$1,200,000
AL	Alabama A&M University	Characterizing Electro-Optical Properties	\$100,000
AL	Alabama A&M University	Research and Development to Establish an Independent Verification and Validation Facility Simulation Testbed/Tools	\$57,000
AL	Oakwood College	Evaluation of Numerical Techniques for MGD Propulsion Simulation	\$50,000
AL	Tuskegee University	Center for Food and Environmental Systems for Human Exploration of Space (CFESH)	\$1,189,553
AL	Tuskegee University	Electrical Issues in Nuclear Electric Propulsion Systems	\$100,000
AL	Tuskegee University	Turbulence Modeling Using Maximum Entropy Concept	\$99,852
DC	Howard University	Center for the Study of Terrestrial and Extraterrestrial Atmospheres	\$270,000
FL	Florida A&M University	Center for Nonlinear and Nonequilibrium Aerosciences (CENNAS)	\$349,000
FL	Florida A&M University	University Research Engineering Institute	\$300,000
FL	Florida A&M University	Design and Control of a Robot Master Manipulator for a Telerobotic System	\$100,000
GA	Clark Atlanta University	High Performance Polymers and Composites Center	\$1,200,000
GA	Clark Atlanta University	Multiscale Modeling of Metallic Alloys	\$99,000
GA	Clark Atlanta University	Simulation of Cavitating Flows Using Mixed Discontinuous Galerkin and Stabilized Galerkin Finite Element Methods	\$75,000
GA	Clark Atlanta University	Development and Implementation of Implicit FVM and FEM for Simulations of Compressible and Two-Phase Experiments	\$75,000
GA	Clark Atlanta University	Liquid Fuels: Pyrolytic Degradation and Fire Spread Behavior as Influenced by Buoyancy	\$60,000
GA	Morehouse School of Medicine	Space Medicine and Life Sciences Research Center	\$791,404
GA	Morehouse School of Medicine	Gravitational Effects on Nutrient Diffusion Through Cartilage Matrix	\$70,000
LA	Southern University and A&M College-Baton Rouge	The Advanced Thin Ionization Calorimeter Balloon Experiment	\$55,000
LA	Southern University and A&M College-Baton Rouge	The Center for Coastal Zone Assessment and Remote Sensing	\$1,198,888
MD	Morgan State University	Chesapeake Information-Based Aeronautics Consortium	\$2,956,000
MD	Morgan State University	Advanced Computational Fluid Dynamics (CFD) Analysis/Experimental Validation and Transient Model Development for the Flow in SSME Exhaust Duct	\$80,000

STATE	INSTITUTION	DESCRIPTION	AWARD
MD	Morgan State University	Manufacturing Cost Reduction for Multiple Production Runs of Nanosats and Related Aerospace Products through Integrating Robustness Concepts	\$69,274
MD	University of Maryland Eastern Shore	Mid-Atlantic Institute for Space and Technology (MIST)	\$200,000
MD	Morgan State University	Center for Advanced Microwave Research and Applications	\$1,759,046
NC	North Carolina A&T State University	Low-Power SOI CMOS Transceiver	\$455,000
NC	North Carolina A&T State University	Third Generation Reusable Launch Vehicle Technology Institute	\$175,000
NC	North Carolina A&T State University	A Wireless Radio Location System for Use in an Indoor Environment	\$100,000
NC	North Carolina A&T State University	Continuous Sensor System for Health Monitoring of Aerospace Fuel Tanks	\$100,000
NC	North Carolina A&T State University	North Carolina A&T State University Center for Aerospace Research	\$218,250
NC	North Carolina A&T State University	Optimal Trajectory Planning for Interplanetary Mission using Hybrid Evolutionary Algorithms	\$100,000
NC	North Carolina A&T State University	Performance Evaluation & Modeling of Affordable Composites Manufactured Using Stitching & Z-Pinning Processes	\$100,000
NC	North Carolina A&T State University	Study of GaAsSbN Alloys for Solar Cell Applications	\$81,000
NC	North Carolina A&T State University	Investigation of Next Generation Design Tool for Aerospace	\$83,280
NC	North Carolina A&T State University	Developing Ultra-Efficient Engine Technology Through Education and Research	\$60,000
NC	North Carolina A&T State University	Meyer Institute for Future Space Transportation	\$50,000
TN	Fisk University	Center for Photonic Materials and Devices	\$160,000
TX	Prairie View A&M University	Center for Applied Radiation Research	\$359,997
TX	Prairie View A&M University	Model Calculations of Radiation Environment Research Foundation at MARS and Data from Martian Radiation Experiment	\$68,546
TX	Texas Southern University	NASA Research Center for Biotechnology and Environmental Health	\$1,189,554
TX	Texas Southern University	Oral Absorption and Drug Interaction Kinetics	\$79,984
VA	Hampton University	Picasso-CENA International Science Advisory	\$560,932
VA	Hampton University	Hampton University Testing Facilities	\$83,000
VA	Hampton University	Aeronomy of Ice in the Mesosphere (AIM) Mission	\$12,700,000
VA	Hampton University	A Complete Adaptive Digital Signal Processing System	\$94,769
VA	Hampton University	Hampton University Aeropropulsion Center	\$1,092,000
VA	Hampton University	Advanced Air Transportation Technologies (ATT) Project at Langley Research Center	\$20,903
VA	Hampton University	Meteorological Event Classes for Moderate Resolution Imaging Spectroradiometer (MODIS) Data Analysis	\$95,000

STATE	INSTITUTION	DESCRIPTION	AWARD
VA	Hampton University	Understanding Radiation Measured by Satellite-Based Instruments	\$605,156
VA	Norfolk State University	Power Allocation and Distributed Logic/Circuit/Smart Membrane Actutory Controlled by a Microwave	\$100,000
VA	Norfolk State University	Novel Spin Polarization Transport Phenomena for Applications in Space Microelectronics Technology	\$90,000
VA	Norfolk State University	Development of a High Efficiency and Lightweight Photovoltaic Device	\$150,000
VA	Norfolk State University	Application of Variational Method in the Analysis of Fluid-Structure High Speed Thermal Fluid Design Densitivity Analysis	\$100,000
VA	Norfolk State University	Center for Research and Education in Advanced Materials	\$1,200,000
VA	Norfolk State University	Power Allocation and Distribution (PAD) Logic Circuit for Smart Membrane Actuators Controlled by a Microwave	\$100,000
VA	Norfolk State University	The Use of Proteomics to Analyze Antioxidant and Phosphoinositol Signal Transduction Pathways	\$22,000
TOTAL			\$32,898,388

AWARDS BY OBJECT CATEGORY

Program Evaluation

In FY 2005, NASA conducted an Inventory and Program Review in response to the Administrator's directive for an inventory and review of NASA's education portfolio. The NASA Education Program Operating Principles were used to evaluate the programs. The Operating Principles are as follows: customer focus, content, pipeline, diversity, evaluation, and partnership/sustainability. As a result of the review, the Office of Education will establish a regular and systematic review of projects within each program, including independent reviews and site visits.

In addition to the program review, all grant awards experienced some form of oversight through a combination of NASA technical monitors, data collection on key metrics, site visits, and/or reverse site visits. For institutional research programs, technical review committees comprised of NASA experts in relevant research areas conducted site visits at least annually. These evaluations and assessments are critical tools that provide valuable information to HBCUs that can be utilized to strengthen their research and program outcomes.

Performance Outcomes

In order to monitor the progress of NASA HBCU programs, all grant recipients were required to submit a Performance Outcomes Report as part of their annual performance report. The Performance Outcomes Report consists of numerical outcomes data and a narrative summary of project accomplishments covering Academic Year (AY) 2004-2005 and the summer of 2005. The data were collected electronically via the World Wide Web. This single annual collection of data provides the information necessary for the annual performance goals reports, required White House reports, budget submissions and justifications, responses to congressional inquiries, and comparative assessments of programs and projects.

The numerical data measure program performance against metrics that apply to all NASA education and research programs. These metrics emphasize outcomes over process, and are applicable to any project. They are aggregable both horizontally and longitudinally, and they allow adjustable benchmarking standards to be applied. For research projects, including URCs, the metrics track two basic areas--student outcomes (degrees awarded and post-degree plans) and research outcomes (refereed publications, leveraged funding, patents, and commercial products). Vital process information, such as numbers of faculty and students supported and the gross categories in which funds are spent, is also collected. For education projects, the Performance Outcomes Report continues to collect data on numbers and demographics of students supported, but also primarily focuses on measurable improvements in student performance. Both short- and long-term metrics are utilized in the collection of data that pertains to education projects.

The narratives on each project provide information on accomplishments relative to that project and, therefore, are not necessarily captured in the Performance Outcomes data. These narratives serve as input for the annual HBCU Performance Report and other similar reports, as required.

Site Visits

Onsite reviews of grants were conducted at 15 HBCUs during FY 2005. The purposes of the visits were to ascertain the projects' accomplishments to date, identify any potential barriers to achieving project objectives, determine whether collaboration between the institution and NASA is sufficient to achieve maximum benefits for the university and for NASA, and to allow NASA personnel an opportunity to review the management of the grant.

AWARDS BY OBJECT CATEGORY

Training

STATE	INSTITUTION	DESCRIPTION	AWARD
AL	Alabama A&M University	Graduate Space Science Education and Research	\$249,000
AL	Alabama A&M University	High School Outreach Program	\$41,800
AL	Alabama A&M University	Summer Faculty Research Opportunity	\$41,800
AL	Lawson State Community College	Achieving Destinations	\$100,000
AL	Oakwood College	Enhancing Mathematics and Science Education Through Research (EMSER)	\$238,500
AL	Oakwood College	Project Mi Futuro	\$50,000
AL	Oakwood College	Pre-service Teacher Institute	\$168,000
AL	Stillman College	Project Mi Futuro	\$100,000
DC	University of the District of Columbia	Partnership for a Sustainable Space Science Program	\$251,000
DC	University of the District of Columbia	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$125,000
FL	Bethune Cookman College	NASA Education Exploration Team (NEET)	\$410,000
FL	Bethune Cookman College	Pre-service Teacher Institute	\$60,000
GA	Albany State University	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$400,000
GA	Spelman College	Model Institutions of Excellence (MIE)	\$946,800
LA	Southern University A & M	Space Science at Southern University	\$120,000
LA	Xavier University	Pre-service Teacher Institute	\$64,910
MD	Bowie State University	Bowie State's Satellite Operation Control Center	\$50,000
MD	Bowie State University	Model Institutions of Excellence (MIE)	\$1,112,000
MD	Morgan State University	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$125,000
MD	University of Maryland Eastern Shore	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$93,750
MD	University of Maryland Eastern Shore	Small Educational Rocket Initiative (SERI)	\$20,000
MS	Jackson State University	Project ICI (Institutes for College Instructors)	\$99,989
NC	Fayetteville State University	Pre-service Professional Development Model for Partnership and Change	\$90,000
NC	Livingstone College	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$125,000
NC	North Carolina A&T State University	Partnership for Research and Education in Space Science	\$235,000
NC	North Carolina Central University	Integration of Nanotechnology and Computational Modeling NASA Research in the Undergraduate Curriculum at North Carolina Central and Fisk Universities	\$400,000
NC	Winston-Salem State University	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$31,250
OH	Wiberforce University	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$62,500

STATE	INSTITUTION	DESCRIPTION	AWARD
PA	Cheney University	Collaborative for Excellence in Teacher Preparation	\$54,008
SC	South Carolina State University	New Directions in Astronomy and Astrobiology	\$249,000
TN	Fisk University	Fisk Astronomy, Space Science and Technology (FASST) Program	\$251,000
TN	Fisk University	Summer Faculty Research Opportunity	\$1,533
TN	Tennessee State University	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$125,000
TN	Tennessee State University	Summer Faculty Research Opportunity	\$39,560
TN	Tennessee State University	TSU College Bound IV Program	\$42,500
TX	Prairie View A & M University	Pre-service Teacher Institute	\$58,910
TX	Wiley College	Science, Engineering, Mathematics, and Aerospace Academy (SEMAA)	\$125,000
VI	University of the Virgin Islands	Saturday Science Academies and Summer Science Enrichment Academies	\$150,000
VA	Hampton University	Space Science Minor at Hampton University	\$251,000
VA	Norfolk State University	Space Science Education and Research at Norfolk State University	\$235,000
VA	Norfolk State University	2005 Pre-Service Teacher Program (Institute and Conference)	\$276,928
VA	Hampton University	Continuing Education Aeroscience Center	\$300,000
WV	West Virginia State University	West Virginia State University (Independent Verification and Validation Facility)	\$100,000
TOTAL			\$8,070,738

AWARDS BY OBJECT CATEGORY

Facilities and Equipment

There are no competitively awarded grants specifically for facilities and equipment. A small portion of funding is normally permitted under a research or education grant to fund equipment required to support research or education activities. In addition, to the degree that it is available from NASA Centers, HBCUs are able to acquire excess or loaned equipment to support research efforts or scientific teaching.

STATE	INSTITUTION	DESCRIPTION	AWARD
GA	Morehouse College	JPL transferred a customized Varian Spectrometer	\$42,115

AWARDS BY OBJECT CATEGORY

Fellowships, Traineeships, Internships, Recruitment, and Arrangements under the Intergovernmental Personnel Act (IPA)

STATE	INSTITUTION	DESCRIPTION	AWARD
AL	Alabama A & M University	Graduate Students Researchers Program (GSRP)	\$72,000
AL	Tuskegee University	NASA Space Flight and Life Sciences Training Program	\$294,482
DC	Howard University	Public Service Intern Program	\$53,000
FL	Florida A & M University	Internship at Glenn Research Center	\$3,700
GA	Spelman College	Internship at Glenn Research Center	\$5,550
MD	Bowie State University	Summer Institute in Engineering and Computer Applications Program (SIECA)	\$425,338
MD	University of Maryland Eastern Shore	NASA University of Maryland Eastern Shore Student Internship Program (NUSIP)	\$50,000
NC	North Carolina A&T State University	NASA Ronald E. McNair Graduate Research Fellowship Program	\$179,000
NC	North Carolina A&T State University	NASA Summer Research Opportunity Program	\$23,340
TN	Tennessee State University	College Bound Program	\$38,000
TN	Tennessee State University	Graduate Students Researchers Program (GSRP)	\$24,000
TN	Tennessee State University	Internship at Glenn Research Center	\$32,945
TN	Tennessee State University	Minority Introduction to Engineering	\$34,865
VA	Hampton University	Internship at Glenn Research Center	\$8,100
VA	Hampton University	Langley Aerospace Research Summer Scholars Program (LARSS)	\$600,000
WV	West Virginia State University	Summer internship at Goddard Space Flight Center	\$65,000
WV	West Virginia State University	Upward Bound Program	\$61,110
TOTAL			\$1,970,430

AWARDS BY OBJECT CATEGORY

Student Tuition Assistance, Scholarships, and Other Aid

STATE	INSTITUTION	DESCRIPTION	AWARD
DC	Howard University	Co-op Education Program	\$34,396
FL	Florida A&M University	Increasing Minority Access to the Graduate Engineering Program (IMAGE)	\$40,000
GA	Morehouse College	Strategic Preparedness Advancing Careers in Engineering/Sciences (Project SPACE)	\$687,000
GA	Spelman College	Women in Science and Engineering (WISE) Scholars Program	\$687,000
LA	Southern University and A & M College – Baton Rouge	Co-op Education Program	\$34,395
LA	Xavier University	Co-op Education Program	\$34,395
MS	Jackson State University	Co-op Education Program	\$34,395
TX	Prairie View A & M University	Co-op Education Program	\$34,395
TN	Tennessee State University	Undergraduate Scholars Program	\$510,270
TOTAL			\$2,096,246

AWARDS BY OBJECT CATEGORY

Direct Institutional Subsidies

NASA does not provide direct institutional subsidies.

AWARDS BY OBJECT CATEGORY

Third-Party Awards

INSTITUTION / DESCRIPTION	AWARD
American Society for Engineering Education (ASEE) - Helen T. Carr Fellowship	\$50,000
Central Intercollegiate Athletic Association (Scholarship Fund)	\$100,000
Enterprise for Innovative Geospatial Solutions (EIGS)	\$134,045
NASA Space Grant College and Fellowship Program	\$511,897
United Negro College Fund Special Programs, Inc. - Harriett G. Jenkins Predoctoral Fellowship Program	\$1,750,000
United Negro College Fund Special Programs, Inc. - Curriculum Improvement Partnership Awards (CIPA)	\$1,200,000
United Negro College Fund Special Programs, Inc. - NASA Administrator's Fellowship Program (NAFP)	\$1,250,000
TOTAL	\$4,995,942

