Rodriguez



FY 2009 Budget Justification to OMB September 2007



Smithsonian Institution

Fiscal Year 2009 Budget Justification to OMB

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THE SMITHSONIAN INSTITUTION IN THE 21st CENTURY

For more than 161 years, the Smithsonian Institution has remained true to its mission, "the increase and diffusion of knowledge." In that time, it has become the largest museum and research complex in the world, the most respected provider of museum experiences supported by authoritative scholarship, and an international leader in scientific research and exploration.

Historian David McCullough has described the Smithsonian as a "storehouse of ideas." It is indeed that and much more. With 19 museums, numerous research centers, and the National Zoo, the Smithsonian stands out as a unique entity, a leader in science, history, art, and culture. As an international institution, it offers the world a picture of America and America a picture of the world. At the same time, the Smithsonian's pioneering science initiatives and innovative education and outreach programs continue to advance both "the increase and diffusion of knowledge."

The Smithsonian Institution's collections, containing nearly 137 million objects and a like number of documents, are staggering in their breadth and depth. Consequently, by a large margin, more people visit the Institution than any other museum complex on Earth.

Although English scientist James Smithson's bequest launched the Smithsonian in 1846, the debate and counsel of the Congress helped to shape the Institution from day one — and does so to this day. In fact, the Smithsonian simply would not be able to function without the generous support of the Administration and the Congress.

This support takes many forms, including oversight. In 2007, the Smithsonian moved forward with a vigorous and thorough reform agenda. The Institution's management and staff rallied around the Board of Regents' efforts to improve governance. An aggressive effort to implement the reform recommendations of the Board of Regents is well under way.

The Institution's overall goal is much more than to fix past problems; the goal is to become a leader in good governance. Throughout this transition period, thanks to its dedicated staff and volunteers, the vital work of the Smithsonian has continued.

The Smithsonian takes its task of serving the American public very seriously, and last year we kept that commitment. During fiscal year 2007, millions of Americans enjoyed the continuing success of all our museums, including the National Air and Space Museum's (NASM) Steven F. Udvar-Hazy Center in Chantilly, Virginia, the National Museum of the American Indian on the National Mall, and, in the renovated, historic Patent Office Building, the Donald

W. Reynolds Center for American Art and Portraiture, which is home to the National Portrait Gallery and the Smithsonian American Art Museum.

Smithsonian collections are a national and global resource that millions of visitors and researchers access each year to explore every subject from aeronautics to zoology. Through its collections, the Smithsonian presents the astonishing record of American and international artistic, historical, cultural, and scientific achievement, with a scope and depth no other institution in the world can match. Collections are acquired from tropical rainforests, archaeological sites, everyday life, the depths of the oceans, and the heavens above. Currently, Smithsonian museum collections total nearly 137 million objects and specimens. In addition, the holdings of the Smithsonian contain 1.5 million library volumes, including rare books, and 89,000 cubic feet of archives.

Researchers from the Smithsonian and from around the world use these collections to pose new questions and advance our knowledge. In turn, our education efforts are expanded across America through traveling exhibitions, affiliate museums, curriculum guides, Web outreach, and much more.

More than 12 million visitors have come to the Smithsonian's National Zoo to see our giant pandas, Mei Xiang and Tian Tian, and their cub, Tai Shan. More people are also coming to see our new Asia Trail — home to seven different Asian species. Work on Asia Trail II: *Elephant Trails*, which is a new home for our Asian elephants, is under way. Scientists at the Zoo have been conducting research on the reproductive biology of endangered species. The results of their work have enabled the successful reproduction of animals such as the Golden Lion Tamarin, the Black-footed Ferret, and the Giant Panda, bringing some of these animals back from the brink of extinction. In addition, scientists at the Zoo have monitored the sharp decline of bird populations caused by the West Nile Virus across the eastern United States.

Smithsonian astronomers at the Smithsonian Astrophysical Observatory (SAO) in Cambridge, Massachusetts, study the origin, evolution, and ultimate fate of the universe. They continue to make breakthrough discoveries, finding new planets outside our solar system. Last September they discovered a new planet unlike any other in that it is the biggest planet ever found inside or outside our solar system, yet has the least density of any planet ever seen. It is bigger than Jupiter but lighter than a giant ball of cork — it is called a "puffy" planet.

Back on Earth, visitors continue to flock to major attractions such as the annual Folklife Festival on the National Mall; the National Museum of Natural History's (NMNH) *Hall of Mammals*; and the NASM exhibition, *The Wright Brothers and the Invention of the Aerial Age*. Although the National Museum of American History (NMAH) is closed for an extensive revitalization, its work

continues. Research, traveling exhibitions, and public programs throughout the country are planned, and a special exhibition of more than 150 iconic objects, *Treasures of American History*, has been installed at NASM.

In addition, NMNH announced a partnership to launch an online *Encyclopedia of Life*, a webpage for every species, which will be available to every student across America and worldwide.

Scientific expertise and leadership are at the core of the Smithsonian's reputation for excellence and central to achieving our mission to promote the "increase and diffusion of knowledge." The Smithsonian's more than 500 scientists have pioneered efforts to improve our understanding of how the Earth and similar planets were formed, and they are world leaders in the fields of anthropology, ethnology, and archaeology, including the fields of forensic anthropology and human origins. The Institution is also internationally recognized for its expertise in systematics, paleobiology, ecology, and biological conservation, and is uniquely situated to explore the loss of biodiversity and respond to governmental initiatives on climate change, tropical forest conservation, control of invasive species, and protection of endangered species.

Our large and diverse collections of art continue to attract numerous visitors. Some of the greatest works of art in this country — and the world — are at the Smithsonian. The Smithsonian's art museums, the Freer, the Sackler, the Hirshhorn Museum and Sculpture Garden, the National Museum of African Art, the Cooper-Hewitt, National Design Museum in New York City, the Smithsonian American Art Museum and its Renwick Gallery, and the National Portrait Gallery, collectively, are the fourth most visited art complex in the United States. Hundreds of thousands of visitors came to see *Encompassing the Globe: Portugal and the World in the 16th and 17th Centuries* when it was at the Sackler Gallery and the National Museum of African Art. Many global partners helped put more than 260 extraordinary objects on display in this beautiful exhibition on art, history, economics, and politics.

In the context of public service, the reach of everything the Smithsonian does — in both the research and the museum activities — is expanded exponentially by websites and education and outreach programs. The Smithsonian Institution Traveling Exhibition Service (SITES) is the largest traveling exhibition service in the world, and reaches roughly five million people throughout the nation every year. In 2007, SITES will reach 401 communities in all 50 states, the District of Columbia, Puerto Rico, and Guam. These exhibitions reach learners of all ages in museums, schools, libraries, community centers, veterans' halls, municipal buildings, transportation terminals — wherever the public is.

The Smithsonian's electronic outreach has been equally impressive. Our Web presence has expanded dramatically in a short period of time and several of our websites have won awards for their content and design. Six years ago, we had half as many visits to our websites as physical visits to our museums. Now, visitation on the Web is more than 740 percent of our museum visitation, with 153 million visits to our various websites.

Furthermore, we are engaged in a major national outreach program. We now have 156 affiliates in 39 states, Panama, Puerto Rico, and Washington, DC. To present as many items as possible of the Smithsonian's collections to the American public, we lend impressive objects to these local affiliate organizations, in addition to the many artifacts that tour nationwide as part of the SITES exhibits.

The establishment of Smithsonian Networks, a joint venture with CBS-Showtime, will expand how the Institution shares its vast collections with the American people and educates the public about the richness of Smithsonian-sponsored discoveries in science, the arts, and the humanities.

The Smithsonian Center for Education and Museum Studies (SCEMS) is collaborating with the Council of Chief State School Officers to create new ways for teachers and students to enrich classroom instruction by accessing Smithsonian collections and talking to experts. SCEMS, as part of the collaboration, leads SI-based professional development opportunities for the State Teachers of the Year.

One of the biggest obstacles we face in continuing this important work is our facilities revitalization and maintenance problems, which directly affect our mission. This issue concerns not only the buildings themselves, some of which are priceless national treasures in their own right, but more importantly the fact that the buildings enable us to educate the public, exhibit national collections, and create the ideal experience for our visitors. Without the proper facilities in safe operating order, none of this is possible.

Today the Smithsonian owns or leases more than 700 buildings and other structures in the District of Columbia, seven states, Panama, Belize, and Chile, about 10.2 million square feet of owned space and 1.7 million square feet of leased space with an estimated replacement value of more than \$5.1 billion. Some of these buildings are new, some are 150 years old, many are decades old, and more than half are more than 25 years old. It is an expensive, challenging task to care for these facilities and keep our workers and visitors safe — especially in a post 9-11 world where security is of paramount concern.

Both the National Academy of Public Administration and the Government Accountability Office (GAO) have looked into this matter and underscored its

seriousness, with the GAO saying current funding levels are insufficient to provide the \$2.5 billion we know is required to fix and maintain the Institution's facilities in the coming years. Over a 10-year period, this would represent \$100 million more each year than is provided at current funding levels. With more than half of our buildings — and their electrical and mechanical systems — well past their normal, useful life spans, this is an overwhelmingly problematic issue, and it is clear that the scope of the facilities problem is enormous.

In spite of the work that must be done to repair our infrastructure, we want to continue with our ambitious plans to revitalize Smithsonian facilities in ways that strengthen both our scientific research as well as our education and outreach efforts. Accordingly, the largest multi-disciplinary project ever undertaken by the Smithsonian Institution is under way — the \$78 million Ocean Science Initiative at the National Museum of Natural History, in collaboration with the National Oceanic and Atmospheric Administration. The project includes a new exhibition space, the *Ocean Hall* (opening in 2008), a newly endowed Chair for Marine Science research, educational outreach, a new Ocean Web portal, and additional funding for research.

The National Museum of American History will reopen in 2008. Implementing recommendations from its Blue Ribbon Commission, this Museum will have a new home for the Star-Spangled Banner and a completely redesigned central core of the Museum.

Farther into the future, the Smithsonian's 19th museum, the National Museum of African American History and Culture, will open on the National Mall. Part of that Museum is up and running right now, with a website and special programs. As directed by Congress, funding for construction of the Museum will be half private and half federal.

The growth of the Internet and related technologies enable new possibilities for sharing the Smithsonian's knowledge from our collections and research in ways never envisioned when the Institution was first created. Over the next several decades, the Institution proposes committing its intellectual and financial resources to create a digital Smithsonian which would provide unlimited access to the national collections and research via channels previously unimaginable on such a grand scale. A digital Smithsonian would contribute to improving the Institution's stewardship and preservation of its collections. The technology exists today to turn a digital Smithsonian into reality, but resources are needed to implement this vision.

The Smithsonian agenda is ambitious but focused. As in previous years, a key challenge faced by the Institution is the need to revitalize its aging buildings, physical plant, and outdated exhibits. However, this budget also reflects a vigorous investment in and commitment to the programmatic mission of the Institution and rebalances the Institution's budget priorities accordingly. The

requested programmatic increases will enable the Institution to advance and expand important research into the effects of global climate change; allow the Smithsonian to maintain its scientific leadership in ground-based astrophysics to explore the origin and evolution of the universe; improve care of the Institution's collections and exhibitions; and increase access to Smithsonian collections and research.

In order to respond to the Board of Regents' new permanent Governance and Nominating Committee, the Institution is requesting funding to support the new governing practices that were developed to strengthen the Board's oversight of the Institution. In addition, to better position the Institution to tell its story, the Institution has packaged the priorities of security, facilities, and collections care under a new heading, *Stewardship of National Treasures*. Similarly, to reflect the high priority of the Institution's programmatic requirements, the scientific research and education/outreach programs, as well as the underlying information technology systems to support these programs, are grouped under the heading of *Increase and Diffusion of Knowledge*. Given its successes, concerns, and budget realities, the Institution's priorities are:

- Mandatory funding requirements, such as legally mandated federal compensation increases; contractually obligated rental increases; rent requirements; and leases for collections storage space
- Board of Regents' Governance and Nominating Committee support to strengthen oversight of the Institution, including additional staff for the IG, General Counsel, and the Chief Financial Officer, along with support staff
- Stewardship of National Treasures, which includes:
 - o Security guards to meet minimum security staffing needs; increased security costs at the George Gustav Heye Center in New York City; and measures to provide employee and contractor security screening
 - o Physical facilities maintenance and revitalization, as recommended by the National Academy of Public Administration's 2001 report and reinforced by the Government Accountability Office's 2005 report
 - Collections care, including improved manual and electronic registration; preservation; electronic and physical storage; and increasing accessibility of the collections to the nation
 - Maintenance of the consolidated Information Technology (IT) infrastructure, put in place over the past five years, by meeting the most critical IT needs, including enterprise storage, backup systems, and server replacements

• Increase and Diffusion of Knowledge, which includes:

- O Question-driven scientific research to enable global forest monitoring to study the effects of global climate change; and, in partnerships with other research entities, plans to develop the nextgeneration telescope that will explore the origin and evolution of the universe
- Research infrastructure and tools to sustain the Institution's research competency, including scholarly programs and supporting research equipment
- Digitization of the Smithsonian and implementation of technological solutions to allow everyone, regardless of where they live, to explore and learn from its vast collections and research
- Education and public outreach programs for diffusion of researchbased knowledge of science, history, and art, and to provide opportunities for educators and scholars to further share this knowledge
- Continued planning, fund raising for, and management of the National Museum of African American History and Culture (NMAAHC)

The Smithsonian is a public trust; it belongs to every American, young and old. Tens of millions of adolescents have come to the nation's capital and experienced the Smithsonian. Through the Internet and our expansive education and outreach programs, millions more have experienced the Smithsonian in their own hometowns. This younger audience is America's cultural and scientific future. We inspire the next generation of astronauts, scientists, artists, explorers, and historians. Once they experience the Smithsonian, this great Institution is in their hearts and minds for life.

The Smithsonian Institution faces significant challenges if it is to continue serving the public in an exemplary manner, with both engaging, modern exhibitions backed by authoritative scholarship and groundbreaking scientific research and exploration. What follows is our plan to efficiently and effectively meet these challenges.

SMITHSONIAN INSTITUTION FY 2009 BUDGET REQUEST SUMMARY

	FY 2008	FY 2009
Account	Estimate	Request
Salaries and Expenses	\$571,347,000	\$673,371,000
Facilities Capital	107,100,000	167,800,000
Total	\$678,447,000	\$841,171,000

For FY 2009, the Smithsonian's request to fund essential operating expenses and revitalization of the Institution's physical infrastructure is \$841 million. It includes \$673 million for Salaries and Expenses (S&E) and \$168 million for Facilities Capital. A detailed summary is provided in the table at the end of this section.

SALARIES AND EXPENSES

MANDATORY INCREASES

- Salaries and Related Costs (+ \$16,120,000) The request funds a 3.5 percent pay raise for FY 2008 and a 3.0 percent pay raise for FY 2009. It also includes an increase in the amount required for Workers' Compensation in FY 2009.
- Non-pay Mandatory Items (+\$7,062,000) The Institution requests an increase to its utilities, rent, and other mandatory operating costs. Details are provided in the S&E section.

GOVERNANCE

Governance Costs (+ \$3,888,000) — The Institution requests an increase to support the Board of Regents' Governance and Nominating Committee efforts to strengthen oversight of the Institution.

STEWARDSHIP OF NATIONAL TREASURES

Security/Anti-Terrorism (+ \$2,133,000) — The Institution is requesting funds for security guards to meet minimum security staffing needs for the Donald W. Reynolds Center and the National Museum of the American Indian (NMAI) facilities; for additional security requirements at NMAI George Gustav Heye Center in New York City; and to provide employee and contractor security screening for units outside of the Washington, DC area, as recommended by the Inspector General.

- Facilities Requirements (+\$28,407,000) This request supports improvements to the Smithsonian's facilities maintenance and cleanliness needs, as recommended by the National Academy of Public Administration (NAPA) and reviewed by the Government Accountability Office (GAO). The maintenance increase is intended to raise the Smithsonian's score under the industry building maintenance standard to level 3 of 5, with a goal to eventually achieve level 2.
- Collections Care (+\$11,099,000) This request provides resources to improve collections care through manual and electronic registration; preservation; electronic and physical storage; and increased access to the collections nationally and internationally through digitization initiatives. This includes resources for animal welfare and safety at the National Zoo.
- Information Technology Infrastructure (+ \$4,335,000) This request provides funds for improvements to the Institution's information technology (IT) architecture, as well as implementing enterprise architecture segments in accordance with Federal Enterprise Architecture practices.

INCREASE AND DIFFUSION OF KNOWLEDGE

- Question-Driven Research (+ \$15,200,000) This request includes funds to monitor global forests to measure the impact of global climate change on forest organisms and, in partnership with other research entities, to develop the next-generation ground-based telescope that will explore the origin and evolution of the universe.
- Research Infrastructure and Tools (+ \$5,282,000) This request includes funds for research infrastructure and tools to sustain the Smithsonian's research competency, including scholarly programs, scientific computing, and supporting research equipment.
- Digitization (+ \$3,661,000) This request includes funds to enable
 the creation of a digital Smithsonian through the seamless exchange
 of information among the Institution's collections information systems
 and digital asset management system. A digital Smithsonian will
 enable all citizens, regardless of where they live, to explore and learn
 from the Institution's vast collections and research via the Internet.
- Education and Outreach (+ \$3,537,000) This request includes funds for the diffusion of research-based knowledge of science, history, and art, and to provide opportunities for educators and scholars to further share this knowledge. Also, the request provides funds for operating the museums' newer exhibits, which are more interactive and, therefore, require greater maintenance.

NEW MUSEUM

New Museum (+\$1,300,000) — This request provides resources for the continued planning, fund raising, and management of the congressionally authorized National Museum of African American History and Culture (NMAAHC). An additional requirement for collections storage (\$372,000) is included in the Mandatory Costs section.

FACILITIES CAPITAL PROGRAM

The request for the Facilities Capital Program (\$167.8 million) is critical to improve the deteriorating condition of some of the oldest buildings and maintain the current condition of other facilities through systematic renewal and repair. Numerous independent entities have highlighted the poor state of Smithsonian facilities, including the GAO's April 2005 report, which noted a serious funding need that the Smithsonian estimates will require \$2.3 billion during the next nine years. For FY 2009, this request continues major revitalization work at the National Zoological Park (\$21.1 million) and the National Museum of Natural History (NMNH) (\$25.7 million); and the renovation of the Museum Support Center Pod 3 to provide for essential collection storage space (\$15.0 million). It also includes funds for the Smithsonian Tropical Research Institute to purchase land at the Gamboa campus, to complete the schoolhouse replacement, and other infrastructure upgrades in Panama (\$9.5 million); to replace the Institution's greenhouses (\$8.2 million); and to provide for critical revitalization projects under \$5 million across the Institution (\$51.1 million). In addition, the requested funds reflect increased security and anti-terrorism requirements (\$7.0 million) as well as the planning and design of future projects (\$30.2 million), which includes \$3 million for security and anti-terrorism and \$3 million for NMAAHC. Specific details are provided in the Facilities Capital section of this request.

SMITHSONIAN INSTITUTION

FY 2009 BUDGET REQUEST BY APPROPRIATION ACCOUNT

SALARIES AND EXPENSES	FTEs	Amount
FY 2008 Estimate	4,285	\$571,347,000
FY 2009 Changes		
Mandatory Increases		
Salaries and Related Costs		16,120,000
Utilities, Postage, Rent, Communications, and Other		7,062,000
Governance		
Required staff and support increases	23	3,888,000
Stewardship of National Treasures		
Security/Anti-Terrorism	41	2,133,000
Facilities Requirements		
Improve Building Maintenance	70	24,047,000
Improve Building Cleanliness and Services	46	4,360,000
Collections Care		
Collections Care Initiatives	21	9,789,000
National Zoo (Animal Welfare and Staff Safety)	5	1,310,000
Information Technology Infrastructure	3	4,335,000
Increase and Diffusion of Knowledge		
Question-Driven Research		
Global Earth Observatories	15	5,200,000
Next-Generation Extremely Large Telescope	5	10,000,000
Research Infrastructure and Tools		
Research Equipment		1,500,000
Scholarly Studies		1,400,000
DNA Barcoding and Biomaterials Resources Banks	13	1,500,000
Scientific Workstations and Infrastructure	1	882,000

SALARIES AND EXPENSES	FTEs	Amount
Digitization	6	3,661,000
Education and Public Outreach		
Exhibitions Maintenance	:	1,700,000
American Art Museum Public Programs	1	77,000
African Art Museum Education	1	87,000
Anacostia Community Museum Curator	1	108,000
Latino Center Initiatives	2	503,000
Education Program Portal	1	847,000
Traveling Exhibitions	1	215,000
New Museum		
National Museum of African American History and Culture		1,300,000
FY 2009 Salaries and Expenses Request	4,541	\$673,371,000

FACILITIES CAPITAL	FTEs	Amount
FTEs in Base	48	
Revitalization:		
National Zoological Park		21,100,000
National Museum of Natural History		25,700,000
Museum Support Center (Pod 3)		15,000,000
SI Tropical Research Institute (Gamboa Development)		9,500,000
Replace Greenhouses		8,200,000
Security/Anti-Terrorism		7,000,000
Other Revitalization Projects		51,100,000
Facilities Planning and Design		30,200,000
FY 2009 Facilities Capital Request	48	\$167,800,000

FY 2009 REQUEST, ALL ACCOUNTS	4,589	\$841,171,000

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SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES

Summary of FY 2009 Change

FY 2008 Congressional Budget Estimate	FTEs 4,285	Amount \$571,347,000
FY 2009 Changes		
Mandatory Increases Legislated Pay Raises and Workers' Compensation Utilities, Postage, Rent, Communications, & Other Total Mandatory Increases		16,120,000 7,062,000 23,182,000
Governance	23	3,888,000
Stewardship of National Treasures	186	45,974,000
Increase and Diffusion of Knowledge	47	27,680,000
New Museum	<u>0</u>	1,300,000
Total Governance and Program Increases	<u>256</u>	78,842,000
FY 2009 Budget Request	4,541	\$673,371,000

SMITHSONIAN INSTITUTION
Salaries and Expenses
Summary of the 2007 Appropriation and the 2008 and 2009 Estimetes
(\$ in Thousands)

FTE = Full-Time Equivalent	FY	FY 2007	FY	FY 2008	FY	FY 2009	ANALYSIS OF CHANGE	OF CHANGE	
	Ac	Actuals	Rec	Request	Red	Request	Mandatory Costs	Pro	Program
Page #	FTEs	\$000	FTEs	\$000	FTEs	\$000	\$000	FTEs	\$000
MUSEUMS AND RESEARCH CENTERS									
American Museums									
29 Anacostia Community Museum	16	1,952	21	1,993	22	2,161	09	-	108
	17	2,168	18	2,218	18	2,286	89	0	0
40 National Museum of African American History & Culture	2	2,894	41	12,932	41	14,937	202	0	1,300
47 National Museum of American History, Behring Center	186	20,708	190	21,282	203	23,928	1,457	13	1,189
	263	31,213	283	32,000	283	32,952	952	0	0
Subtotal, American Museums	487	58,935	553	70,425	267	76,264	3,242	14	2,597
Art Museums									
68 Archives of American Art	20	1.710	19	1.762	19	1.843	8	0	0
	20	5.722	57	5,867	25	960'9	229	0	0
79 Copper-Hewitt, National Design Museum	32	3.078	39	3,383	39	5,548	999	0	1,500
84 Hirshhorn Museum & Sculpture Garden	42	4,146	47	4,254	47	4,405	151	0	0
91 National Museum of African Art	30	4,301	37	4,400	38	4,609	122	-	87
97 National Portrait Gallery	22	5,453	59	5,599	69	5,837	238	0	0
103 Smithsonian American Art Museum	92	8,362	98	8,601	66	9,071	393	_	77%
Subtotal, Art Museums	321	32,772	356	33,866	358	37,409	1,879	2	1,664
Science Museums and Research Centers									
109 National Air and Space Museum	171	16,860	174	17,337	174	18,775	988	0	450
116 National Museum of Natural History	330	44,919	398	46,052	413	52,920	1,736	15	5,132
127 National Zoological Park	202	20,737	215	21,842	225	24,476	824	10	1,810
136 Smithsonian Astrophysical Observatory	108	22,844	113	23,330	118	25,165	985	2	850
141 Museum Conservation Institute	18	2,936	23	3,029	23	3,122	93	0	0
146 Smithsonian Environmental Research Center	31	3,128	34	3,222	34	3,349	127	0	0
151 Smithsonian Tropical Research Institute	247	12,064	248	12,438	263	18,045	407	15	5,200
Subtotal, Science Museums and Research Centers	1,167	123,488	1,205	127,250	1,250	145,852	5,160	45	13,442
Total Mississippe December Contere	1 975	215 195	2114	231 541	2 175	259 525	10 281	61	17 703
ו פוניו ואומסמיווים מווח וומסממוכיו כמווומוס	2012	210,100	11.17	101.04	2,11,0	200,000	27/01	5	201111

SMITHSONIAN INSTITUTION
Salaries and Expenses
Summary of the 2007 Appropriation and the 2008 and 2009 Estimates
(\$ in Thousands)

	FTE = Full-Time Equivalent	FY	FY 2007	FY ?	FY 2008	FY	FY 2009	ANALYSIS OF CHANGE	F CHANGE	
		Ac	Actuals	Req	Request	Re	Request	Mandatory		
Pa	Page **	FTEs	\$000	FTEs	\$000	FTEs	\$000	\$000	Program FTEs \$1	<u>ram</u> \$000
		i								
	PROGRAM SUPPORT AND OUTREACH									
	160 Outreach	59	9,505	65	699'6	99	11,559	275	-	1,615
	168/ Communications	26	2,083	24	2,143	25	2,367	104	-	120
	173 Institution-wide Programs	_	6,953	0	6,953	0	12,703	0	0	5,750
/	189 Office of Exhibits Central	30	2,749	30	2,832	30	3,023	121	0	70
	192 Major Scientific Instrumentation (017000) (No-Year)	0	3,886	0	3,886	0	13,036	0	0	9,150
	198 Museum Support Center	20	1,743	25	1,784	25	1,845	61	0	0
	200 Smithsonian Institution Archives	19	1,322	15	1,387	15	1,463	9/	0	0
		92	9,326	97	9,551	97	6,953	319	0	83
	Total Program Support and Outreach	247	37,567	256	38,205	258	55,949	926	2	16,788
	209 ADMINISTRATION	253	64,110	264	66,740	295	83,685	3,604	31	13,341
	2/18 INSPECTOR GENERAL	15	1,834	16	1,977	21	2,532	85	ß	470
	FACILITIES SERVICES 222 Facilities Maintenance 227 Facilities Operations, Security and Support	307	51,277	307	5 2,273 180,611	377 1,415	77,735 57 193,945	1,415	70 87	24,047 6,493
	Total Facilities Services	1,624	217,589	1,635	232,884	1,792	271,680	8,256	157	30,540
	GRAND TOTAL, SMITHSONIAN INSTITUTION	4,114	536,295	4,285	571,347	4,541	673,371	23,182	256	78,842

SALARIES AND EXPENSES

FY 2007 Appropriation	\$536,295,000
FY 2008 Estimate	\$571,347,000
FY 2009 Estimate	\$673,371,000

For FY 2009, the Institution requests \$673.4 million in the Salaries and Expenses account. Within the total increase requested, approximately 23 percent is attributable to mandatory costs for sustaining base operations (e.g., pay, utilities, rent, etc.), and the remainder is for priority program requirements within the Institution.

SALARY AND RELATED COSTS (\$16,120,000) — The Institution requests an increase of \$16,120,000 for higher projected salary and benefits costs in FY 2009, as described below. This request is limited to the unfunded portion and annualization of the 2008 pay raise, the proposed 2009 pay raise, an additional workday in FY 2009, and an increase in Workers' Compensation costs. The following is a line-item display of the pay required:

Salary and Related Costs:

	,	
-	Unfunded 2008 pay raise (3.5% vs. 3.0%)	\$1,338,000
•	Annualization of 2008 pay raise (1/4 year at 3.5%)	-3,205,000
•	2009 pay raise (3/4 year at 3.0%)	9,944,000
•	Additional Workday in FY 2009	1,498,000
•	Workers' Compensation	135,000
To	otal	\$16,120,000

- Unfunded Portion of 2008 Pay Raise (+\$1,338,000) Funds the anticipated January 2008 pay raise differential (3.5% vs. 3.0%) between the amount requested in the FY 2008 Congressional Budget submission and the current pay raise estimate.
- Annualization of 2008 Pay Raise (+\$3,205,000) Funds the annualization of the anticipated 3.5 percent January 2008 pay raise for the first quarter of FY 2009.
- **Proposed 2009 Pay Raise (+\$9,944,000)** Funds the anticipated 3.0 percent January 2009 pay raise for three-guarters of a year.
- Additional Workday (+\$1,498,000) Funds one additional workday in FY 2009. The Institution's salary base currently contains funding for 260 days; FY 2009 contains 261 workdays.

Workers' Compensation (+ \$135,000) — Supports the provisions of Section 8147(b) of Title 5, *United States Code*, as amended by Public Law 94-273. The Workers' Compensation bill for FY 2009 is \$3,405,000, based on actual costs incurred from July 1, 2006 through June 30, 2007, as provided by the U.S. Department of Labor. With an amount of \$3,270,000 in its FY 2008 base, the Institution requires an increase of \$135,000 for FY 2009.

FY 2009 Increased Pay Costs

(Dollars in Thousands)

		FY 2009	
	FY 2008	Pay Raise	
	Unfunded/	and One	
Line Item	Annualization	Add'I Day	Total
Anacostia Community Museum	17	43	60
Center for Folklife and Cultural Heritage	20	48	68
National Museum of African American History and Culture	19	314	333
National Museum of American History, Behring Center	230	588	818
National Postal Museum	9	21	30
National Museum of the American Indian	273	679	952
Archives of American Art	24	57	81
Arthur M. Sackler Gallery/Freer Gallery of Art	69	160	229
Cooper-Hewitt, National Design Museum	38	88	126
Hirshhorn Museum and Sculpture Garden	43	108	151
National Museum of African Art	34	88	122
National Portrait Gallery	71	167	238
Smithsonian American Art Museum	116	277	393
National Air and Space Museum	206	502	708
National Museum of Natural History	497	1,239	1,736
National Zoological Park	239	585	824
Smithsonian Astrophysical Observatory	181	454	635
Museum Conservation Institute	25	68	93
Smithsonian Environmental Research Center	36	91	127
Smithsonian Tropical Research Institute	116	291	407
Outreach	82	193	275
Communications	34	70	104
Office of Exhibits Central	36	85	121
Museum Support Center	17	44	61
Smithsonian Institution Archives	24	52	76
Smithsonian Institution Libraries	93	226	319
Administration	443	1,010	1,453
Inspector General	25	60	85
Facilities Maintenance	416	999	1,415
Facilities Operations, Security, and Support	1,110	2,835	3,945
Total Increased Pay Costs	4,543	11,442	15,985

UTILITIES, POSTAGE, RENT, COMMUNICATIONS, AND OTHER MANDATORY COSTS (+\$7,062,000) — For FY 2009, the Institution requests a net increase of \$7,062,000 for utilities, postage, communications, and rent costs for increases in consumption, rate and inflationary increases, as well as project needs. The following table displays estimates from FY 2007 through FY 2009. Detailed explanations of each line item follow.

Federal Utilities, Postage, Rent, Communications, and Other Mandatory Costs FY 2007-FY 2009

(Dollars in Thousands)

	FY 2007	FY 2008	FY 2009	
	Estimate	Estimate	Estimate	Change
Utilities:				
Electricity	18,034	20,351	20,164	-187
Chilled Water	5,802	6,344	6,811	467
Steam	7,453	9,492	8,166	-1,326
Natural Gas	4,265	4,839	4,346	-493
DC Gov't Water/Sewer	3,853	2,753	6,021	3,268
Other Water and Fuel	770	664	756	92
Energy Cost-Savings Proj.	0	<u>o</u>	<u>650</u>	<u>650</u>
Subtotal, Utilities	40,177	44,443	46,914	2,471
Postage	2,071	2,071	2,071	0
Rent:				
Central	19,175	24,862	25,287	425
Unit			<u>2,150</u>	2,150
Subtotal, Rent	19,175	24,862	27,437	2,575
Communications	9,668	10,088	11,224	1,136
Other			880	880
Total	71,091	81,464	88,526	7,062

- **UTILITIES** (+\$2,471,000) The request includes increases for the following:
 - o **Electricity** (-\$187,000) Electricity is used to operate the Smithsonian's large infrastructure. The major consumer of electricity is the air-conditioning system that cools the Smithsonian facilities, ensuring the comfort of staff and visitors and providing essential climate control to protect the priceless National Collections. The net estimate includes an anticipated 2.2 percent rate increase on all electricity accounts in FY 2009 (+\$504,000); offset by reductions to FY 2008 estimates for

lower projected rate increases for Virginia facilities in FY 2008 (-\$665,000) and anticipated increased reimbursements (-\$26,000).

- o Chilled Water (+\$467,000) Chilled water costs represent both the annual cost of the fixed, 15-year debt service for the joint project between the General Services Administration (GSA) and the Smithsonian to supply chilled water from GSA's central plant to the Smithsonian's south Mall facilities and the variable cost for actual chilled water usage. The FY 2009 request includes an anticipated 2.2 percent rate increase in FY 2009 (+\$61,000) and unanticipated price increases above the FY 2007 and FY 2008 estimated levels (+\$715,000). Offsetting the increases are savings from a Memorandum of Agreement which temporarily assigned Smithsonian surplus capacity at the GSA chilled water plant to the National Gallery of Art (-\$130,000) and anticipated increased reimbursements (-\$179,000).
- o Steam (-\$1,326,000) The Smithsonian uses steam for heating and humidification, and to produce hot water in facilities on the Mall and in New York City. The net estimate includes an anticipated 2.6 percent rate increase in FY 2009 (+\$231,000), reduction to the steam estimate included in the FY 2008 Budget Justification to Congress for an anticipated five percent GSA price increase in FY 2008 that will not transpire (-\$460,000), further savings from decreases in consumption due to conservation efforts that began in late FY 2006 (-\$1,084,000), and anticipated increased reimbursements (-\$13,000). The request includes a one-time redirection of \$650,000 in savings from conservation efforts to support an Energy Savings Performance Contract, which is justified at the end of the Utilities section in this budget submission.
- Natural Gas (-\$493,000) The Smithsonian uses natural gas for heating and generating steam. The net estimate includes an anticipated 2.2 percent rate increase in FY 2009 (+\$98,000); savings from actual FY 2007 and anticipated FY 2008 price increases that were less than projected (-\$589,000), and anticipated increased reimbursements (-\$2,000).
- o **DC Water and Sewer (+\$3,268,000)** Funds provide for both water and sewer services provided by the District of Columbia Water and Sewer Authority (DCWSA). The request includes a net increase of \$3,274,000 to the budget estimate to reflect rate and billing adjustments identified by the DCWSA, and a billing adjustment of \$1.5 million for under-billed estimates in FY 2005 due to a faulty meter at the National Zoological Park. Offsetting the increases are anticipated increased reimbursements (-\$6,000).

- o Other Water and Fuel (+\$92,000) Funds provide water for facilities outside of Washington, DC, and fuel oil used in dual-fuel boilers, as a backup to natural gas. The net request provides for an anticipated 2.2 percent rate increase for fuel oil in FY 2009 and unanticipated fuel-oil rate increases above the FY 2006 appropriated level (+\$25,000). In addition, the request provides for an anticipated 8 percent rate increase for water outside of the DC area in FY 2009 and unanticipated rate increases above the FY 2007 estimated levels (+\$67,000).
- o Energy Cost-Savings Project (+\$650,000) One-time funds redirected from savings from steam conservation efforts will support an Energy Savings Performance Contract (ESPC) to replace the chilled water plant at the National Museum of American History (NMAH); convert the NMAH domestic hot water system from GSA steam to natural gas; upgrade lighting for both NMAH and the National Museum of Natural History (NMNH); and modify the NMNH chilled water and ventilation systems for improved energy efficiency. The contractor, NORESCO, will finance the expected \$19,900,000 implementation cost by using guaranteed savings over a 20-year term to achieve payback in 11.7 years. With funds redirected from steam savings, the Smithsonian will reduce the amount of debt financed to enable the project to be self-financing.
- **POSTAGE** Funds provide for all official domestic and international mail services. The Institution is not seeking an increase for postage in FY 2009.
- **RENT** (+\$2,575,000) The request includes a net increase for centrally-funded lease requirements (+\$425,000) and unit-funded, programmatic lease requirements (+\$2,150,000), as follows:
 - Central Rent (+ \$425,000) The net increase provides (+ \$2,225,000) additional base rent funds for leased office and storage space, which is offset by a reduction (-\$1,800,000) for non-recurring costs in FY 2008. Details follow:

<u>Escalation (+ \$884,000)</u> — Provides for annual rent increases in accordance with the actual terms of current lease contracts. Among the contracts, the escalation rate for base rent averages between two and three percent, and operating and real estate taxes average eight percent.

<u>Capital Gallery (+\$848,000)</u> — Provides for annual lease costs for an additional 19,383 square feet of leased space at Capital Gallery East in Washington, DC to house the Office of the Inspector General (+\$373,000) and the Office of Safety, Health, and Environmental

Management's health unit (+\$475,000). The landlord will amend the Smithsonian's current lease contract at Capital Gallery to include the additional leased space at the existing contractual rate.

Office of the Inspector General (OIG) — In its June 2007 report to the Governance and Nominating Committee, the Smithsonian's Board of Regents recommended that the OIG relocate from leased space in Crystal City, Virginia to the District of Columbia to be closer to Smithsonian management. The OIG will relocate from 5,810 square feet of leased space in Crystal City, Virginia to 8,520 square feet of leased space on the sixth floor of Capital Gallery East (\$373,000). The leased space will accommodate existing staff requirements and provide space for anticipated increases to staff levels. The 5,810 square feet of space vacated by the OIG will be apportioned to the Office of the Comptroller, the Office of Contracting, and the Office of the Treasurer as additional office space for anticipated staff increases. All move and relocation costs will be funded from the Smithsonian's existing federal base resources.

Office of Safety, Health, and Environmental Management (OSHEM) — The requested funds will allow OSHEM's health unit to relocate from leased space on the Concourse level of the Victor Building to a more central location that is closer to the Mall, thereby enabling the health unit to better serve the Smithsonian community. The Smithsonian will relocate the health unit from 8,127 square feet of leased space in the Victor Building, along with OSHEM offices currently located in 7,137 square feet of leased space on the seventh floor of Capital Gallery West, to 18,000 square feet of space on the eighth floor of Capital Gallery East. The additional space will provide for expanded occupational health programs. The space vacated in the Victor Building by the OSHEM health unit will become available for either potential use by the Smithsonian American Art Museum and National Portrait Gallery (for additional program and storage space) or for sublease by the Smithsonian until the lease expires in 2011. The requested \$475,000, along with existing base rent resources, will cover the annual lease costs. Move and relocation costs will be funded from the Smithsonian's existing federal base resources.

The 7,137 square feet of space vacated by OSHEM offices on the seventh floor of Capital Gallery West will provide expanded space for the adjoining office of the National Museum of African American History and Culture (NMAAHC). The NMAAHC requires additional leased space to house the anticipated increase in staff from the continued development of the Museum's infrastructure. The NMAAHC will use existing base resources to fund lease costs.

Cluny Court (+\$270,000) — Provides six months of funding for a one-time lease extension of warehouse space in Springfield, Virginia, which houses the NMAH collections. The Smithsonian's plan to consolidate leases includes relocating NMAH collections to a leased facility at 3400 Pennsy Drive in Landover, Maryland. The relocation of Smithsonian tenants to the Pennsy Drive facility is planned to occur by August 2008, with complete occupancy by the end of September 2008. However, the relocation time frame conflicts with the planned reopening of the NMAH in the summer of 2008. To minimize disruption to NMAH staff focusing on reopening activities, the requested funds will enable NMAH to relocate its collections to Pennsy Drive in FY 2009. The Cluny Court lease expires in March 2008 and a one-year lease extension is necessary to provide for a smooth, uninterrupted transition. Base central rent funds will cover lease costs in FY 2008, but funding for six months of lease costs is needed for FY 2009 when these base funds are redirected for the Pennsy Drive facility lease costs.

<u>Victor Building (+ \$125,000)</u> — Provides funds to cover annual lease costs for an additional 3,696 square feet of leased space on the Concourse level of the Victor Building in Washington, DC. The leased space provides additional, critical collections storage for the Smithsonian American Art Museum and National Portrait Gallery.

<u>Crystal City (+\$98,000)</u> — Provides funds to cover annual lease costs for 5,035 square feet of leased storage space at 1851 S. Bell Street, Arlington, Virginia, to store the Smithsonian's financial documents from the Office of Contracting and the Office of the Comptroller. The leased space replaces valuable storage space lost when the Victor Building was sold and provides a less costly alternative for storing documents close to the offices located in nearby leased space in Crystal City.

- 1111 North Capitol Street (-\$1,800,000) Returns one-time FY 2008 move and fit-out funds for relocation of staff, storage, and workshop activities from leased space at 1111 North Capitol Street to leased space at 3400 Pennsy Drive in Landover, Maryland.
- Unit-Funded Rent (+\$2,150,000) Justified here, but included in the following museums' line items, are unit-funded rent increases that are necessary to support Smithsonian programs. The increases will provide \$360,000 for necessary escalation to existing lease contracts, \$280,000 for ground-lease costs, and \$1,510,000 for collections storage space, as follows:

Escalation (+ \$360,000) — Provides funds to cover annual rent increases in accordance with the actual terms of current lease contracts. Included in the request are increases for the federal share of costs among the Smithsonian Astrophysical Observatory's (SAO) leased facilities in Cambridge, Massachusetts. The increase of 10 percent above the FY 2008 estimate reflects the fact that escalation has not been budgeted for several years for SAO facilities (+ \$350,000). In addition, the request includes funds for an anticipated 3 percent escalation above FY 2008 estimates for the NMAAHC leased space at Capital Gallery in Washington, DC (+\$10,000).

National Museum of American History (NMAH) (+\$609,000) — Provides initial base rent funds for leased warehouse space on Cinderbed Road in Newington, Virginia. The leased space houses collections displaced by the revitalization of the public areas of the NMAH, Behring Center, and the recently acquired CIGNA insurance company collection of firefighting and maritime objects. Donors have objected to using their donations to pay for storage costs and the Museum cannot cover this cost within base funds. The requested resources will enable the Museum to continue paying the lease for collections stored at the Cinderbed Road facility, thus ensuring continued care and storage of the Museum's collections.

Cooper-Hewitt, National Design Museum (CHNDM) (+ \$539,000) — Provides the balance of funds needed to cover the annual costs of leased space in the Bronx, New York to relocate CHNDM's collections, as well as library and conservation staff. In FY 2008, CHNDM will undergo a privately funded \$40 million renovation to increase exhibition space. Master plans include an off-site facility that will provide space for collections storage, a library, and a conservation laboratory. The FY 2008 Budget Justification to Congress includes \$240,000 for one-half of the annual lease costs for an estimated 15,000 square feet of storage space at a location not identified at that time. CHNDM space requirements subsequently increased to 19,000 square feet and space has been identified in the Bronx. The requested \$539,000 will provide the remaining balance of estimated annual lease costs (\$779,000), thus enabling CHNDM to expand exhibition space at the Museum.

National Museum of African American History and Culture (NMAAHC) (+ \$362,000) — Provides for 15,000 square feet of leased space at the Pennsy Drive facility for storage and processing of NMAAHC collections. As NMAAHC moves ahead with plans and operations geared to the opening of the Museum on the Mall, it is crucial that NMAAHC has the resources it needs to provide adequate and appropriate space to maintain

the planned collections. The Smithsonian's space plans for the Pennsy Drive facility include sufficient museum-standard storage space for NMAAHC. The requested funds will provide the requisite resources for NMAAHC's long-term storage and processing requirements at the Pennsy Drive facility.

National Air and Space Museum (NASM) (+ \$280,000) — Provides initial base funds for annual ground-lease costs for NASM's Udvar-Hazy Center. The Smithsonian has a long-term lease agreement with the Metropolitan Washington Airports Authority (MWAA) for the purpose of constructing and operating the Udvar-Hazy Center. The Center sits on 177 acres of land that is controlled by the MWAA. NASM uses critical program funds to pay MWAA for the annual ground-lease costs. The requested increase will enable NASM to redirect its base funds to provide improved public programs at the Udvar-Hazy Center.

- COMMUNICATIONS (+\$1,136,000) The communications base supports operations, maintenance, and equipment for the Institution's voice and data telecommunications requirements. The requested increase provides for the following:
 - (+\$429,000) for continuing Institution-wide migration of outdated telephone systems to Voice over Internet Protocol (VoIP) systems at the National Zoological Park (NZP) and its Conservation Research Center (CRC) in Front Royal, Virginia, to include hardware, software, and contractor services.
 - (+\$258,000) for cost increases to leased communications lines to support SInet. The increase provides for the redesign and upgrade of leased lines at the NZP-DC (to support the Zoological Information Management System project at the veterinary hospital) and at NZP-CRC (to support the National Ecological Observatory Network project). In addition, the request will provide for additional bandwidth and distance requirements resulting from the relocation of the Smithsonian Institution Service Center at 1111 North Capitol Street to leased space at Pennsy Drive in Landover, Maryland.
 - (+\$186,000) for the addition of network switches and routers at the SAO to the Institution's switch and router five-year replacement program. The first priority will be to replace 45 old switches and routers at SAO that are beyond their lifespan and represent a critical risk to SAO's network reliability.
 - (+\$263,000) for the critical replacement of the aging Citrix server, the key element in providing remote access to staff; to cover increased software maintenance costs; and to provide contractor system support. Remote access allows employees to work from home and conduct essential Smithsonian business during an emergency.

- OTHER MANDATORY COSTS (+ \$880,000) Provides needed resources for the following additional mandatory increases that are included in the Administration line-item increases:
 - Administration (+\$60,000) Enables the Office of the Chief Financial Officer to support the federal portion of the annual audit of the Smithsonian's financial statement (+\$25,000) and begin a threeyear inventory cycle for all of the Institution's physical assets to support the insurance requirements of the Smithsonian (+\$35,000).
 - Administration (+ \$220,000) Enables the Office of Contracting to comply with federal requirements to provide procurement training classes to Smithsonian federal employees.
 - Administration (+\$600,000) Enables the Office of the Chief Information Officer to provide required annually recurring software licenses and maintenance for mission-critical collections information management systems and security management systems.

SUMMARY OF PROGRAM CHANGES

GOVERNANCE (+\$3,888,000, +23 FTEs) — This request supports the new governing practices that were developed to strengthen the Board of Regents' oversight of the Institution, to include additional staff for the Inspector General (5 FTEs), General Counsel (2 FTEs), and the Chief Financial Officer (6 FTEs); along with support staff for Human Resources (3 FTEs), Public Affairs (1 FTE), and Information Technology (IT) (6 FTEs). Additional IT personnel are required to redesign the Smithsonian's website to increase the transparency of the Institution's operations, comply with Government Web standards; and improve the Institution's record management practices.

STEWARDSHIP OF NATIONAL TREASURES (+ \$45,974,000, + 186 FTEs)

This request provides the critical resources needed to support the security, facilities, collections care, and IT infrastructure required for the Institution's stewardship responsibilities to preserve and protect the nation's treasures. The increases are as follows:

- SECURITY/ANTI-TERRORISM (+\$2,133,000, +41 FTEs) This request continues implementation of security improvements recommended by the Inspector General's evaluation of the Institution's employee and contractor security check and badging systems for units outside of the Washington, DC area (+\$447,000, 1 FTE). It provides funding to support minimal security staffing at the Institution's newest museums, the Donald W. Reynolds Center, and the National Museum of the American Indian (+\$2,004,000, 40 FTEs). It also provides funds to reimburse the Federal Protective Service for required security costs at the National Museum of the American Indian's George Gustav Heye Center in New York City (+\$452,000). The request also includes a decrease in non-recurring FY 2008 costs to fund the initial implementation of the mandates in the Homeland Security Presidential Directive 12 (-\$770,000).
- FACILITIES REQUIREMENTS (+ \$28,407,000, + 116 FTEs) This request supports critical improvements required for the Smithsonian's facilities program, as recommended by the National Academy of Public Administration. The Institution completed a Program Assessment Rating Tool (PART) evaluation of the Facilities Operations and Maintenance program in FY 2007 and received the highest PART rating score. This rating confirms the Government Accountability Office's conclusion that the Institution's facilities programs are efficiently managed and that additional resources would be effectively spent. The specific increases requested are as follows:
 - Facilities Maintenance (+\$24,047,000, +70 FTEs) Provides resources to continue addressing the Institution's critical maintenance

needs. With this increase of \$24 million, along with the maintenance increase requested in FY 2008, the total facilities maintenance funding would be \$76 million. These resources are still below the minimum level to attain the industry standard of 2 percent of what it would cost to replace the Institution's buildings, or \$94 million. However, these resources would enable the Smithsonian to achieve industry standard maintenance level 3, with the goal of improving to maintenance level 2, referred to as "Comprehensive Stewardship," in the near future. Funding will support new facility maintenance requirements for the National Zoo, the Donald W. Reynolds Center Courtyard facility, and the Pod 5 Wet Collections Storage facility, as well as contract support for additional maintenance at the Institution's IT facility in Herndon, Virginia. Also, this funding will support security maintenance contracts for vital system monitoring, vehicle barrier systems, and locksmith services.

- Facilities Operations (+\$4,360,000, +46 FTEs) Provides resources to improve the overall cleanliness of museums to approach the industry standard appearance level 2, with the goal of achieving appearance level 2 in the near future. Appearance level 2, known as "Ordinary Tidiness," provides the level of cleanliness that the public expects and deserves. It is vital that the Institution have the resources to maintain the appropriate level of cleanliness for the most visited museum complex in the world. This funding will support new facility operational requirements, most notably expansion of mail and shuttle services for leased facilities; critical supplies and materials for the National Zoo's newly opened Asia Trail exhibits; and the Pod 5 Wet Collections Storage facility in Suitland, Maryland.
- COLLECTIONS CARE INITIATIVE (+\$11,099,000, +26 FTEs) This
 request provides essential resources to meet collections care
 accreditation standards and provide for the highest priority collections
 management needs throughout the Institution. It provides state-of-the-art
 collections management systems, better access and improved storage,
 conservation, and the preservation resources needed to ensure the
 longevity and availability of the National Collections. The specific
 increases requested are as follows:
 - Collections Care and Preservation Fund (+\$3,000,000) Provides resources for the Smithsonian to conduct an Institution-wide collections assessment program, preserve collections, and store them in better conditions for use. The increase will improve collections care, mitigate collections deterioration, and address the highest priority collections care needs throughout the Institution.
 - Information Resource Management (IRM) Pool (+\$1,000,000) —
 Provides resources to continue the digitization of collections

- information and images, and provides public access to the National Collections via the Internet.
- Unit Collections Care (+\$5,789,000, +21 FTEs) Provides resources for high-priority, unit-specific collections care needs, including collections storage, which was the top priority of the Smithsonian Collections Advisory Council. Also includes unit-specific Collections Information System requirements.
- National Zoo (+\$1,310,000, +5 FTEs) Provides funding for increased animal welfare and staff safety in support of daily operations; Avian Flu protective requirements; and collections record maintenance via the Zoological Information Management System (ZIMS). ZIMS will allow increased access to animal information by Zoo animal care staff and the wider Zoo community interested in tracking disease vectors like Avian Flu and West Nile Virus. Preventing the spread of Avian Flu is a major safety issue. Safety measures must be installed to preclude wild waterfowl from infecting birds in the Zoo's collection, and protective equipment is needed for staff to preclude contamination of the collection. All of these efforts will enable the Zoo to be more responsive to emergencies and ensure the health and safety of its valuable "living" collection.
- INFORMATION TECHNOLOGY (IT) INFRASTRUCTURE (+\$4,335,000, +3 FTEs) This request provides funding for the most critical IT infrastructure needs, including the continued expansion of the Institution's enterprise storage, replacement of obsolete backup systems, and initiation of a server replacement program. Resources are also requested to complete implementation of the Security Management System to comply with the mandates of Homeland Security Presidential Directive 12, and to eliminate redundancies and increase efficiencies by using a phased approach to implement an Enterprise Architecture segment solution.

INCREASE AND DIFFUSION OF KNOWLEDGE (+\$27,680,000, +47 FTEs)

This request provides funding for the Smithsonian's diverse research activities and its efforts to inform, educate, and inspire Americans, as well as people worldwide. The great scientific tradition of the Smithsonian dates back to its origins. Given the pressing scientific issues facing the public today, the Smithsonian now — more than ever — has an obligation to seek answers to key scientific questions and increase the public's understanding of those questions. The increases are as follows:

QUESTION-DRIVEN RESEARCH (+\$15,200,000, +20 FTEs) —
 Smithsonian scientists are among the leaders in their fields, nationally and internationally. A 2003 National Research Council report noted that the

Institution's research centers are "world-class scientific institutions that combine facilities, personnel and opportunities for specialized long-term research that is enabled by the stability of federal support." Federal investments in research are essential to sustain competency, provide long-term research continuity, and leverage additional private-sector resources from outside sources. The specific increases requested are as follows:

- Global Earth Observatories (+ \$5,200,000, + 15 FTEs) Supports the expansion of the Smithsonian's network of tropical forest plots to become a system of Smithsonian Institution Global Earth Observatories (SIGEO), which will provide scientific data about ecological, hydrological, soil, and meteorological processes. This research will enable Smithsonian scientists to better understand the storage and movement of carbon and water in tropical and temperate forests, and advance researchers' understanding of forests' relationships with wildlife, the atmosphere and fresh water sources. The resulting data will inform worldwide policy decisions related to carbon change, carbon budgets, nutrient cycling, and biodiversity. This investment will directly support the 2007 Administration Research and Development Environment priority, while leveraging other related Government efforts.
- Giant Magellan Telescope (+\$10,000,000, +5 FTEs) Supports the development and construction of a new Extremely Large Telescope (ELT) the Giant Magellan Telescope (GMT). An ELT was the top priority in the most recent National Academies of Sciences' Decadal Survey recommendations for ground-based astronomy, and an ELT supports the strategic science goals of several federal agencies, including NASA, the Department of Energy, and the National Science Foundation. Its discoveries about the fundamental physics of the universe will change the way people think about physics and will have a far-reaching impact on U.S. policy in sectors such as energy, space, and manufacturing, thus aligning with the 2007 Administration Research and Development priorities. GMT partnerships currently in place will leverage federal support by a ratio of approximately four to one. A federal investment will ensure U.S. leadership in astronomy, creating dynamic opportunities for breakthrough research.
- RESEARCH INFRASTRUCTURE AND TOOLS (+\$5,282,000, +14 FTEs)
 The success of the Smithsonian's world-class scientific research,
 including those key areas described above, depends on a world-class
 supporting research infrastructure. Predictable and dependable core
 research support will ensure that the Institution attracts, retains, and
 inspires the next generation of scientists and engineers, and will enable

the Smithsonian to successfully compete for external research funds. The specific increases requested are as follows:

- Research Equipment Pool (+\$1,500,000) Provides essential support to replace, upgrade, and maintain research equipment in support of the Smithsonian's research mission. For projects to be funded from this competitive pool, they must demonstrate that the equipment will contribute to the development of a new research capability, have the potential to leverage matching funds and/or support multiple users, contribute to the Smithsonian Science Strategic Plan priorities, and result in increased management excellence and efficiency.
- Scholarly Studies (+\$1,400,000) Supports competitively awarded pre- and postdoctoral fellowships for research and study, and the research interests of Smithsonian scientists via a Scholarly Studies Program. Fellowships ensure the intellectual interaction between national and international scholars and the Smithsonian research community. The Scholarly Studies Program provides seed money through internal competition to support new research initiatives and sustain research competency.
- DNA Barcoding and Biomaterials Resources Banks (+\$1,500,000, +13 FTEs) Funds are requested for this valuable tool that accelerates the identification of species and facilitates environmental and biodiversity discovery and monitoring. Sustaining this infrastructure will support linking taxonomy to numerous issues of direct and commercial relevance to society, including water quality, forensics, diseases, and food quality. The Smithsonian is a recognized leader in DNA barcoding and these resources will support key Smithsonian science priorities. Resources are also requested for Biomaterials Resources Banks to preserve the Institution's unique and vast collection of biomaterials, including frozen tissues, blood products, and DNA. Proper storage, adequate archiving, and maintenance of these specimens are essential for researchers to be able to use them effectively.
- O Scientific Workstations and Infrastructure (+ \$882,000, +1 FTE) Provides funds to initiate the replacement of scientific workstations on an industry standard, four-year life cycle. A four-year replacement life cycle is based on rapid changes in both technology and software, where older scientific workstations are frequently unable to handle newer software programs that require more memory and processing power. Funds are also requested to upgrade and/or replace the Smithsonian Astrophysical Observatory's (SAO) scientific computing and archive servers needed to support the volume of data generated by the new SAO instruments. Requested funds will also support the data migration from legacy NZP systems to the Zoological Information

Management System used for specimen record keeping and scientific collections management of the Zoo's living collection.

- **DIGITIZATION** (+\$3,661,000, +6 FTEs) This request provides the resources for laying the technological foundation required for creating a digital Smithsonian. The Smithsonian is uniquely positioned to become the vetted and trusted source of information on the Web, based on its vast collections and extensive research made accessible to the world. along with the expertise of its scholars, scientists, researchers, museum specialists, and curators. Specifically, funds are requested for the Enterprise Digital Asset Network (EDAN) project, which will provide seamless sharing and exchange of information among the Institution's existing collections information systems (the system of record that describes the digital asset), the digital asset management system (that manages the access to a digital asset), and the Web interfaces that enable users everywhere, regardless of where they live, to experience the National Collections at the Smithsonian through the Internet. In addition, funds are requested to establish a central digitization office to coordinate the digitization strategic plan, policies, and standards throughout the Institution.
- EDUCATION AND PUBLIC OUTREACH (+\$3,537,000, +7 FTEs) The specific increases requested are as follows:
 - Natural History Exhibitions Maintenance (+\$1,200,000) Provides funds to maintain the Museum's exhibits, which are much more open, accessible, and interactive. To date, \$1,200,000 has been raised from private sources for an endowment to maintain and operate the Ocean Hall. Federal matching funds are requested in this amount to leverage future private investment. Donors have clearly indicated that they are more willing to partner if there is a match for their donations with federal resources.
 - American History Exhibitions Maintenance (+\$250,000) Provides funds to operate the Museum's newer exhibits, which are much more interactive, and, therefore, require greater maintenance. The requested budget increase will provide contract support to ensure that the Museum's exhibitions are clean and in repair, the media components are fully operational and up to date, and the exhibition content is accurate and current.
 - Air and Space Exhibitions Maintenance (+\$250,000) Provides funds to improve and maintain the appearance of exhibits in the Museum. Priority will be given to providing energy-efficient lighting fixtures and improving the technology used in computer interactive exhibits which, in many cases, can no longer be maintained.

- American Art Museum Public Programs (+\$77,000, +1 FTE) Provides funds for a staff member who will help develop and present public programs in the Donald W. Reynolds Center that reopened last year. The Museum has an ambitious calendar of lectures, concerts, and workshops, and this position is needed to develop, organize, and manage these public programs.
- African Art Education Specialist (+\$87,000, +1 FTE) Provides funds for an education specialist to augment current community outreach and enable the Museum to expand and develop new and innovative programs and activities, within and outside the Museum, and to disseminate information about African culture, history, and society.
- Anacostia Community Museum Curator (+ \$108,000, +1 FTE) —
 Provides funds to support a Museum curator to enhance the exhibition program at the Anacostia Community Museum. The curator will develop exhibitions based on collections and research, coordinate exhibitions being developed by guest or contributing curators, and facilitate the mounting of leased exhibitions.
- Latino Center Initiatives (+ \$503,000, +2 FTEs) Provides funds for the Latino Initiatives Pool that will result in more stimulating, innovative, and comprehensive programming to better present the compelling story of the extensive Latino contributions in this country. The requested increase will also provide resources to expand the Center's programs and improve access to Latino collections.
- Education Program Portal (+\$847,000, +1 FTE) Provides funds to develop and implement the Smithsonian Educational Program portal. The portal will provide a single point of access for all Smithsonian educational programs, resources, products, and services so that future educational programs and resources are developed more precisely.
- Traveling Exhibitions (+\$215,000, +1 FTE) Provides funds to hire one staff member to develop and tour new Museum on Main Street (MoMS) exhibitions, which are specifically designed to travel to rural and under-served areas. Resources are required to keep pace with the rising indirect costs of the very popular MoMS program.

NEW MUSEUM (+\$1,300,000) — The request provides resources to support the requirements of the National Museum of African American History and Culture. It will fund the Smithsonian's work to continue developing and refining plans for exhibitions, public programs, educational programs, collections acquisition, technology, and capital fund raising.

NO-YEAR AND TWO-YEAR FUNDING — The following table provides the FY 2009 Salaries and Expenses request for No-Year and Two-Year funding.

No-Year and Two-Year Funding Request

(Dollars in Thousands)

Salaries and Expenses	FY 2008 Request	FY 2009 Request		
No-Year Funds				
National Museum of African American	12,932	14,937		
History and Culture				
National Museum of Natural History:				
Exhibition Reinstallation	1,013	1,013		
Repatriation Program	1,671	1,723		
Major Scientific Instrumentation	3,886	13,036		
Collections Acquisition	466	466		
Total, No-Year	\$19,968	\$31,175		
Two-Year Funds				
Outreach: Office of Research and Training	1,578	2,979		
Services				
Total, Two-Year	\$1,578	\$2,979		

FEDERAL RESOURCE SUMMARY BY PERFORMANCE OBJECTIVE AND PROGRAM CATEGORY

In accordance with the President's Management Agenda (PMA) initiative on budget and performance integration, the Smithsonian has developed its FY 2009 budget request by reviewing all resources, both base amounts and identified increases or decreases, in relation to the Institution's performance plan. In the sections that follow, detailed justifications are provided for all funding and FTEs by Institutional strategic goal and by performance objective under each goal, and specific annual performance goals are provided for each objective for which funding is requested.

To better meet the standards of success in the budget and performance integration initiative of the PMA, the Institution's program performance goals and objectives were aligned with the program categories used in the federal budget and the Institution's financial accounting system. This enables the Institution to more clearly demonstrate the relationship between dollars budgeted and results achieved.

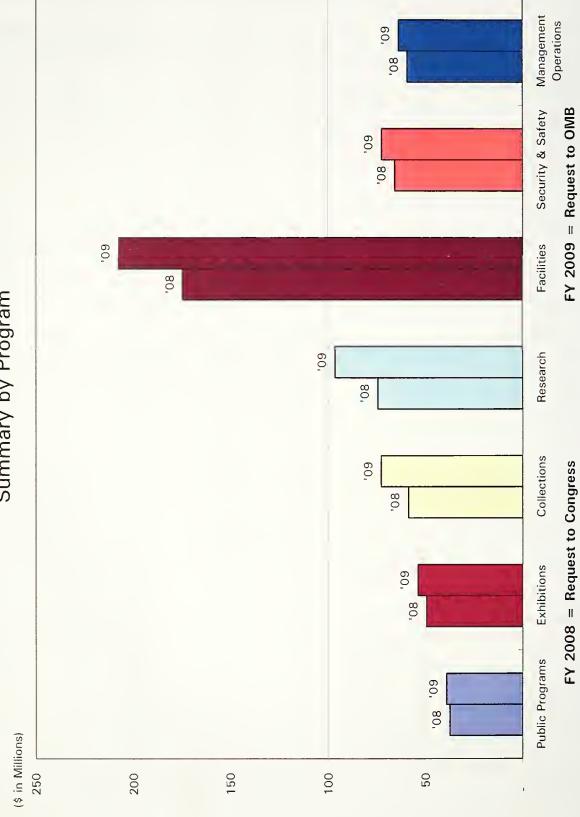
The following table provides a summary of the Institution's FY 2008 and FY 2009 estimates and the proposed changes by strategic goal, performance objective, and program category.

Federal Resource Summary by Performance Objective and Program Category (\$ in Thousands)

Performance Objective/	EV	2008	EV	2009	Change		
Program Category	FTEs	\$000	FTEs	\$000	FTEs	nange \$000	
	IILS	4000	IILS	3000	FIES	4000	
Increased Public Engagement Public Programs							
Engage and inspire diverse audiences	253	26 270	252	27 244	1	1.074	
Provide reference services and information		26,270 11,272		27,344	-1	1,074	
	112	11,272	114	11,832	2	560	
Exhibitions	400	40.505	400	F0 004		4.000	
Offer compelling, first-class exhibitions	489	49,565	489	53,831	0	4,266	
Collections	F04		===	70.047		10.001	
Improve the stewardship of the national	524	58,716	552	72,647	28	13,931	
collections	1						
Strengthened Research	1	-					
Research							
Engage in research and discovery	\ 440	61,109	470	82,427	30	21,318	
Ensure the advancement of knowledge in	102	13,317	102	14,132	0	815	
the humanities							
Enhanced Management Excellence							
Facilities							
Execute an aggressive, long-range	10	1,249	10	1,886	0	637	
revitalization program and limited	•						
construction of new facilities							
Implement an aggressive and professional	325	49,692	395	74,148	70	24,456	
maintenance program							
Improve the overall cleanliness and	453	123,510	495	131,552	42	8,042	
efficient operation of Smithsonian facilities							
Security & Safety							
Provide world-class protection for	899	58,365	940	64,186	41	5,821	
Smithsonian facilities, collections, staff,		,		,		,	
visitors, and volunteers							
Provide a safe and healthy environment	53	7,252	57	8,231	4	979	
Information Technology		,					
Modernize the Institution's information	165	51,711	183	67,459	18	15,748	
technology systems and infrastructure				,		,	
Management Operations							
Strengthen an institutional culture that is	194	20,778	210	23,328	16	2,550	
customer centered and results oriented		,,				_,,,,,	
Ensure that the Smithsonian workforce is	91	14,660	92	15,028	1	368	
efficient, collaborative, committed,	-	,	-	,			
innovative, and diverse							
Modernize the Institution's financial	90	12,946	90	13,526	0	580	
management and accounting operations		,		,	_		
Enhance the reputation of the Smithsonian	41	4,042	43	4,300	2	258	
by maintaining good relations with the	'	.,0 .2		.,000	_	200	
news media and with federal, state, and							
local governments							
Modernize and streamline the Institution's	37	4,389	40	4,947	3	558	
acquisitions management operations	0,	۲,000		7,047	U	000	
Financial Strength							
Secure the financial resources needed to	7	2,504	7	2,567	0	63	
carry out the Institution's mission	'	2,504	′	2,307		03	
TOTAL	4 205	E71 247	1 E 1 1	672 271	256	102 024	
IVIAL	4,285	571,347	4,541	673,371	256	102,024	

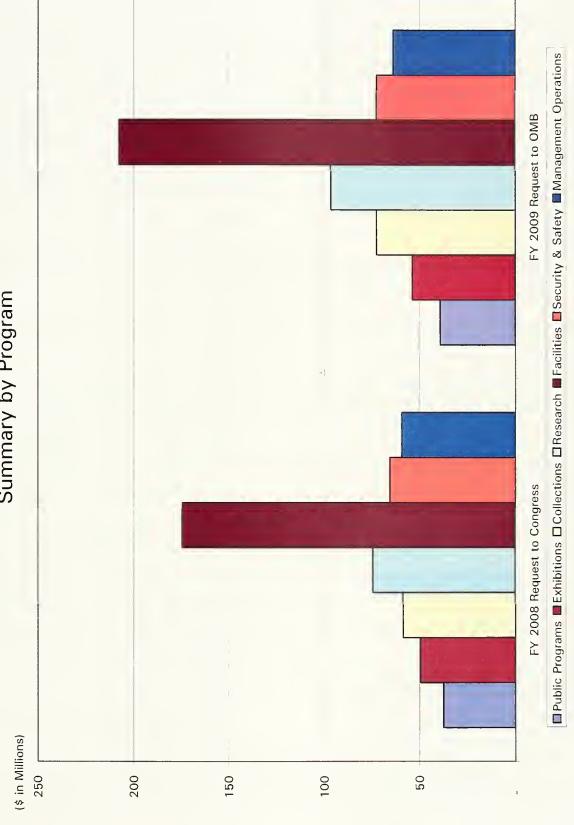
Smithsonian Federal Budget

Salaries and Expenses Summary by Program



Smithsonian Federal Budget

Salaries and Expenses Summary by Program



ANACOSTIA COMMUNITY MUSEUM

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2007 ESTIMATE	16	1,952	2	214	0	20	0	108				
FY 2008 ESTIMATE	21	1,993	2	210	0	125	0	79				
FY 2009 ESTIMATE	22	2,161	2	210	0	125	0	79				

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	8	662	8	693	0	31
Exhibitions						
Offer compelling, first-class exhibitions	5	538	6	646	1	108
Collections						
Improve the stewardship of the national collections	4	373	4	386	0	13
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	2	232	2	241	0	9
Ensure that the workforce is efficient, collaborative, committed, innovative, and diverse	1	83	1	86	0	3
Enhance the reputation of the Smithsonian by	1	105	1	109	0	4
maintaining good relations with the news media and						
with federal, state, and local governments			İ			
Total	21	1,993	22	2,161	1	168

BACKGROUND AND CONTEXT

On September 15, 2007, the Anacostia Community Museum (ACM) will celebrate its 40th anniversary. Just as it has from its inception as the first federally funded, community-based museum, ACM faces unique

challenges relating to mission, resources, and location. Over the years, it has developed into a valuable cultural resource for the region and the country, setting a groundbreaking direction in terms of traditional museological thought and practice.

Although the initial intent of the Smithsonian's establishment of what was initially called the Anacostia Neighborhood Museum was for audience development and outreach — to take the Smithsonian's cultural and historical treasures into neighborhoods whose residents did not venture to the Mall — these same residents quickly participated in helping to make the Museum relevant to their own experiences. Within months of its opening, the community rejected the eclectic collection of SI holdings being displayed. The Museum quickly modified its focus to the documentation, preservation, and interpretation of African American history and culture from a community-based perspective. It was the forerunner in using this approach to collaborate directly with different sectors of communities, including local museums, religious institutions, and arts, cultural, and civic organizations, in order to mobilize, organize, and equip them to research, document, interpret, and preserve their cultural heritage through educational and training programs.

With the establishment of the National Museum of African American History and Culture (NMAAHC) in 2004, the ACM now finds itself having to redefine and redirect its mission and vision to create an identity that will not be duplicated by the launch of the NMAAHC. The Museum's new identity is in some ways a return to its original charter as a community museum. However, the new direction will define the term "community" in much broader terms.

For FY 2009, the budget estimate includes an increase of 1 FTE and \$168,000. Included is an increase of \$60,000 for necessary pay for existing staff funded under this line item, and a program increase of 1 FTE and \$108,000 for a museum curator to develop exhibitions based on collections and research, coordinate exhibitions being developed by guest or contributing curators, and facilitate the mounting of leased exhibitions.

MEANS AND STRATEGY

By the end of FY 2007, the staff of the ACM will have completed a long-range strategic plan scheduled for implementation in October 2008. Not only will this plan redefine and better describe the Museum's mission and help shape its vision, it will create a blueprint for bridging the gap from its current reality to its new future.

The ACM will continue to accomplish the Institution's goal of Increased Public Engagement through exhibitions, public programs, and collections using resources that draw from the broad range of communities it serves. It will draw from those things that bring groups of people together — social, ethnic, religious, geographic and other commonalities. Specifically, the Museum will continue to work with community partners to document and preserve local heritage, identify cultural materials at risk, document significant local cultural materials, and develop an interpretation and appreciation of them through regionally based educational activities, publications, and exhibitions. Through its website, the Museum will disseminate information on community heritage preservation projects.

From December 2008 through October 2009, the ACM will mount *Jubilee*, an exhibition on the plethora of traditional (as well as some not-so-traditional) celebrations prominent among different cultures — from religious observances to family reunions. The *Sullivan Family Collection*, an exhibition of documents, photographs, and artifacts tracing five generations of a family history, will also be on display from April through September 2009. Throughout FY 2009, preparations for *The African Presence in Mexico*, an exhibition from the Mexican Fine Arts Center Museum in Chicago, will be finalized and complemented with collaborative programming from other SI units. Confirmed collaborating SI partners to date include the Latino Center, the Center for Folklife and Cultural Heritage, the National Museum of American History (NMAH), and the National Museum of African Art (NMAfA).

Beginning in 2009, to increase public interest in and access to the Museum's permanent collection, rotating exhibitions (in four- to five-month intervals) of select items from the collection will be displayed in the John R. Kinard Gallery. Several teaching aids and reference guides will be developed and made available online and in print.

Recognizing the ACM's unique responsibility to youth development within the southeast Washington DC community and beyond, the Museum Academy Program will be expanded from its out-of-school-time programming for children to a multi-tiered program involving both school day and after-school offerings for K-12th grades. There will be a menu of programmatic activities, from cultural enrichment to educational enhancement and career training, which can be tailored to meet the specific needs of each collaborative community partner.

By 2009, the ACM will reinstate the Young Curators program, first established in 1998, using the collections and expertise of the ACM curatorial, research, and archives staff. The Museum will also expand internship opportunities for high school and college students, and will

continue to be an educational and career-building resource for them. The various program components provide direct access to exhibitions, collections, and professional staff of the Museum and the wider Smithsonian Institution. Outreach to high school students seeks to broaden the experiences and horizons of young people through training in cultural documentation and preservation, as well as through docent and practicum opportunities.

In FY 2009, the Museum will continue to expand its regional community network by collaborating directly with partners in preservation and training, and with regional seminars designed to promote community action in cultural heritage preservation.

Another Community Historians Initiative, Family Legacies, will increase the capacity of families to preserve history and traditions through regionally based family history workshops, Web-based resources, and a family history conference. These activities will lead to the development of materials for a future exhibition tentatively titled *Family Reunions: Preserving Traditions*.

The Museum will achieve the Institution's goal of Enhanced Management Excellence by improving customer service and responsiveness through a Web-based, direct feedback site. This website will be specifically designed for local, regional, and national partner institutions, and will provide online reference and consultation for solutions to problems and issues. It will also include links to the related websites of the Museum's cultural partners.

The ACM will maintain substantive relationships with state and local governments through the regional partnership process. Staff will offer training and technical assistance to strengthen local, regional, and national partners' abilities to preserve local heritage. The Museum will increase its public relations efforts directed toward local, regional, national, and international press outlets, and will seek news media coverage in periodicals related to its field.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (8 FTEs and \$693,000)

- Develop new regional exhibition projects focusing on a broader definition of community, as defined by geography, ethnicity, shared interests, professions, culture, etc., in keeping with the revised mission and vision of ACM — to be refined during the Museum's ongoing strategic planning process
- Reinstate the Young Curators program, first established in 1998, using the collections and expertise of the ACM curatorial, research, and

- archives staff. This program will expand internship opportunities for high school and college students, and will be an educational and career-building resource for them
- Expand the ACM Community Historians Initiative, a regional cultural heritage consortium, and bring together a network of community historians, artists, and craftspersons for training as community curators
- Conduct training and provide technical assistance for small and midsize museums to enhance their capacity for community documentation and preservation

Offer compelling, first-class exhibitions at Smithsonian museums and across the country (6 FTEs and \$646,000)

- Present Jubilee, an exhibition on traditional (as well as some not so traditional) celebrations
- Present the Sullivan Family Collection documents, photographs and artifacts tracing five generations
- Prepare The African Presence in Mexico, an exhibition from the Mexican Fine Arts Center Museum in Chicago

Improve the stewardship of national collections (4 FTEs and \$386,000)

- Acquire collections documenting all aspects of various diverse communities
- Create Web access to ACM collections
- Publish an inventory of the Museum's permanent collection
- Develop teaching tools and reference guides based on the resources in the permanent collection
- Present rotating exhibits of select items from the permanent collection

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (2 FTEs and \$241,000)

 Develop responsive strategies to support and connect regional heritage preservation networks

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (1 FTE and \$86,000)

- Align individual performance plan objectives directly with annual organizational objectives
- Increase staff training to support local, regional, and national preservation networks
- Enhance network and information technology skills

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (1 FTE and \$109,000)

 Ensure timely press notification of key exhibitions, programs, and important collections acquisitions

- Work with regional press outlets to provide information and outreach concerning Museum activities with regional collaborators
- Maintain and increase relationships with state and local governments through the regional partnership process intended to strengthen regional partners' capacity to preserve and interpret local heritage and to celebrate and commemorate heritage preservation successes

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of 1 FTE and \$168,000. Included in the increase is \$60,000 for necessary pay for existing staff funded under this line item, and a program increase of 1 FTE and \$108,000 for a museum curator. Details of the program increase are as follows:

• (+ \$108,000, +1 FTE) This increase will fund the salary and benefits for a museum curator who will develop exhibitions based on collections and research, coordinate exhibitions being developed by guest or contributing curators, and facilitate the mounting of leased exhibitions. Currently, curatorial functions are being handled by staff historians and researchers, augmented by contracted guest curators. Adding a staff curator will help the ACM in its quest to chart a new direction and serve a broader audience. This person will be instrumental in helping the ACM define and interpret those things that link people together on various levels. The proposed increase will help the ACM ensure a level of accountability and quality that is expected of all SI exhibitions, research, collections, and related public programs.

If the FY 2009 request is not allowed, the ACM will not be able to achieve the desired level of quality and accountability in its exhibitions and related public programs, greatly hindering the ACM's ability to accomplish SI goals and objectives.

CENTER FOR FOLKLIFE AND CULTURAL HERITAGE

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2007 ESTIMATE	17	2,168	11	1,365	7	2,686	0	294				
FY 2008 ESTIMATE	18	2,218	11	1,308	5	1,437	3	895				
FY 2009 ESTIMATE	18	2,286	11	1,308	5	1,860	0	5				

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Develop and bring first-class educational resources to the nation	4	663	4	685	0	22
Exhibitions						
Offer compelling, first-class exhibitions	9	930	9	969	0	39
Collections						
Improve the stewardship of the national collections	2	190	2	196	0	6
Enhanced Management Excellence						
Security and Safety						
Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers	0	100	0	100	0	0
Information Technology						
Modernize the Institution's information technology systems and infrastructure	1	135	1	135	0	0
Management Operations						
Modernize the Institution's financial management and accounting operations	2	200	2	201	0	1
Total	18	2,218	18	2,286	0	68

BACKGROUND AND CONTEXT

The Center for Folklife and Cultural Heritage conducts research and public programs that promote the understanding and continuity of traditional grass-roots regional, ethnic, tribal, and occupational heritage in the United States and abroad. The Center maintains the Ralph Rinzler Folklife Archives and Collections, a repository of documentary sound recordings, photographic images, and reports deemed a national treasure through the Save America's Treasures program. In addition, the Center produces the annual Smithsonian Folklife Festival on the National Mall every summer — long recognized as the premier event of its kind. The Center produces Smithsonian Folkways Recordings, which include the iconic songs, speeches, and sounds of the American experience among its more than 3,000 published titles. The Center also produces websites, particularly Smithsonian Global Sound, which bring its collections and educational materials to libraries and schools throughout the nation and worldwide. The Center cooperates with federal, state, and international agencies to advance the nation's interest in cultural matters, and produces major national celebration events which in the past have included the National World War II Reunion, the opening of the National Museum of the American Indian, and various programs for the Olympics and Presidential Inaugural festivities.

For FY 2009, the budget request includes an increase of \$68,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

To achieve the Smithsonian's goal of Increased Public Engagement, the Center will continue its annual production of the Smithsonian Folklife Festival on the National Mall. This museum of living cultural heritage is very popular with the public and the media, as well as with the communities served. In 2008, the Festival will feature the Himalayan country of Bhutan, music and culinary traditions of Texas, the occupational traditions of the National Aeronautics and Space Administration (NASA), and the musical traditions of African American and Latino artists. The Festival aims to draw one million visitors in 2008 and reach millions more through webcasts and media coverage. In 2009, plans are to feature the cultural traditions of Wales, Tanzania, and Latino and Latin American music. Traveling exhibitions produced from the Festival, such as Workers of the White House, will tour the nation and reach additional audiences in 2009.

To bring Smithsonian educational resources to the nation, the Center will continue to issue approximately 18 new documentary recordings in CD format (through Smithsonian Folkways Recordings), in 2009, as well as continue to distribute the 3,000 album titles in its back catalogue to

teachers, students, musicians, community members, and the general public. New recordings will feature the musical traditions of diverse communities from across the United States and around the world, and are expected to reflect the high quality that has earned Smithsonian Folkways eight Grammy award nominations, one winner, and other major awards in the past three years. Smithsonian Folkways and other digital collections of the Center will continue to be disseminated through the Smithsonian Global Sound website, both to the general public and (in a more specialized form) to some 350 subscribing libraries throughout the nation and worldwide. Smithsonian Global Sound includes more than 40,000 soundtracks, liner notes, and educational features drawn from Festival performances and the Rinzler and partner archives. Together with related websites, it is expected to reach more than four million visitors.

To apply Smithsonian research to its work and collections, the Center will continue to preserve and catalogue its documentary sound, photographic, and ethnographic collections as well as generate new materials by organizing the research projects necessary to produce the Festival and Smithsonian Folkways Recordings. After moving the Center and the Archive to a new location in late 2006, the Archive reopened to users in FY 2007. To improve its stewardship of the national collections, the Center is requesting support for an additional collection specialist to help catalogue the collection, systematize its organization, and contribute to digitization efforts to make it more accessible to the public, especially via the Internet.

Center curators and research staff will continue to publish books and articles, make professional presentations, and contribute to U.S. cultural heritage policy formulation through consultation with the U.S. Department of State, cooperative work with the United Nations Educational, Scientific and Cultural Organization (UNESCO), and other national and international organizations.

The Center will contribute to the Smithsonian's goal of Enhanced Management Excellence and will continue to help provide for security and safety of people and property outdoors on the National Mall during the Festival period. Festival organizers will work with the National Park Service to acquire outdoor flooring to protect the Mall's turf and tree roots. The Center will also continue to improve its information technology infrastructure for tracking Festival participants and related project budgeting and planning.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Develop and bring first-class educational resources to the nation (4 FTEs and \$685,000)

- Generate more than four million visits to the Center's webpages
- Have Smithsonian Global Sound adopted by more than 350 libraries as a resource for students and teachers
- Produce and distribute at least 18 documentary recordings through Smithsonian Folkways Recordings
- Develop at least 10 new educational features for teachers and students on the Smithsonian Global Sound website

Offer compelling, first-class exhibitions (9 FTEs and \$969,000)

- Produce the annual Folklife Festival on the National Mall
- Generate attendance of one million visitors
- Feature more than 400 musicians and artists from cultural communities important to Americans
- Generate 500 media stories about the Festival
- Generate 90 percent approval ratings by the public for the Festival
- Travel at least two exhibitions generated from the Festival and other projects throughout the United States

Improve the stewardship of the national collections for present and future generations (2 FTEs and \$196,000)

- Generate 400 audio recordings, 200 videotapes, 5,000 images, and at least 100 narrative reports documenting contemporary community-based cultural traditions for preparation of the Festival, Smithsonian Folkways Recordings, and other Center projects
- Process and secure the archival and artifact collections in the new Capital Gallery office space
- Install digitization equipment and facilities, and enhance software to continue digitization processes

Enhanced Management Excellence

Provide world-class protection for Smithsonian facilities, collections, staff, and volunteers (\$100,000)

- Provide enhanced security and safety for the Folklife Festival Modernize the Institution's Information Technology systems and infrastructure (1 FTE and \$135,000)
- Coordinate with the central Smithsonian system and modernize the current systems used for Festival budgeting, planning, and production Modernize the Institution's financial management and accounting operations and to streamline the acquisitions management operations. (2 FTEs and \$201.000)
- Process thousands of financial transactions for the Center

NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS		GENERAL TRUST		l	/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE_	\$000	FTE	\$000	FTE \$000		FTE	\$000				
FY 2007 ESTIMATE	5	2,894	2	381	0	300	0	0				
FY 2008 ESTIMATE	41	12,932	1	383	0	250	0	0				
FY 2009 ESTIMATE	41	14,937	1	388	0	0 100		0				

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; ENHANCED MANAGEMENT EXCELLENCE; AND GREATER FINANCIAL STRENGTH

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	6	1,313	6	1,369	0	56
Exhibitions						
Offer compelling, first-class exhibitions	4	1,731	4	1,746	0	15
Collections						
Improve the stewardship of the national collections	5	3,366	5	4,425	0	1,059
Strengthened Research						
Research						
Ensure the advancement of knowledge in humanities	2	275	2	282	0	7
Enhanced Management Excellence						
Facilities						
Execute an aggressive, long-range revitalization	0	453	0	825	0	372
program and limited construction of new facilities						
Information Technology						
Modernize the Institution's information technology	2	1,067	2	1,383	0	316
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer	10	1,200	10	1,315	0	115
centered and results oriented						
Ensure that the Smithsonian workforce is efficient,	0	124	0	124	0	0
collaborative, committed, innovative, and diverse						
Modernize the Institution's financial management and	4	611	4	612	0	1
accounting operations						

Performance Objective/	FY	2008	FY	2009	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	1	288	1	289	0	1
Greater Financial Strength						
Secure the financial resources needed to carry out the Institution's mission	7	2,504	7	2,567	0	63
Total	41	12,9 32	41	14,937	0	2,005

BACKGROUND AND CONTEXT

The National Museum of African American History and Culture (NMAAHC) was established to document, collect, conserve, interpret, and display the historical and cultural experiences and achievements of Americans of African descent. When completed, the NMAAHC will provide a national meeting place for all to learn about the history and culture of African Americans and their contributions to every aspect of American life. This effort will encompass the period of slavery, the era of reconstruction, the Harlem Renaissance, the civil rights movement, and other periods of the African American diaspora. As a truly national institution whose vision is to be a place that has meaning for all citizens, the NMAAHC will use the African American experience as a lens into what it means to be an American.

The goal of the Smithsonian Institution is to open NMAAHC on the National Mall within 10 years. It is anticipated that, if pre-design and programming phases for the building are completed in the summer of 2008, design work will be completed in the fall of 2011 and construction completed in 2016, allowing for an opening soon thereafter.

For FY 2009, the budget estimate includes an increase of \$2,005,000. Included is a programmatic increase of \$1,300,000 to expand and enhance outreach through the establishment of strategic collaborations and partnerships and the development of traveling exhibition; to identify, acquire, document, and conserve the collection; to continue developing and refining plans for exhibitions and public and education programs in order to ensure that program planning decisions are interwoven with plans for the design of both the interior and exterior of the future Museum building; and to strengthen the capacity for administration and information technology.

The FY 2009 budget estimate also includes an increase of \$333,000 for necessary pay for existing staff funded under this line item, and \$372,000 to support the rental of space for collections and annual rent increase for current leased space, both of which are justified in the Mandatory Costs section. As authorized by Public Law 108-184, these funds are requested to remain available until expended.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, activities will include efforts to build alliances and collaborative partnerships within the Smithsonian Institution, as well as with African American organizations and other national organizations, to help generate support to build and develop the Museum, leverage resources, and share ideas. Because public awareness of the Museum is limited, the NMAAHC has embarked on a long-term campaign of visibility to broaden knowledge through print and electronic media, and through national programs to tour collections and exhibitions that engage and inspire audiences throughout the nation.

Collaborative initiatives and activities to increase public awareness are being planned as follows:

- The NMAAHC is collaborating with Atlanta's High Museum of Art on two exhibitions and a catalogue. The exhibitions will examine photographic records from the civil rights movement, with an accompanying show of works by contemporary artists responding to the civil rights images. A related catalogue will feature illustrations and documentation of the project, with an essay by the curator and a leading cultural historian. The exhibition Road to Freedom tracks an historic moment that continues to shape contemporary thought and culture. To further the dialogue generated by the images included in Road to Freedom, while renewing awareness of the revolutionary actions they record, the High Museum will invite a group of influential contemporary artists to create new work in response to the photographs and artifacts included in that exhibition.
- Color Pictures: Visual Culture and the Struggle for Civil Rights, a
 collaborative project with the Center for Art and Visual Culture at the
 University of Maryland in Baltimore, represents the first comprehensive look
 at the role played by visual representation. Using images from both high and
 popular culture, the exhibition and book will track the ways in which these
 images perpetuated racial stereotypes, altered attitudes and beliefs,
 fostered a sense of black pride and accomplishment, and transformed the
 negative view of African Americans in the culture at large.
- In FY 2009, the NMAAHC will collaborate with the National Museum of Natural History (NMNH) and the National Museum of the American Indian (NMAI) to produce programming for several exhibitions, including Written in Bone at NMNH, Shared Identity at NMAI, and the groundbreaking exhibition produced by the Minnesota Science Center, Race: Are We So Different at NMNH.

- The NMAAHC will collaborate with museums around the Mall to bring the touring exhibition *Transcendent Traditions: Baskets of Two Continents* to the Smithsonian. The exhibition highlights the remarkable beauty of coiled basketry, and features more than 100 baskets from diverse regions of Africa, the low country of South Carolina, and Georgia. The exhibition is being organized by the Museum of African Art in New York City.
- Programmatic collaborations include the National Zoological Park's (NZP) annual African American Family Celebration that includes: documenting family objects and teaching visitors to preserve their family documents, photographs, and textiles; a presentation relating to the to the local African American community and an award to a local African American who has given outstanding service to the NZP; an oral history program being held in conjunction with the National Children's Museum; school programming and performances with Arena Stage and the Washington Performing Arts Society; and annual programming with the National Council of Negro Women's Black Family Reunion.
- In FY 2009, the NMAAHC will continue its collaboration with the National Portrait Gallery (NPG) and the Smithsonian Institution Traveling Exhibition Service (SITES) to create a touring version of *Let Your Motto Be Resistance: African American Portraits*. The exhibition, which opened to great acclaim in New York City in 2007, will travel to 12 venues around the country. The first venue is the California African American Museum in Los Angeles. Curriculum guides for elementary, middle and high school students will be made available to the host museums, along with a listing of art, performance, and film programs.
- The NMAAHC will continue its collaboration with the Center for Folklife and Cultural Heritage to produce the 2009 Smithsonian Folklife Festival.
- Developed in partnership with International Business Machines (IBM) in FY 2007, the Museum on the Web encourages visitors to share their knowledge, stories, and creativity building community and enabling the public to participate in celebrating the culture and building the Museum. IBM provided this major in-kind contribution to support this vital program. In FY 2009, the NMAAHC will continue to develop and enhance this tool to extend the reach of the Museum's vision and programs to a global audience. During this time, the NMAAHC will be engaged in the second phase of the website's development adding more functions, interactive components, and greater capacities for various online media and social networking. Functionalities of the site will include, but are not limited to, virtual tours of exhibitions, online participation, visitor surveys, and the ability to view updates on the progress of design and construction of the building. The Museum on the Web will play a significant role in the

Museum's ability to raise funds, build a constituency, identify collections, and become a physical presence on the National Mall.

- The NMAAHC will continue its National Collections Initiative project, "Save Our African American Treasures." The Museum will continue engaging the American public in discovering, collecting, preserving, and sharing the material culture of African American heritage through a series of programs and collaborations with museums and historical institutions in five key cities: New York, Los Angeles, Atlanta, Chicago, and Washington, DC. The goals of the "Save Our African American Treasures" initiative are to:
 - demonstrate that the Museum exists now
 - cultivate and strengthen national partnerships
 - o document and identify potential Museum collections
 - assist the public in identifying and preserving objects of historic and cultural significance
 - o provide teachers with hands-on curriculum materials
 - o collect oral histories and Memory Book entries
- Through continued development of symposia, workshops, and forums, the Museum will cultivate strong partnerships, gain significant visibility, and enable communities across the country to feel a sense of ownership in the success of this national Museum. These programs will be designed to inspire the American people, educate children, equip teachers, honor elders, excite the Museum's audience, inform a new generation, instill pride, connect people with their heritage, and ensure that access to a rich history is available to future generations.

The identification of potential collections will continue as an ongoing pursuit and the Museum will accept donated collections and purchase collections on a systematic basis (for example, as they may relate to future planned exhibitions), and on an opportunistic basis (as significant African American historical items may surface at the whim of benevolent donors and benefactors).

To achieve the goal of Strengthened Research, the NMAAHC will continue to emphasize the development of educational materials, publications, public programs, collections, and exhibitions based on scholarly research. In addition, the NMAAHC will continue to collaborate with other Smithsonian units and external organizations to produce content—rich programs and exhibitions.

The Museum will also continue to enhance its management and administrative infrastructure by developing its operating organizational structure and making revisions as necessary to accomplish program goals. Staff will develop estimates of future staffing, space, and storage needs, and will prepare operating budgets and plans accordingly. Information technology needs will be identified, and required hardware and software installed, to provide an efficient, networked

technology infrastructure, including the enhancement and maintenance of the Museum's website.

To secure the resources needed to successfully build and develop the Museum, the NMAAHC will use its federal fundraising resources to develop and nurture relationships with potential significant donors, build a reliable base of regular donors, and use advanced fundraising techniques to identify and cultivate sources of new and larger donations. Enacting legislation mandates that the Smithsonian Institution pay 50 percent of building construction costs with appropriated federal funds and 50 percent with non-federal resources. Therefore, substantial cultivation of donors, combined with substantial activities in public relations, will be required to achieve and sustain fundraising success in the future.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (6 FTEs and \$1,369,000)

- Observe the 40th anniversary of the tumultuous year of 1968, the year
 of the Reverend Martin Luther King's assassination and subsequent
 urban unrest, of Robert Kennedy's assassination and the Democratic and
 Republican conventions of that election year, with a scholarly
 conference in the fall of 2008. The conference will be planned in
 cooperation with the Museum's Scholarly Advisory Committee, and will
 involve colleagues from universities in the metropolitan Washington, DC
 area
- Plan a Smithsonian Folklife Festival Program with the Smithsonian's Center for Folklife and Cultural Heritage, which will present cultural traditions from the range of communities of African descent in the Western hemisphere
- Develop student materials honoring the anniversary of Marian Anderson's historic concert
- Continue to establish affiliations/collaborative agreements with museums, educational institutions, and foundations
- Continue preliminary concepts/designs for public programs
- Continue to develop a national membership program
- Continue to develop concepts/proposals for student and teacher programs
- Continue to mentor interns, Fellows and professional staff
- Continue to engage volunteers at various levels of the organization Offer compelling, first-class exhibitions (4 FTEs and \$1,746,000)
- Fund the creation of a new gallery space at the National Museum of American History (NMAH) for the display of NMAAHC exhibitions and programming. This new gallery will be approximately 3,000 square feet, and will be located in a highly visible area of the Museum's second floor. The gallery will be designed to accommodate a wide range of changing exhibitions. The first exhibition will open in September 2008

- Continue to develop concepts/designs for exhibitions
- Increase curatorial support

Improve the stewardship of the national collections (5 FTEs and \$4,425,000)

- Implement process to ensure that objects receive required conservation prior to being moved into renovated, climate-controlled storage
- Continue to identify and acquire (through gift/purchase) desired collection items
- Continue to develop a collections management strategy
- Continue to develop a collections information system (CIS)

Strengthened Research

Ensure the advancement of knowledge in the humanities (2 FTEs and \$282,000)

- Produce at least two recordings, one of existing materials from archival recordings and one of new music or spoken—word narratives. These will appear as part of the new African American Legacy Series
- Continue to collaborate with Smithsonian Folkways Recordings to repackage existing individual American music and spoken-word recordings associated with African American history

Enhanced Management Excellence

Execute an aggressive, long-range revitalization program and limited construction of new facilities (\$825,000)

- Occupy and pay for rental space for collections housing and processing
- Occupy and pay for expanded temporary rental space in a timely and efficient manner

Modernize the Institution's information technology systems and infrastructure (2 FTEs and \$1,383,000)

- Support the Institution's efforts to improve its technology infrastructure through use of a consultant Webmaster and arranging for staff training
- Continue to implement internal hardware/software operating requirements
- Continue to expand and develop existing website

Strengthen an institutional culture that is customer centered and results oriented (10 FTEs and \$1,315,000)

- Continue to refine organizational structure
- Continue to improve internal operations through analysis of programs

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (\$124,000)

 Continue to provide comprehensive training to improve professional skills of staff

Modernize the Institution's financial management and accounting operations (4 FTEs and \$612,000)

 Prepare purchase orders, personnel actions, and fiscal and contractual documents in a timely and accurate manner Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (1 FTE and \$289,000)

Continue to develop a national visibility campaign that captures public attention through various communications and public relations activities. This campaign will be designed to enhance fund raising, membership and collections building, educational programming, as well as to increase audiences for the Museum's inaugural traveling exhibition. This campaign will be designed and implemented in collaboration with other Smithsonian divisions including Public Affairs and Development. A keen focus will be put on developing media coverage by establishing partnerships with national organizations

Greater Financial Strength

Secure the financial resources needed to carry out the Institution's mission (7 FTEs and \$2,567,000)

- Continue to set goals and priorities for obtaining substantially increased private donations
- Continue to schedule one-on-one activities with several major donors
- Continue to conduct special fundraising events for donors
- Continue to manage an ongoing and proactive public relations and media program to engage donors, corporations, and the media, and to increase their enthusiasm and support for the Museum's mission and programs

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of \$2,005,000. Included in the increase is \$333,000 for necessary pay for existing staff funded under this line item; \$362,000 to support the rental of space for collections; \$10,000 to support annual rent increase for current leased space; and \$1,300,000 to support collections acquisition and information technology enhancements. Details of the increases are as follows:

(+ \$362,000) This increase will support the rental of space for collections housing and collections processing. As the NMAAHC moves ahead with plans and operations geared to the opening of the Museum on the Mall, it is crucial that it have resources to provide adequate and appropriate space to maintain the planned collections. This will entail the availability of sufficient museum-standard storage space to house the expanding collection activities of the Museum. This space should be accessible for staff and visiting scholars as the program and developmental activities of the Museum call for the utilization of these artifacts in efforts to support research, care and preservation, and public outreach in anticipation of the opening of the Museum.

- (+ \$10,000) This increase will provide for annual rent increases in accordance with the terms of current lease contracts.
- (+ \$1,000,000) This increase will support acquisition costs, encompassing purchase, transfer, and conservation treatments of collections, including a textile collection and a photograph collection. As a new Museum without the benefit of a large base collection, efforts in the curatorial area are particularly key to building a national cultural and historical institution. There is a need to initiate and implement a program in the area of collections management, including the establishment of sound collections, registration, and acquisitions policies and procedures based on accepted museum practices. Through "Save Our African American Treasures," a National Collections Initiative project, the Museum will identify potential collections and assist the public in identifying and preserving objects of historic and cultural significance. These are key start-up functions intended to develop support and interest in the Museum whose visions is to be a place that has meaning for all citizens.
- (+ \$300,000) This increase is requested to continue phase two of the development of this Museum on the Web. The NMAAHC will be adding new functionalities, especially more interactive components and greater capacities for various online media. The NMAAHC will be absorbing the direct costs of updating and maintaining the website, the hiring of a consultant webmaster, the fees for various Internet services and software, and staff training. The overall goal is to find innovative ways to use technology to extend the reach of Museum programming to a global audience through development of a comprehensive website using state-of-the-art software. This will enable the Museum to move forward, test ideas, and experiment with various mechanisms of engagement, all within the context of making manifest the Museum's vision to the public at large.

If the FY 2009 increase request is not allowed, the Smithsonian's ability to continue planning and development of the NMAAHC will be hindered. New funding is critical to continue planning, outreach, fund raising, and development of an infrastructure. Future increases will be necessary to finish developing the NMAAHC. At this developmental stage of the newest of the SI family of museums, it is crucial that the Museum maintain a level of momentum to carry its mission forward, maintain and enhance a public presence, and strive to reach realistic benchmarks in the establishment of a building on the Mall, as well as a public presence, signifying the rich and vibrant historical and cultural role and contributions of African Americans. It is critical that the infrastructure established now be supported and enhanced in order to establish and operate yet another successful cultural museum on the National Mall.

NATIONAL MUSEUM OF AMERICAN HISTORY, KENNETH E. BEHRING CENTER

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000	
FY 2007 ESTIMATE	186	20,708	11	1,794	42	12,755	23	3,019	
FY 2008 ESTIMATE	190	21,282	9	1,114	38	19,754	20	3,332	
FY 2009 ESTIMATE	203	23,928	13	1,709	35	8,054	20	3,088	

Note: Operating resources include the National Postal Museum

NATIONAL MUSEUM OF AMERICAN HISTORY, KENNETH E. BEHRING CENTER

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						1
Engage and inspire diverse audiences	33	3,150	33	3,297	0	147
Exhibitions						
Offer compelling, first-class exhibitions	58	4,520	58	5,031	0	511
Collections		·				
Improve the stewardship of the national collections	49	7,090	62	8,863	13	1,773
Strengthened Research						
Research						
Ensure the advancement of knowledge in the	28	3,910	28	4,035	0	125
humanities						
Enhanced Management Excellence						
Facilities						
Improve the overall cleanliness and efficient	2	370	2	377	0	7
operation of Smithsonian facilities		370		377		
Information Technology						
Modernize the Institution's information technology	9	1,090	9	1,127	0	37
systems and infrastructure	3	1,030	J	1,127		J,
Management Operations						
Ensure that the workforce is efficient, collaborative,	4	430	4	446	0	16
committed, innovative, and diverse		450		740		
Total	183	20,560	196	23,176	13	2,616

BACKGROUND AND CONTEXT

The National Museum of American History (NMAH), Kenneth E. Behring Center, works to inspire a broader understanding of our nation and its people through exhibitions, public programs, research, and collections activity. The NMAH is the only Museum with the mandate to tell the entire story of America, from the early contact period through the 21st century. The Museum collects and preserves more than three million artifacts — from the original Star-Spangled Banner and Abraham Lincoln's top hat to Dizzy Gillespie's angled trumpet and Dorothy's ruby slippers from *The Wizard of Oz*.

Generations of visitors — three million on site each year, making it the most-visited history museum in the world, with millions more online — have explored the Museum's halls, making their own personal discoveries. The NMAH has something for everyone, presenting the triumphs and tragedies, explorations and innovations, and treasures and curiosities that animate the American story. The Museum creates learning opportunities, stimulates imaginations, and presents challenging ideas about our country's past.

For FY 2009, the budget request includes an increase of 13 FTEs and \$2,616,000. Included in the increase are \$818,000 for necessary pay for existing staff funded under this line item and \$609,000 for off-site storage leases, both of which are also justified in the Mandatory Costs section of this budget submission; a program increase of 5 FTEs and \$420,000 to enhance staffing for Collections Care and 8 FTEs and \$519,000 for the NMAH Collections Information System (justified here and under the Institution-wide Collections Initiative section of this budget); and \$250,000 to provide much-needed resources for exhibition maintenance.

MEANS AND STRATEGY

The Museum will have reopened in the summer of 2008 to reveal the new *Star-Spangled Banner Gallery*, an architectural transformation of the Museum's central core, and the updating of the Museum's infrastructure. The NMAH will take full advantage of the renovated exhibition and public spaces to offer visitors a stimulating and dynamic cultural environment. The renovation will revitalize the presentation of the Museum's unrivaled collections and ensure that the NMAH is a source of national pride and inspiration to visitors, researchers, and employees.

The Star-Spangled Banner will be displayed at the center of the Museum in a state-of-the-art gallery so that it may be preserved and enjoyed by generations to come. Along with ensuring the long-term preservation of this cherished artifact, the exhibition will present the history of the flag and evoke its significance as a national symbol. This permanent exhibition

represents the Smithsonian's greatest effort to meet the dual challenges of preserving the Star-Spangled Banner and communicating its history and significance to visitors.

The Museum's most visible architectural changes will be the central atrium and skylight, a grand staircase connecting the first and second floors, and 10-foot-high artifact walls on the first and second floors, showcasing the breadth of the Museum's three million objects. Additionally, every visitor's Museum experience will be greatly enhanced by a new exhibition gallery for the Lemelson Center for the Study of Invention and Innovation, new retail operations and Visitor Welcome Center, improved signage and increased sightlines, and the reopening of previously closed exhibitions.

NMAH Staff will continue to plan and design future exhibits and programs, work on reopening exhibitions, conduct programs and performances, develop traveling exhibitions, acquire new collections, conduct research, and extend the scope of the Museum through new and expanding electronic outreach initiatives. The new program series for families and adults will feature living history, live musical performances (including Smithsonian Jazz Masterworks Orchestra and the Smithsonian Chamber Music Society), and hands-on experiences. Featured programs will include African American Culture, Latino History and Culture, and Jazz Appreciation Month. The Museum's popular website will be expanded and upgraded with new features on exhibitions, collections, and public programs. The new Thinkfinity initiative will provide innovative and stimulating resources for teachers, students and after-school audiences.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science and culture (33 FTEs and \$3,297,000)

- Develop a new long-term exhibition, With Liberty and Justice for All, on the history of civil rights
- Develop traveling exhibitions based on the Scurlock African
 American photography collection, the Bracero History Program, and
 the Museum's Hip-Hop initiative
- Integrate the stories of diverse Americans in all new exhibitions, especially *On the Water* and *American Dreams: An Introduction to American History*
- Launch new engaging programs for visiting school groups,
 featuring living history interpreters and hands-on activity carts
- Present new seasonal programs, including family activities and events for the Smithsonian heritage months

- Continue planning for the new Lemelson and Education Centers
- Integrate new visitor service policies into all Museum activities
- Launch electronic initiatives for teachers, students, and families
- Present the Smithsonian's Jazz Masterworks Orchestra's new concert season, featuring a signature holiday event

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (58 FTEs and \$5,031,000)

- Open new long-term exhibitions, On the Water and American Dreams: An Introduction to American History
- Open a temporary exhibition for the Abraham Lincoln bicentennial
- Continue development of new exhibitions on The American Presidency, First Ladies, and America Plays: Music, Sports and Entertainment — projected to open in 2012
- Continue working with the National Air and Space Museum (NASM) to develop Finding Time and Place: From Chronometers to GPS — projected to open in 2010
- Develop new long-term exhibitions on American Enterprise
 (business history) and With Liberty and Justice for All (about the
 history of civil rights in the United States)
- Develop traveling exhibitions based on the Scurlock African American photography collection, the Bracero History Program, and the Museum's Hip-Hop initiative
- Begin planning for the Civil War Sesquicentennial (2011–2015) Improve the stewardship of the national collections for present and future generations (62 FTEs and \$8,863,000)
- Implement appropriate collections preservation and documentation procedures to ensure that NMAH collections are cared for and are physically accessible to the broadest possible audience, internal and external
- Implement appropriate collections registration and documentation procedures to ensure that NMAH collections are legally and contextually documented, and that related information is accessible to the broadest possible audience, internal and external
- Implement recommendations from the NMAH Collections Information Systems (CIS) Data Analysis Project
- Produce two collections groups for the NMAH website

Strengthened Research

Ensure the advancement of knowledge in the humanities through original research (28 FTEs and \$4,035,000)

- Continue research on new long-term exhibitions on *American Enterprise* (business history) and *With Liberty and Justice for All* (about the history of civil rights in the United States)
- Complete research on a book to accompany the Abraham Lincoln bicentennial exhibition

 Complete research on websites for all exhibitions scheduled to open upon completion of the renovation

Enhanced Management Excellence

Improve the overall cleanliness and efficient operation of Smithsonian facilities (2 FTEs and \$377,000)

- Integrate the Comprehensive Facilities Development Plan with the Smithsonian's Capital Facilities Project Planning system, as well as with the Smithsonian's global space planning document, to ensure the comprehensive integration of collections storage needs and completion of ongoing public space renewal projects
- Reduce work-related accidents and illnesses by at least five percent Modernize the Institution's information technology (IT) systems and infrastructure (9 FTEs and \$1,127,000)
- Provide design, implementation, maintenance, security, and administrative support for the Museum's information and exhibit technology infrastructure
- Install the Museum's public spaces network cable plant as part of the public spaces renovation program
- Add digital content to the Museum's collections
- Expand electronic file storage to provide adequate capacity for Museum data
- Examine and enhance Museum data processing systems to enable and leverage new and existing business processes

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (4 FTEs and \$446,000)

- Maximize use of the electronic systems for travel and accountable property management
- Complete at least three recruiting trips to minority colleges/universities
- Advertise 80 percent of open staff positions above grade GS-13 in media which will normally guarantee a widely diverse population of candidates
- Ensure that 100 percent of staff members attend diversity training and other SI-mandated training

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget request includes an increase of 13 FTEs and \$2,616,000. Included in the increase are \$818,000 for necessary pay for existing staff funded under this line item and \$609,000 for off-site storage leases, both of which are also justified in the Mandatory Costs section of this budget submission; a program increase of 5 FTEs and \$420,000 to enhance staffing for Collections Care and 8 FTEs and \$519,000 for the NMAH Collections Information System (justified here and under the Institution-wide Collections Initiative section of this budget); and \$250,000 to provide much-

needed resources for exhibition maintenance. Details of the program increases are as follows:

- Collections Care (+\$420,000, +5 FTEs) This increase supports the Institution's Collections Care Initiative and contributes to the goal of improving the stewardship of the national collections for present and future generations. The funds will be used to hire five preservation staff that are needed to meet the basic collections care requirements for the stability, protection, and accessibility of the Museum's collections. These additional preservation staff will work with existing staff to 1) stabilize artifacts through conservation treatment and collections maintenance; 2) improve artifact housing and upgrade collection storage to appropriately protect artifacts and improve safe physical access to them; 3) work at the collections level, as well as with individual artifacts, to maximize the efficient use of limited personnel and financial resources help to improve the care of larger groups of objects; 4) improve the overall state of preservation of the collection to stimulate and enhance access to the collections for staff, researchers, and the general public; and, 5) create preservation conditions for the artifacts which are favorable for maximizing storage space and maintaining inventory control and accountability. Without this additional funding, the artifacts will remain at high risk of damage or loss, ongoing deterioration will continue unmitigated, and the risk to the Museum's collection will grow exponentially over time.
- Staff to Support NMAH CIS (+\$519,000, +8 FTEs) The increase provides the NMAH with funds to hire six documentation specialists and two imaging specialists for the Museum's Collections Documentation Program. A recent analysis has determined that the data in the Museum's collection information system is inconsistent and unreliable due to the lack of sufficient resources. The requested increase will bring NMAH collections documentation to an acceptable minimum level for sound and responsible collections stewardship by improving collections data quality, quantity, and accessibility. The addition to the CIS program is vital to facilitate the exchange of information about collections management work and processes, and to increase work efficiencies by providing a centralized electronic system.
- Off-site Storage (+ \$609,000) There is a permanent, and mandatory need to lease space to properly store the Museum's collection of more than three million objects. The collections currently stored at the Cinderbed Road facility include objects removed from the Road, Rail, Power Machinery, and Electricity Halls; the central core exhibits Material World; Palm Court; Headsville Post Office; Agriculture Hall; Graphic Arts Hall; Hall of American Maritime Enterprises; and the

recently acquired CIGNA Collection — a large collection of firefighting and maritime objects donated by the CIGNA insurance company that recently closed its museum. The annual lease payments for either the existing Cinderbed Road or future off-site facilities exceed the available financial resources of the Museum. Lease payments were originally planned to come from permanent exhibition budgets, however, these funds have been exhausted and there is no public or private Museum funding stream for off-site storage.

• Exhibition Maintenance (+\$250,000) — This increase directly supports the Institution's Increased Public Engagement goal to offer compelling, first-class exhibitions at Smithsonian museums and across the nation. The requested budget increase will provide contract support to ensure that the Museum's exhibitions are clean and in repair, the media components are fully operational and up to date, and the exhibition content is accurate and current. Signature exhibitions such as America on the Move, The Price of Freedom, Star-Spangled Banner Gallery, and Julia Child's Kitchen are examples of exhibitions that require periodic upgrades to equipment and display structures to maintain the media-rich environments that NMAH visitor surveys have shown the public expects and finds engaging. The impact of reopening the Museum will be greatly diminished if the NMAH cannot provide its visitors with a quality learning experience.

If the FY 2009 increase request for Collections Care is not allowed, the National Museum of American History's Preservation Program will fall further behind in its efforts to adequately protect the Museum's collections. The artifacts will remain at high risk of damage and loss, ongoing deterioration will continue unmitigated, and the risk to the collection will increase exponentially over time. The Museum and the Institution will be vulnerable to charges of poor trusteeship in their roles as caretakers of the nation's collections. Failure to approve the increase request for offsite storage will result in the degradation of current and future exhibitions. Providing physical storage of the collection is a basic component of the stewardship of the NMAH artifacts, which cannot be neglected. If the Exhibit Maintenance increase is not approved, NMAH will not be able to maintain exhibitions at the level that SI and the public demands and broken audiovisual and video equipment will not be replaced.

NATIONAL POSTAL MUSEUM

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY 2008		FY 2009		Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Exhibitions						
Offer compelling, first-class exhibitions	2	171	2	176	0	5
Collections						
Improve the stewardship of the national collections	5	526	5	551	0	25
Enhanced Management Excellence						
Information Technology						
Modernize the Institution's information technology	0	25	0	25	0	0
systems and infrastructure						
Total	7	722	7	752	0	30

BACKGROUND AND CONTEXT

The National Postal Museum (NPM) was created to preserve, interpret, and exhibit historical stamps and postal objects. The Museum dedicates its resources to developing new and innovative ways to explore the vital role of the postal system in American life, and to making its vast philatelic and postal collections available to all.

In addition to the many activities and programs that are completed throughout the year, the NPM is focused on several major initiatives aimed at increasing visitation to both the Museum and its website. These initiatives include an 18,000-square-foot expansion of the Museum's exhibit space; the creation of a new Philatelic Center of Excellence honoring the U.S. Stamp Collection; the design and fabrication of seven new history galleries; and continued upgrades and enhancements to the increasingly popular Webbased, online collection information system. The success of these long-term projects will require the use of non-federal resources made available to the Museum.

For FY 2009, the budget request includes an increase of \$30,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

The National Postal Museum's primary activities are aimed at meeting the goal of Increased Public Engagement through new exhibitions and improved stewardship of the national collections. In FY 2009, the NPM will exhibit the second portion of the Hirzel collection, one of the premier collections of classic U.S. philately. Similar to the Miller exhibit, the Hirzel exhibit is a two-year project that is expected to attract a strong following in the philatelic community, as well as in the general public. The Museum's plan to expand its exhibition space will serve as a major attraction for new and current visitors. Planning efforts are currently under way to assess the space requirements needed for the design of a newly renovated National Philatelic Gallery. The new gallery will be a permanent home for the National Collection exhibition, the Museum's largest and most comprehensive philatelic display.

In FY 2009, planning and design will begin on the Systems at Work gallery, the first of seven history galleries. The exhibit will explore the history and development of the expanding postal network, focusing on the innovative communication techniques used to move the mail. In the future, history galleries will be made up of seven different exhibits which will explore the history of America's postal service from the Colonial period to the present. Although most of the galleries are in the planning stages, research will begin on the Portrait of the Postal Worker gallery in FY 2009. The exhibit will highlight the history of America's postal employees and their jobs. Postal employees and their families will be invited to share their stories through an interactive memory book that will be available online as well as in the gallery.

The Museum's federal resources are primarily dedicated to improving the stewardship of the national collections for present and future generations. In FY 2009, the NPM will continue to process new acquisitions, which includes digitizing and cataloguing these entries using the automated collections information system (CIS). Ongoing efforts to reduce the existing backlog of accessions will also continue. A major initiative to improve accessibility to off-site collections will remain a Museum priority. In FY 2007, a significant portion of postal history objects were moved to the Curseen-Morris postal facility. In FY 2008, the NPM transported several postal vehicles to various postal facilities for display and storage. In FY 2009, resources will be used to survey, inventory, catalogue and scan these off-site collections, as well as open them to additional conservation and exhibition opportunities.

The Museum's online CIS, Arago, has enabled the public to view the national collection in the privacy of their homes. Implementation of the Webbased system has increased online visitation 40 percent. State-of-the-art technical enhancements to the system are planned for FY 2009, and more than 500 enhanced collection records and images will be added. Object descriptions

and related information will continue to accompany each new collection record and image. The NPM remains dedicated to increasing the number of collection records and digital images added to its collections management systems.

Additional resources will be directed toward maintaining NPM's information technology (IT) systems and infrastructure requirements to meet the goal of Enhanced Management Excellence. The Museum will continue to replace network hardware and related computer systems that support a host of programmatic and exhibition needs required to modernize IT systems.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (2 FTEs and \$176,000)

- Redesign and modify requirements for the Systems at Work exhibit,
 the first of seven new permanent postal history exhibits
- Finalize exhibit requirements and begin installation on phase two of the Hirzel Philatelic exhibit
- Plan and design the Portrait of a Postal Worker exhibit
- Plan for major renovation and expansion of the National Philatelic Gallery, with consideration for additional new space within the Postal Square building

Improve the stewardship of the national collections for present and future generations (5 FTEs and \$551,000)

- Continue to accession, catalogue, and scan new acquisitions and legacy collections, using the automated CIS, ARAGO
- Continue to clean and enhance legacy collection records and update storage location information
- Add 500 enhanced collection records and images to Arago, the Museum's online collections information system
- Complete the cyclical collections inventory
- Continue to survey, inventory, catalogue, and scan off-site collections
- Improve accessibility to off-site collections
- Create or enhance object and media records for significant philatelic materials selected for the National Collection, a new exhibit project
- Continue to identify, rehouse, and treat at-risk collections
- Continue to process incoming object loans for new exhibitions and to make the national philatelic collection available to other museums

Enhanced Management Excellence

Modernize the Institution's Information Technology (IT) systems and infrastructure (\$25,000)

- Maintain network hardware and related computer systems
- Maintain software requirements for the automated CIS

NATIONAL MUSEUM OF THE AMERICAN INDIAN

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000	
FY 2007 ESTIMATE	263	31,213	4	1,475	18	5,712	0	27	
FY 2008 ESTIMATE	283	32,000	6	2,029	22	6,037	0	20	
FY 2009 ESTIMATE	283	32,952	6	2,029	22	6,037	0	20	

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Cha	ange
Performance Category	FTEs	\$000	FTEs	\$000	FTEs	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	58	5,411	58	5,583	0	172
Provide reference services and	35	4,279	35	4,418	0	139
information to the public						
Exhibitions						
Offer compelling, first-class	41	4,852	41	4,971	0	119
_exhibitions						
Collections						
Improve the stewardship of the	37	4,104	37	4,231	0	127
national collections						
Strengthened Research						
Research						
Ensure the advancement of	20	2,786	20	2,881	0	95
knowledge in the humanities						
Enhanced Management Excellence						
Facilities						
Improve the overall cleanliness and	14	1,998	14	2,025	0	27
efficient operation of Smithsonian						
facilities		_				
Information Technology						
Modernize the Institution's	25	3,612	25	3,712	0	100
information technology systems and						
infrastructure						

Performance Objective/	FY	2008	FY :	2009	Cha	ange
Performance Category	FTEs	\$000	FTEs	\$000	FTEs	\$000
Management Operations						
Strengthen an institutional culture	34	3,155	34	3,261	0	106
that is customer centered and						
results oriented						
Ensure that the Smithsonian	4	384	4	399	0	15
workforce is efficient, collaborative,						
committed, innovative, and diverse						
Modernize the Institution's financial	7	745	7	771	0	26
management and accounting	1					
operations						
Enhance the reputation of the	5	411	5	426	0	15
Smithsonian by maintaining good						
relations with the news media and						
with federal, state, and local						
governments			_			_
Modernize and streamline the	3	263	3	274	0	11
Institution's acquisitions						
management operations						
Total	283	32,000	283	32,952	0	952

BACKGROUND AND CONTEXT

The National Museum of the American Indian (NMAI) is committed to advancing knowledge and understanding of the Native cultures of the Western hemisphere — past, present, and future — through partnerships with Native people and others. The Museum works to support the continuance of culture, traditional values, and transitions in contemporary Native life.

To achieve the goal of Increased Public Engagement, NMAI will focus its resources to support community-curated exhibits, and to present contemporary works of art to the public in the changing gallery in the National Mall Museum. These exhibits, along with significant educational and public programming, are expected to attract 1.5 million visitors annually. The offering of crafts demonstrations, educational presentations, seminars, and symposia throughout the building will ensure a meaningful visitor experience. Web content based on these programs will reach distant "virtual visitors" to the Museum, who may not be able to come to the East Coast but can avail themselves of technology and written materials developed at NMAI. Through its community-curated exhibitions and public programming, the Museum continues to present the contemporary voices of Native peoples to educate and inform the public while countering widespread stereotypes.

The FY 2009 budget estimate includes an increase of \$952,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, NMAI is directing its resources to: 1) activities that will result in increased visitation to the Mall Museum, the Cultural Resources Center in Suitland, Maryland, and the George Gustav Heye Center (GGHC) in New York City; 2) public programming that will encompass the indigenous peoples of the Western hemisphere (as mandated in the NMAI legislation) and will demonstrate the presence of contemporary Native peoples today; and 3) outreach to Native communities, tribes, and organizations, through technology, internships, seminars, and symposia.

Engagement efforts will continue to bring the Museum and its resources to audiences through media such as radio and the Web, and via innovative outreach and training programs. These contacts will link external communities to audiences at the Mall Museum through technology and involvement in planning and programming. The Film and Video Center will present the variety and excellence of Native productions at both the Mall Museum and the GGHC.

In education, funding will continue for planning and operating programs seven days a week, including interpretive activities, cultural arts performances, demonstrations, and resource materials about Native American history and cultural heritage. The resource centers will continue to provide daily information about Native peoples of the Western hemisphere, including Hawaii, thereby providing opportunities to correct stereotyping and expand knowledge. Various tribal educational resources, including curricula, will be made available to teachers in the metropolitan Washington, DC area.

In addition, staff will make research, film, video, audio, and photographic content developed for Mall exhibitions broadly available both in the Mall Museum and to Native American communities and public audiences, through the Web, printed materials, and collaborative activities with other groups and organizations.

NMAI staff will continue to oversee group and school tour programs, and volunteers, and direct presentations in galleries and all public space and program areas to ensure maximum use of all the educational resources of the building to enhance the visitor experience.

The goal of Enhanced Management Excellence will be addressed by efficiently and economically designating resources to meet the mission of the Museum, implementing the goals of the Smithsonian Institution, and enhancing the collection through the acquisition of contemporary works.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (58 FTEs and \$5,583,000)

- Continue to develop and administer a community services program plan and involve 10 –15 new communities in program activities
- Maintain a continual NMAI extension presence in Native communities, by attending 10 –15 outreach venues year-round; outreach activities will serve as a constant reminder in Indian Country about the services available through the art and internship programs, training activities, and other NMAI opportunities
- Evaluate and refine the formal process for sending on tour three to four NMAI exhibitions to the communities represented in those exhibitions, including a community opening event, training in exhibition installation, and a community brochure or exhibition guide to assist the community in its own educational and outreach efforts
- Evaluate and review the formal processes for community-curated exhibitions, working with one to two communities per year to loan NMAI objects to a tribal museum, cultural center, or related entity, including a community opening event, training in exhibition development and object curation, and related assistance for the community to develop its own educational and outreach efforts
- Follow a Memorandum of Understanding (MOU) with the Smithsonian Institution Traveling Exhibition Service (SITES) to develop a two-set panel exhibition traveling show that has relevance for Native communities; under this proposal, one set of panels will travel to tribal museums, cultural centers, or related entities, and include a community opening event and general assistance for the community to develop its own educational and outreach efforts
- Present (through the Cultural Arts Department within NMAI) at least six programs which serve the international community in and around the Washington, DC area, and at least three programs in collaboration with embassies from Latin American countries and Canada
- Develop a public access Film and Video Center at the GGHC that supports access to and increases the awareness of the NMAI Film and Video Center and its collections
- Develop and conduct a varied menu of tours, cultural demonstrations, teaching cart programs, family programming, and workshops for students and teachers
- Build the Cultural Interpreters Program to include 20–30 volunteer interpreters
- Develop university partnerships to strengthen the training program for the cultural interpreters

- Arrange to have symposia and seminar staff host two significant symposia or seminars annually in support of the Museum as a place of civic engagement, including the Ball State University initiative serving more than 20 million students via satellite broadcasting
- Develop a Native Museum Alliance Network to facilitate the loan of NMAI objects to tribal museums and cultural centers
- Increase the GGHC's community outreach initiatives within the metropolitan New York City area, with special focus on targeted programs in the Pavilion to reach local Native populations
- Present diversified and ongoing publications and cultural arts programs (e.g., music, dance, storytelling, drama) to educate the public about the history and significance of Native cultures, including 10–15 cultural arts programs each month that encompass crafts demonstrations and theatrical performances
- Continue cultural arts programs and author programs, as well as collaborations with other Smithsonian bureaus and Washington-area cultural institutions, and supplemental programs for approximately 20 schools in the local and regional communities
- Continue monthly programs presenting performing arts (at least one per month), arts and crafts demonstrations (at least one per month), and writers' programs (one per month). Programs in the Museum and in local communities will serve at least 30 schools
- Maintain a diversified and ongoing publications program to educate the
 public about the history and significance of Native cultures through
 the production of books, recordings, children's and educational
 materials, brochures, retail products, and other printed matter. Publish
 two exhibition-related books and three to five additional titles
- Conduct approximately 12 educational workshops annually for families and teacher audiences
- Implement a new website component to provide all Americans with educational resources tied to grade levels and national curriculum standards
- Extend electronic community-based outreach efforts to bring the Museum's resources to more American communities. Electronic information projects, videoconferencing, podcasts, and Webcasts link communities to Museum activities and programming in Washington, DC and New York City
- Support multi-department use of a customer relationship management system to email electronic newsletters to subscribers to present quarterly information about the Museum and its diverse programs. Increase electronic newsletter subscriptions by five percent through provision of relevant and personalized information
- Maintain a computer system that supports data collection from a wide variety of NMAI public program activities to contribute to an

- Institution-wide system for assessing the effectiveness of educational programs
- Increase the size of the Museum's Cultural Registry at a rate of 20 percent per year, with a goal of 5,000 total and current records

 Provide reference services and information to the public (35 FTFs and

Provide reference services and information to the public (35 FTEs and \$4,418,000)

- Respond to the needs of Native communities and serve as a national leader in the area of training in museum practice by refining internship, visiting professional, technical assistance, traditional artist, and workshop programs to strengthen their effectiveness and inclusiveness, as well as by serving 30–35 interns, four to five visiting professionals, one to two technical assistants, and conducting four workshops
- Continue and maintain the Native Arts Program to incorporate the
 visiting artist, community arts symposium, and youth public art
 projects; maximize outreach efforts by developing opportunities in the
 area of community-based activities, Internet visibility, collaborations
 with public programs and publications; initiate a long-term
 sustainability strategy for the Native Arts Program; and expand
 programs with affiliated museum institutions, cultural centers, and
 indigenous artists to include four visiting artists, one community art
 symposium, and one public youth art project
- Solidify the Native Radio Program to include broadcasts of Living Voices; maximize outreach efforts through annual productions of Living Voices which demonstrate relevant, effective, and compelling oral indigenous stories for local radio station distribution and for the worldwide Internet audience; and build partnerships with other Native media organizations, including Native Voices One, Koahnic Broadcasting, American Indian Radio on Satellite (AIROS), Aboriginal Voices Radio, and Radio Bilingüe
- Evaluate and refine requirements, and appropriately revise content via new programming and migration to electronic applications in the Washington, DC and New York City Interactive Learning Centers (ILCs). Renew public computing facilities by uprgrading computer hardware to ensure that 95 percent of equipment operates 95 percent of the time during opening hours
- Develop and incorporate recordings and other media materials from artists, community visitors, presenters, and Community and Constituent Services (department within NMAI) field projects, which are related to NMAI's public programs or outreach efforts, into the resource centers through interactive educational presentations; and collect program-related recordings, books, website information, and other resources for incorporation into the ILC's delivery systems
- Develop an integrated plan to use technological tools to expand connections and services to Native communities via the Web,

- including the Museum's collections resources, feature stories, and community training materials and classroom support (e.g., distance-education applications)
- Develop and maintain the handling of collections and one Discovery Box, which contains objects/materials for hands-on experience with Native American culture, for one year. The items are reproductions of objects that may be found in the exhibitions and they educate visitors about the relationship the objects have with Native people.
- Maintain outreach to fourth-grade students visiting the Haudenosaunee Discover Room to learn more about the Iroquois Tribe. Collaborate with the education department to develop teachers' workshops focusing on the Haudenosaunee
- Complete profiles for two to three underserved new communities on the Indigenous Geography website, including community training, media, and educational components
- Upgrade and maintain audiovisual and multimedia equipment and software to enable media unit staff to efficiently produce professional audio, video, and graphics to support department and NMAI programs
- Conduct 2–3 week-long Virtual Museum Workshops with Native students who access culturally relevant objects in the collections to provide virtual exhibits for the communities and the Interactive Learning Center
- Conduct one week-long Virtual Museum Workshop in Latin America at a local museum to provide training in approaches to content development with the active participation of indigenous groups.
- Conduct two videoconferencing programs with Native communities that provide access to culturally relevant objects in the NMAI collections; record the sessions for use in other museum and community projects; and acquire feedback from participants to develop an ongoing annual videoconferencing program
- Work with local schools to conduct one semester-long student project that connects Latin American immigrant students with NMAI collections to which they have cultural connections; and acquire feedback from the project to develop an annual education program that similar local schools may join
- Solidify and expand Latin American programming efforts, and develop a consistent and targeted program for Latin American constituencies, which includes internships, visiting professional appointments, radio, visiting artists, youth public art projects, and annual workshops alternating between virtual museum and museology themes
- Provide consistent and accurate translations of NMAI Web materials in Spanish, serving both constituents in Latin America and the Spanishspeaking public in the United States.

- Maintain strong relationships with the international community in and around Washington, DC to develop relevant and interesting programming and serve constituent needs throughout the Western hemisphere
- Manage and maintain all MOUs for the Museum, including monitoring of commitments and execution of deliverables
- Sponsor a tribal museums conference
- Initiate a formal community activity documentation program for all
 projects that uses photography, video, audio, and other media to capture
 the program and process in the community, and ensures that
 documentation and archiving standards are developed and implemented
 for future records and programs
- Increase the GGHC's community outreach initiatives within the metropolitan New York City area, with special focus on targeted programs in the Pavilion to reach local Native populations
- Collect and make accessible materials from at least 40–50 programs, including audio and video recordings, photographs, recorded interviews, and other resources per year to all relevant NMAI units and efforts. This includes archives, resource centers, websites, recordings, books, etc.
- Develop non-commercial publications in alternate text-file formats, including Portable Document Format (PDF) and Print On Demand (POD) to support the activities of various Museum departments (e.g., Public Programs, Cultural Resources, and Community Services) and to promote outreach to the general public by heightening awareness of Native American life and educating the public about the history and significance of Native cultures

Offer compelling, first-class exhibitions (41 FTEs and \$4,971,000)

- Continue to provide research support and assistance for developing exhibits and public programs based on NMAI's collections. Support development of three exhibitions a year. Exhibits under development in FY 2009 include *Treaties, Collections Survey,* and *Song for the Horse Nations*. Provide websites for new exhibits
- Provide daily technical support for exhibits, interactive kiosks, and NMAI's Lelawi Theater, replace and repair outdated equipment, and ensure that the kiosks and the theater are available for public access 95 percent of the time
- Expand and develop NMAI's website to provide in-depth content about all exhibitions and events in New York City and Washington, DC. Increase the number of website visits by five percent yearly
- Expand NMAI's capacity to disseminate information to all audiences by offering access to an additional 10,000 NMAI collections records
- Install one major exhibition in the 8,500-square-foot Changing Gallery
- Install exhibits that interpret the building, grounds, and the Museum to the visitors. These exhibits will be located in the Potomac rotunda, a

- central gathering place for live presentations, and a visitor information center at the point of entry to the Museum
- Provide a year-round exhibition program at the GGHC for three major galleries, and the Photo Corridor Gallery, and offer daily cultural interpreter programs and major monthly programs. Projects in FY 2009 include Collections Survey, Song for the Horse Nations, and a major film festival
- Organize four workshops and networking opportunities for Native film makers and Native media organizations with the television, film, and media industries
- Collaborate with Native educational organizations, such as Oyate, the American Indian Library Association, National Indian Education Association, and the Canadian Arts Council. Work with them to identify video resource materials
- Present a regular, ongoing schedule of programs encompassing Native cultural arts in collaboration with communities and curatorial teams that complement and expand on exhibition themes
- Continue to produce and provide print and electronic pieces to enhance the visitor experience with general information about the Museum, its exhibitions, programs, and other services. These resources will be available in alternate formats, including Braille and Web access, and will be evaluated by the responsible department
- Evaluate visitor services to ensure an effective orientation for public audiences at NMAI

Improve the stewardship of the national collections (37 FTEs and \$4,231,000)

- Provide information about NMAI's collections via a website. Review and update records for public access. Digitize objects needing higher quality digital images than those taken during the move of collections. Augment digitization, cataloguing, and electronic access to NMAI's collections resources. Provide public access to approximately to 40,000 collections items by September 2009
- Continue to implement a pesticide research project to assess pesticide use in NMAI's ethnographic collections, in coordination with the Smithsonian's Museum Conservation Institute, leading to an enhanced understanding and actual use by Native communities to mediate the impact of contaminating materials
- Provide consultation and assistance to domestic and international indigenous communities for the research, repatriation, and management of specific kinds of culturally sensitive collections, including six consultations, four traditional care visits, and two to three repatriations
- Provide system development and customization to meet staff needs, specifically in the areas of repatriation and events, as well as support

for data enhancement; and provide technical support for the integration of the digital asset management systems with the CIS to augment digitization, cataloguing, and public access to NMAI's photo, audio, film, and video archival collections to represent living and vibrant indigenous cultures throughout the Western hemisphere

- Upgrade and maintain a wide variety of foundation systems such as CIS, the digital asset management system, the Events Management System, and NMAI's intranet and public applications; replace outdated systems and equipment; and enhance system storage and security
- Enhance physical access to the collections for diverse audiences, such as Native visitors, researchers, students, and the general public
- Make media and text produced in the Virtual Museum Workshops available to the public through the NMAI's CIS
- Augment virtual access to NMAI collections by including contextual information gained during NMAI programs with Native communities, and ensure the representation of Native voices within NMAI's foundation systems to serve the ends of cultural preservation and continuity in Native America

Strengthened Research

Ensure the advancement of knowledge in the humanities (20 FTEs and \$2,881,000)

- Develop the intellectual component of the collections by conducting collections-based studies which include Native viewpoints and meanings in their own terms to enhance existing electronic content, and increase the potential of the collections for future scientific inquiry and public use
- Develop procedures to include digital narratives provided by visiting researchers and Native experts to augment collections records
- Maintain and extend staff use of an NMAI collaborative, Web-based toolset to add knowledge and context to both individual collections records as well as related groups of collections objects. Undertake research for publications and media products to generate educational resource materials in connection with the Museum's public programs
- Continue ongoing research to add historic, geographic, and statistical content to all exhibitions and educational programs and resources

Enhanced Management Excellence

Improve the overall cleanliness and efficient operation of Smithsonian facilities (14 FTEs and \$2,025,000)

- Provide maintenance and visitor support services for a seven-day-aweek operation open to the public at GGHC in New York City
- Provide ongoing oversight and management of all NMAI facilities, including maintenance, security, and visitor support, in coordination with

- appropriate Smithsonian Institution offices and the General Services Administration
- Increase staff awareness of and involvement in safety, and improve the museum's ratings on the annual management evaluation and technical review of NMAI facilities

Modernize the Institution's information technology (IT) systems and infrastructure (25 FTEs and \$3,712,000)

- Ensure that NMAI personnel can rely on IT systems in three different locations (New York, Maryland, and Washington, DC) to undertake daily work activities. NMAI technical staff work locally to provide secure, reliable, and efficient systems, meeting federal standards, with less than 1 percent downtime
- Maintain three computer rooms, internal networks, servers, and Museum-based applications, including collections and digital asset management, research, conservation, archives, electronic signage, welcome desks, group reservations, public programs, interactive exhibits, Webcasting, distance education, registries of cultural interpreters, community services events, as well as secure significant digital resources. Information and technology specialists work closely with NMAI staff to analyze processes and determine where economies of scale, integration across functions, and other efficiencies can be achieved
- Maintain NMAI project and program management systems to effectively manage and coordinate programs across organizational lines, manage capacity, and ensure availability of staff, space, and fund-based resources
- Work with the Office of the Chief Information Officer's (OCIO) initiative
 to implement a secure wireless network, and to acquire the needed
 software and hardware to implement and support a real-time Auto ID
 Data Capture (AIDC) system in the collections area

Strengthen an institutional culture that is customer centered and results oriented (34 FTEs and \$3,261,000)

- Align, integrate, and manage NMAI's physical, financial, human, management and technological resources and systems to ensure effectiveness and measurable productivity in all aspects of the Museum's operations
- Provide effective and responsible fiscal management of NMAI's resources to meet all of the changing needs, obligations, and priorities of NMAI and the Smithsonian
- Develop and maintain training plans for all staff members; complete annual staff appraisal and performance plans with 100 percent participation; complete annual security training for all staff with 100 percent participation; and provide staff with the results of a biennial NMAI employee survey
- Evaluate programs to refine processes, better meet constituent needs, and guide future planning

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (4 FTEs and \$399,000)

- Foster and sustain a productive work environment that supports the recruitment, retention, and recognition of NMAI's staff
- Foster and sustain a productive and supportive work environment for NMAI that values initiative, creativity, and teamwork, and that reflects an awareness of and sensitivity to Native culture, values, and protocols
- Manage an active, supportive, and responsive human resources operation within NMAI, including recruitment, training, implementation of disciplinary actions, time and attendance tracking, and maintenance of performance plans and appraisals
- Provide special training opportunities for NMAI staff to gain and expand knowledge and proficiency in key areas related to their individual work and career goals, in a manner consistent with NMAI needs and priorities
- Foster and implement human resources policies and procedures to recruit and retain a diverse workforce
- Provide training and orientation to staff to ensure their knowledge level is sufficient to support programmatic efforts

Modernize the Institution's financial management and accounting operations (7 FTEs and \$771,000)

- Manage all NMAI-related budgeting activities on an integrated basis, including support and technical assistance to NMAI staff and provision of information to the Smithsonian Institution, Office of Management and Budget, and Congress, both for baseline operations and new funding for the operation of the Mall Museum
- Provide effective and responsive fiscal management to meet the changing needs, obligations, and priorities of NMAI and the Institution, including the implementation of the new SI inventory program

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (5 FTEs and \$426,000)

- Continue to maintain high visibility in the press to ensure positive NMAI reviews in the local, national, international, and Indian Country media by encouraging editorials and coverage of exhibits, programs, and initiatives
- Focus on programming for Native populations in the Western hemisphere
- Manage ongoing and proactive outreach programs including public relations and media programs to enhance the Museum's visibility nationally, internationally, and among Native peoples

Modernize and streamline the Institution's acquisitions management operations (3 FTEs and \$274,000)

- Manage all NMAI procurement and travel on an integrated basis, including technical procurement assistance and processing of all procurement and travel documentation
- Foster diversity in the procurement process

ARCHIVES OF AMERICAN ART

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS		GENERAL TRUST			R/SPONSOR GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000	
FY 2007 ESTIMATE	20	1,710	1	356	27	1,876	0	0	
FY 2008 ESTIMATE	19	1,762	1	342	25	1,771	0	0	
FY 2009 ESTIMATE	19	1,843	1	342	25	1,418	0	0	

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	0	19	0	11	0	-8
Provide reference services and information	6	397	4	241	-2	-156
Exhibitions						
Offer compelling, first-class exhibitions	2	81	2	59	0	-22
Collections						
Improve the stewardship of the national collections	7	849	10	1,213	3	364
Strengthened Research						
Research						
Ensure the advancement of knowledge in the humanities	0	14	0	14	0	0
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	1	159	3	305	2	146
Ensure that the workforce is efficient, collaborative, committed, innovative, and diverse	1	107	0	0	-1	-107
Modernize the Institution's financial management and accounting operations	2	136	0	0	-2	-136
Total	19	1,762	19	1,843	0	81

BACKGROUND AND CONTEXT

The Smithsonian's Archives of American Art (AAA) enlivens the extraordinary human stories behind America's most significant art and artists. With more than 16 million items, it is the world's largest and most widely used resource dedicated to collecting and preserving papers and primary records of the visual arts in America. Constantly growing in range and depth, ever increasing in accessibility to its many audiences, it is a vibrant, unparalleled and essential resource for the appreciation, enjoyment and understanding of art in America.

To achieve the Institution's goal of Increased Public Engagement, the AAA continues with its ambitious six-year program, begun in 2005, to digitize a significant portion of its more than 50-year accumulation of resources. At its completion, the project will greatly increase public access to the collections. AAA's website will continue to be developed to improve delivery of unprecedented numbers of new digital files, descriptive information, engaging content, online exhibitions, subject-focused guides, and reference services. AAA's Lawrence A. Fleischman Gallery in the Donald W. Reynolds Center reaches new audiences as never before. The results of the Preservation and Assessment Survey conducted FY 2004–2008 will be used to prioritize collection processing and preservation activities to achieve the Institution's goal of improved stewardship of the collections. The goal of Enhanced Management Excellence will be met by assessing and enhancing staff development and increasing oversight of internal controls.

The FY 2009 estimate includes an increase of \$81,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

To achieve the Institution's goal of Increased Public Engagement, the AAA is directing its resources to optimize its presence in the Donald W. Reynolds Center by mounting compelling exhibitions in its Lawrence A. Fleischman Gallery and offering a series of related gallery talks. Among the planned exhibits are *Six Degrees of Separation*, November 1, 2008 to February 28, 2009; *Money Matters*, February 7 to May 30, 2009; and an exhibition guest-curated by an artist, June 7 to September 27, 2009. In FY 2009, the Archives will promote Smithsonian Arts collaborations by borrowing works of art from the Smithsonian art museums.

Development of the Archives' informational kiosk located within the Fleischman Gallery, as well as related website content, will optimize the visitor's experience of the exhibitions and reveal the inter-relationships

among AAA's resources and the collections of the Smithsonian's art and other museums.

In addition, to reach new audiences, the AAA will continue to collaborate with SAAM and NPG on educational projects such as "Posters-to-Go". In FY 2008 they will produce and distribute 500 poster portfolios to middle and high school classes that address themes about U.S. history. AAA will also cosponsor symposia with Smithsonian Arts and outside organizations to raise its national profile. Through these public programs, online versions of its exhibitions, and lending documents to exhibitions in museums and other institutions world wide, the AAA will continue to widen its audience and provide a greater understanding of the history of visual arts in the United States.

In FY 2009, approximately 50 collections representing 500 linear feet of papers of painters, sculptors, critics, and collectors will be processed, resulting in new, fully searchable finding aids added to the AAA's website. Of these, 25 collections will be digitized using state-of-the-art equipment, and in combination with digitization for reference, exhibitions, loans, and special projects, nearly 325,000 digital files will be produced. The increase in digitization will result from AAA's six-year digitization project funded by the Terra Foundation for American Art. In addition, the Terra Foundation will also enable AAA to build on its existing Web-based Guides system for providing new access routes to AAA's collections by expanding thematic, topical, chronological, and geographical pathways to collections; increasing collaboration with Smithsonian Arts; and increasing direct engagement with the public through innovative Web technologies such as social tagging and podcasting.

The website will be the locus for public engagement through the timely release of information and increasingly interactive access to AAA's online reference services section. AAA will continue to increase visits to its website by adding finding aids to processed collections, thousands of images of digitized collections and microfilm, and oral history interviews of American art dealers (funded by the Widgeon Point Charitable Foundation and the Art Dealers Association of America).

The AAA's resources will continue to support work related to the systematic survey of collections begun in FY 2004, which is designed to identify preservation needs, determine the degree of potential research value, and target audiences and other factors needed to formulate processing priorities that will increase the number of finding aids for collections accessible via the website. Improved stewardship will also be achieved by continuing development of AAA's internal digitization and Collection Information Systems Database, ensuring proper collections documentation

and supporting increasingly complex workflow encompassing the life cycle of a collection and oral history from pre-acquisition to storage and access. AAA's investment in the digitization of its collections will be preserved by reviewing requirements and implementing a standards-based digital assets storage and preservation system.

To achieve the Institution's goal of Strengthened Research, the Archives will convene a national advisory committee to support its ongoing efforts to acquire high-priority collections.

The goal of Enhanced Management Excellence will be addressed by continuing to implement the goals of the Smithsonian, thereby ensuring its workforce is efficient and skilled, and by adopting best practices to safeguard Smithsonian resources.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science, and culture (\$11,000)

- Continue to expand AAA's audiences through a national touring exhibition in collaboration with Smithsonian Institution Traveling Exhibition Service (SITES)
- Develop co-sponsored symposia with Smithsonian art organizations and outside institutions
- Continue to develop gallery talks that focus on current exhibitions in the Lawrence A. Fleischman Gallery at the Donald W. Reynolds Center to raise public awareness and visibility of the Archives

Provide reference services and information to the public (4 FTEs and \$241,000)

- Collaborate with Smithsonian Institution Libraries and Smithsonian art organizations to develop resource guides to art-related research materials that will enhance researchers access to collections
- Expand public access to AAA's vast collection by increasing
 website and in-person visits through continuation of the Terra
 Foundation for American Art's six-year program to digitize
 collections, which will add 325,000 new digital files representing
 both fully digitized collections and individual items from collections
 through a *Collections Online* interface
- Increase by 30-50 the number of online finding aids
- Increase by 20–30 the number of oral history interviews accessible online
- Enhance the website with improved website technologies and tools to attract more visitors and promote and enhance their level of

engagement with the Archives' programs

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (2 FTEs and \$59,000)

- Produce three original exhibitions for the Lawrence A. Fleischman Gallery at the Reynolds Center (one will complement exhibitions at either SAAM or NPG)
- Produce three original exhibitions for the AAA's New York Research Center
- Continue AAA's survey of public responses to its exhibitions in the Lawrence A. Fleischman Gallery to assess and improve exhibition design
- Integrate the Web-based informational kiosk and related technologies into exhibition design in the Lawrence A. Fleischman Gallery

Improve the stewardship of the national collections for present and future generations (10 FTEs and \$1,213,000)

- Continue to address critical processing and preservation activities identified in AAA's systematic survey of collections
- Enhance the digitization and Collection Information Systems
 Database and its staff interface to ensure proper collections
 documentation, and to support increasingly complex workflow that
 encompasses acquisition, physical and legal control, processing,
 preservation, digitization, and Web access
- Protect AAA's investment in digitization by advancing its implementation of a standards-based digital assets storage and preservation system

Strengthened Research

Ensure the advancement of knowledge in the humanities through original research (\$14,000)

- Conduct original research resulting in at least one monograph, article, or Web publication based on AAA resources
- Work effectively with a national advisory committee to collect high-priority papers and produce at least 25 new oral history interviews of enduring historical value

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (3 FTEs and \$305,000)

- Continue to assess and enhance the skills of employees so that staff provide more efficient and effective levels of services both internally and externally
- Review current administrative policies and procedures to improve effective programmatic and financial management of all resources

ARTHUR M. SACKLER GALLERY/FREER GALLERY OF ART

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000	
FY 2007 ESTIMATE	50	5,722	0	270	65	12,117	0	529	
FY 2008 ESTIMATE	57	5,867	0	434	65	12,480	0	0	
FY 2009 ESTIMATE	57	6,096	0	434	65	12,480	0	0	

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Performance Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement				-		
Public Programs						
Engage and inspire diverse audiences	8	823	8	856	0	33
Provide reference services and information to the public	8	823	8	856	0	33
Exhibitions						
Offer compelling, first-class exhibitions	15	1,294	15	1,345	0	51
Collections						
Improve the stewardship of the national collections	14	1,441	14	1,497	0	56
Strengthened Research						
Research						
Ensure the advancement of knowledge in the humanities	4	562	4	584	0	22
Enhanced Management Excellence						
Information Technology						
Modernize the Institution's information technology systems and infrastructure	3	309	3	319	0	10
Management Operations						
Modernize the Institution's financial management and accounting operations	5	615	5	639	0	24
Total	57	5,867	57	6,096	0	229

BACKGROUND AND CONTEXT

The Freer Gallery of Art and the Arthur M. Sackler Gallery (FSG) celebrate the artistic traditions of Asia and are widely regarded as one of the world's most important centers for collections of Asian art. The museums collect, study, exhibit, and preserve exemplary works of Asian art, as well as works by Whistler and other American artists represented in Charles Lang Freer's original gift. The combined resources of the museums are directed toward programs that advance understanding of the arts of Asia and of the museums' collection.

To achieve the goal of Increased Public Engagement, FSG will continue to maintain momentum in hosting exhibitions of international importance and complementary public programs, as well as expand the number and range of exhibitions and object loans offered to other museums and cultural and educational institutions throughout the nation and worldwide. Associated with these activities will be a continued emphasis on exhibition-related scholarly research and an increased Web presence.

To meet the goal of Strengthened Research, FSG will devote resources to maintain the outstanding conservation and scientific research programs currently in place for the analysis, study, and conservation of Asian art and objects. Scholarly research on the collections, as well as broader research on Asian art and culture, will be further enhanced by maintaining a dedicated position to oversee scholarly programs and publications.

To support the goal of Enhanced Management Excellence, FSG will continue to participate in programs designed to improve the Institution's management and financial systems, and continue to evaluate and modernize its internal organization and systems.

For FY 2009, the estimate includes an increase of \$229,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, FSG has developed a long-range strategic plan that focuses on an aggressive, multi-year strategy of high-profile exhibitions and research projects to raise attendance and reassert FSG's pre-eminence in the field of Asian art.

For FY 2009, FSG will present three major loan exhibitions and continue its contemporary art programming, as well as reinvigorate and reemphasize its thematic exhibitions drawn from FSG's permanent collections.

The year will begin with Falnama: The Book of Omens, a major exhibition that focuses on a series of very unusual 16th and 17th century royal manuscripts from Turkey and Iran, which have not been studied despite their importance. The Falnama is the earliest book of its kind and features spectacular painted illustrations. The manuscripts will be complemented by textiles, ceramics, and metalwork, and will offer new insight into the rich artistic exchange between the Ottoman and Safavid empires at the height of their political rivalry.

In the summer of 2009, FSG will present a major exhibition of Tang dynasty treasures that were discovered in a shipwreck off the coast of Indonesia. Containing more than 53,000 items, the find was unlike any other recent discovery because of the number and type of items found. Among the ceramics, a cache of exquisite gold and silver items stand out and will interest scholars of Chinese art as well as capture the imagination of the general public. FY 2009 will close with a major exhibition of modern and contemporary Japanese prints. The exhibition will showcase works from the permanent collection, along with selected works from an important private collection, resulting in a comprehensive survey of modern Japanese printmaking. Traveling exhibitions will also play a major role in FY 2009, when FSG circulates two major loan exhibitions, *Garden and Cosmos: The Royal Paintings of Jodhpur* and *Falnama: The Book of Omens*, to national and international venues.

To strengthen collegial ties and offer a regular program on the arts of Asia to new audiences, FSG will continue to develop a network of museum partners, often where collections and/or areas of expertise are lacking. This Asia in America program showcases the holdings of important American institutional collections of Asian art through an ongoing series of exhibitions presented at the Sackler, which will strengthen ties with other cultural institutions throughout the nation and with local audiences.

To provide greater access to high-quality educational resources, FSG will be looking more carefully at state, county, and municipal learning mandates to ensure that FSG's programs support curricula. In addition, FSG will devote more effort to developing long-lasting teaching materials based on the FSG's world-renowned collections, and placing more educational resources on the FSG website to make it the premier online resource in the United States for information on the arts of Asia.

In the area of collections management, FSG plans to increase public access to the collections through digital technology, and to ensure data integrity in the digital collections management system. Additionally, the FSG will work toward effectively using grants for students to work on collections

management records, providing for timelier and greater public access to the entire collection. FSG will implement recommendations from the current space allocation studies, thereby promoting efficient use of storage space and access to the collection by scholars and the public. Plans have been prepared to increase storage in the library, which is much used by the public, scholars, and staff, and which will enable FSG to avoid off-site storage for a major part of the collection.

Improvements in visitor services are expected during FY 2009, primarily as a result of visitor surveys and improved signage and way-finding. FSG expects to survey visitors to determine their interest in the use of increased technology in exhibitions, as well as in the use of hand-held, electronic, self-guided tours. FSG will continue to focus on making its collections accessible to the public through its website. The website will offer an expanded number of objects for viewing and research by national and international audiences. FSG is also studying several of the Sackler galleries to determine if they can accommodate a future orientation center.

To achieve the goal of Strengthened Research, FSG will continue to devote resources to its internationally renowned conservation department and laboratory. Research work in the analysis, study, conservation, and long-term preservation of Asian art objects and materials of Asian art will help guarantee that objects from FSG's collections and many other museums remain accessible to future generations. In FY 2009, curators and researchers will continue to study and publish new research on the collections, including the recent gift of Japanese prints from the Robert O. Muller collection, ancient Chinese art donated by Dr. Paul Singer, the extensive collection of ancient Chinese jades, and the recently acquired collection of Japanese books. In addition, work on the five volumes of the Freer's collection of Song and Yuan paintings will continue.

The addition in 2006 of a dedicated staff person to oversee and coordinate scholarly research and publications has enabled FSG to continue to foster closer links with university partners, such as the University of Michigan, oversee the fellowship program, organize scholarly conferences, and supervise the publication of the *Ars Orientalis* journal and a newly revived scholarly monograph series. Research fellows will work on projects of special interest, as well as conduct research on FSG's permanent collection. In addition, FSG plans to present at least one symposium for serious art collectors, where curators will comment on collectors' objects, an investment that FSG hopes will open doors for future donations to enhance the collections. To safeguard the conservation department's reputation as one of the world's finest scientific research and conservation centers in Asian art, FSG also will begin a program to modernize its equipment

inventory through upgrades, enhancements, or replacement of outdated equipment.

To meet the goal of Enhanced Management Excellence, FSG expects to play a continuing leadership role in developing sophisticated collections management systems. In addition, as implementation of the new Institution-wide financial and human resources systems is expanded, it is anticipated that they will result in improved administrative efficiencies and reporting mechanisms within FSG. This will enable FSG to improve accountability by linking the strategic plans and goals of the museums directly to departmental activities and outputs to ensure that resources are effectively deployed and managed.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (8 FTEs and \$856,000)

- Increase the number of attendees at family programs by 10 percent from FY 2008
- Use the FY 2008 visitor survey results to implement at least two recommended improvements to self-guided tours of the permanent collection
- Use the FY 2008 visitor survey results to implement at least two recommended improvements in visitor services

Provide reference services and information to the public (8 FTEs and \$856,000)

- Develop one new curriculum based on state-mandated guidelines and distribute the curriculum to schools by the end of FY 2009
- Increase by five percent the number of website visitors from FY 2008
- Increase by 10 percent the number of FSG objects available for viewing on the website from FY 2008

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (15 FTEs and \$1,345,000)

- Mount three major exhibitions to increase visitation from the FY 2008 attendance level
- Rotate works in accordance with conservation guidelines, emphasizing recent additions to the permanent collections
- Provide family-friendly educational programming for each major exhibition
- Place FSG objects in at least two non-FSG exhibitions at other institutions in FY 2009
- Publish exhibition-related materials as a resource for scholars, educators, and the general public

Improve the stewardship of the national collections for present and future generations (14 FTEs and \$1,497,000)

- Initiate at least one new fellowship or scholarly award in FY 2009
- Raise the profile of the conservation department through a five percent increase in publications from FY 2008
- Complete conservation on at least 100 collection objects

Strengthened Research

Ensure the advancement of knowledge in the humanities through original research (4 FTEs and \$584,000)

- Study and publish new research on recent collections, including Dr. Singer's gift of ancient Chinese art; the extensive collection of ancient Chinese jades; the Freer collection of Song and Yuan paintings; and the Muller collection of Japanese prints
- Organize one symposium for serious art collectors

Enhanced Management Excellence

Modernize the Institution's information technology (IT) systems and infrastructure (3 FTEs and \$319,000)

- Modernize and standardize all IT desktop and peripheral platforms to single-faceted footprints
- Initiate desktop and peripheral support for all Macintosh Apple workstations
- Finalize installation of the latest software for The Museum System (TMS), FSG's collections information system

Modernize the Institution's financial management and accounting operations (5 FTEs and \$639,000)

 Use the new and enhanced Enterprise Resource Planning system modules to enhance management reports for senior staff and Board members

COOPER-HEWITT, NATIONAL DESIGN MUSEUM

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS			NERAL RUST	l	/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000	
FY 2007 ESTIMATE	32	3,078	28	3,003	19	4,561	0	33	
FY 2008 ESTIMATE	39	3,383	32	4,351	21	5,711	0	20	
FY 2009 ESTIMATE	39	5,548	32	4,351	21	5,110	0	20	

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	3	262	3	244	0	-18
Provide reference services and information	1	101	1	118	0	17
Exhibitions						
Offer compelling, first-class exhibitions	4	395	4	289	0	-106
Collections						
Improve the stewardship of the national collections	9	931	9	3,113	0	2,182
Strengthened Research						
Research						
Ensure the advancement of knowledge in humanities	3	227	4	319	1	92
Enhanced Management Excellence						
Facilities						
Improve the overall cleanliness and efficient	11	801	10	730	-1	-71
operation of Smithsonian facilities						
Information Technology						
Modernize the Institution's information technology	2	208	2	253	0	45
systems and infrastructure						
Management Operations						
Ensure that the workforce is efficient, collaborative,	1	99	1	103	0	4
committed, innovative, and diverse						
Modernize the Institution's financial management	4	292	4	300	0	8
and accounting operations	_					
Enhance the reputation of the Smithsonian by	1	67	1	79	0	12
maintaining good relations with the news media and						
with federal, state, and local governments						
Total	39	3,3 8 3	39	5,548	0	2,165

BACKGROUND AND CONTEXT

Cooper-Hewitt, National Design Museum (CHNDM), located in New York City, is the only museum in the nation dedicated exclusively to historic and contemporary design. Its collection is international in scope and encompasses 250,000 objects representing 24 centuries of design, from China's Han Dynasty (200 B.C.) to the present. The Museum presents compelling perspectives on the impact of design on daily life through active educational programs, exhibitions, and publications.

As the design authority of the United States, CHNDM's programs and exhibitions demonstrate how design shapes culture and history — past, present, and future. To achieve the Institution's goal of Increased Public Engagement, the Museum will continue its dynamic exhibition programming and active roster of educational and public programs, as well as expand the number of programs offered in venues outside the New York metropolitan area in 2009. Together, these programs will help CHNDM engage larger, more diverse audiences, and fulfill its mission to serve as a catalyst for design education, both nationally and internationally. To achieve the goal of Enhanced Management Excellence, the Museum will devote resources to foster greater understanding of the role of design in everyday life and its impact on shaping the built environment of past and future centuries; and to encourage the "byproducts" of design thinking — such as creative problem solving and team working — in other disciplines and areas of life, through an interactive, engaging online experience.

For FY 2009, the estimate includes an increase of \$2,165,000, including an increase of \$126,000 for necessary pay for existing staff funded under this line item; \$539,000 for rent for leased collections storage space, which is justified in the Mandatory Costs section of the budget; and \$1,500,000 for the purchase of compact storage for collections care, which is further justified under the Institution-wide Collections Initiative.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, CHNDM will concentrate its resources on maintaining a world-class exhibition program that will attract diverse audiences and prove unique in its balancing of historic and contemporary design shows. Each of the upcoming exhibitions in FY 2009 will feature significant objects and original theses, and will have a strong appeal to a diverse audience of visitors. The major exhibitions will be *China Constructs*, *Felt*, and *Deutche Werkbund*. Smaller surveys of design will include the *Shazia Sikander* and *Quicktakes* exhibitions. In conjunction with these exhibitions and design surveys, the Museum will offer a series of public programs, such as workshops, studio visits, international conferences, and study tours, to engage

and inspire the general public as well as professional, youth, and educationoriented audiences. The Museum will also continue to respond to requests for exhibition loans.

As part of its national outreach effort, CHNDM plans to expand its "City of Neighborhoods" program in three to five venues outside the New York City area in FY 2009, including Stanford, California; Winterthur, Delaware; and Boston, Massachusetts. This innovative program brings architects, educators, and planners together to extend the classroom into the community and apply design education to a neighborhood concept, enabling teachers to take this model back to the classroom for development of similar programs for K–12 students and for after-school programs. The program's goal is to use design to promote community awareness and to involve young people in positive community change.

The Museum will also continue to offer an expanded Summer Design Institute program on the West Coast as well as in New York City. This program, which will celebrate its fifteenth anniversary in 2009, is also geared to K–12 and design educators, and draws a steadily increasing national and international audience each year. Outreach will be further enhanced by a continuing effort to lend major works to other venues in the United States and abroad.

Resources will continue to support exhibition-related scholarly research to create the most innovative and educational exhibitions for the public to view. The Museum anticipates that important new research will be published in conjunction with each major exhibition presented in FY 2009. Catalogues also may be published for the *China Constructs*, *Felt*, and *Deutche Werkbund* exhibitions, depending on whether private publication funding can be secured.

CHNDM hopes to make its educational opportunities available to a broader audience in FY 2009 through greater use of technology. In particular, the Museum plans to devote resources to increasing the accessibility of its educational programs through video and the Internet. This will include components of the "City of Neighborhoods" and Summer Design Institute programs to support the growing network of program participants and to make program resources available to broader audiences.

To improve the stewardship of the national design collection, the Museum will catalogue and put an additional 3,000 objects in the electronic collections information system and on the Web by the end of FY 2009. In addition, the Museum will continue to support an on-site graduate program on the history of decorative arts, which will enable students and scholars to access objects in CHNDM's collections. In FY 2009, a process will be implemented to ensure that objects will receive required conservation prior to

being moved into renovated, climate-controlled storage, as well as when objects require constant attention to maintain their stability. The Museum will also complete moving a majority of its stored collections off site to make room for the renovation of the mansion that is scheduled to begin in FY 2009 and continue through the beginning of FY 2011. This major renovation will significantly increase exhibition space. The purchase of a compact storage system will enable the Museum to minimize the ongoing annual rent cost associated with storing the collections off site.

To achieve the goal of Enhanced Management Excellence, the Museum expects to conduct a review of on-site and off-site storage, redesign CHNDM's website to create a world-class online resource for design education, and streamline financial systems to improve the efficiency of the procurement process. In addition, the Museum will continue to publicize its offerings online, as well as in the *Cooper-Hewitt National Design Journal* and in the Museum's spring and fall program brochures.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (3 FTEs and \$244,000)

- Offer 60 public programs, including international conferences, handson workshops, studio visits, and presentations in conjunction with major exhibitions and smaller design surveys
- Create educational content that will be available nationwide through the Online National Design Museum
- Develop online communities to further the integration of design into the K-12 curriculum

Provide reference services and information to the public (1 FTE and \$118,000)

- Develop public relations campaigns for exhibitions, public programs, and other CHNDM activities to increase awareness of the Museum and attract additional visitors
- Attract 2.5 to 3 million web site visitors

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (4 FTEs and \$289,000)

- Mount three exhibitions on historic and contemporary design while undergoing a major renovation
- Send two exhibitions to six museums in other states
- Attract 210,000 visitors to the Museum's exhibitions

Improve the stewardship of the national collections for present and future generations (9 FTEs and \$3,113,000)

- Catalogue 3,000 objects in the electronic collections information system and make images of these objects available on the Museum's website
- Implement a new process to ensure that objects receive required conservation prior to being moved into renovated, climate-controlled storage
- Purchase a compact collections storage system to minimize annual rent costs
- Move and maintain collections off site to accommodate the mansion's renovation

Strengthened Research

Ensure the advancement of knowledge in the humanities (4 FTEs and \$319,000)

- Publish two exhibition catalogues based on research of the collections
- Produce one catalogue for a smaller exhibition based on research of the collections

Enhanced Management Excellence

Improve the overall cleanliness and efficient operation of Smithsonian facilities (10 FTEs and \$730,000)

- Conduct reviews of on-site and off-site storage
- Provide maintenance of the facility and upkeep of the grounds while making continued progress in improving the level of cleanliness

Modernize the Institution's information technology (IT) systems and infrastructure (2 FTEs and \$253,000)

- Redesign the Museum's website to create a world-class online resource for design education
- Implement a user account system for shopping, membership, program registration, special events, ticket sales, National Design Awards nominations, internships, and Summer Design Institute applications

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (1 FTE and \$103,000)

- Monitor Museum staffing and organization to ensure efficiency
- Work closely with central Smithsonian offices to implement new management systems and processes

Modernize the Institution's financial management and accounting systems (4 FTEs and \$300,000)

 Develop management reports for Board members, the director, and senior management of Cooper-Hewitt

- Develop and present interim and year-end financial information to the Board and senior management within eight weeks of fiscal-year closure
- Manage Museum renovation budget Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (1 FTE and \$79,000)
- Produce the Cooper-Hewitt National Design Journal and the Museum's spring and fall program brochures that publicize the offerings of the Museum

FY 2009 REQUEST — EXPLANATION OF CHANGE

For FY 2009, the estimate includes an increase of \$2,165,000. This amount includes \$126,000 for necessary pay for existing staff funded under this line item and \$539,000 for rent for leased collections storage space, both of which are justified in the Mandatory Costs section of the budget. In addition, CHNDM is seeking a one-time increase of \$1,500,000 to purchase a compact collections storage system. This system will be used to house collection items currently stored at the Museum. Due to the renovation of the mansion that is scheduled to begin in FY 2009, the Museum will move collections off-site to a rental storage space. It is anticipated that once the renovation is completed in FY 2011, much of the collection will remain in offsite storage to accommodate the significant increase in exhibition space at the mansion. The compact storage system will house nearly 150,000 objects and will enable the Museum to store the collection items more efficiently, as well as protect and preserve them from excess movement, dust, and the damaging emissions from materials housed in low-quality storage. While enhancing collections preservation and allowing improved access and retrieval of objects for study, the purchase of a compact storage system also will reduce the need for additional rental space, thereby minimizing the ongoing annual rent costs associated with storing the collections off site.

If the FY 2009 request is not allowed and compact storage is not installed, space at the off-site facility will quickly become inadequate. This will greatly increase the risk of damage to objects, as well as limit access to the collections. In addition, the Museum will either be forced to lease additional off-site storage space or will not be able to complete moving the majority of its stored collections off-site in advance of the mansion renovation. This failure will have a significant impact on the renovation plans and future plans to increase exhibition space, thereby compromising the Museum's goal of maintaining a world-class exhibition program.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS			NERAL RUST	-	/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000	
FY 2007 ESTIMATE	42	4,146	2	953	13	5,505	0	0	
FY 2008 ESTIMATE	47	4,254	2	970	13	6,669	0	0	
FY 2009 ESTIMATE	47	4,405	2	970	13	6,364	0	0	

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	8	718	7	695	- 1	-23
Provide reference services and information to the public_	3	273	3	281	0	8
Exhibitions						
Offer compelling, first-class exhibitions	17	1,576	19	1,721	2	145
Collections						
Improve the stewardship of the national collections	5	478	5	501	0	23
Strengthened Research						
Research						
Ensure the advancement of knowledge in the humanities	3	295	2	302	-1	7
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	5	403	5	409	0	6
Modernize the Institution's financial management and accounting operations	2	190	1	78	-1	-112
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	4	321	4	322	0	1
Modernize and streamline the Institution's acquisitions management operations	0	0	1	96	1	96
Total	47	4,254	47	4,405	0	151

BACKGROUND AND CONTEXT

The Hirshhorn Museum and Sculpture Garden (HMSG) is a leading voice for contemporary art and culture, and provides a national platform for the art and artists of our time. The Museum seeks to share the transformative power of modern and contemporary art with audiences at all levels of awareness and understanding by creating meaningful, personal experiences in which art, artists, audiences, and ideas converge. HMSG enhances public understanding and appreciation of contemporary art through acquisition, exhibitions, education and public programs, conservation, and research.

HMSG dedicates a significant portion of its resources to the Institution's goal of Increased Public Engagement, specifically by producing a compelling array of exhibitions and public programs based on its collections and loaned works of international modern and contemporary artists. HMSG resources also support national and local outreach initiatives through community development projects, website development, catalogues and brochures, outgoing loans, collaborations with other museums, and traveling exhibitions. Associated with these activities is a continued emphasis on the refinement, care, and management of the national collections.

To further the goal of Strengthened Research, the Museum will continue to emphasize the development of educational materials, public programs, collections — particularly in the area of conservation of works in new media — and exhibitions based on scholarly research.

The Museum will continue key initiatives and expand activities to pursue the goal of Enhanced Management Excellence. The Museum will sustain projects to deliver unique cultural experiences for diverse audiences, and carry on work to improve visitor amenities and way-finding. HMSG will streamline financial reporting and procurement processes to improve oversight and control. In addition, the Museum will expand the range of its media outreach to promote broader international awareness of HMSG as a premier contemporary art and culture center.

For FY 2009, the estimate reflects an increase of \$151,000 for necessary pay for existing staff.

MEANS AND STRATEGY

To engage and inspire diverse audiences, HMSG will sustain its program offerings that enable educators, families, and young people to understand and explore the permanent collection in unexpected ways, and to

supplement personal arts studies. The Museum will offer an enhanced openhouse event to educators which, along with the regular teacher workshops throughout the year, help teachers incorporate contemporary art themes from HMSG exhibitions into their curricula. Family workshops geared to a younger audience and led by practicing artists will offer hands-on components and enable children of diverse backgrounds and ages to experience the visual arts. In addition, HMSG will upgrade the quality of information resources reaching the public. The quarterly magazine, which already includes educational information about exhibitions, art works, and programs, will be redesigned to better lead readers to additional learning opportunities on the public website. The website itself will be enhanced with the latest media-viewing capabilities to let users customize their own personal educational experience. The visitor will become a contributing participant in the development of programs through the incorporation of regular onsite and web survey results.

To help visitors focus on their personal experiences with art, HMSG will continue to install better signage to assist the public's exploration of the galleries. The Museum will present "Meet the Artist" programs that will provide the public with the opportunity to hear working contemporary artists speak about their ideas and approaches. HMSG will also offer "After Hours" programs that will make the Museum's exhibitions and related educational programs available to a broader audience through extended evening hours. In addition, the public's viewing of exhibitions will be augmented by gallery talks and tours, and by films that examine exhibition themes or contemporary art issues.

HMSG will continue to present exhibitions introducing new artists and insightful considerations of major figures in modern and contemporary art. In FY 2009, the Museum will present an exhibition of landmark art works acquired from the renowned Panza Collection. The exhibition schedule will also feature the first retrospective of American artist Anne Truitt since her death in 2004, and the wide-ranging works of major avant-garde artist Louise Bourgeois. HMSG will continue its *Directions* exhibition series that showcases emerging artists creating original works for display at the Museum. The series will feature Jennifer Allora and Guillermo Calzadilla. The curatorial staff will also rotate displays of the expanding permanent collection, and all exhibitions will be complemented by numerous public tours led by docents, curators, and artists.

In FY 2009, HMSG will focus on upgrading storage conditions and enhancing its restoration efforts to advance the goal of improving stewardship of the national collections. In late FY 2009, the Museum will begin moving 60 percent of its collection to a secure storage location at the

Museum Support Center in Suitland, Maryland, a huge undertaking that HMSG will plan and initiate with central Smithsonian resources. For the 40 percent of the collection that will remain onsite, HMSG will start a space redesign that will feature an upgraded storage area and conservation studio. In addition, the Museum will begin the physical rearrangement of the sculpture garden while gradually completing a thorough restoration of one or more of the outside sculptures. The Museum will increase public access to its permanent collections by adding new images and expanded records to the collections database and making such information searchable and viewable on its public website.

To achieve the goal of Strengthened Research, HMSG will publish a signature work for scholars, curators, and conservators on the materials and methods of artist Willem de Kooning. The Museum will further increase its scope as a national center for works on new media by developing a core competency in the conservation of these works, and sharing this knowledge through papers or presentations in national and international forums.

To reach the goal of Enhanced Management Excellence, HMSG will further improve the individual's personal experience at the Museum by redesigning visitor amenities on the lower level, making visitor flow around the Museum more direct, and re-orienting the main visitor entrance to the Mall side of the Museum. A cross-functional effort to improve gallery interpretation will yield better interpretive aids and gallery labels. Ongoing staff development will continue to reinforce an outcomes-based culture that always puts the visitor first.

HMSG will also continue to streamline financial management and procurement, allowing HMSG to concentrate on presenting world-class exhibitions and programs while increasing administrative oversight.

Modernizing managerial budget reports will enable the Museum's leaders to allocate funds and resources with greater precision and efficiency.

The Museum will build greater awareness of its role as a nexus of modern and contemporary art and culture by establishing a regular slate of press events to provide information on upcoming exhibitions and programs. Moreover, HMSG will develop a plan to extend its media network into the international travel media, highlighting the Museum's contemporary art program in the nation's capital.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (7 FTEs and \$695,000)

- Offer 30 family and teacher workshops throughout the year, related to a current exhibition or the permanent collection
- Expand the teachers' open-house event by supplementing the onsite event and staff interpretative tours with educational materials made available on HMSG's website
- Conduct ongoing visitor surveys, through the Web as well as onsite, to incorporate public responses into the planning of exhibitions and programming
- Complete the redesign and re-launch distribution of HMSG's quarterly magazine
- Continue timely upgrades to HMSG's website, taking advantage of the latest distribution technologies and visitor feedback

Provide reference services and information to the public (3 FTEs and \$281,000)

- Offer 12 programs, including the annual James Demetrion Lecture and the "Meet the Artist" series, which focus on working contemporary artists
- Offer four After Hours programs
- Schedule 15 films annually that are directly related to an exhibition theme or address current conversations in contemporary art

Offer compelling, first-class exhibitions at the Smithsonian and across the nation (19 FTEs and \$1,721,000)

- Develop and mount five exhibitions, including major retrospectives, thematic shows, and small focused exhibitions
- Develop one exhibition in collaboration with another art museum
- Offer two Ways of Seeing installations that present selections from the permanent collection in new contexts
- Conceptualize and install an exhibition of the permanent collection and complement it with regularly scheduled public tours

Improve the stewardship of the national collections for present and future generations (5 FTEs and \$501,000)

- Begin reconfiguring the entire sculpture garden according to the approved plan
- Continue annual progress of restoring at least one major outdoor sculpture
- Add 700 new images to HMSG's collections database
- Develop a plan to transport 60 percent of the collection to the newly constructed collections storage facility offsite
- Begin efforts to redesign onsite spaces for the approximately 40 percent of the permanent collection remaining at HMSG

Strengthened Research

Ensure the advancement of knowledge in the humanities through original research (2 FTEs and \$302,000)

- Deliver at least six original research presentations or reports on emerging conservation techniques at national and international professional meetings or in publications
- Publish a book for scholars, curators, and conservators on the materials and methods of artist Willem de Kooning

Enhanced Management Excellence

Strengthen an Institutional culture that is customer-centered and results-oriented (5 FTEs and \$409,000)

- Continue redesign and improvements to visitor amenities on lower level
- Improve visitor flow into HMSG and around the first floor
- Pursue the re-orientation of the main visitor entrance to the Mall side of the building
- Improve gallery interpretation by rewriting and redesigning gallery labels and developing other interpretative aids for installations in the lower level and lobby
- Continue ongoing leadership development by training the remaining 50 percent of staff and conduct at least one Museum-wide workshop per year

Modernize the Institution's financial management and accounting processes (1 FTE and \$78,000)

 Integrate funds control tools with monthly budget reporting and review process

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (4 FTEs and \$322,000)

- Host three annual press events to share information on upcoming exhibitions and programs with members of the news media
- Promote HMSG as a leading voice for contemporary arts and culture by developing a long-term program to inform and attract the international travel media
- Develop congressional host committees and other similar opportunities for elected representatives and their staff to become involved with HMSG

Modernize and streamline the Institution's acquisitions management operations (1 FTE and \$96,000)

- Centralize most procurement tasks under a single staff position
- Implement a procurement in-briefing with handbook for all new hires, and deliver semi-annual refresher classes tailored to each department's procurement activities

NATIONAL MUSEUM OF AFRICAN ART

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000					
FY 2007 ESTIMATE	30	4,301	2	491	1	246	0	0					
FY 2008 ESTIMATE	37	4,400	2	457	1	726	0	0					
FY 2009 ESTIMATE	38	4,609	2	457	1	436	0	0					

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

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Performance Objective/	FY	2008	FY	2009	Change	
Performance Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	7	893	6	659	-1	-234
Provide reference services and information to the public	2	226	5	473	3	247
Exhibitions						
Offer compelling, first-class exhibitions	17	1,854	12	1,741	-5	-113
Collections						
Improve the stewardship of the national collections	4	485	5	613	1	128
Enhanced Management Excellence						
Information Technology						
Modernize the Institution's information technology systems and infrastructure	1	128	1	140	0	12
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	3	463	6	687	3	224
Modernize the Institution's financial management and accounting operations	2	248	2	193	0	-55
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	1	103	1	103	0	0
Total	37	4,400	38	4,609	1	209

BACKGROUND AND CONTEXT

The National Museum of African Art (NMAfA) collects and exhibits ancient to contemporary art from the continent of Africa. NMAfA fulfills its mission by fostering the discovery and appreciation of the visual art of Africa. The Museum develops and schedules exhibitions, publications, and public educational programs, as well as providing stewardship of the art collection and photography archives. Through the visual arts, the Museum seeks to stimulate an interest in the history of Africa and an understanding of its diverse cultures.

To achieve the goal of Increased Public Engagement, NMAfA engages and inspires diverse audiences by developing educational resources geared to educators and children, as well as providing lectures and gallery tours on the collections and specific exhibitions to audiences of different ages and learning levels. NMAfA facilitates research about African art by scholars, and provides reference services to academics and the public through exhibition texts and digital access to its collections on the Web. NMAfA also focuses resources on the presentation of exhibitions of ancient, traditional, modern, and contemporary art, using its permanent collection and borrowed works from other public and private collections. The Museum also schedules exhibitions organized by other museums and art galleries.

NMAfA will achieve its goal of Enhanced Management Excellence by focusing on improving information technology (IT) operations, and by emphasizing professional and quality engagement with the public. Staff performance and programs will be measured through a variety of performance-based measurement tools such as visitor surveys. In addition, the Museum will continue to improve media relations, and develop effective financial reports that facilitate management by Museum senior staff and the Director.

For FY 2009, the estimate reflects a net increase of 1 FTE and \$209,000. This amount includes an increase of \$122,000 for necessary pay for existing staff funded under this line item, and 1 FTE and \$87,000 for an education specialist.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, NMAfA is directing resources to activities that will result in consistently high-quality programs and an increase in visitors and audiences. NMAfA will deploy a variety of strategies, including printed school-based curriculum resources for area school teachers; training for Museum docents; educational websites;

educational community outreach programs for children and adults in the metropolitan Washington, DC area; various types of free publications; and exhibitions geared to collectors, scholars, educators, youth, and families.

Free brochures and pamphlets, such as family guides for exhibitions and educational posters that summarize key exhibition themes, provide general orientation for visitors about African art and intellectual activities that visitors may complete at the Museum or at home. The Museum plans to publish an exhibition catalogue for *Thinking with Animals* as a learning and teaching tool for children. NMAfA will also complete a catalogue that includes essays from scholars and artists for *Cosmos*, a major exhibition scheduled to open in 2010.

NMAfA will enhance the Museum's website through navigation features and multi-media applications for educational activities and learning modules for students and teachers. An emphasis will be placed on the Walt Disney-Tishman African Art collection, a major collection of traditional African art that has functioned as the foundation for the study of African art. Another educational component will be a new docents corps that Museum staff and visiting scholars will train to give public tours. The docents are essential for reaching audiences of different economic backgrounds, ages, and diverse cultures.

NMAfA will continue to develop and expand exhibition-related teacher/student workshops, as well as community outreach activities in the performing arts such as dance, music, and storytelling. NMAfA will expand its collaboration with the Smithsonian Discovery Theater in the "Meet the Museum" program, where children are introduced to art in the galleries that is tied in with theater subjects. Ongoing educational programs will include "Sounds of Africa" musical performances, dance performances, "Let's Read about Africa," storytelling, "Family Day," and community outreach and school outreach programs and activities. Some of these programs are collaborations with community organizations such as Studio Africa, which will begin in 2008.

NMAfA will increase the number of scheduled public lectures and gallery tours by staff, docents, and invited scholars based on the Museum's current exhibitions to target mixed-generation audiences. For adult audiences, the Museum will revive its highly successful film series and plan a major scholarly conference associated with the *Cosmos* exhibition. NMAfA also will continue its curatorial and conservation clinics that provide staff expertise to the general public.

In addition, the Museum provides a reference service for African culture, history, society, and art through online educational resources and with age-appropriate texts within exhibits. To increase public access to NMAfA's collections, the Museum will continue online cataloguing of its art and photographic collections, with priorities being the Walt Disney-Tishman African Art Collection and the Eliot Elisofon Photography Archives. The Museum will also continue providing podcasts of artists' interviews and music.

In FY 2009, three new exhibitions are expected to attract general audiences, collectors, scholars, and educators by presenting collections that reflect the diverse cultures of Africa and their artistic expression, the art history of Africa, and the importance of art within African cultures. Each exhibition will have an exhibition brochure and family guide. Mami Wata, Arts for Water Spirits in Africa and the African Atlantic World, an exhibition of 150 objects organized by the Fowler Museum of Cultural History at UCLA, will present art depicting the mermaid images associated with Africa and the African diaspora in the Caribbean, Brazil, and the United States. Thinking with Animals is a child-oriented exhibition that will illustrate how animal attributes are used to describe personalities, appropriate and inappropriate behavior, and social status and prestige. New Voices in Contemporary Art will present new contemporary art drawn from the Museum's collection. Educational components such as interactive stations will be installed in the exhibition galleries to provide contexts for understanding African art. In addition to these temporary exhibitions, the Walt Disney-Tishman African Art Collection will be on continuous view. The Museum will also prepare for the 2010 opening of the Cosmos exhibition.

As part of collections stewardship, NMAfA will continue to deaccession approximately 50 works from the art collection. The Museum also will develop and implement a collection policy and plan for the Eliot Elisofon Photographic Archives, as well as for the modern and contemporary African art collection.

To achieve the goal of Enhanced Management Excellence, NMAfA will focus resources on information technology (IT) operations, staff performance and accountability, and relations with the news media. The Museum's IT plan has integrated information technology functions for administration, collections management, exhibitions, and public access. NMAfA will perform the third annual review of its IT plan in preparation for making software and hardware updates as needed.

To strengthen customer service, NMAfA will ensure that annual staff performance plans incorporate the goals of the Institution's and NMAFA's strategic plans. Personnel and programmatic management responsibilities already have been incorporated into the performance plans of all department

heads to ensure more effective operations and meet audience expectations. Accountability will be further achieved through feedback from expanded visitor surveys, assessments of the effectiveness of staff interaction with the public, and periodic "town hall" meetings with representatives from the community.

To increase public visibility and enhance the Museum's reputation, NMAfA will continue to cultivate media representatives by expanding its number of contacts and strengthening its one-to-one relationships with representatives of the printed press, media websites, other museums and cultural organizations, and with congressional representatives.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (6 FTEs and \$659,000)

- Develop a revised school-based curriculum resource for area school teachers
- Develop a new curriculum and training for Museum docents that reflects diverse audience needs
- Provide one new curriculum-based/educational site on the Web
- Conceive and develop one new educational outreach program for children and adults
- Develop a family guide for the Museum's collection Provide reference services and information to the public (5 FTEs and \$473,000)
- Make available online 80 percent of all printed educational resources, such as family guides and exhibit brochures, as well as podcasts of artist interviews to provide reference and information for students, teachers, and educators
- Increase by 10 percent the digital image database for the Museum website and publications
- Increase online cataloguing and digital images of the Eliot Elisofon Photographic Archives by 10 percent to provide greater public access to the collection
- Increase the number of virtual visitors by 10 percent by enhancing the design and navigation of the Museum's website
- Develop editorial templates for exhibition texts for young audiences Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (12 FTEs and \$1,741,000)
- Present two exhibitions with broad appeal to attract more diverse audiences, including children, adults, target schools, educators, and African art scholars and collectors
- Present one exhibit that focuses on children and provides

- interactive components for children and adults
- Develop one innovative exhibition design/installation to enhance audience appeal and encourage learning opportunities for visitors
- Develop design, interpretive content, and interactive educational components for a major exhibition to open at NMAfA in FY 2010

Improve the stewardship of the national collections for present and future generations (5 FTEs and \$613,000)

- Deaccession 50 objects from NMAfA collections
- Perform conservation treatment on one percent of NMAfA collections
- Develop policy and collection plans for modern and contemporary African art, as well as for the Eliot Elisofon Photographic Archives

Enhanced Management Excellence

Modernize the Institution's information technology systems and infrastructure (1 FTE and \$140,000)

 Perform the third annual review of the Museum's five-year IT plan and perform upgrades as required

Strengthen an institutional culture that is customer centered and results oriented (6 FTEs and \$687,000)

- Ensure conformance of staff performance plans with goals and priorities of the Institution and the Museum's strategic plan
- Achieve highly favorable responses in visitor surveys for all exhibitions presented in FY 2009
- Implement participant surveys for all educational public programs held at NMAfA

Modernize the Institution's financial management and accounting operations (2 FTEs and \$193,000)

 Complete development of reports that facilitate effective financial management by the Director and Museum senior staff

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (1 FTE and \$103,000)

 Increase by five percent the number of personal contacts with media representatives to achieve ongoing positive media coverage of the Museum

FY 2009 REQUEST — EXPLANATION OF CHANGE

For FY 2009, the estimate reflects a net increase of 1 FTE and \$209,000. This amount includes \$122,000 for necessary pay for existing staff funded under this line item, and a programmatic increase of 1 FTE and \$87,000 to fund an education specialist position. This position would augment current community outreach and enable the Museum to expand and develop new and more innovative types of programs and activities, both within and outside the Museum, and to disseminate information about African culture, history, and society. These new activities and programs would specifically target newer and more diverse audiences that are currently underserved, such as adolescents, college students, and the elderly. The education specialist would also be responsible for increasing the amount and quality of educational content available on the Museum's website, thereby enhancing reference services to the public. Adding this position would result in a 30 percent increase in the number of educational programs offered by the Museum, which in turn should increase the diversity of NMAfA's audience by 20 percent.

If the FY 2009 request for an education specialist is not approved, the Museum will be unable to address programmatic deficiencies cited in its own strategic plan and by an external arts review. As a result, diversity goals will be compromised, target audiences will remain underserved, and public access to the collections will be limited.

NATIONAL PORTRAIT GALLERY

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS			GENERAL TRUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE					\$000					
FY 2007 ESTIMATE	55	5,453	3	651	7	2,628	0	0					
FY 2008 ESTIMATE	59	5,599	3	653	7	4,001	0	0					
FY 2009 ESTIMATE	59	5,837	4	653	7	4,001	0	0					

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	nange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
	' ' -	7000	1	7000		+000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	8	750	8	800	0	50
Provide reference services and information	5	570	5	620	0	50
Exhibitions						
Offer compelling, first-class exhibitions	11	977	11	1,091	0	114
Collections						
Improve the stewardship of the national collections	18	1,549	18	1,649	0	100
Strengthened Research						
Research						
Ensure the advancement of knowledge in the	4	382	4	425	0	43
humanities						
Enhanced Management Excellence						
Information Technology						
Modernize the Institution's information technology	1	128	1	128	0	0
systems and infrastructure						
Management Operations					i	
Strengthen an institutional culture that is customer	9	1,071	9	952	0	-119
centered and results oriented						
Enhance the reputation of the Smithsonian by	3	172	3	172	0	0
maintaining good relations with the news media and						
with federal, state, and local governments						
Total	59	5,599	59	5,837	0	238_

BACKGROUND AND CONTEXT

The National Portrait Gallery (NPG) functions as a free public museum for the exhibition and study of portraiture depicting women and men who have made significant contributions to the history, development, and culture of the people of the United States, and the artists who have created such portraiture. Congress established the NPG to be the pinnacle of national recognition, and the Gallery will continue to ensure that its collections honor the American people.

The Gallery devotes a major portion of its resources to achieve its Increased Public Engagement goals. Compelling exhibitions, educational and public programs, publications, the management and growth of its collections and the use of innovative media in its galleries and website will attract new visitors and appeal to its diverse national and international audiences.

Strengthened Research resources will be used to produce scholarly publications to accompany exhibitions on Marcel Duchamp and NPG's self-portraiture collection and the editing project of the *Charles Willson Peale Family Papers*. The Peale Papers' archive is a matchless source of information on the American family, social, and cultural history from the 1730s to the 1880s.

NPG will continue to manage its resources for Enhanced Management Excellence by expanding its public media campaign to increase promotion of its exhibitions, programs, and website at national and local levels. Technological platforms and electronic outreach initiatives will be updated and human resources and management objectives will be examined to improve systems communication and training.

The FY 2009 estimate includes an increase of \$238,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

Two major exhibitions are planned for FY2009. *Reflections/ Refractions: Self-Portraiture in the Twentieth Century* will include 75 works on paper and highlight the Bowman-Kahn Twentieth Century American Self-Portrait Collection acquired in 2002. The triennial *Outwin Boochever Portrait Competition* — a nationwide endeavor wherein known and unknown artists compete for a portrait commission and a cash award — will culminate in an exhibition of portraits by the 65 finalists. Four smaller exhibitions will be presented, as follows: *Inventing Marcel Duchamp: The Dynamics of Portraiture; Presidents in Waiting*, the story of the vice-presidents who

ascended to the nation's highest office will open during the 2009 Presidential inauguration; One Life: President James Monroe; and the third installation of the contemporary exhibition series of Portraiture Now will be presented. Scholarly publications for the Reflections/Refractions and Duchamp exhibitions and a book celebrating the finalists for the Outwin Boochever Portrait Competition will be produced.

The Gallery's permanent collection galleries will undergo a significant change as 250 works on paper will be rotated off view for preservation, and new collection objects will be matted and framed and new labels will be researched, written, edited and prepared for public display. Audio-visual elements installed in the permanent collection galleries will be refreshed as license agreements initiated for the 2006 NPG grand reopening of its public spaces expire. Research and planning for future exhibitions will proceed, particularly for a photographic exhibition on *The Frontier Remade; Thomas Sully: the Theatre of His World;* and *Seeing Gertrude Stein*.

Outgoing national and international loans provide a significant opportunity for outreach. Loans will be made available for the major exhibition on *Man Ray, African Art and the Modernist Lens* originated by the Museum of Fine Arts of Santa Fe, New Mexico, which will travel to the San Diego Museum of Art, Newark Museum, the High Museum of Art in Atlanta, Georgia, and the De Young Museum of Art of San Francisco, California; the *Cezanne and American Modernism* exhibition originated by the Montclair Art Museum in New Jersey, which will travel to the Baltimore Museum of Art and a third venue.

STRATEGIC GOALS AND FY 2009 PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science, and culture (8 FTEs and \$800,000)

- Award a portrait commission and cash award to the winning artist for the second Outwin Boochever Portrait Competition in 2009
- Present the Edgar P. Richardson symposium on American portraiture and biography
- Publish three issues of *Profile*, the Gallery's publication, to increase national awareness of NPG programs and research
- Publish three high-quality, illustrated books in support of current exhibitions
- Recruit and train a corps of teen ambassadors to serve as museum mentors for fifth-grade students in the Washington, DC metropolitan area

- Design 25 educational programs and 150 presentations for school and community audiences
- Design 12 public programs and 72 presentations for community audiences
- Promote new—and build on existing—relationships with scholars, internal and external to the Smithsonian, to develop collaborative ventures for the future, including public programs, exhibitions, and publications
- Present a series of gallery talks and focus tours, highlighting objects on view in the permanent collection, special exhibitions galleries, and NPG collection storage sites
- Provide the public with insights into collection preservation at the Visible Conservation Lab by allowing visitors to observe conservation treatments in progress

Provide reference services and information to the public (5 FTEs and \$620,000)

- Update the NPG website to include virtual tours of current exhibitions, an enhanced collections database, program information, and public programs, and pursue opportunities for electronic dissemination through other media
- Write, edit, and produce several hundred labels for rotating permanent collection exhibitions
- Provide individual responses to public inquiries about individual portraits and biographies
- Continue adding records of historically significant portraits of notable American subjects or by notable American artists from various public and private collections to NPG's Catalog of American Portraits (CAP)
- Provide backlisted NPG publications to scholars and the general public via the NPG website

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (11 FTEs and \$1,091,000)

- Install two major exhibitions: Reflections/Refractions: Self-Portraiture in the Twentieth Century and the 2009 Outwin Boochever Portrait Competition
- Install four smaller exhibitions that will reflect the Gallery's mission to exhibit portraits of individuals who have made significant contributions to American history and culture or who have expanded knowledge of American portraiture
- Rotate 250 permanent collection works on paper in the public galleries and employ preservation techniques to the works going off-view
- Travel one major exhibition: Reflections/Refractions: Self-Portraiture in the Twentieth Century
- Make collection objects available as outgoing loans to significant non-NPG exhibitions

Improve the stewardship of the national collections for present and future generations (18 FTEs and \$1,649,000)

- Ensure adherence to current museum practices for proper storage and exhibition of collection objects
- Complete accession records on all objects acquired during the year (accessions average 190 per year)
- Prepare condition reports on all objects received from or going out on loan to other institutions
- Inventory the painting and sculpture collection
- Provide conservation treatments for collection objects as required
- Mat and frame 250 paper objects
- Acquire portraits of significant Americans when available, particularly from under-represented populations
- Ensure completion of digital coverage for 350 objects

Strengthened Research

Ensure the advancement of knowledge in the arts and humanities through original research, including research on collections, which is reflected in publications, exhibitions/displays, and public programs (4 FTEs and \$425,000)

- Publish scholarly books on Marcel Duchamp and on NPG's selfportraiture collection
- Continue research and writing for Volumes 6 and 7 of the Selected Papers of Charles Willson Peale and His Children
- Research images and biographies of significant Americans who should be added to the collection and included in exhibitions and publications
- Continue staff participation on Smithsonian initiatives such as the Congress of Scholars, the Smithsonian Photography Initiative Committee, the selection of Smithsonian residential Fellows (pre- and postdoctoral Fellows), the review of nominations for the Secretary's distinguished research lecturer, and service on the editorial board of the Smithsonian American Art Museum's periodical, American Art

Enhanced Management Excellence

Modernize the Institution's information technology (IT) systems and infrastructure (1 FTE and \$128,000)

- Manage and refine IT capabilities that will enhance the visitor experience and increase visitation
- Train and cross-train staff on various Smithsonian software programs and systems
- Manage services to ensure that reliable and efficient technological systems meet federal standards, with less than one percent downtime

Strengthen an institutional culture that is customer centered and results oriented (9 FTEs and \$952,000)

- Collect and report on audience/customer data for NPG programs and products, and introduce marketing planning, implementation, and controls for use in planning future programs
- Improve management of the NPG through increased staff communications, training, and reorganizations, as appropriate
- Coordinate efforts with other Smithsonian units to improve systems and procedures

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (3 FTEs and \$172,000)

- Increase national and local visibility through robust publicity and media campaigns to announce NPG exhibitions, programs, educational initiatives, and special events
- Conduct print and radio advertising campaigns in local outlets for two major exhibitions opening in FY 2009
- Promote NPG through public service announcements
- Coordinate publicity efforts with other Smithsonian units to leverage the distinct role of the Gallery

SMITHSONIAN AMERICAN ART MUSEUM

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL TRUST		_	/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000 FTE \$000 FTE				\$000					
FY 2007 ESTIMATE	92	8,362	7	822	14	4,936	3	166					
FY 2008 ESTIMATE	98	8,601	7	1,058	13	5,701	3	184					
FY 2009 ESTIMATE	99	9,071	7	955	13	6,919	3	195					

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	16	1,426	16	1,417	0	-9
Provide reference services and information	4	319	5	410	1	91
Exhibitions						
Offer compelling, first-class exhibitions	20	1,742	20	1,890	0	148
Collections						
Improve the stewardship of the national collections	29	2,468	29	2,630	0	162
Strengthened Research						
Research						
Ensure advancement of knowledge in humanities	5	520	5	545	0	25
Enhanced Management Excellence						
Information Technology		_				
Modernize the Institution's information technology	7	685	7	671	0	-14
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	6	555	6	581	0	26
Ensure that the workforce is efficient, collaborative, committed, innovative, and diverse	1	89	1	93	0	4
Modernize the Institution's financial management and accounting operations	3	181	3	190	0	9
Enhance the reputation of the Smithsonian by	6	551	6	577	0	26
maintaining good relations with the news media and with federal, state, and local governments						
Modernize and streamline the Institution's acquisitions management operations	1	65	1	67	0	2
Total	98	8,601	99	9,071	1	470

BACKGROUND AND CONTEXT

The Smithsonian American Art Museum (SAAM) is the nation's Museum dedicated to the arts and artists of the United States from colonial times to the present. It is the home of the largest and most inclusive collection of American art in the world, and its holdings of more than 40,000 works spanning three centuries and paralleling the nation's cultural development tell the story of America through the visual arts. The Museum's programs make the collection available to national audiences and beyond, as well as to those who visit its two historic landmark buildings in Washington, DC: the Donald W. Reynolds Center (DWRC) for American Art and Portraiture (shared by SAAM and the National Portrait Gallery [NPG]) and the Renwick Gallery, dedicated to American crafts and decorative arts.

To achieve the goal of Increased Public Engagement, SAAM devotes most of its federal resources to exhibitions, education, collections care and enhancement, Web and research resources, publications, and information for the public. An ambitious schedule of exhibitions developed in-house, and complemented by shows obtained from other organizations, is expected to attract old friends and new. Larger exhibition spaces, restaurants and shops provide visitors with a broad menu of activities, encouraging more frequent return visits to the Museum. The Lunder Conservation Center opens the window on collections care, and the Luce Foundation Center for American Art displays an additional 3,500 collection objects in densely installed glass cases. The Museum is investigating using cell phone tours and mobile audio and multi-media guides, streaming the rich content of SAAM's collections and American culture in general. A 350-seat auditorium makes possible a vastly expanded range of public programming that includes lectures and films as well as music, theater, and dance performances. A glass atrium over the courtyard creates a grand, year-round gathering space for premier events. SAAM's branch museum, the Renwick Gallery, continues to present public programs, exhibitions, and rotations of its permanent collection of American crafts, including an extremely popular biennial exhibition, the Renwick Craft Invitational. Multiple traveling exhibitions simultaneously crisscross the country, providing the public with broad, direct access to the Nation's artistic and cultural heritage.

The balance of SAAM's allocation is dedicated to achieving the goals of Strengthened Research and Enhanced Management Excellence. Curators and other staff will research collection objects and related topics, and disseminate their results through publications, symposia, and lectures. Managers will carefully plan, promote, and conserve the Museum's resources in the pursuit of Enhanced Management Excellence.

The FY 2009 estimate includes an increase of 1 FTE and \$470,000. This amount includes \$393,000 for necessary pay for existing staff funded under this line item, and 1 FTE and \$77,000 for a new public program position.

MEANS AND STRATEGY

Educational and public program offerings will continue to expand in 2009 as the Museum implements new ways to use facilities such as the auditorium and courtyard, and builds on successful programming at the Renwick Gallery. Audiences throughout the country will benefit from distance-learning and national education programs, and more data and images will be made available on the Web. Innovative technologies, such as blogs and podcasts, will be used to promote the Museum as a destination as well as to provide content remotely, and SAAM will continue its highly successful online reference service, "Ask Joan of Art."

Exhibition schedules will include 10–12 shows per year in the six exhibition galleries at the DWRC and the Renwick Gallery. Works in the permanent collection galleries will be rotated to show the many facets of American art and culture, as well as to encourage return visits. Interactive exhibition components will be developed to keep pace with technology-savvy audiences. National outreach will include six exhibitions which will tour to venues throughout the country.

The safe storage and display of collection objects continue to be a priority. SAAM will develop public interest and awareness of conservation issues through the Lunder Visible Conservation Laboratory and related public programs. Digital information and images will be expanded and made available on the Web, and new artworks will be acquired to fill gaps in the collection.

Research on the collections and related topics will be performed in support of exhibitions and the permanent collection, and results will be shared with the public in various ways.

Information technology and administrative processes will be strengthened through close monitoring of resources and processes, and strong partnerships with central offices will enable SAAM to provide an enduser perspective on policy changes. Use of SAAM's searchable, Web-based WIKI format will keep staff current on the dynamic procedural and regulatory environment at the Smithsonian Institution.

Expanded marketing and media campaigns will promote the Museum's collections and programs to a growing public audience. Emphasizing a shared

"brand" for SAAM and NPG will increase the impact and effectiveness of ad campaigns.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science, and culture (16 FTEs and \$1,417,000)

- Plan, prepare, and produce at least 300 successful public program and lecture events for Museum audiences, in person and remotely
- Maintain and improve SAAM's National Education Program, partnering with organizations nationwide to fulfill the need for quality curriculum and educational resources using visual arts in core disciplines
- Make effective use of SAAM collections and scholarship in education programs
- Make effective use of evolving information technology in educational programs. Include Web presence in the Museum's National Education Program and other distance-learning programs
- Publish at least two catalogues and other high-quality publications related to SAAM's mission, collections, and/or exhibitions to further academic criticism, as well as educate the general public on the continual and direct involvement of art in the American experience
- Continue curatorial and other staff participation in national conferences, symposia, and programs in order to share SAAM's knowledge, collections, and expertise
- Provide a robust internship program to advance museum career development for college and graduate students
- Enhance the visitor experience and enjoyment of the Museum through a visitor services program

Provide reference services and information to the public (5 FTEs and \$410,000)

- Continue to develop visitor services for the Museum-goers in the Reynolds Center
- Continue SAAM's online reference service, Ask Joan of Art, responding to at least 5,000 information requests nation- and worldwide a year
- Provide public access to specialized art research databases, including the Inventory of American Painting, Inventory of American Sculpture, and SAAM's Photo Study Collections

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (20 FTEs and \$1,890,000)

• Plan, prepare and produce 10-12 successful exhibitions for the

- **DWRC** and Renwick Gallery
- Mount and support six traveling exhibitions as well as loans from SAAM collections
- Increase curatorial support

Improve the stewardship of the national collections for present and future generations (29 FTEs and \$2,630,000)

- Ensure the physical safety of the collection to guarantee the longevity of the collections and preserve America's cultural heritage.
- Provide secure and environmentally sound storage and display of collections, following established collection management policies
- Conserve and maintain objects according to professional ethics and standards of the American Institute for Conservation of Artistic and Historic Works
- Secure major artworks, revising the acquisitions priority list to address collection gaps, goals, and opportunities
- Maintain accurate, accessible, and useful information on collection objects, including cataloguing, images, and location tracking
- Enhance collections accessibility with digital photography and information for online retrieval, creating digital records for all new acquisitions, expanding biographical information, and maintaining access to database from multiple SAAM locations and applications
- Maintain and improve website infrastructure and content in order to share exhibitions, collections information, and images with a larger audience than can enjoy the collection in person

Strengthened Research

Ensure the advancement of knowledge in the humanities through original research (5 FTEs and \$545,000)

- Continue curatorial research on collections and the broader field of American art
- Support research and intellectual discourse in the fields of art history and cultural studies through a robust residential fellowship program
- Publish three issues of the American Art journal to further scholarly research in the field of American Art

Enhanced Management Excellence

Modernize the Institution's information technology (IT) systems and infrastructure (7 FTEs and \$671,000)

- Provide SAAM staff with the IT tools and support necessary to meet program goals
- Work collaboratively throughout the Smithsonian Institution to improve automated management systems
- Create and maintain the Web platform necessary for electronic

- outreach (i.e., for exhibitions, education, general museum, and collections information)
- Provide infrastructure to support the use of technology for innovative presentations in the Museum

Strengthen an institutional culture that is customer centered and results oriented (6 FTEs and \$581,000)

- Manage resources efficiently and responsibly, whether fiscal, human, or cultural, to ensure that core functions of SAAM work
- Provide guidance, leadership, direction, and oversight to staff and unit activities to ensure that strategic goals and program objectives are met
- Provide SAAM staff with the administrative tools and support necessary to do their jobs
- Work closely with central Smithsonian Institution offices on implementation of new management systems and processes

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (1 FTE and \$93,000)

- Monitor Museum staffing and organization to ensure efficient allocation of limited personnel resources
- Train and cross-train staff for flexibility in responding to changes in funding, technologies, and processes

Modernize the Institution's financial management and accounting operations (3 FTEs and \$190,000)

 Monitor financial transactions closely through monthly review, reconciliation and reports to management, ensuring allowability and allocability of expenses

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (6 FTEs and \$577,000)

- Publicize SAAM and Renwick Gallery exhibitions, events, and programs to local and national media to ensure widest possible awareness of collections and resources
- Ensure successful placement of publicity with general media for Renwick Gallery activities, as well as in craft publications
- Collaborate with NPG on the promotion of shared programs and activities in the DWRC

Modernize and streamline the Institution's acquisitions management operations (1 FTE and \$67,000)

 Ensure efficient processing and monitoring of procurement activity at SAAM

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of 1 FTE and \$470,000. Included is an increase of \$393,000 for necessary pay for existing staff funded under this line item. In addition, SAAM is seeking a programmatic increase of 1 FTE and \$77,000 to its Public Programs staff. This person will assist in developing and presenting public programs in the DWRC. SAAM has an ambitious calendar of lectures, concerts, and workshops and this position is needed to organize, set-up, and manage these public programs. SAAM's public programs increase public engagement by keeping old museum friends involved while providing multiple points of entry for new ones at the museum.

If the FY 2009 increase request is not allowed, SAAM will lose momentum from its reopening in 2006 because the Museum will be unable to provide the public with as many opportunities for engagement, and reasons to visit, as are needed to prevent visitor attendance from stagnating.

NATIONAL AIR AND SPACE MUSEUM

		APPLICATION OF OPERATING RESOURCES											
	1	EDERAL OPRIATIONS	GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000							
FY 2007 ESTIMATE	171	16,860	35	4,858	24	4,126	5	1,732					
FY 2008 ESTIMATE	174	17,337	34	5,003	23	4,213	6	2,052					
FY 2009 ESTIMATE	174	18,775	34	5,003	23	4,203	6	2,052					

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Cha	ange
Program Category	FTEs	\$000	FTEs	\$000	FTEs	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	12	1,036	12	1,085	0	49
Provide reference services and	7	655	7	683	0	28
information to the public						
Exhibitions						
Offer compelling, first-class exhibitions	45	5,060	45	5,493	0	433
Collections						
Improve the stewardship of the national	53	3,969	53	4,385	0	416
collections						
Strengthened Research						
Research						
Engage in research and discovery	4	988	4	1,004	0	16
Ensure the advancement of knowledge in	25	2,700	25	2,802	0	102
the humanities						
Enhanced Management Excellence						
Facilities						
Execute an aggressive, long-range	0	0	0	280	0	280
revitalization program and limited						
construction of new facilities						
Information Technology						
Modernize the Institution's information	9	859	9	891	0	32
technology systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is	19	2,070	19	2,152	0	82
customer centered and results oriented						
Total	174	17,337	174	18,775	0	1,438

BACKGROUND AND CONTEXT

The mission of the National Air and Space Museum (NASM) is to commemorate the national development of aviation and space flight, and educate and inspire the nation by:

- preserving and displaying aeronautical and space-flight equipment and data of historical interest and significance to the progress of aviation and space flight;
- developing educational materials and conducting programs to increase the public's understanding of, and involvement in, the development of aviation and space flight; and
- conducting and disseminating new research in the study of aviation and space flight and their related technologies.

NASM is administered as one Museum with multiple locations: the National Mall building; the Udvar-Hazy Center; and the Garber Facility. NASM provides access to the nation's aviation and space flight history to an average of 6–10 million on-site visitors from around the world per year, making it one of the most visited museum in the world. In addition, NASM draws tens of millions of virtual visitors to its website and broadcast and webcast educational programming.

In FY 2009, NASM will collect and preserve the nation's aviation and space heritage, perform the necessary research for exhibits and the increase of knowledge of the solar system, and enhance educational programs, using a mixture of in-house and volunteer resources to convey excitement and information to a diverse audience.

For FY 2009, the budget estimate includes an increase of \$1,438,000. Included in this increase are \$708,000 for necessary pay for existing staff funded under this line item; \$250,000 to improve and maintain the appearance of Museum exhibits; \$200,000 for collections storage, which is justified in the Collections Care section of this budget submission; and \$280,000 to support rent requirements at the Udvar-Hazy Center, which is also justified in the Mandatory Costs section of this budget submission.

MEANS AND STRATEGY

Public Engagement — NASM reaches a diverse audience through static and dynamic exhibits on site, through outreach efforts at local and national schools and organizations, and through professional activities concerning the history of aviation and space flight and the planetary sciences. To perform these activities, NASM relies on staff as well as more than 600 volunteers.

In the National Mall building and Udvar-Hazy Center, docents offer thousands of tours annually, and education volunteers provide on-the-floor educational demonstrations. In FY 2006, NASM's Docent Corps was awarded the Frank G. Brewer Trophy, the National Aeronautics Association's highest honor, for significant contributions of enduring value over the last 30 years to aerospace education in the United States.

The National Mall building's highly interactive and popular *How Things Fly* Gallery and Explainers Program served almost 100,000 visitors last year, with regularly scheduled theater demonstrations of the principles of flight. NASM also host several "Family Day" events and related programs during the year, which are tied to specific themes. Recent Family Days have included the Heritage Series celebrating America's diverse cultural heritage, "Air and Scare" for Halloween, Kite Day in March, and a Fly-in during June. In May, the Museum conducts the national "Space Day" commemoration in collaboration with the National Aeronautics and Space Administration (NASA) and Lockheed Martin Corporation. On this day, students and teachers around the country are able to connect to a live broadcast made available to more than 38,000 schools and more than 8.5 million students and educators throughout the nation.

In FY 2009, NASM will continue to inspire and educate audiences through renewed exhibits at the National Mall building and the Udvar-Hazy Center. According to audience assessments, the element that audiences would most like to see is interactive exhibits based on NASM's collections. This mode of audience engagement is well represented in the National Mall building's *How Things Fly* Gallery and on-the-floor Discovery Stations. During FY 2008, NASM will install air- and spacecraft in the Udvar-Hazy Center, rotate objects on exhibit, and upgrade galleries to reflect current trends in aviation and space flight. In FY 2008, NASM will continue to expand its integrated website and on-site visitor information. This feature will enable visitors to plan their visit on the Web, and to customize their Museum experience — from pre-visit planning, to on-site Museum tours, to post-visit learning.

In FY 2008, NASM will open *America by Air*, the first renovation to the National Mall building's Hall of Air Transportation since NASM's opening in 1976. Of special interest will be a Boeing 747 cockpit that is open to visitors and the model of an Airbus 320 cockpit that demonstrates Fly-by-Wire technology. NASA will support the gallery by providing regular updates on the latest advances in aviation. In 2007–2008, NASM installed art exhibits, including *Earth from Space*, displaying satellite photographs of Earth from space; *Fly Now!*, showcasing aviation travel posters of the 1920s to

1950s; and *In Plane View*, an artistic rendering of aircraft. Other galleries will be evaluated for upgrades.

Collections — To improve the stewardship of the national collections, NASM will continue to raise funds for phase two of the Udvar-Hazy Center, the restoration and collections storage buildings. When complete, the high level of craftsmanship shown in the NASM restoration program will be matched by world-class facilities that can handle the various types of objects and materials that the Museum manages. NASM will continue its loan program of more than 600 aviation and space artifacts, including some of the most sought-after artifacts of the last century: space suits and lunar spacecraft. In order to make information on the collection available to the public, NASM will continue to migrate collections information to a publicly accessible website. The curatorial databases that have been constructed contain extensive information on the history and provenance of each artifact, and the best way to offer more of this in-depth information to the public is through electronic means. NASM's electronic resources allow more people access to the Museum's archival collections, with a resulting increase in archival information requests by the public.

Scientific Research — To achieve the goal of Strengthened Research, NASM's Center for Earth and Planetary Studies conducts basic research related to planetary exploration with an emphasis on Mars, and curates galleries and public offerings in the space sciences. NASM continues to work with the excellent data provided by the Mars Exploration Rover, Mars Express, and Mars Reconnaissance Orbiter missions, and to convey this excitement to the public. NASM scientists are team members on the High Resolution Camera and two radar instruments now in orbit. If successful with the NASA grant process, NASM will lead a \$350 million Mars Radar Mission. In FY 2008, basic research will concentrate on National Research Council and NASA priorities of determining the past climate of Mars, with results published in the scientific literature.

NASM will continue to lead in the fields of aviation and space history by publishing papers and books in the fields of the history of space technology, aviation and aerodynamics history, and the early history of aviation. Based on their research and expertise, the curatorial staff will continue to evaluate potential acquisitions for the national collection and respond to numerous public inquiries. NASM will also continue to upgrade exhibits dealing with aviation and space, thereby ensuring that current material is available to the public.

Management — To achieve the goal of Enhanced Management Excellence, NASM has developed a single infrastructure to support the National Mall

building and the Udvar-Hazy Center. NASM relies on contracted facilities management, information technology, security, and parking for the Udvar-Hazy Center. NASM has found its contractor solution to be a workable alternative for operating a remote site where central Smithsonian support services are unavailable.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science, and culture (12 FTEs and \$1,085,000)

- Implement three educational programs and scholarly events relating to aviation, space flight history, and planetary science through involvement with school systems and in partnerships with outside organizations
- Develop an expanded family and underserved audience educational program, including Family Days, and a special summer program with a focus on NASM's new America by Air exhibition
- Expand the "Aerospace Educator-in-Residence" program reach to attract more students to the Udvar-Hazy Center
- Continue developing a strong distance-learning electronic outreach program through broadcasting special events over the Internet in partnership with Fairfax Network

Provide reference services and information to the public (7 FTEs and \$683,000)

- Expand Visitor Services programs by offering new self-guided tours at the National Mall building
- Support other Smithsonian Institution museums and other federal agencies in implementing successful Visitor Services programs

Offer compelling, first-class exhibitions and other public programs (45 FTEs and \$5,493,000)

- Complete and open the America by Air exhibit in the National Mall building
- Support the National Museum of American History's Treasures of American History exhibition
- Provide curatorial input to continuing upgrades of Udvar-Hazy Center exhibits, including at least two small object cases and two exhibit stations
- · Complete art exhibitions planned for the National Mall building
- Plan the upgrades to Exploring the Planets and the gallery, including concept evaluations and designs
- Increase the exhibits maintenance budget to address wear and tear on flooring, casework, and interactive exhibits

Improve the stewardship of the national collections for present and future generations (53 FTEs and \$4,385,000)

- Improve and maintain the appearance of exhibits in the Museum
- Continue collections management by focusing resources on artifact restoration in addition to artifact installation at the Udvar-Hazy Center
- Begin preparation for accepting the Space Shuttle fleet and related artifacts from NASA
- Add more documentation to 30 artifacts and upgrade the Collections Information System

Strengthened Research

Engage in research and discovery (4 FTEs and \$1,004,000)

- Increase emphasis on Mars research by gaining at least two new competitive research grants
- Support three to five researchers, using competitively reviewed proposals and grants
- Provide outreach for Mars missions that will be shown to the public through video displays, both on monitors in the Museum and on NASM's website
- Publish at least four peer-reviewed professional papers documenting the role of Mars' tectonic and climate history
- Use Mars Odyssey and Mars Global Surveyor data to understand the geologic history of Mars and study similar processes from Earth's geological history

Ensure the advancement of knowledge in the humanities (25 FTEs and \$2.802,000)

- Undertake the proper conservation, documentation, display, and interpretation of existing collections, and accept new artifacts as they are identified and funding is made available for their support
- Provide leadership among aerospace museums by conducting the annual Mutual Concerns of Air and Space Museums Conference

Enhanced Management Excellence

Execute an aggressive, long-range revitalization program and limited construction of new facilities (\$280,000)

 Fund the ground lease for the land upon which the Udvar-Hazy Center is built

Modernize the Institution's information technology systems and infrastructure (9 FTEs and \$891,000)

 Provide support and leadership to the Institution's efforts to improve its technology infrastructure through Web server consolidation

Strengthen an institutional culture that is customer centered and results oriented (19 FTEs and \$2,152,000)

- Provide state-of-the-art facilities and security support, and manage facilities integration, including prime and subsidiary contractors and security outsourcing contracts for the Udvar-Hazy Center
- Maintain an excellent working relationship with NASM stakeholders, including federal, state, local, and business constituencies, by providing briefings at least annually

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of \$1,438,000. This amount includes \$708,000 for necessary pay for existing staff funded under this line item. In addition, NASM is seeking programmatic increases of \$730,000 to provide a discrete, sustainable funding stream for the Udvar-Hazy Center land-lease payment, to improve and maintain the appearance of Museum exhibits, and to upgrade collections storage. The increases are as follows:

- (+\$200,000) This increase provides funds to purchase museum-quality metal storage cabinets to replace obsolete and hazardous wooden and sheet-metal units currently housing the Flight Material and Clothing Collection. A recent chemical analysis by the Smithsonian's Museum Conservation Institute confirmed a high level of arsenic in existing cabinets, which is a health and safety hazard to staff and researchers as well as detrimental to collections preservation. These issues are compounded by overcrowded storage conditions and the potential for mold outbreaks, all of which will continue to worsen without this requested increase.
- (+\$250,000) This increase is requested to improve and maintain the
 appearance of exhibits in the Museum. Some of the exhibits at NASM are 30
 years old and damage caused by years of wear and tear is cumulative over
 time. Visitors to NASM will have a more favorable experience once the
 maintenance of the exhibits is brought up to standard. Maintained exhibits
 reflect more positively and professionally on the Museum, specifically, and
 the Institution as a whole.
- (+\$280,000) This increase is requested to provide for the land lease at the Udvar-Hazy Center. The Smithsonian has a long-term lease agreement with the Metropolitan Washington Airports Authority for the purpose of constructing and operating the Udvar-Hazy Center.

If the FY 2009 request is not allowed, the Udvar-Hazy land lease payment will have to be funded from the Museum's discretionary general expense funding, impacting programs and exhibits. If the exhibits maintenance funds are denied, the condition of the exhibits will continue to deteriorate. Damaged exhibits may not be repaired or may be removed from the Museum floor if they affect visitor safety.

NATIONAL MUSEUM OF NATURAL HISTORY

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL TRUST			R/SPONSOR GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000					
FY 2007 ESTIMATE	390	44,919	8	1,990	30	8,381	20	4,650					
FY 2008 ESTIMATE	398	46,052	16	2,948	35	19,174	22	11,522					
FY 2009 ESTIMATE	413	52,920	16	2,948	35	12,174	22	4,522					

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	54	5,471	54	5,679	0	208
Exhibitions						
Offer compelling, first-class exhibitions	47	5,271	47	6,670	0	1,399
Collections						
Improve the stewardship of the national collections for present and future generations	140	15,967	147	19,503	7	3,536
Strengthened Research						
Research						
Engage in research and discovery	130	16,349	138	17,961	8	1,612
Enhanced Management Excellence						
Facilities						
Execute an aggressive, long-range revitalization program and limited construction of new facilities	3	317	3	330	0	13
Security and Safety						
Provide a safe and healthy environment	2	226	2	234	0	8
Information Technology						
Modernize the Institution's information technology	12	1,299	12	1,348	0	49
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	10	1,152	10	1,195	0	43
Total	398	46,052	413	52,920	15	6,868

BACKGROUND AND CONTEXT

The mission of the National Museum of Natural History (NMNH) is to inspire curiosity, discovery, and learning about nature and culture through outstanding research, collections, exhibitions, and education. Building upon its unique and vast collections and associated data, field research stations, specialized laboratories, and internationally recognized team of staff scientists, research associates, federal agency partners, and fellows, the Museum provides fundamental research information to a wide array of constituencies ranging from federal agencies to the public. The Museum's particular strengths are in the following three Smithsonian Science theme areas: formation and evolution of the Earth and similar planets; discovering and understanding life's diversity; and studying human diversity and cultural change. The Museum's research provides new understanding and relevance to broader national and international scientific agendas, looking at such important societal issues as global change, biodiversity, cultural conflict, and natural hazards.

The Museum's stewardship of its collection of more than 126 million natural history specimens and human artifacts is at the core of its mission. This collection, the largest of its kind, is an unparalleled resource for collectionsbased research on the diversity of life on Earth, including plants, animals, fossils, minerals, and human activity. These anthropological, biological, and geological specimens and objects are the foundation for all of the Museum's scientific products. With their unparalleled spatial breadth and temporal depth, the collections promote analyses and interpretations that allow scientists to connect observations of contemporary phenomena with the past and around the world so that we can better understand our planet and the effect of human activities on it. The Museum's collections capture the imagination and stimulate the next generation of scientists, and are important for the intellectual infrastructure and the Administration's continuing goal of competitiveness in international science and application of scientific knowledge. NMNH collections and their attendant information are a dynamic resource used by researchers, educators, and policy makers worldwide.

In addition, NMNH's collections serve as critical reference materials for U.S. government agencies. These resources are actively and collaboratively used by staff members of the Departments of Defense, Commerce, Agriculture, and Interior, who are housed in NMNH facilities. For example, tens of thousands of insects urgently requiring identification are sent to NMNH from ports of entry each year. Scientists at the U.S. Department of Agriculture and NMNH consult the collections and rapidly provide identifications to border control agencies so that U.S. agricultural and economic interests are kept secure from damage by potential invasive species. The NMNH bird collections provide answers to the Federal Aviation Administration and the U.S. Department of Defense, revealing the species of birds that damage aircraft, and leading to improved habitat

control around airports and improved aircraft and engine design. The National Cancer Institute relies upon NMNH as a trusted repository for plant specimens which must be kept as vouchers for pharmacological research. Similarly, the U.S. Department of the Interior Minerals Management Survey relies on the NMNH as a trusted repository for the invertebrate animals it collects in the course of its research. Meteorites collected from Antarctica are deposited at NMNH by the Johnson Space Center and the National Aeronautics and Space Administration (NASA). The Federal Bureau of Investigation benefits from the identifications and analyses conducted by experts in the Department of Anthropology, who consult the human skeletal collections when providing answers about the remains of crime victims. Analyses of the collections have provided answers regarding the spread of H5N1, the Avian Flu virus, and the etiology of past influenza epidemics.

NMNH's first-class research supports its exhibitions and educational outreach. As one of the most visited museums in the world, NMNH provides diverse public audiences with presentations on every aspect of life on Earth. Through affiliations and partnerships, the Museum takes its science and public programs beyond the National Mall to other museums and non-traditional exhibition venues, such as libraries, schools, and universities throughout the country. With a growing network of interactive websites, the Museum is transforming itself into a true electronic classroom, which is potentially accessible to everyone.

The FY 2009 budget estimate includes an increase of \$6,868,000 and 15 FTEs. Included is \$1,736,000 for necessary pay for existing staff, which is justified in the Mandatory Costs section of this budget, and \$5,132,000 and 15 FTEs in increases for collections care, the NMNH Research Collections Information Systems (RCIS), exhibit maintenance, and DNA barcoding research that supports the Smithsonian's focus on Stewardship of National Treasures and the Increase and Diffusion of Knowledge.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, funding will be used to replace outdated exhibits with integrated, multi-disciplinary, and interactive exhibitions on the Mall and in other venues through traveling exhibits and electronic outreach across the country. In FY 2009, NMNH will continue renovating its permanent exhibition halls and offer new temporary exhibitions. NMNH will open the *Ocean Hall* exhibit in September 2008, a significant accomplishment because of the size (23,000 square feet of exhibition space), complexity, and dynamic nature of this new exhibit hall. This is the largest renovation of public space at the Museum in 40 years and is specifically designed so that the content can be updated and changed to incorporate new scientific

discoveries. Design will be completed and fabrication well under way for another exciting and important permanent exhibit on *Human Origins*, which is planned to open in November 2009. The temporary exhibitions planned for FY 2009 include *Written in Bone*, a major exhibit on forensic anthropology and the Jamestown settlement; *Darwin*, in recognition of the bicentennial of Charles Darwin's birth; and *Nature's Best Photography*, a very popular photography exhibit of animals and nature. Federal funding also enables NMNH to make its exhibitions available to other U.S. and international institutions. The effectiveness of NMNH exhibitions and presentations can be seen in the excitement they generate and their popularity with family audiences. In FY 2007, NMNH expects more than seven million visits.

In FY 2009, the Museum's commitment to education will continue through support for ongoing programs, an extensive national/international network that includes traveling exhibitions, interactive electronic classrooms and field trips, websites and an ocean portal, as well as school programs, self-guides for teachers, and festivals to attract interest in and understanding of NMNH research and collections. These outreach efforts serve millions of visitors each year, nationally and internationally. In FY 2009, NMNH will increase the number of teacher training manuals available on the NMNH website by 50 percent; prepare and distribute 2,500 new curriculum packages for each of the major exhibitions and electronic programs opening in FY 2009; and continue to upgrade the website to provide additional educational programs and make use of the planned ocean portal's asset to provide additional educational materials on ocean literacy for both formal and informal educational opportunities.

Consistent with the guidance provided in the joint Office of Management and Budget-Office of Science and Technology Policy memo on FY 2009 research and development budget priorities, NMNH will strengthen its commitment to the stewardship of the federal scientific collections. These collections play an important role in public health and safety, homeland security, trade and economic development, medical research, and environmental monitoring, as well as serving as the foundation for NMNH research, exhibits, and public outreach programs. NMNH will expand its commitment to research on and stewardship of the collections, in partnership with affiliated federal agencies (such as the Departments of Defense, Commerce, Agriculture, and the Interior), in response to this guidance. Federal funding is the linchpin for maintaining and preserving these priceless collections and their valuable information for future generations, while also supporting their use for critical ongoing research that, for example, facilitates recovery efforts after natural disasters like volcanic eruptions and the associated loss of biodiversity. The breadth of NMNH research and collections of biological, geological, and anthropological objects fosters an interdisciplinary environment that attracts other academic institutions, foreign researchers, and national and international policy makers.

Furthermore, the NMNH has a long history of training future scientists here and abroad to examine and monitor biodiversity in their own countries, among their other research endeavors, which also serves to strengthen the NMNH collections and connections with these countries. NMNH is committed to training future generations of scientists by increasing the number of its postdoctoral fellowship awards and providing an entry-level experience for the most talented undergraduates in the Earth and life sciences as well as anthropology. Collaboration with foreign students and colleagues will continue to be emphasized to broaden the international science network.

In FY 2009, NMNH will focus on adding more specimens to its electronic catalogue for scientists, the RCIS, and to expanding the availability of these invaluable and unique assets via the Internet to researchers, policy makers, and the public both nationally and worldwide. NMNH also will continue migrating records from the in-house Transaction Management (TM) system into the RCIS, using EMu, a commercial software application for museums. TM records document ownership and custody of NMNH's collections as well as objects and collections on loan. Furthermore, NMNH will continue image digitization of selected plant, vertebrate, and artifact collections. In addition, NMNH will continue digitization of selected data sets from the 50 million additional paper records, and link text-based information to images, video, and audio recordings to make available to scientists and the public a wealth of resources (e.g., photographs, artwork, sound recordings, field notes, and publications) which describe and explain the diversity of life, culture, and Earth processes. NMNH will also complete the move of fluid-preserved collections to a new facility, and update associated inventories.

To achieve the goal of Strengthened Research in FY 2009, NMNH will build upon its updated strategic plan which is linked to the Smithsonian Science Plan, and focus on initiatives related to new insights in geology and mineralogy, paleobiology, systematics, evolutionary biology, ecology and its relationship to biodiversity, and anthropology. Increasing the number of digitized specimens will enable researchers to leverage the knowledge inherent in the diverse collections to address many of today's pressing issues regarding invasive species, disease vectors, and the impact of humans on biodiversity and climate. Smithsonian publications will have a more integrated quality, providing insights from all viewpoints of the Museum on pressing national and international topics.

In addition, NMNH will continue its work on a new scientific effort started in 2007, the *Encyclopedia of Life*. The NMNH hosts the Secretariat (administrative and leadership hub) for the *Encyclopedia of Life* (EOL), which has the lofty goal of documenting every known species living on Earth. The EOL, funded through two leadership grants from foundations, is a Web-based, online database, which is expected in about 10 years to encompass the 1.8 million known species of animals, plants, and other life forms. The database will be

configurable for all types of audiences, from students and scientists, to policy makers, and the general public. The NMNH is uniquely poised to contribute to this global effort of documenting every known species currently living on earth, through its extensive and broad collections as well as through the scientific staff who provide the context for these specimens. The specimens themselves are irrelevant without the scientific expertise that provides the related ecological and evolutionary information, including DNA barcoding of species for which NMNH requests additional funding as described in the Explanation of Change section of this narrative below.

In FY 2009, NMNH will address the goal of Enhanced Management Excellence in part by completing the move to re-house collections preserved in alcohol, currently located on the National Mall, into a state-of-the-art research, conservation, and collection storage facility at the Museum Support Center (MSC) in Suitland, Maryland. This facility will ensure that the alcohol-preserved collection will continue to be available for research in a facility that meets fire and safety codes. An additional focus in FY 2009 for the Natural History Building on the Mall will continue to be the renovation of major building systems and improved security in the building.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science, and culture (54 FTEs and \$5,679,000)

- Reorganize and expand the volunteer docent program, and increase the number of docents by 100 percent
- Plan, develop, and implement three family festivals to complement the Museum's exhibitions and research
- Prepare and distribute new educational packages for each of the major exhibitions opening in 2009
- Continue and enhance interaction with graduate training programs at local universities
- Continue to increase access to exhibits, research, and collections for students with disabilities and for economically disadvantaged students
- Continue to increase access to the scientific professions for minorities and women, with a special emphasis on museum science careers
- Complete 100 percent design for the newly integrated and relocated Naturalist Center and Discovery Room complex, scheduled to open in 2011
- Host a symposium for the general public on the bicentennial of Charles Darwin's birth in association with the 150th anniversary of the publication of Darwin's On the Origin of Species

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (47 FTEs and \$6,670,000)

- Complete design and 90 percent fabrication for the new 15,000-squarefoot Human Origins exhibition scheduled to open in November 2009
- Complete fabrication and open a major, original 5,000-square-foot temporary exhibition, Written in Bone, in November 2008 on forensic anthropology and the Jamestown settlement
- Open four new temporary exhibitions Nature's Best Photography (November 2008); Darwin (Summer 2009) to mark the bicentennial of Charles Darwin's birth and the 150th anniversary of the first publication of On the Origin of Species; Ants, a photographic exhibit on ant behavior (May 2009); and Orchids (January 2009)
- Complete 95 percent design for *Yupik*, a new temporary exhibition scheduled to open in early 2010 on the Yupik Eskimo in western Alaska *Improve the stewardship of the national collections for present and future generations (147 FTEs and \$19,503,000)*
- Continue work on the next phase of a Museum-wide collections assessment that prioritizes collections care projects and provides comparable, current information about the status of the collections
- Continue image digitization of selected plant, vertebrate, and artifact collections, including completion of digitization of botanical type specimens for Web access
- Continue project to conserve all botanical specimens from the U.S.
 Exploring (Wilkes) Expedition that were preserved with mercuric chloride
- Provide conservation treatments to fossil collections in need of physical stabilization, vertebrate skeletons including human skeletal remains in need of re-housing, and geological collections in need of chemical stabilization
- Re-house DNA collections, update inventory, and continue assessing incremental results from pilot project that informs the most effective conservation strategies for these tissue collections and supports their accessibility to the wider scientific community
- Complete re-housing of marine mammals collections with new collection cabinets, and begin re-housing of botanical collections with new collection cabinets
- Continue making records of paleontological, botanical, entomological, zoological, and anthropological specimens and objects and associated data universally available on the Web
- Continue migrating records from the in-house TM system into the RCIS, using EMu, a commercial software application for museums. TM records document ownership and custody of NMNH collections as well as objects and collections on loan
- Continue digitization of selected sets from within the 50 million additional paper records, and link text-based information to images,

video, and audio recordings to make available to scientists and the public a wealth of resources (e.g., photographs, art, sounds, field notes, and publications) that describe and explain the diversity of life, culture, and Earth processes

- Continue migrating digital images of collection items to the Institutionwide Digital Asset Management (DAM) system
- Develop improved functionality of the EMu system, including faster importing and exporting of data and reports
- Continue to implement the congressionally authorized program of repatriating Native American skeletal remains and associated objects
- Complete the move of fluid-preserved collections to the new Pod 5, update associated inventories, and correct any container, preservative, or labeling problems resulting from the move
- Continue providing collections to national and international researchers through the collections loan program
- Complete inventory of several high-value collections as recommended by the Inspector General as part of the 2006 collection inventory and security audit including: phase 3 of minerals reference collection, the inventory of meteorites, and the inventory the Burgess Shale collection
- Prepare for the upcoming move of eight million feet of ethnographic film in the Human Studies Film Archives into the renovated Pod 3 at the MSC

Strengthened Research

Engage in research and discovery focused on understanding the origin and evolution of the universe, Earth and planets, biological diversity, and human culture (138 FTEs and \$17,961,000)

Continue to implement NMNH's strategic plan linked to the Institution-wide Science Enterprise Plan, focusing on three fundamental themes:
 1) formation and evolution of the Earth and similar planets;
 2) discovering and understanding life's diversity;
 and 3) understanding human diversity and cultural change

The Formation and Evolution of Earth and Other Planets

- Continue research on asteroid differentiation and geochemical consequences for carbon, and alteration in Martian meteorites
- Continue to analyze prebiotic materials in the first samples returned from a comet by a NASA spacecraft
- Continue work on the geological history of global climate change with a special emphasis on periods of global warming
- Continue work on ocean environments and circulation, focusing on past intervals and greenhouse climate

Discovering and Understanding Life's Diversity

• Continue studies of the large-scale evolutionary relationships among birds, insects, and plants as part of collaborative research projects in the

National Science Foundation (NSF)-funded Tree of Life initiative, and, in particular, studies of the large-scale evolutionary relationships among Lepidoptera (moths and butterflies), spiders, and ants. The primary goal of the Tree of Life initiative is to produce a robust phylogeny of all oldest lineages within a particular group of organisms, which provides an important predictive framework for diverse purposes, including biodiversity studies

- Continue research on the tempo and mode of evolution in deep-sea faunas
- Inventory and digitize diatom type collections in Botany for Web access, and continue digitizing images and radiographs of primary types in the Fishes collection
- Continue research into the geological history of plant-animal interactions
- Continue work on evolution and phylogenetic relationships of dinosaurs
- Continue exploring the diversity of various groups of vertebrates, particularly in tropical regions, with emphasis on undescribed forms and the development of comprehensive studies of various groups, their phylogenies, and biogeographic histories
- Continue studies of deep-sea invertebrates from the Gulf of Mexico, including exploration of poorly known regions such as cold seeps and petroleum seeps, which are home to a diverse but still largely unknown community of animals. This research is being done in collaboration with the National Oceanic and Atmospheric Administration (NOAA) and Texas A&M University at Corpus Christi
- Continue to make entomological primary type specimens and images available on the Web
- Continue molecular-phylogenetic and population-genetic studies of, and develop checklists for the identification and inventories for, various plant families, with an emphasis on plants in the environments of the Pacific, northern South America, the Caribbean, Southeast Asia, and specific marine ecologies
- Continue to sample insects and spiders from poorly sampled localities, particularly beetles, ants, spiders, and moths and butterflies from Central and South America
- Continue research on ecological recoveries from mass extinctions and the evolution of innovations in the history of life, with special emphasis on the Cambrian explosion, the Permo-Triassic, and the early Cenozoic eras
- Continue to host the Executive Secretariat for the Encyclopedia of Life (EOL), an international effort funded by two large grants from foundations to construct one website where information can be found on all known species of life
- Continue to host the Secretariat for the Consortium on the Barcode of Life, and participate in the working group on plants, with the goal of determining the optimal barcode region for land plants

Understanding Human Diversity and Cultural Change

- Continue to support the Endangered Language Program, which will
 preserve and make accessible through digitization more than 11,400
 sound recordings of endangered languages in the National
 Anthropological Archives and Human Studies Film Archives, many of
 which currently exist only on endangered recording media
- Continue research on human/environment interaction within the climatic and environmental context of human evolution in East Africa
- Continue research on the development of coastal and deltaic environments as early centers of urbanization
- Continue interdisciplinary fieldwork in Mongolia to study the development of early civilizations in Central Asia
- Continue research into the spread of the earliest humans from Africa and Asia, with funding from NSF
- Conduct research into how and when human beings first processed and cultivated cereal grains, illuminating how the human species went from being primarily hunter-gatherers to becoming farmers
- Continue research on the origins of animal domestication
- Continue research on cultural responses to globalization

Enhanced Management Excellence

Execute an aggressive, long-range revitalization program and limited construction of new facilities (3 FTEs and \$330,000)

- Provide curatorial and technical support for continuing renovation of the Natural History Building and the occupation of a new facility at the MSC to re-house collections preserved in alcohol
- Provide oversight and review of the Natural History Building's longterm facilities heating, ventilation, and air-conditioning (HVAC) efforts and renovation, and restoration of public exhibit spaces

Provide a safe and healthy environment to support Smithsonian programs (2 FTEs and \$234,000)

 Implement extensive inspection and training efforts to provide the highest quality safety program for NMNH to continue to reduce identified safety problems and ensure that new problems do not develop

Modernize the Institution's information technology (IT) systems and infrastructure (12 FTEs and \$1,348,000)

- Maintain desktop and application server support for NMNH functions
- Work with resources provided by the Office of the Chief Information
 Officer to replace desktop computers on a three-year cycle
- Ensure that all users of the Enterprise Resource Planning (ERP) system have compatible hardware and software to support all transactions
- Create a robust and reliable infrastructure for new online facilities and broader Web programs that support NMNH-specific electronic outreach goals, with a focus on making collections data easily

accessible via the Internet, as well as developing important collaborative Web projects such as the ocean portal

Strengthen an institutional culture that is customer centered and results oriented (10 FTEs and \$1,195,000)

- Train all staff responsible for financial, budget, procurement, and human resources transactions to implement the ERP system as it is deployed
- Recruit, hire, and train staff to perform core administrative functions
- Implement the NMNH strategic plan and annual performance activities, and ensure that these efforts are linked to the Smithsonian Science Strategic Plan

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of \$6,868,000 and 15 FTEs. Included is an increase of \$1,736,000 for necessary pay for existing staff funded under this line item. In the area of Stewardship of National Treasures, the Institution is seeking a programmatic increase of \$2,300,000 for collections cabinetry and supplies to replace substandard cabinets that have been contaminated with hazardous materials, are vulnerable to damaging environmental conditions due to warping, and are not secured with locks. The NMNH is also seeking \$420,000 and 5 FTEs for improved collections conservation, collections accountability, and responsible access. Both of these requested increases are in response to recent reports that indicate national standards are not being met in key areas. These reports include: 1) a 2006 audit of collections security and inventory that found NMNH's collections are at risk of loss or damage, and that the Museum must improve inventory control, physical security of the collections, and oversight of users of the collections, and 2) the Heritage Health Index, a national survey of museums, archives, and libraries, which found that the National Collections are at risk due to lack of climate control and staffing shortages.

Also, an increase for \$212,000 is requested for the Institution's digitization effort for the NMNH research and collections information system. This increase will enable NMNH to advance scientific understanding; expand the reach of Smithsonian science; use the CIS to make NMNH collections more available to scientists and the public via the Web; and to manage the 126 million specimens and objects in the NMNH collections, and make this information available to the public and scientific users over the Web.

The above collections-related increases are in support of the Institution's Stewardship of National Treasures and are further justified in the Institution-wide section of this budget, under the Collections Care Initiative. To support *Increase and Diffusion of Knowledge*, the Institution is requesting \$1,200,000.to support increased maintenance costs associated with new and innovative exhibitions which use new technologies and therefore sustain increased wear and tear from higher levels of visitation. The request also includes an increase of 8 FTEs and \$1,000,000 for DNA barcoding, a technique for characterizing species of organisms using a short DNA sequence from a standard and agreed-upon position in the genome. This request will enable the Smithsonian Institution to maintain its leadership position in this critical research effort, which has widespread practical applications such as pest and invasive species management.

The requested increases for FY 2009 include:

- (+\$2,720,000, +5 FTEs) This increase is requested for improved storage cabinetry (\$+2,300,000) and focused conservation and inventory support (+\$420,000 and +5 FTEs) to ensure the long-term physical preservation of the Institution's irreplaceable National Collections.
 - o (+\$2,300,000) NMNH will purchase cabinets, like those now in use at the Museum Support Center, to replace existing substandard cabinets at the Natural History Building that have been treated with arsenic, have warped and ill-fitting doors (leaving the contents susceptible to pests, dust, dirt, and rapid temperature and moisture changes), are off-gassing volatile organic compounds harmful to the collections, and lack locks, all of which make the cabinets unacceptable by contemporary Museum standards. New compactors and cabinetry will support the most effective use of existing spaces in the Natural History Building, and will provide secure, chemically inert storage. Such cabinetry is a lasting infrastructure investment in the long-term preservation of the collections. Use of these cabinets now is cost effective because it mitigates future damage that will occur without an improved barrier against these agents of deterioration. Over the next several years, purchasing and associated risk management will focus on re-housing the following collections currently in substandard cabinetry: marine mammals, botanical collections, high-value gems and minerals, and fossils. NMNH will also develop specialized cabinetry for forensic anthropology collections and radioactive collections.
 - (+\$420,000, +5 FTEs) The requested staff will support a standards-compliant inventory program and collections conservation initiative focusing on exhibited specimens and the research collections of fossils, plants, and animals. Currently, staffing is inadequate to ensure consistent inventories for all of the Museum's more than 126 million collection items. The need is most critical in the collections of greatest

monetary value and the most scientifically important collections, the biological types. During the next several years, funding will be used to complete the minerals reference collection, complete the meteorites inventory, inventory the Burgess Shale collection, complete the inventory of types of mammals and inventory the Museum's extensive ethnographic collections. Furthermore, funding will be used to address a serious risk to the fossils now on exhibit. Temperature and humidity fluctuations, vibrations and other mechanical damage, adherence of dust and airborne particles, and the degradation of outmoded mounting techniques and conservation treatments point to a grim future for some of the Museum's most charismatic, publicly engaging iconic collections. Biological collections need the benefit of contemporary conservation practices to maintain their scientific potential and make them safe for use. For the next several years, funds will be used to assess the condition of exhibited terrestrial vertebrate and marine fossils; prioritize conservation needs and begin treatments; assess the condition of mineralogical reference collection; perform basic treatments and use specific preventive practices to protect the mineralogical reference collection; test mammal and bird skins for harmful chemicals and mitigate risks from chemically dangerous mammal and bird skins; and develop plans for treatments of ethnographic collections having harmful chemical residues.

(+\$1,200,000) This request will support increased maintenance associated with exhibitions that use new technologies and sustain increased wear and tear from growing visitation. New exhibitions and public programming have rejuvenated the Museum's exhibits and attracted record-setting crowds. The design and learning style that make these new resources attractive also dramatically increase their operational costs. The increased number of visitors has resulted in more wear and tear on the exhibitions. Computer technology creates a more interactive and dynamic exhibit experience that appeals to a wide variety of learning styles, but also requires frequent maintenance and upgrades. Lighting costs have risen fourfold, carpeting costs have risen by 900 percent, and routine hall maintenance costs have risen by 500 percent. The Museum building is more than 1 million square feet and more resources are needed to maintain and repair over 75,000 light bulbs for emergency lighting, lighting for public and staff safety, and lighting in exhibit areas. There are more than 300,000 square feet of exhibit space that require daily and preventive maintenance and repairs, and upgrades to outdated scientific information. With more than 5000 specimens on exhibit and few staff to support maintenance activities, NMNH runs the risk of being unable to respond in a timely manner to the need for critical repairs and to ensure the security of its priceless specimens. Moreover, NMNH is unable to keep its scientific information

current because there are insufficient resources to replace outdated scientific information. More than half of the exhibits in the Dinosaur Hall contain outdated information and reflect poorly on the science and research currently being done at the Museum. Without additional staff to maintain more than 135 audiovisual elements, the NMNH will continue to have an embarrassing number of blank screens and inoperative computer interactives. Sixty percent of the audiovisual components and interactives in the *African Voices* exhibit do not currently work.

Increased funding will ensure that NMNH audiovisual equipment is operating at levels acceptable to the public and that the significant investment made in upgrading exhibits is not undermined by operational shortfalls that affect the exhibits' quality, appearance, and scientific accuracy. The funds for supplies (including audiovisual equipment, lighting, projectors, monitors, carpet, paint, and cabinetry) and contractors are required to meet the increased operational responsibilities associated with innovative exhibition styles, and should improve the operational time of audiovisual equipment within the exhibits from 80 percent to 93 percent. NMNH requests that this initiative be supported as a private-public match of funding, leveraging the Institution's ability to raise private funds with a public match. It is extremely difficult to find donors who are willing to support exhibit maintenance as well as support the development and fabrication of new, highly visible exhibitions on the Mall. Having an incentive such as federal matching funds will provide a much-needed leveraging opportunity attractive to possible donors. To date, NMNH has raised \$1.2 million for an endowment to maintain and operate the upcoming Ocean Hall exhibit and requests that this amount be matched in FY 2009.

• (+\$1,000,000, +8 FTEs) This increase is requested to help the Smithsonian maintain its leadership and expand its efforts in DNA barcoding, a technique for characterizing species of organisms using a short DNA sequence from a standard and agreed-upon position in the genome. As the recognized U.S. leader in DNA barcoding, the Smithsonian Institution must increase its capacity to maintain its leadership for training and research in multiple DNA barcoding efforts. Biologists from several SI bureaus, not just NMNH, are actively engaged in DNA barcoding efforts, and participation by Smithsonian staff will only grow in the years ahead. DNA sequences collected from a uniform locality on genomes can be a barcode of life for identifying species, an invaluable tool that will facilitate environmental and biodiversity discovery and monitoring in the United States and abroad. Speeding up the recognition of a species has vast practical applications, from finding and eliminating invasive species to control of pests at U.S. borders. Without

substantial additional funding, critical efforts at the Smithsonian Institution will stall — for example, support for collections to be barcoded, development of genetic resources, exploratory research on environmental sampling, as well as support for biodiversity documentation. This proposal seeks to establish a budgetary framework to sustain and, if possible, expand the Smithsonian-wide efforts in this critically important new area of applied and basic biological research. It provides the staffing and consumable costs for barcoding efforts in several high-priority taxonomic groups. It will position the Smithsonian Institution and NMNH as leaders in providing biodiversity services to the scientific community.

(+\$212,000, +2 FTEs) This increase is requested to digitize some of the 50 million additional paper records; link text-based information to images, video, and audio recordings; support the continued migration of more than 6.5 million catalogue and transaction records from more than 50 legacy systems; and make available to scientists and the public a wealth of inadequately accessible resources (e.g., photographs, art, sounds, field notes, and publications) which describe and explain the diversity of life, culture, and Earth processes. The requested funding will enable the NMNH to support the RCIS with robust modern hardware and software to support the rapidly growing data, images, sound, and video files in RCIS. These increased funds will provide critical infrastructure needed for redundancy, adequate test platforms, and additional storage and other capacity planning requirements. As more data, more users, and more stress are placed on the system, needs in this area continue to increase. The upgrade of the EMu license to a developer license, along with additional trained staff, will provide faster data import and export, more complex and enhanced reports, and customized data entry screens. Funds requested would also support users of the TM portion of EMu and the customized reports that they will need. The requested additional 2 FTEs will enable NMNH to ramp up the migration of records from legacy systems into RCIS, and will provide additional system user support to the NMNH community. NMNH data have been used to guide conservation planning issues in Guyana; predict the economic impact and control of invasive species in Mexico and North America; and develop predictive models of the potential spread of West Nile virus. The NMNH goal is to bring these disparate data together, make them widely accessible, and to provide the tools and interfaces that will make them useful to everyone who needs them — from scientist to policymaker to student — for research, conservation, drug discovery, protected area management, and disease control.

There are significant consequences to not providing adequate resources for collections care if the FY 2009 request is not allowed. Degraded collections undermine NMNH's ability to produce high-quality research and exhibits. Among the near-term risks are health hazards to users of the collections due to arsenic in existing cabinetry; loss of specimens to theft because the collections cabinets do not lock; environmental and pest damage to collections; and inefficient use of the existing footprint of the Natural History Building. Finally, continued insufficient staffing will lead to closing more collections to visitors. For example, approximately 20 percent of the insect collections, which are important for identification of potential invasive species, are closed due to insufficient staff to process research loans and provide visitor oversight.

If the FY 2009 request for exhibits maintenance is not allowed, visitors to the Museum will more frequently find that exhibits with computer-generated interactive features are not operating because the maintenance required to keep these exhibits operating properly is not available. Overall appearances will remain neglected without additional funding to support new carpeting, repainting, refurbishing of casework, refinishing of metalwork, and other maintenance needed because of daily wear from the Museum's high visitation rate.

For DNA barcoding, if the FY 2009 request is not supported, large-scale biodiversity exploration will regress to small-scale, narrowly focused data set generation, progress and accomplishment will creep behind the pace being set by others, and Smithsonian scientists will be unable to continue leading the way in this important field of research. Specific initiatives that cannot happen without further funding include DNA barcoding support for the international effort on the *Encyclopedia of Life*, the Smithsonian Institution Global Earth Observatories (SIGEO) project; barcoding the Center for Tropical Forest Science plots beyond Barro Colorado Island (BCI)/Panama; barcoding validation of cryopreservation collections; expeditionary research support; mobile laboratory development/deployment; and barcoding any of the extensive Smithsonian frozentissue collections, which are a worldwide resource.

For collections digitization, if the requested increase is not allowed, NMNH will not be able to make necessary RCIS infrastructure improvements, meet increased maintenance costs, upgrade the EMu software license to expand RCIS functionality, and ramp up the migration of records from legacy systems into the TM functions in the RCIS. These records document ownership and custody of NMNH's collections. Because fewer collections will be made accessible to NMNH and other researchers, advances in scientific research, especially in the critical areas of biodiversity, conservation, drug discovery, protected area management, disease control, and invasive species, will be inadequately supported.

NATIONAL ZOOLOGICAL PARK

	APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS		_	NERAL RUST			GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	FTE \$000		\$000			
FY 2007 ESTIMATE	202	20,737	6	975	19	6,720	4	900			
FY 2008 ESTIMATE	215	21,842	10	1,100	17	3,953	4	900			
FY 2009 ESTIMATE	225	24,476	10	1,100	17	3,953	4	900			

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
	' ' -	7000		7000		7000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	2	252	2	259	0	7
Exhibitions						
Offer compelling, first-class exhibitions	115	10,249	115	11,082	0	833
Collections						
Improve the stewardship of the national	49	5,918	57	7,018	8	1,100
collections						
Strengthened Research						
Research						
Engage in research and discovery	28	2,261	28	2,352	0	91
Enhanced Management Excellence						
Security and Safety						
Provide a safe and healthy environment	4	685	5	1,158	1	473
Information Technology						
Modernize the Institution's information	4	802	4	815	0	13
technology systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is	9	1,109	10	1,213	1	104
customer centered and results oriented						
Ensure that the workforce is efficient,	0	100	0	100	0	0
collaborative, committed, innovative, and diverse						
Enhance the reputation of the Smithsonian by	4	466	4	479	0	13
maintaining good relations with the news media						
and with federal, state, and local governments						
Total	215	21,842	225	24,476	10	2,634

BACKGROUND AND CONTEXT

As the Nation's Zoo, the mission of the National Zoological Park (NZP) is to provide leadership in animal care, conservation science, education, and sustainability. The Zoo has outlined an ambitious new strategic plan with the goal of, by 2016, being recognized as the world's finest zoo, providing the highest quality animal care; advancing scientific excellence in conserving wildlife; teaching and inspiring people to engage in conservation of wildlife, water, and habitats; and practicing conservation leadership.

Consistent with the overarching objectives of the Institution, the NZP has established specific goals and performance metrics to fulfill its mission and achieve its vision. The Zoo has set as its highest priority an aggressive, long-range facilities maintenance and revitalization plan that ensures optimal safety and protection of facilities, collections, visitors, staff, and volunteers. This will provide the necessary infrastructure to achieve NZP's programmatic goals. In support of the Smithsonian's goal of Increased Public Engagement, the Zoo will offer compelling, first-class exhibits; judiciously build, refine, and care for its animal and plant collections; and extend the reach of its educational programs, both for the general public and for professionals in the conservation sciences.

To achieve the goal of Strengthened Research, the NZP will expand programs that integrate research on both Zoo animals and species in the wild, resulting in synergies that benefit the health and well-being of both populations, as well as the human societies that interact with these diverse animals. The Zoo will continue to develop strategic partnerships with other Smithsonian units and external organizations to complement its strengths in veterinary medicine, reproductive sciences, and conservation biology. Under the Smithsonian Strategic Science Plan, the Zoo will pursue focused research on life's diversity, including partnership-based and multi-disciplinary studies of extinction-prone species and their habitats.

To achieve the goal of Enhanced Management Excellence, the Zoo will focus on increased attention to safety and health of the staff and collections, continue to apply integrated pest management throughout its facilities, modernize information systems for management purposes and for communicating the Zoo's stories and messages to the public, and enhance the skills of staff and managers to increase their effectiveness. Major improvements already have been made in these and other areas that were cited as concerns in the 2003 American Zoo and Aquarium Association (AZA) accreditation inspection, in the 2003–2006 U.S. Department of Agriculture (USDA) inspection findings, and in the 2004 and 2005 reports of the National Academy of Sciences (NAS). The National Zoo is preparing once again for AZA re-accreditation in 2008.

For FY 2009, the budget estimate includes an increase of 10 FTEs and \$2,634,000. Included is an increase of \$824,000 for necessary pay for existing staff funded under this line item. In addition, the NZP is seeking a programmatic increase of 10 FTEs and \$1,810,000 to provide for avian flu protective requirements, ensure animal welfare and staff safety, support hospital and pathology service contracts and medicine and laboratory supplies, and to establish Biomaterials Resources Banks.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, the NZP will continue to devote significant resources to its animal habitats and the care of the animals in the Zoo—recognizing that both are essential for the overall health and safety of the animal collection—as well as to ensure a high-quality visitor experience. A major portion of the NZP staff and budget will continue to be used to provide state-of-the-art medical care, nutrition, husbandry, and safe and enriching environments for all NZP animals at both the Zoo's public exhibitions in Washington, DC's Rock Creek Park and its Conservation and Research Center at Front Royal, Virginia.

Animal exhibits will continue to be upgraded, using the strategy of customizing or tailoring exhibit spaces to reflect the specific needs of the animal species, particularly with regard to their overall welfare and behavioral needs. Each species' behavior and natural history will be considered when designing habitats to stimulate natural behaviors for foraging, hunting, and breeding. Planned exhibit improvements will expand opportunities for animal enrichment; support behavioral, nutritional, or reproductive studies; and provide Zoo visitors with an inspiring and educational experience. Staff continue to update and improve the Zoo's popular website, rated by Web visitors as excellent in amount and quality of information and design. The website provides enhanced content to supplement exhibit content, with a focus in 2009 on developing materials for new exhibits such as Asian elephants, and to enable people who cannot visit the Zoo in person, due to distance or infirmity, to enjoy a rich, educational virtual experience. Devising better ways to use the website's popular webcams for educational purposes is a priority, as is connecting the public to the Zoo's science and conservation programs through online experiences. In 2007, these efforts include an Antarctic Expedition, the Przewalski's Horse Satellite Tracking project, and the Dolphin program. In 2007, the website hosted about 13,000 pages and attracted 30 million visits, maintaining the record-breaking numbers of 2006. Surveys to be conducted in 2009 will guide future development of the website.

Numerous aging or failed exhibit, staff, and visitor areas are being revitalized as the NZP continues renovating and modernizing the Zoo. A priority will be upgrading the inadequate fire-detection and suppression

systems throughout the Rock Creek and Front Royal facilities. A nosmoking policy was implemented in all public areas and buildings on January 1, 2007, to minimize the risk of fire. In coordination with the Office of Facilities Engineering and Operations (OFEO,) a review of the regular maintenance needs of these systems, addition of systems where none currently exists, and replacement of failing systems has been made and is incorporated in the Zoo's Facilities Capital Program.

In FY 2007, the NZP is assessing the success of Asia Trail I, which opened in October 2006. The Zoo provided programmatic guidance to design and begin construction of a new elephant "wing" that incorporates modern science and husbandry requirements into the historic Elephant House, which was built in the 1890s and last renovated in the 1930s. With input from other *in situ* and *ex situ* elephant experts around the world, the NZP has designed a series of habitats for its elephants that will stimulate a variety of natural behaviors and exercise. The Zoo will continue to incorporate and link science into existing and new exhibits, while also increasing the visibility and scope of its conservation efforts through demonstrations, the website, and various other media.

To achieve the goal of Strengthened Research, the NZP will continue to address significant scientific and conservation issues of key species and critical habitats by studying animals in the field and in captive environments. In the context of the Smithsonian Institution (SI) Science and NZP Strategic Plans, the Zoo will continue efforts to be recognized as scientific leaders in the conservation of species and their habitats. The NZP will enhance the integration of science with exhibits, selection and care of the animal collection, educational programs, and the overall facilities master plan. Scientific, curatorial, and veterinary personnel are working together to study the medical needs, reproductive patterns, behavior, habitat use, interaction with people, and populations of numerous threatened and endangered species, including the cheetah, tiger, clouded leopard, black-footed ferret, Przewalski's horse, and Asian elephant. Ongoing studies on these and many other species will help secure sustainable wild and captive populations, and are conducted in collaboration with other scientific zoological and conservation organizations worldwide. NZP scientists will continue to share this research with the public and a wide range of scholars, university researchers, and field biologists, and will use their findings to enhance the health and welfare of the NZP collection and strengthen NZP exhibits as well as educational and outreach programs. The NZP will continue to invite students and outside colleagues to participate and collaborate in efforts to increase the Zoo's capacity for scientific research and science-based professional training programs. More than 350 professionals participated in NZP training programs in FY 2007, making the Smithsonian Institution a major center of conservation-based training.

To achieve the goal of Enhanced Management Excellence, the NZP has increased safety training and set a goal of zero injuries. Zoonotic training and increased biosecurity protocols have been implemented to minimize health risks to staff and the animal collection. The NZP is aggressively executing its strategic and long-range renewal plans and continuing its modernization and improvement programs in the areas of life, health, and safety of people and animals, animal nutrition (including food distribution), pest management, training, records management, and information technology. In addition, the NZP continually assesses its around-the-clock infrastructure support operation for animal exhibits to ensure the safety and well-being of the collection, visitors, facilities, and staff. The Zoo's master planning efforts, begun in January 2005, will incorporate the strategic plan, collection and exhibit plans, science priorities, and visitor amenities, and will establish priorities for facility renovation and improvements at both the Rock Creek Park and Front Royal sites.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (2 FTEs and \$259,000)

- Coordinate the many opportunities for learning that exist in the Zoo
 environment—including exhibit graphics, informal talks provided by
 volunteer interpreters and keepers, and structured classes, special
 events, and courses—to encourage audiences of all ages to
 appreciate the diversity of wildlife and the impact of human
 behavior on habitats
- Use current and new affiliations and special programs to reach out to students, educators and families, and increase scientific literacy and understanding. The NZP will focus on hands-on, "citizen science" programming to engage the many and diverse communities in both the greater Washington, DC and northern Shenandoah regions. After-school programs will be specifically targeted to engage youngsters in inquiry-based scientific exploration that builds on Zoo-related research
- Respond to the Science Standards of Learning, which increasingly shape the K-12 curricula, by providing case studies that bring to life essential concepts through a variety of tools, including selfguided tours of the Zoo, in-class resources, and videoconferencing opportunities that link classes with Zoo experts
- Provide educational programming built on sound scientific content, with special attention to the contributions that Smithsonian scientists make to understanding wildlife and conservation

Offer compelling, first-class exhibitions at the Smithsonian and across the nation (115 FTEs and \$11,082,000)

- Continue to upgrade fire protection in animal exhibit areas to ensure that exhibits are safe for the Zoo's living collection and the public and meet the new National Fire Protection Association (NFPA) regulation "Fire and Life Safety for Animal Housing Facilities," which was issued in July 2006
- Continue construction on the Zoo's historic Elephant House facility, habitat, and exhibit
- Improve interpretation, graphics, interactive media, signage, and the overall park presentation, concentrating on the visitor experience to improve cleanliness, amenities, access, and comfort, and incorporate recycling and use of sustainable products
- Replace aging camera systems with newer IP-based and wireless mesh-grid technology that takes advantage of advanced networking features and camera-resolution improvements. Establish a hosted access presence to ensure that growth demands are met as they occur
- Use the collection planning process to increase the size and diversity of the animal collection to strengthen the NZP's exhibition and outreach efforts while identifying priority species deserving research and conservation attention
- Incorporate at least two videos and one live webcam feed from the field into public exhibitions and the public website, www.nationalzoo.si.edu
- Continue the exhibit improvement program to renovate and upgrade existing exhibits, landscapes, and animal habitats, including effective, creative interpretation of the Zoo's science and conservation messages in these areas
- Support the Botanical Garden goal while documenting plant collections and mapping park landscapes

Improve the stewardship of the national collections (57 FTEs and \$7,018,000)

- Improve the stewardship of the collection by providing fire protection and fire safety through upgrading or installing firesuppression and smoke-detection and evacuation systems, improving the water main distribution system, and upgrading the central control system
- Conduct continual review and training on protocols to minimize the risk to the collection due to fire or other emergencies during and after normal operating hours
- Continue regular preventive medical exams for appropriate animals at both the Rock Creek Park Zoo and the collection at the Front Royal, Virginia, Conservation Research Center

- Continue to meet the nutritional needs of the animal collection through routine monitoring of diets, improved quality control of daily feedings, and increased centralization of diet preparation
- Continue to update and maintain animal diet database to exceed AZA and other appropriate standards
- Conduct annual reviews of all animal diets, food storage, handling and preparation methods, diet presentation, and record keeping associated with nutrition management of the collections
- Monitor effectiveness of centralized commissary operations
- Increase forage production at the Front Royal facility, yielding higher-quality forage over a longer growing season
- Work within the NZP, and with other zoos, to implement and promote the use of the new Zoological Information Management System (ZIMS) as a global database resource for improving animal care and knowledge of animals
- Work within NZP and with other AZA zoos to develop and implement taxon-based standardized guidelines for animal care as a global resource for improving the care and well-being of wild animals in captivity
- Work within NZP and across the Smithsonian to inventory and assess for the first time the approximately 750,000 sample Smithsonian frozen biomaterials collections currently held at the NZP, Smithsonian Tropical Research Institute (STRI) and National Museum of Natural History (NMNH)
- Work within NZP and across the Smithsonian to consolidate and manage frozen biomaterials within units, with data shared across units to create Institution-wide Biomaterials Resources Banks
- Work within NZP and across the Smithsonian to develop a database for frozen biomaterial collections within units, but share data across the units to create Institution-wide search capabilities

Strengthened Research

Engage in research and discovery focused on discovering and understanding life's diversity (28 FTEs and \$2,352,000)

- Continue in situ and ex situ research on surveillance of wildlife health, disease, emerging infectious diseases, and the interfaces between wildlife, domestic animals, and human health, which is a federal research priority area. A major effort is already under way for the Smithsonian Institution to work with several other zoos and agencies on a "first alert" system to track Avian Flu. Such research will be enhanced by the collections data available through ZIMS
- Expand the NZP-George Mason University conservation biology program to enhance and expand undergraduate and graduate

student training. This includes continuing to explore an increased presence of university activities at the Zoo's Conservation and Research Center

- Work with federal agencies, universities, and nongovernmental organizations, including the AZA, to provide professional training in ecological and biodiversity monitoring, geographic information systems applications, veterinary medicine, comparative nutrition, reproductive biology, conservation genetics, wildlife management, and animal behavior
- Serve as expert technical advisors to the U.S. Fish and Wildlife Service, other governmental agencies, and conservation organizations to promote the recovery of threatened and endangered species and their habitats
- Expand ongoing conservation and research efforts for selected endangered species under the auspices of the Conservation Centers for Species Survival (CCSS) consortium (e.g., The Wilds [Ohio], White Oak Conservation Center [Florida], Fossil Rim Wildlife Center [Texas], and Zoological Society of San Diego [California]) to secure sustainable wild and captive populations
- Provide leadership in advancing the sciences of reproductive physiology, ecological nutrition, veterinary medicine, biodiversity assessment, conservation genetics, and small population management, with priorities established by the NZP Science Plan
- Increase the Zoo's collection-based research on Asian elephants, giant pandas and other bears, kori bustards, cheetahs, Sahelo-Saharan antelopes, equids, several species of endangered frogs, Japanese giant salamanders, Pacific giant octopus, Atlantic cuttlefish, tropical Atlantic and Indo-Pacific corals, freshwater stingrays, and electric fishes. This includes establishing a cheetah breeding and science facility at NZP's Conservation and Research Center
- Share research results with the global scientific community by publishing more than 100 peer-reviewed technical publications annually
- Train at least 10 postdoctoral Fellows and 30 graduate students annually in reproductive sciences and conservation biology
- Work with partners in the National Ecological Observatory Network (NEON) to establish, operate, and sustain the NSF-funded Mid-Atlantic Regional Ecological Observatory (MAREO) core-site at the NZP Conservation and Research Center
- Increase integration of zoo- and field-based research to improve the overall impact of the NZP's conservation and educational programs
- Continue to integrate science at the NZP with animal husbandry, exhibits, and education, especially through the implementation of the

Asian elephant program and by establishing the new cheetah breeding and science facility at the Conservation and Research Center

Enhanced Management Excellence

Provide a safe and healthy environment to support Smithsonian programs (5 FTEs and \$1,158,000)

- Meet or exceed code requirements in all animal holding and humanoccupied facilities at both the Rock Creek Park and Front Royal sites. Systems to be installed or upgraded include fire alarms and reporting, fire detection, fire suppression (e.g., sprinklers), smoke evacuation, fire-separation barriers, and emergency lighting and power
- Expand biosecurity practices throughout Zoo facilities to minimize risk of Avian Flu and other diseases among the Zoo collections and transmission of diseases between the collections and the staff
- Improve fire protection in visitor areas to ensure that visitors have a safe experience at the Zoo

Modernize the Institution's information technology systems and infrastructure (4 FTEs and \$815,000)

- Continue to develop ZIMS repository and other supporting interface tools which will allow access to a complete information context in remote and field areas
- Monitor implementation of computer security protocols, including regular password changes, to reduce risk of penetration by hackers Strengthen an institutional culture that is customer centered and results oriented (10 FTEs and \$1,213,000)
- Prioritize NZP facilities projects to ensure the safety of animal collections, staff, and visitors, and to support the implementation of the Zoo's master plan
- Assess the effectiveness of management support to increase efficiency and ensure timely processing of procurement, travel, and other program requirements as well as to meet the Institution's reporting responsibilities

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (\$100,000)

 Enhance the skills of staff, supervisors, and managers to increase their effectiveness

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (4 FTEs and \$479,000)

 Enhance the Zoo's national and international exposure by promoting the Zoo's success stories in science, animal care, and education through regular news releases, photo releases, interviews, and press briefings to local and national news outlets, as well as popular and professional journals and magazines Increase the Zoo's credibility with the news media by meeting journalists' needs and answering their queries in a timely, efficient, and productive manner

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of 10 FTEs and \$2,634,000. Included is an increase of \$824,000 for necessary pay for existing staff funded under this line item. In addition, the NZP is seeking a programmatic increase of 10 FTEs and \$1,810,000 to provide for Avian Flu protective requirements, ensure animal welfare and staff safety, support hospital and pathology service contracts and medicine and laboratory supplies, and to establish Biomaterials Resources Banks. The increases are as follows:

- (+\$460,000) This increase is requested for Asia Trail II, the new elephant facility, for phones, webcams, and other information technology equipment, as well as for supplies and equipment for this major new exhibit facility. The new elephant enclosures and keeper areas will be occupied during 2009. The webcam monitors not only provide viewing to our virtual visitors, but, more importantly, allow Zoo staff to study and record elephant behavior in the new habitat, and to track them throughout the 3.5-acre exhibit complex. Continued funding is required to maintain equipment and ongoing supplies for enrichment activities which will be incorporated into the daily programming for the Zoo's elephants.
- (+\$370,000) This increase is requested to address a major safety issue the prevention of the spread of Avian Flu. As the Zoo prepares for the potential avian influenza appearing in the United States and being transmitted to the Zoo's captive bird population, netting must be installed to preclude wild waterfowl from infecting the Zoo's bird collection with Avian Flu, and personal protective equipment is needed for staff to preclude contamination of the collection. Additional uniforms are needed to allow staff to change-in/change-out on at least a daily basis, and laundry services are requested to minimize the potential transfer of zoonotic disease between staff and the collection, and the worksite and home.
- (+\$249,000, +2 FTEs) This increase is requested for animal welfare and staff safety and health. There is only one veterinary technician at the NZP facility at Front Royal, with no backup for days off, weekend coverage, and emergencies. This request for an additional GS-11 veterinary technician enables the Zoo to be more responsive to the medical needs of its growing animal population without taxing the limits of one individual. The new cheetah breeding and science facility at Front Royal requires a GS-11 biologist to oversee their husbandry and monitor their health and welfare.

There is also an increased need for medicines, hospital and pathology supplies and service contracts.

- (+\$231,000, +3 FTEs) This increase is requested to provide for a GS-11 safety specialist, a GS-9 registrarial technician and a GS-9 management support specialist. Currently there is no one at the NZP facility at Front Royal to oversee the safety requirements, and safety findings have increased as the size of the collection, number of students, and activities have grown at the Conservation and Research Center. Registrar support addresses NAS recommendations to standardize and integrate all animal records, implement ZIMS, and provide access to these records to all animal management staff. An additional management support person is needed to deal with expanding procurement, financial and other administrative requirements.
- (+\$500,000, +5 FTEs) This increase is requested to create an Institution-wide Biomaterials Resources Banks for the care of a collection of biomaterials and to allow a dramatic increase in scholarly access to these valuable scientific resources. Scientists at three Smithsonian Institution organizations (NZP, NMNH, and STRI) have collected and stored at least 750,000 samples of frozen tissues, blood products, germ-plasm (sperm and eggs), embryos, DNA, and other animal and plant products from at least 6,000 species. A GS-9 database manager and four GS-9 biomaterials resources banks managers are required to inventory the cryo-banks, cleanup and standardize databases, and manage the collection on along-term basis. In addition, state-of-the-art cryo-banking equipment is needed to ensure that proper storage conditions are provided to all of the collections.

If the FY 2009 budget request is not allowed, the NZP will not be able to provide the needed communications, network, and monitoring systems that should be available upon opening of the first phase of Asia Trail II, the elephant enclosures, and keeper work areas. There is a potential risk that endangered and valuable avian collections will be lost and that other animals and staff in the Zoo could be infected if the H5N1 Avian Flu arrives on the East Coast. Without the requested increase in staff, improvements needed for the health and welfare of the animal collection and the safety concerns for staff will not be addressed. In addition, the implementation of ZIMS and the animal record keeping improvements recommended by the AZA and NAS will be hampered. Failure to adequately conserve the Smithsonian's frozen biological materials puts at risk one of the world's most diverse and extensive Biomaterials Resources Banks. Recurrent equipment failures without adequate backup systems, lack of standard databases, and the need for a formal, integrated management system threaten these increasingly important collections.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

	APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000				
FY 2007 ESTIMATE	108	22,844	6	1,966	16	2,511	344	79,191				
FY 2008 ESTIMATE	113	23,330	6	1,966	3	747	425	85,538				
FY 2009 ESTIMATE	118	25,165	6	1,966	3	733	425	85,538				

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Provide reference services and information to the public	3	700	3	721	0	21
Strengthened Research						
Research						
Engage in research and discovery	105	21,211	110	22,983	5	1,772
Enhanced Management Excellence						
Information Technology						
Modernize the Institution's information	0	540	0	556	0	16
technology systems and infrastructure						
Management Operations						
Ensure that the workforce is efficient,	5	879	5	905	0	26
collaborative, committed, innovative, and diverse						
Total	113	23,330	118	25,165	5	1,835

BACKGROUND AND CONTEXT

The mission of the Smithsonian Astrophysical Observatory (SAO) is to advance the public's knowledge and understanding of the universe through research and education in astronomy and astrophysics. SAO engages in cutting-edge research in areas ranging from small, individual projects to

major partnerships with academic institutions, and which involve unique ground- and space-based facilities to study the breadth of the electromagnetic spectrum. These varied activities create the distinctively fertile research environment that underpins SAO's success.

Founded in 1890, SAO is the largest and most diverse astrophysical institution in the world. It has pioneered the development of orbiting observatories and large, ground-based telescopes; the application of computers to study astrophysical problems; and the integration of laboratory measurements and theoretical astrophysics. Observational data are gathered at SAO's premier facilities: the Submillimeter Array (SMA) in Hawaii; the recently converted 6.5-meter Multiple Mirror Telescope (MMT), the Very Energetic Radiation Imaging Telescope Array System (VERITAS), and related telescopes at the Fred Lawrence Whipple Observatory in Arizona; a broad range of powerful instruments aboard rockets, balloons, and spacecraft (most notably the Chandra X-ray Observatory and the Spitzer Space Telescope); and locations as diverse as the high plateaus of northern Chile and the Amundsen South Pole Station. Headquartered in Cambridge, Massachusetts, SAO is a partner in the Harvard-Smithsonian Center for Astrophysics, along with the Harvard College Observatory.

During the past 50 years, SAO astronomers and their colleagues have made revolutionary discoveries that have changed our fundamental understanding of the universe and our place in it. We have detected and classified extrasolar planets, watched as new stars are born, and discovered bizarre remnants of dead stars that emit vast quantities of x-rays. We have determined that the age of the universe is about 14 billion years, and that it is populated with billions of galaxies, many of which have supermassive black holes at their centers. In addition, we have found convincing evidence that most of the matter in the universe is unseen "dark matter," with normal matter comprising less than 4 percent of the total; and that the expansion of the universe is apparently accelerating, driven by a mysterious and invisible "dark energy." At the same time, SAO astronomers work systematically on the vital basic research that seeks to explain the sun and its x-ray-emitting corona, the nature of the solar system, the abundant elements in our Milky Way galaxy, the gas and dust between the stars, the formation and evolution of galaxies, and other important questions about the nature of the universe. Today, SAO is poised to make the connections between all these discoveries, large and small, and produce a coherent story of the cosmos from the Big Bang to life here on Earth.

SAO's research is unique and world renowned because of the strength of its diverse, expert staff of observers, theoreticians, instrumentalists, and laboratory experimentalists, and because it emphasizes multiple strategies,

which draw from the strengths of both small projects and large research centers. Indeed, SAO's extraordinary research success is partly the result of the rich cross-fertilization that its outstanding scholars bring to each other in a climate that nurtures collaborative excellence. SAO's discoveries, and its research leadership, have placed it at the forefront of the new generation of astronomers and astrophysicists. Together with its partner, the Harvard College Observatory, SAO is the top choice of graduate- and postdoctoral-level young scientists. Federal support makes this leadership possible.

For FY 2009, the budget estimate includes an increase of \$635,000 for necessary pay for existing staff funded under this line item, and a program increase of \$850,000 and 5 FTEs to hire scientists to work on the design and development of the Giant Magellan Telescope (GMT). Also included in the request is \$350,000 for increased rental costs, which is justified in the Mandatory Costs section of this budget.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, SAO will produce and deliver educational services and products that are rooted in SAO research and that meet the educational needs of SAO's audiences. This sustained outreach effort will give SAO increased publicity and recognition.

To achieve the goal of Strengthened Research, SAO scientists will make optimal use of various astronomical facilities to support their research, including the ground-based optical and radio telescopes owned and operated by SAO in Arizona and Hawaii, and space-based telescopes operated by SAO on behalf of the National Aeronautics and Space Administration (NASA). SAO scientists also have research privileges at the two 6.5-meter Magellan telescopes in northern Chile (because of SAO's partnership with the Harvard College Observatory). In addition, SAO scientists and engineers are leading the science operations team and carrying out a vital science research program in very high-energy astrophysics at the VERITAS telescope in southern Arizona. These facilities enable SAO scientists to make substantial progress in answering fundamental questions about the origin and nature of the universe, as well as questions about the formation and evolution of Earth and similar planets — two of the four science themes endorsed by the SI Science strategic plan.

SAO scientists will continue to take a leadership role in astrophysics by participating in or hosting national and international conferences (e.g., the American Astronomical Society, the International Astronomical Union, and the Astronomical Data Analysis Software and Systems conference series), and by participating as keynote and/or invited speakers at such meetings. SAO

scientists will also continue to publish in leading peer-reviewed journals such as the *Astrophysical Journal*, the *Astronomical Journal*, and *Astronomy & Astrophysics*. SAO developed and operates the Astrophysics Data System, which is a world leader in the dissemination of scientific literature.

The goal of Enhanced Management Excellence will be achieved by making SAO's information technology (IT) infrastructure robust, reliable, and secure; maintaining a cooperative environment through communication and activities that underscore SAO's special mission and each staff member's contribution to its success; evaluating management officials and supervisors on their compliance with applicable equal opportunity laws, rules, and regulations, and on the effectiveness of their efforts to achieve a diverse workforce; and facilitating the use of small, minority, women-owned, and other underused businesses in SAO's procurement and business relationships. These management tools support and enhance SAO's scientific and educational missions.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Provide references services and information to the public (3 FTEs and \$721,000)

- Expand Web-based reference services for the rapid public dissemination of new SAO research results, reference materials, and information to diverse audiences
- Deliver frequent educational presentations at national, state, and local meetings and conferences
- Develop a traveling exhibition on black holes and organize a national tour
- Produce professional development DVDs for astronomy educators, the "Private Universe" DVDs for educators and the public, and an SAO-orientation DVD
- Increase registrations for school sites participating in professional development provided by the SAO-operated Annenberg Channel
- Present research findings at professional workshops and practitioner conferences and publish papers on educational research
- Carry out Micro-Observatory operations, a remotely controlled telescope network that reaches approximately 100 participating schools and 5,000 public users

Strengthened Scientific Research

Engage in research and discovery focused on understanding the origin and evolution of the universe, Earth and planets, biological diversity, and human culture (110 FTEs and \$22,983,000)

- Maintain a high rate of publishing significant research results in professional journals
- Maintain a high level of leadership and participation at professional meetings
- Seek non-Institution funding to augment support for scientific research
- Leverage Institution funding by sharing resources for large projects, which increases the scope of scientific opportunity and involvement of the research staff
- Use the collection of instruments, facilities, and expert staff at SAO to probe key scientific problems in astronomy, including the nature of extrasolar planets, star and planet formation, the origins of very energetic cosmic rays, the properties of space-time near black holes, the formation of structure in the universe, and the nature of dark matter and dark energy
- Conduct cutting-edge research using SAO's telescopes, including the MMT, SMA, and VERITAS; and NASA's space-based telescopes, the Chandra X-ray Observatory and the Spitzer Space Telescope, both of which have instruments that were conceived, designed, and built by SAO, and which SAO now operates on behalf of NASA
 - SAO's Submillimeter Array (SMA) will expand its capabilities with technology that doubles the receiver bandwidth (single-receiver operation), thus nearly doubling the throughput/sensitivity of the Array. This improvement will enable SAO scientists to make unprecedented new studies, including observations of the black hole at the center of the Milky Way and of solar systems developing around other stars.
 - SAO will complete work on the spectacular new instrument, Binospec, and deliver it to the MMT. Binospec will enable researchers to conduct very high-efficiency spectroscopic studies of very faint objects, thereby enabling SAO scientists to study galaxy formation, and to help characterize the pervasive dark energy in the cosmos.
 - SAO scientists will explore the highest energy processes in the universe with the recently-commissioned VERITAS and NASA's Gamma-ray Large Area Space Telescope (GLAST) Observatory.

- Develop new scientific instruments which will enable previously impossible investigations
- Develop new computational tools to enable advanced data analysis, data-mining, and theoretical modeling

Enhanced Management Excellence

Modernize the Institution's information technology systems and infrastructure (\$556,000)

- Modernize IT systems and infrastructure at SAO
- Participate in the implementation of the Enterprise Resource Planning system
- Review and improve administrative processes

Ensure that the Smithsonian's workforce is efficient, collaborative, committed, innovative, and diverse (5 FTEs and \$905,000)

- Inform staff about SAO research discoveries and progress, scientific prizes and awards, Smithsonian directives, and internal policies and procedures through weekly science reports, quarterly town hall meetings, and SAO-wide electronic messages, as necessary
- Encourage innovation by aggressively pursuing financial resources for internal research and development, and allocating these resources through a competitive, peer-reviewed process
- Increase targeted recruitment of applicants in under-represented categories to increase the size of candidate pools from applicants in those categories. Increased targeted recruitment efforts will help SAO reach its goal of hiring qualified women, minorities, and individuals with disabilities
- Continue SAO's policy, to the maximum extent practicable, of purchasing from small or disadvantaged businesses, veteranowned, service-disabled businesses, Historically Underutilized Business (HUB) Zone small businesses, and women-owned small businesses

FY 2009 REQUEST — EXPLANATION OF CHANGE

For FY 2009, the budget estimate includes an increase of \$635,000 for necessary pay for existing staff funded under this line item, and a program increase of \$850,000 and 5 FTEs to hire scientists to work on the design and development of the GMT, including design and fabrication of the first two instruments for this telescope. Also included in the request is \$350,000 for increased rental costs, which is justified in the Mandatory Costs section of this budget. The increases are as follows:

- (+\$190,000, +1 FTEs) Hire a senior scientist to set goals for GMT.
 This scientist will confer extensively with SAO scientists to assemble their research objectives for the GMT, and distill these objectives into a set of clear science goals that SAO scientists working with the GMT instruments should strive to meet through the design and operation of the telescope
- (+\$380,000, +2 FTEs) Hire two senior instrument scientists to work on the design and development of the first two instruments for the GMT the Near Infrared Multi-Object Spectrograph (NIRMOS) and the Super High Accuracy Radial Velocity Planet Searcher (SHARPS)
- (+\$280,000, +2 FTEs) Hire two software scientists to direct instrument control and data acquisiton for the NIRMOS and the SHARPS.

SAO expects these positions to continue at least through the completion of construction of the GMT in FY 2017.

If the FY 2009 budget request is not allowed, SAO will not be able to fully participate in the design and development of the GMT. As a result, SAO will fall behind the rest of the world in making fundamental discoveries. Today's researchers are poised to make the connections between many previous discoveries, and to produce a coherent story of the cosmos from the Big Bang to life here on Earth. Without this increase, this story will be told by others. In the race to complete this extremely large telescope, the United States is competing with research institutions and agencies in Europe and Asia. If the United States is not leading this endeavor, it will lose its place as the premier center in the world for astrophysical research and many of the nation's most talented young people will leave U.S. institutions to work on large telescopes developed by other nations.

MUSEUM CONSERVATION INSTITUTE

	APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL [DONOR/SPONSOR- DESIGNATED		GOV'T GRANTS & CONTRACTS					
	FTE	\$000 FTE \$000 FTE		\$000	FTE	\$000						
FY 2007 ESTIMATE	18	2,936	0	61	0	172	0	0				
FY 2008 ESTIMATE	23	3,029	0	12	0	32	0	0				
FY 2009 ESTIMATE	23	3,122	0	12	0	0	0	0				

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Performance Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	2	238	2	241	0	3
Provide reference services and information to the	1	110	1	113	0	3
public						
Collections						
Improve the stewardship of the national collections	8	1,031	6	900	-2	-131_
Strengthened Research						
Research						
Engage in research and discovery	7	917	9	1,117	2	200_
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer	4	633	4	649	0	16
centered and results oriented						
Modernize the Institution's financial management	1	100	1	102	0	2
and accounting operations						
Total	23	3,029	23	3,122	0	93

BACKGROUND AND CONTEXT

The Smithsonian's Museum Conservation Institute (MCI) is the center for multi-disciplinary technical research and conservation for all Smithsonian museums, collections, and research centers. MCI combines knowledge of materials and the history of technology with state-of-the-art instrumentation

and scientific techniques to conduct in-depth studies of artistic, anthropological, and historic objects. These studies aim to elucidate the provenance, composition, and cultural context of Smithsonian collections, and to improve Smithsonian conservation and collection storage capabilities. In addition, MCI provides specialized knowledge of natural history and Native American ethnographic collections in assessing and remediating collections hazards, including pesticide contamination.

MCI is the only Smithsonian resource for technical studies and analyses for most of Smithsonian collections. These services are available to Smithsonian units at no charge. MCI has unique analytical capabilities and collections knowledge, as shown by requests for consultations from within the Smithsonian, from Smithsonian affiliates, and outside organizations, such as the White House, U.S. House of Representatives, Defense Intelligence Agency, the U.S. Secret Service, World Monuments Fund, and other federal, museum, and academic organizations.

For FY 2009, the budget estimate includes an increase of \$93,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, MCI, in collaboration with Smithsonian museums and affiliates, will offer public programs to present the results of MCI research, heighten awareness of the problems of preserving cultural heritage, and gain information about the nature and scope of problems that our constituencies encounter. In particular, MCI will develop new programming for the public, based on the content of the best-selling book *Saving Stuff* coauthored by an MCI senior conservator. MCI's audiences are increasingly concerned with the preservation of family heirlooms and other artistic and historic collections. MCI will partner with Smithsonian museums and affiliates to offer media events, printed and Internet materials, presentations, workshops, and demonstrations to reach new audiences, especially those that will be targeted by our newest museums.

In addition, MCI will continue to promote career development for Smithsonian conservators and other collections care providers by offering colloquia, symposia, and workshops, as well as distance-learning opportunities. The Institute's technical information office will continue serving the museum community, the cultural heritage management community, museum studies students, and the public. The technical information office answers direct inquiries and distributes general guidelines in printed and electronic formats, handling more than 1,500 information

requests annually. MCI's website will be maintained and updated to increase the impact of the Institute's research and outreach programs.

The Institute will support the efforts of Smithsonian museums and research centers in their efforts to care for the national collections and disseminate that information to the larger museum community and the public. MCI will pursue collaborative conservation treatment projects with other Smithsonian units to meet these ends, especially by providing conservation guidance and art history technical consultations to the art and history museums on their more challenging and unique objects. Through continuing communication and interaction with the Smithsonian museum conservators, special training needs and research projects will be identified and research and symposia will be developed to address the most urgent collection preservation needs, such as museum environments (involving light, temperature, and humidity) and collections storage.

To achieve the goal of Strengthened Research, MCI will provide increased technical and research assistance to the science units, and art history technical studies and analyses to the art and history museums. MCI will facilitate and support collaborative research projects on: modern museum and collection materials such as plastics; biodeterioration; and historical and archaeological technologies. MCI will continue its study of the assessment and remediation of collection hazards. In particular, MCI will provide specialized knowledge and analytical capabilities to natural history and Native American ethnographic collections in assessing and remediating pesticide contamination. In addition, MCI will use its website, publications, hosted symposia, presentations, invited seminars, and lectures to disseminate the results of its long-term basic materials research program.

To achieve the goal of Enhanced Management Excellence, MCI will use its strategic plan to guide allocation of its budgetary and human resources, and to secure additional financial resources for its high-priority programs. Resource allocations will be tracked against performance metrics in each of the strategic areas, and against the needs and strategic goals of the Smithsonian's museums and research centers. MCI will encourage appropriate staff to participate in budget-performance integration, succession management, and leadership development programs.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science, and culture (2 FTEs and \$241,000)

- Offer six presentations, programs, or supporting materials in partnership with Smithsonian museums and affiliates, which are directed toward general audiences to advance their knowledge of and interest in collections care and conservation
- Host three internships/fellowships to advance the knowledge and skills of conservation and science graduate and postdoctoral students
- Offer nine or more training seminars, workshops, or lectures to advance the knowledge and skills of professionals in the museum community

Provide reference services and information to the public (1 FTE and \$113,000)

- Increase the number of webpage hits by 5 percent by updating and adding new information to the MCI website to increase the guidelines and other information readily available to general audiences
- Respond to more than 500 inquiries from Smithsonian staff and the public

Improve the stewardship of the national collections for present and future generations (6 FTEs and \$900,000)

- Respond to requests for conservation treatment assistance and consultations from 10 units within the Smithsonian
- Answer 80 requests for technical studies, conservation treatment assistance, and consultations for other Smithsonian units

Strengthened Research

Engage in research and discovery (9 FTEs and \$1,117,000)

- Enable 100 percent of research scientists to disseminate research results through peer-reviewed papers, invited chapters, or fulllength proceedings
- Initiate new projects in the technical studies of objects from Smithsonian museums and collections
- Develop research programs in response to high-priority issues in the care of Smithsonian collections
- Provide more than 1,000 analyses/year for other Smithsonian units

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (4 FTEs and \$649,000)

- Focus conservation and science research on MCI's strategic plan, and link to Institution-wide science planning processes
- Maintain an excellent working relationship with MCI stakeholders, including Smithsonian museums and research centers, by providing briefings at least annually
- Encourage innovation by annually securing financial resources for internal research and development, and allocating these resources through a merit-based process
- Plan for budget-performance integration, succession management, and leadership development, and train staff accordingly

Modernize the Institution's financial management and accounting operations (1 FTE and \$102,000)

 Enable staff responsible for financial, budget, procurement, and human resources (HR) transactions to keep up to date and respond to new policies, procedures, and ERP modules.

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

	APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	FTE \$000		\$000				
FY 2007 ESTIMATE	31	3,128	2	146	6	618	51	6,058				
FY 2008 ESTIMATE	34	3,222	2	150	4	635	51	6,000				
FY 2009 ESTIMATE	34	3,349	2	160	4	635	51	6,000				

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	1	95	1	99	0	4
Strengthened Research	ļ					
Research						
Engage in research and discovery	26	2,559	26	2,656	0	97
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	4	394	4	409	0	15
Modernize and the Institution's financial management and accounting operations	3	174	3	185	0	11
Total	34	3,222	34	3,349	0	127

BACKGROUND AND CONTEXT

The Smithsonian Environmental Research Center (SERC) is a leader in research on land and water ecosystems in the coastal zone. SERC's innovative research and unique setting advance basic environmental science in the zone where most of the world's population lives, and provides society with the knowledge to solve the environmental challenges of the 21st century.

To achieve the Institution's goal of Increased Public Engagement, SERC's public education and outreach program interprets and presents SERC's scientific research to diverse public audiences, which include schoolchildren and science teachers, students, and visiting scientists developing professional careers in the environmental sciences, and the general public.

To achieve the goal of Strengthened Research, SERC uses its unique site on the shore of Chesapeake Bay and other sites, including the Smithsonian Marine Science Network, to investigate the ecological interconnections of aquatic, terrestrial, and atmospheric components of complex landscapes, with comparative studies on regional, continental, and global scales.

To accomplish Enhanced Management Excellence, SERC will update management systems and functions, complete the update of its Facilities Master Plan, and begin implementing the Plan. SERC will continue to build and improve the site infrastructure to ensure a safe and productive working environment for its staff, Fellows, students, volunteers, and visitors.

For FY 2009, the estimate includes an increase of \$127,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, SERC has used its website to provide more information to the public about environmental issues in general and SERC's research and education programs in particular. On-site education will focus on serving approximately 10,000 students and increasing minority participation. SERC will continue to expand its successful distance-learning programs to improve access for traditionally underserved audiences. In addition, SERC will continue the Student Training in Aquatic Research (STAR) academy for high school students.

SERC has strengthened its public outreach programs and was named a member of the National Park Service's Chesapeake Gateways Network. In addition to providing a lecture series, workshops, and expert consultation for the public, teachers, natural resources managers, and public officials, SERC is also now open to the general public.

To train the next generation of environmental scientists and managers, SERC conducts a nationally recognized professional training program for university interns, graduate students, postdoctoral Fellows, and visiting scientists, with a particular emphasis on developing careers of underrepresented minorities.

To address the goal of Strengthened Research, SERC will use its 2,800-acre site on the Chesapeake Bay, where its scientists investigate the interconnections of aquatic, terrestrial, and atmospheric components of complex landscapes. SERC develops innovative approaches and instrumentation to measure environmental changes at four ecological levels (i.e., global change, landscape ecology, ecology of coastal ecosystems, and population and community ecology), and has developed unique, long-term and experimental data sets on environmental change. SERC also participates in developing the Smithsonian's Marine Science Network of sites along the western Atlantic Ocean for comparative coastal studies, and in using the Smithsonian's long-term field stations to assess ecological patterns and processes. During its 43-year history, SERC has built a reputation for world-class research, producing many publications that are rich in data and multi-disciplinary and integrative in analysis.

By building on existing strengths and special programs, SERC seeks to enhance its successful research on the following topics: land-sea linkages of ecosystems; landscape ecology of coastal watersheds; estuarine ecology; invasive species (especially in coastal ecosystems); global change effects on biotic and chemical interactions; biocomplexity of structure and processes in key ecosystems; and community and population ecology. During the next five years, SERC research on coastal marine ecology will focus on four key, interrelated areas: the structure and dynamics of marine food webs; the integrity and biodiversity of crucial marine ecosystems; linkages of ecosystems at the land-sea interface; and the ecological regulation of marine biodiversity. SERC seeks to expand its expertise in the ecology of invasive species and how they affect coastal ecosystems. To implement these goals, SERC will link its research with national and international research networks and enhance the Marine Science Network. SERC is also developing scientific and technological capabilities in analytical chemistry, remote sensing, and instrumentation in coastal watersheds and connected ecosystems.

To address the goal of Enhanced Management Excellence, SERC has updated its strategic plan and linked it to the Smithsonian Science Strategic Plan. SERC is improving its management of research by developing better management tools for its overhead activities, and ensuring tighter management controls and increased oversight of sensitive information for its employees, volunteers, and others. In addition, SERC will ensure the safety and protection of volunteers, staff, and visitors by sustaining its excellent program of supervised inspections and staff involvement.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (1 FTE and \$99,000)

- Evaluate and enhance, as appropriate, the quality of on-site environmental education programs offered to schoolchildren, teachers, natural resources managers, and the general public, to communicate current research findings and field methods used by Smithsonian scientists
- Develop and implement training workshops for parents and professional educators, which support state and national science learning objectives in the environmental sciences
- Conduct worldwide videoconferences interpreting SERC's environmental research for students, teachers, and the general public, in an effort to reach larger and more diverse audiences

Strengthened Research

Engage in research and discovery focused on understanding the origin and evolution of the universe, Earth and planets, biological diversity, and human culture (26 FTEs and \$2,656,000)

Theme: Discovering and Understanding Life's Diversity

- Increase knowledge of human impacts on coastal ecosystems and ecological change in land-sea interactions by developing SERC's unique long-term and experimental studies, field sampling, laboratory analyses, and data records in nine areas: species composition and population dynamics; estuarine water quality; ecosystem alteration and restoration; flow of nutrients; effects of toxic trace elements; invasive species; atmospheric increase in carbon dioxide; ultraviolet radiation; and the biocomplexity of mangrove forest ecosystems
- Enhance environmental research by sustaining awards of competitive external grants and contracts from a diverse array of at least 10 agencies and other sources, to study land-sea linkages, landscape ecology, invasive species, global change, biocomplexity, community and population ecology, transport of toxic trace elements and nutrients, and coastal marine and estuarine ecology
- Disseminate results of research on human impacts on coastal ecosystems and ecological change by publishing articles in peerreviewed journals and books, based on SERC's original environmental research
- Continue to link and coordinate SERC research, through participation in the Smithsonian Marine Science Network, with national and international research networks (such as the National Association of Marine Laboratories, National Ecological Observation

Network, and the Association of Ecosystem Research Centers), and with Government agencies such as the U.S. Coast Guard, U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration (NOAA)

- Provide advice and counsel to state legislatures and Congress on environmental issues within SERC's areas of expertise
- Train the next generation of ecologists, environmental scientists, and natural resource managers by sustaining SERC's high-quality professional training program, and by awarding undergraduate internships, and supporting graduate students, and postdoctoral scientists, with an emphasis on achieving a target goal of 25 percent participation from under-represented minorities
- Manage long-term, spatial data sets on the environment to evaluate the extent of ecological change

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (4 FTEs and \$409,000)

- Implement SERC's strategic plan, which is formally linked to the Smithsonian Science Strategic Plan, and link the Strategic Plan to SERC's Master Plan (completed early in FY 2008)
- Develop better tracking systems for external grants and contracts to improve their efficiency and effectiveness
- Develop standards and strategies to implement SERC's goal of improved compliance with the Smithsonian Institution Performance Management System

Modernize the Institution's financial management and accounting operations (3 FTEs and \$185,000)

- Ensure appropriate staff training on future modules of the Institution's Enterprise Resource Planning system
- Improve coordination with the Office of Facilities Engineering and Operations' support units such as facilities management, security, and safety offices to meet SERC's programmatic goals
- Strengthen conformity with Smithsonian Institution procedures guiding contracting and procurement and the Supplier Diversity Program

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

		APPLICATION OF OPERATING RESOURCES								
	FEDERAL APPROPRIATIONS				DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS			
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000		
FY 2007 ESTIMATE	247	12,064	13	923	33	5,076	20	1,045		
FY 2008 ESTIMATE	248	12,438	13	879	33	5,599	14	916		
FY 2009 ESTIMATE	263	18,045	13	880	33	5,950	12	520		

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	5	276	5	285	0	9
Provide reference services and information	4	187	4	193	0	6
Strengthened Research						
Research						
Engage in research and discovery	119	6,801	134	12,223	15	5,422
Enhanced Management Excellence						
Facilities						
Execute an aggressive long-range	7	437	7	451	0	14
revitalization program and limited						
construction of new facilities						
Implement an aggressive and professional	25	994	25	1,027	0	33
maintenance program						
Improve the overall cleanliness and efficient	15	428	15	442	0	14
operation of Smithsonian facilities						
Security & Safety						
Provide world-class protection for	23	709	23	732	0	23
Smithsonian facilities, collections, staff,						
visitors and volunteers						
Provide a safe and healthy environment	6	238	6	246	0	8
Information Technology						
Modernize the Institution's information	4	301	4	311	0	10
technology systems and infrastructure						

Performance Objective/ Program Category	FY FTE	2008 \$000	FY 2 FTE	2009 \$000	Ch FTE	ange \$000
Management Operations .						
Strengthen an Institutional culture that is customer centered and results oriented	12	441	12	455	0	14
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse	8	773	8	799	0	26
Modernize the Institution's financial management and accounting operations	7	384	7	397	0	13
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	3	222	3	229	0	7
Modernize and streamline the Institution's acquisitions management operations	10	247	10	255	0	8
Total	248	12,438	263	18,045	15	5,607

BACKGROUND AND CONTEXT

The Smithsonian Tropical Research Institute (STRI) is the principal U.S. organization dedicated to advancing fundamental scientific discovery and understanding of biological diversity in the tropics and its contribution to human welfare. STRI plays a critical role for the U.S. Government and the Smithsonian by maintaining world-class research facilities in Panama where last year more than 1,000 resident and visiting scientists representing 44 states in the USA and 40 countries around the world accessed diverse tropical environments, including rain forest and coral reef ecosystems. STRI serves as official custodian for the Barro Colorado Nature Monument (BCNM) in Panama under the terms of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, ratified by the U.S. Senate in April 1941. The BCNM is the only mainland tropical reserve under U.S. stewardship.

As part of its core mission, STRI seeks to transform its network of tropical forest plots into a system of Smithsonian Institution Global Earth Observatories (SIGEO) to monitor the impact of climate change on carbon budgets, nutrient cycling, forest dynamics and biodiversity in tropical and temperate forests and to provide these objective and rigorous scientific data quickly via the World Wide Web to scientists, policy makers, and people around the world who need to make informed decisions. SIGEO extends a well- established, network of 20 research plots in 15 countries named the Center for Tropical Forest Science (CTFS), which is administered by STRI. STRI established the first CTFS/SIGEO plot in 1980 and since that time directs 7 FTEs and \$608,000 per year in SI federal funds and over \$38 M from other federal and private sources towards the global network of Earth observatories.

Each plot is managed in each country by one or more partner institutions and the SIGEO network involves hundreds of scientists from around the world.

Although tremendous advances in tropical forest research have resulted from over 27 years of research, SIGEO is poised to make an even larger contribution through monitoring the effects of anthropogenic increases in atmospheric CO₂ and general air pollution on tree growth and related biodiversity measures at local, regional, and global scales; extend its studies to the temperate zone; and, in addition to continuing its long-term monitoring of trees, begin standardized global censuses of key organismal indicators of environmental health. The proposed initiative will link climate change expertise across Smithsonian science units, including the National Zoological Park's (NZP) Conservation and Research Center (CRC), the National Air and Space Museum (NASM), National Museum of Natural History (NMNH), Smithsonian Astrophysical Observatory (SAO), Smithsonian Environmental Research Center (SERC), and STRI in a concerted effort aimed at dramatically improving our understanding of the environmental impacts.

The FY 2009 budget estimate includes an increase of \$5,607,000 that includes \$407,000 for mandatory pay increases for existing staff and \$5,200,000 and 15 FTEs to provide core salary support and other resources to expand the SIGEO system.

MEANS AND STRATEGY

Smithsonian science aims to transform the STRI/CTFS network of tropical forest plots into a system of SI Global Earth Observatories (SIGEO) through several strategies. First, SIGEO will establish a Global Carbon Research Program to provide *in situ* measures of above- and below-ground carbon and its change over time in response to rising levels of carbon dioxide (CO₂). A recent publication by SIGEO scientists using data from two forest plots with measurements over 25 years (Barro Colorado Island, Panama and Pasoh, Malaysia) has shown that despite increased atmospheric carbon fertilization, the growth rates of tropical forest trees have decreased, perhaps in response to global warming. Objective long-term data from a global network of forest plots provide critical empirical data for modeling carbon dynamics in the future, and permit direct measurement of the effectiveness of efforts to reduce carbon emissions.

Secondly, SIGEO will expand the CTFS program to the temperate zone. Tropical and temperate forests are believed to behave differently with regard to carbon owing to differences in seasonality and other climate factors. Currently, no temperate-zone forest plots follow the same methodology as the tropical plots but the SIGEO initiative will take advantage of long-term forest plot-

associated research at the NZP's CRC in Front Royal, Virginia, and SERC located in the Chesapeake Bay watershed in Maryland, to quickly establish a series of large-scale temperate plots that will permit direct comparison to the forests in the tropical plot network. Partnerships in temperate China and Europe are being developed to help expand temperate-tropical and temperate-temperate comparisons to a global scale. The HSBC, a major donor, has recently formed a climate partnership with the Smithsonian and the environmental organization Earthwatch Institute to establish a regional training center on climate change at SERC. Furthermore, the CRC is currently a candidate as one of the National Ecological Observatory Network (NEON) sites, which provides a tremendous opportunity for cross-fertilization and synergy between SIGEO and NEON, which may lead to the establishment of forest plots at other NEON sites.

The third component of SIGEO will expand the monitoring program to include organisms in addition to trees. Scientists from the CRC, NMNH, and STRI will significantly improve assessment of the effects of global change on biodiversity through focused surveys of vertebrates, invertebrates, and microbes. Standard methods for measuring and monitoring the biodiversity of different groups of organisms will be developed and put in place across the SIGEO network.

Furthermore, NMNH and STRI scientists will develop DNA barcodes for a range of organisms including trees, invertebrates, and microbes that will permit rapid and accurate identification, and ultimately automated assessment, of key groups monitored across the SIGEO network. The Smithsonian Institution is the host for the Consortium for the Barcode of Life, an international initiative devoted to developing DNA barcoding as a global standard permitting objective, rapid DNA-based identification of organisms. DNA barcodes for the trees on SIGEO plots would provide molecular markers for more than 10 percent of global tree diversity, and barcodes for other forest organisms would an extremely useful database for bioprospectors.

Finally, scientists from NASM and SAO will link ground-truthed data from SIGEO plots to space-based assessments of large-scale landscape change and environmental health. SAO has pioneered the space-based measurement of volatile organic compounds, which are released by heat-stressed trees and thus may permit enhanced remote sensing of forest health. NASM, in turn, will use remote-sensing technology to extend the controlled measures of carbon change over time across SIGEO sites to assessment of carbon dynamics at the broad landscape scales required to inform public policy on atmospheric CO₂ reduction strategies.

An investment in SIGEO will directly support the 2007 Administration Research and Development Environment priority to improve the nation's "ability to observe, model, assess, and adapt to impacts of climate change and to assure the availability of critical long-term climate data." The expanded methodology and objectives of SIGEO will ensure even better observation, data, and models in the future. In the environmental sciences, the CTFS stands as one of the premier U.S.-led international partnerships, and SIGEO aims to integrate the SI network of forest dynamics plots with the U.S. Group on Earth Observations (USGEO) and towards implementation of an international Global Earth Observation System of Systems (GEOSS) to further advance the progress of science across borders. SIGEO contributes to fulfilling the strategic plan of the U.S. Climate Change Science Program (CCSP) and addressing its proposed FY 2009 priority of reducing scientific uncertainty about potential effects of climate change on ecosystems. The Smithsonian collaborates with the Environmental Protection Agency (EPA), United States Geological Survey (USGS), U.S. Department of Agriculture (USDA) Forest Service, the National Oceanic and Atmospheric Administration (NOAA), and the National Aeronautics and Space Administration (NASA) in the context of Global Earth Observatories. SIGEO promotes large-scale environmental monitoring and maintains enormous banks of data and metadata, which help galvanize advanced data networks and sophisticated analyses extending from single forest plots to outer space.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (5 FTEs and \$285,000)

- Engage and inspire diverse audiences in a lifelong exploration and understanding of science through high-quality public programs at four STRI sites, and with tools based on the Institutes research, such as exhibits in Panama's Biodiversity Museum set to open in 2009
- Continue to provide in situ research training opportunities by increasing the number of postdoctoral fellowships and internships

Provide reference services and information (4 FTEs and \$193,000)

- Increase the scientific data available on the World Wide Web to make research results accessible to scientists, policy makers and the public
- Provide reference services and information derived from ongoing research to the public through the STRI library

Strengthened Research

Engage in research and discovery focused on biological diversity and human culture (134 FTEs and \$12,223,000)

 Begin to transform the CTFS network monitoring forest dynamics program at 20 sites in 15 nations into the system of SIGEO to develop a predictive science of global change and biodiversity

- Initiate experiments to quantify the ecosystem services provided by tropical forests (e.g., quality and quantity of water and carbon) in the Panama Canal watershed
- Use DNA-based studies to increase understanding of the ecology and evolution of forests with high biodiversity and their functional responses to climate change
- Begin to develop predictive models for the roles of temperate and tropical forests in the global carbon cycle and their likely impact on climate change
- Publish at least 250 books and scientific papers in peer-reviewed journals to share research results with the scientific community worldwide on the origins, maintenance, and loss of tropical biodiversity
- Facilitate tropical research for at least 900 visiting scientists and students working in STRI facilities, including projects funded by the National Science Foundation (NSF) and the National Institutes of Health (NIH)
- Continue to strengthen the SI Marine Science Network collaborative projects on marine environments, such as on coral reefs and mangroves in the tropical eastern Pacific Ocean and Caribbean Sea, to better understand their diversity, threats, and conservation opportunities
- Build inter-unit, inter-agency, and international coalitions through collaborative projects, meetings, and workshops conducted at STRI facilities
- Take advantage of Panama Canal expansion work to obtain fossils that can allow STRI to reconstruct the diversity of plants and animals before, during, and after the rising of the Central American isthmus
- Continue archaeological research aimed at revealing the importance of prehistoric tropical societies in New World cultural development
- Develop improved understanding of human occupation in neotropical forests, from the first colonization 15,000 to 11,000 years ago

Enhanced Management Excellence

Execute an aggressive, long-range revitalization program and limited construction of new facilities (7 FTEs and \$451,000)

 Continue to execute plans to revitalize Gamboa facilities as an integrated educational and research center that meets current safety and laboratory standards

Implement an aggressive and professional maintenance program (25 FTEs and \$1,027,000)

 Advance structural assessment of STRI facilities to ensure their continued safe and effective use for tropical research and education

Improve the overall cleanliness and efficient operation of Smithsonian facilities (15 FTEs and \$442,000)

 Conduct regular monitoring of all facilities, including buildings, vessels, vehicles, and docks, to ensure their safety and operational capacity to conduct ongoing research

Provide world-class protection for Smithsonian facilities, staff, visitors, and volunteers (23 FTEs and \$732,000)

 Provide additional surveillance of contractors participating in the Panama Canal expansion, from the perspective of safety, security, and logistics, to ensure continued effective operations at the Barro Colorado Nature Monument

Provide a safe and healthy environment (6 FTEs and \$246,000)

 Bring STRI facilities into compliance with recognized safety standards to ensure safety and protection of staff, visitors, volunteers, collections, infrastructure, and equipment

Modernize the Institution's information technology systems and infrastructure (4 FTEs and \$311,000)

 Increase information-sharing within the Institute via improved connectivity between STRI facilities through the Local Area Network (LAN) system

Strengthen an institutional culture that is customer centered and results oriented (12 FTEs and \$455,000)

 Increase internal customer satisfaction (i.e., STRI staff and visitors) by streamlining the acquisitions process and adopting the Enterprise Resource Planning (ERP) system for financial, budget, procurement, and human resources management

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (8 FTEs and \$799,000)

 Update STRI local salary scale to attract and retain the best bilingual employees in a highly competitive market due to the improving local economic situation (e.g., growth of tourism and mega-projects)

Modernize the Institution's financial management and accounting operations (7 FTEs and \$397,000)

 Advance modernization of financial management and accounting operations by continuing training and development of staff

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (3 FTEs and \$229,000)

 Conduct targeted seminars and visits to research sites for journalists and policy makers to keep them informed about relevant research discoveries

Modernize and streamline the Institution's acquisitions management operations (10 FTEs and \$255,000)

 Review current acquisition practices for cost effectiveness and client satisfaction, and propose alternatives adhering to established policies

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of \$5,607,000 that includes \$407,000 for mandatory pay increases for existing staff and \$5,200,000 and 15 FTEs to provide core salary support and other resources to expand the SIGEO system.

The new federal investment of \$5,200,000 and 15 FTEs requested aims to ensure that SIGEO can recruit the number and caliber of scientists required to provide long-term reliable oversight of the network and data quality, make fundamental observations regarding the nature of forest change over time, and develop a predictive science capable of informing policy makers of the potential consequences for forests of global change and biodiversity loss. The need for these staff positions results from the success of the CTFS network, which has grown in global representation and in the sheer quantity of data collected, maintained, distributed, analyzed, and interpreted. Some of the new scientists will be responsible for the long-term quality, reliability, and consistency of the data across the different forest plots in the network. Other scientists will be responsible for maintaining the distributed network database and for developing the database tools, analytical approaches, and the predictive environmental science required to take full advantage of the SIGEO.

It is worth noting that the network is extremely well used by independent, university-associated faculty and network partners; thus, the SIGEO leverages huge intellectual horsepower. More than 200 scientists have published research from the CTFS data sets, attesting to the broad usability and benefits of the network. One measure of this effective leveraging is the large number of NSF-funded research projects based within the network. In addition, Harvard and Yale universities have pledged \$8 million, in addition to \$10 million pledged from a single private donor, in support of the network for the next five years to maintain partnerships with SIGEO and strengthen the network's basic and social research programs.

A federal investment in SIGEO science and core scientists, whose careers are devoted to the endeavor, will establish a global carbon research program from the tropics to the temperate zone and enable scientists to assess the effects of global change on vertebrates, invertebrates, microbes and trees. Furthermore, funding will provide the continuity, coordination, integration, and

quality control required to ensure stability and long-term integrity of SIGEO and its unique global data set. The increases are as follows:

- (+\$1,035,000, +7 FTEs) supports the SI inter-bureau core science competencies, including theoretical and ecosystem ecology
- (+\$360,000, +3 FTEs) supports the generation, analysis, management, and coordination of temperate forest plot research
- (+\$453,000, +5 FTEs) supports the science integration and management among plots for different biodiversity, DNA studies, and administrative coordination
- (+2,577,000) provides supplies, materials, travel, and contractual services associated with carbon, plant, animal, DNA, and remote-sensing assessments
- (+\$375,000) provides for site management and maintenance
- (+\$400,000) provides for education, outreach, and policy

If the FY 2009 increase is not allowed, the government will not be able to capitalize upon its prior long-term investment in CTFS, which has recently stimulated \$18 million in private investment and which promises to develop further private and public partnering in understanding global change and inform public policy in this area.

The Smithsonian will fail to generate data that can be used to mitigate the detrimental consequences of global change on Earth's biodiversity, economy, and human health. STRI would miss a uniquely Smithsonian and national opportunity to build on infrastructure and long-term data that have the potential to greatly accelerate original and critical analysis of fundamental questions in biology regarding global processes, ecosystem function, and biological complexity. The Smithsonian will falter in training the next generation of scientists in the long-term and global-scale examination of the interface between global change and the function of Earth's biological diversity. In addition, the Institution will miss the opportunity to strengthen collaborations among its science units and with other national and international institutions.

OUTREACH

		APPLICATION OF OPERATING RESOURCES								
	FEDERAL APPROPRIATIONS					/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS			
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000		
FY 2007 ESTIMATE	59	9,505	32	4,466	15	4,894	4	569		
FY 2008 ESTIMATE	65	9,669	34	4,689	16	4,841	3	247		
FY 2009 ESTIMATE	66	11,559	34	4,513	16	4,891	3	182		

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	11	1,041	10	1,089	-1	48
Exhibitions						
Offer compelling, first-class exhibitions	42	4,872	43	5,267	1	395
Strengthened Research						
Research						
Engage in research and discovery	5	2,335	_ 5	3,560	0	1,225
Ensure the advancement of knowledge in the humanities	0	633	0	833	0	200
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	7	788	8	810	1	22
Total	65	9,669	66	11,559	1	1,890

BACKGROUND AND CONTEXT

Smithsonian Across America is the outreach strategy of the Institution, linking its national collections, research, and educational resources with Americans from coast to coast. Its aims are to 1) broaden the audiences who share in the nation's rich cultural heritage; 2) enhance widespread research-

based knowledge of science, history, and art; and 3) provide opportunities for educators and scholars to further increase and diffuse knowledge.

In FY 2007, outreach programs served millions of Americans, thousands of communities, and hundreds of institutions in all 50 states, through loans of objects, traveling exhibitions, and sharing of educational resources via publications, lectures and presentations, training programs, and websites. Smithsonian outreach programs work in close cooperation with Smithsonian museums and research centers, as well as with 150 affiliate institutions and others across the nation.

This line item includes the programs that provide the critical mass of Smithsonian Across America outreach activity: the Smithsonian Institution Traveling Exhibition Service (SITES); Smithsonian Affiliations; the Smithsonian Center for Education and Museum Studies (SCEMS); the Office of Research Training and Services (ORTS); and the Smithsonian Institution Scholarly Press (SISP). The Smithsonian Associates and the National Science Resources Center, which receive no direct federal funding, are also part of this national outreach effort.

The FY 2009 budget estimate includes an increase of 1 FTE and \$1,890,000. This amount includes \$275,000 for necessary pay for existing staff funded under this line item. The request also includes program increases of 1 FTE and \$215,000 for Museum on Main Street (MoMS) program support and \$1,400,000 to increase the number of fellowships awarded and to offer two-year appointments in research fields that are important for the continued intellectual growth and development of the Institution.

MEANS AND STRATEGY

Smithsonian Institution Traveling Exhibition Service (41 FTEs and \$4,979,000) — SITES' success in managing an exhibition program that captures the scope and vitality of Smithsonian collections and research is in line with the Smithsonian's performance plan goal of Increased Public Engagement. In FY 2009, SITES exhibitions will feature topics as wideranging as America's sports icons, planet Earth as seen from space, the Muppets, and Latino music.

SITES maintains an unrivalled program of exhibitions that honor and celebrate the cultural heritage of African Americans, Latinos, Asian Pacific Americans, Native Americans, and the many other peoples who make up the nation. Substantial FY 2008 resources will continue this focus, energizing public involvement through such exhibitions as *Becoming American*:

Teenagers and the Immigrant Experience; Beyond Baseball: The Legacy of Roberto Clemente; Exit Saigon, Enter Little Saigon; Freedom Sisters; Native Words, Native Warriors; Documenting China; and Let Your Motto be Resistance: African American Portraits.

In the decade since SITES launched its groundbreaking Museum on Main Street (MoMS) program, rural America has become a defining force in setting the national agenda. Nowhere is civic pride in the Smithsonian more visible than when small-town USA opens a MoMS exhibit. In FY 2008, New Harmonies: Celebrating American Roots Music will open in five states, extending MoMS' outreach to 560 rural communities nationwide. Journey Stories, which chronicles the history of transportation in America, will begin its tour in FY 2009.

Smithsonian scientists conduct pioneering research every day. Yet the academic context of their work limits the degree to which their discoveries can be represented in SITES' exhibitions. Increasing the total number of science-oriented shows that SITES offers annually is an FY 2009 priority. Based on the results of a survey of natural history museums and science centers throughout the country, SITES will be initiating exhibit tours that showcase Smithsonian research and discoveries in areas such as space exploration, horticulture, zoonotic diseases, botany, and soil ecology.

Smithsonian Affiliations (2 FTEs and \$288,000) — The mission of Smithsonian Affiliations is to build a strong, national network of affiliated museums and educational and cultural organizations that will facilitate the display of Smithsonian artifacts and expertise to communities across America. By working with both emerging and well-established museums of diverse sizes, subject areas, audience bases, and scholarly disciplines, Smithsonian Affiliations is creating the framework through which visitors unable to come to Washington, DC can experience the Smithsonian in their own communities. In addition, the Smithsonian is working closely with affiliated organizations to increase their audiences, expand their professional capabilities, and gain greater recognition in their local communities.

These strategies have resulted in the display of more than 7,000 Smithsonian artifacts in Affiliate locations, including items such as historic spacecraft, First Ladies' gowns, Civil War arms and uniforms, outdoor sculptures, and scientifically significant mineral collections. Smithsonian scholars have participated in science literacy, American history, and art education programs at Affiliate locations. Professional development workshops, internships, and visiting professional residencies have given Affiliates the opportunities to increase their knowledge and skills in areas such as collections management, exhibition planning, and museum

administration. The Smithsonian Affiliations' annual conference creates a forum for networking, information sharing, and future planning.

Smithsonian Center for Education and Museum Studies (14 FTEs and \$1,524,000) — The mission of SCEMS is to increase the Smithsonian's impact as an educational organization by leading Institution-wide initiatives, creating networks, and offering programming. In FY 2006, the Center established a long-term alliance for the Smithsonian with state education officials to provide the basis for developing new Smithsonian educational resources and ensuring their widespread use. In FY 2008, the Center will continue to strengthen this alliance by collaborating with Smithsonian teacher-fellows designated by the state officers and providing professional development for state teachers of the year.

The national outreach importance of the Center's website, www.SmithsonianEducation.org has continued to grow. To make this a more effective portal to all of the Institution's educational resources, the Center has updated, abstracted, and indexed all resources identified by the units as having relevance to school curricula, and made them easily accessible via a search engine. In addition, all of the resources have been correlated to the standards of learning in all 50 states, thereby greatly increasing their usefulness to teachers. The Center works with all of the Smithsonian's units to keep the website content current and relevant.

To complement its many professional development workshops and institutes, in FY 2008 the Center will expand the content of SmithsonianSource.org, its professional development and distance-learning website for history teachers.

In FY 2007, the Center implemented a system to standardize and aggregate information about educational activities throughout the Institution. In FY 2008, the Center will analyze the data collected and launch the second phase of this three-phase initiative, which will focus on audience demographics.

Office of Research Training and Services (5 FTEs and \$3,358,000) — To meet the goal of Strengthened Research and maintain the Smithsonian's level of expertise in the research community, the Institution must continue to attract the best scholars. Increasing fellowships stipends to provide awards at the level of other prestigious awards — generally \$42,000, plus a research allowance of \$3,000 for postdoctoral fellowships — will enable the Smithsonian to stay competitive and attract the best candidates.

In recent years, many internal funding sources at the Smithsonian have been diminished. However, there is a genuine need to rebuild the funding available to the Institution's Scholarly Studies Program so that the Smithsonian will have the resources necessary to help today's young scientists become the next generation's top researchers. In addition, current staff need funds to develop new research initiatives, collaborate with other scholars, and establish the scope and feasibility of projects. Members of the research community see the Smithsonian as a seed bank for research specialties. To maintain this position, ORTS, through the Scholarly Studies Program, will need to regain the level of funding that was provided in years past.

External funding is often very competitive, and in some cases, the Institution's researchers are not eligible. Awards given through the Smithsonian Scholarly Studies Program provide basic funding for new research projects, especially when external funding is not available. Although these awards help develop research concepts, they are not large enough to fund long-term research requiring two to four years to complete. In recent years, the Scholarly Studies Program has provided start-up funding for major research at the National Zoo, and two of these efforts received additional five-year funding from the National Institutes of Health to continue the research. New research initiatives include:

- Improving cyropreservation technologies in rare and endangered species
- The study of Earth-like planets around other stars
- Determining the impact of reduced genetic diversity on male reproductive function

Smithsonian Institution Scholarly Press (4 FTEs and \$1,410,000) — Through the Contributions and Studies Series Program, continuously published since 1875, SISP publishes research conducted by Smithsonian staff. The federal resources will support the production of the first-class science results and widened public distribution to libraries, universities, and other organizations. The program publishes monographs in several subject areas, including anthropology, botany, marine sciences, paleobiology, zoology, visual and material culture, and history and technology. Furthermore, federal resources will underpin the publishing of scholarly books written by Smithsonian staff or books closely related to Smithsonian collections.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (10 FTEs and \$1,089,000)

- Manage the Smithsonian internship program, providing 700 college students with internship placements, training, and enrichment opportunities
- Publish a teachers' magazine based on Smithsonian research collections, and distribute it to every elementary and middle school in all 50 states (82,000 schools)
- Provide professional development for an audience of 3,000 museum and classroom educators through workshops, special events, and learning institutes
- Maintain www.SmithsonianEducation.org, a central education
 website for teachers, families, and students; http://intern.si.edu, a
 central website for intern applicants and current interns;
 http://museumstudies.si.edu, a resource site for museum
 professionals and museum studies students; and
 www.SmithsonianSource.org, a complex, Institution-wide multimedia website. These websites are expected to reach two million
 visitors in FY 2007
- Provide quality public programs that have, on average, an outstanding rating on a poor-fair-good-outstanding-excellent scale

Offer compelling, first-class exhibitions and other public programs at Smithsonian museums and across the nation (43 FTEs and \$5,267,000)

- Arrange tour of at least three exhibitions from the National Museum of American History to guarantee public access to national collections while the Museum is under renovation
- Arrange tour of three exhibitions about African American cultural history to introduce the public to the richness of the Smithsonian's new National Museum of African American History and Culture
- Arrange tour of four new exhibitions that honor and celebrate the cultural heritages of Latinos, Asian Pacific Americans, Native Americans, and new immigrant groups in the United States
- Launch one new exhibit and add 50 small towns to the number of locations that participate in the MoMS, the SITES program that sends Smithsonian exhibits to rural America
- Launch two new exhibits from the National Air and Space Museum to respond to public demand for exhibitions on air and space subjects

- Develop tours for two blockbuster exhibits from the National Museum of Natural History and the National Zoological Park on the subjects of earth science and zoology
- Increase network of Affiliates to include all 50 states. There are 11 states remaining
- Coordinate with other Smithsonian units the expansion of services, including artifact loans, traveling exhibitions, cultural and educational programs, and professional development opportunities, to more than 50 percent of Affiliates

Strengthened Research

Engage in research and discovery (5 FTEs and \$3,560,000)

- Increase stipend levels and research allowances to stay competitive in science to attract a new generation of scholars
- Offer multi-year fellowships in the areas of systematics, paleobiology, ecology, and biology research
- Support scholarly science research
- Support a robust scholarly publishing program focused on the Contributions and Studies Series Program, scholarly books, and research conducted by scientists, researchers, and curators in the different SI museums and units
- Publish up to 15 volumes each year in the Contributions and Studies Series and between 10 and 13 scholarly books
- Expand the reach of the Smithsonian Institution's past studies and scientific contributions by digitizing and making available on the SI Scholarly Press website all legacy volumes of the Contributions and Studies Series as well as all forthcoming volumes
- Support editorial boards that oversee a centrally managed competitive proposal process for scholarly publications and books

Ensure the advancement of knowledge in the humanities (\$833,000)

- Increase the number of awards and stipend levels offered to scholars studying humanities
- Continue support for scholarly research in the humanities

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (8 FTEs and \$810,000)

- Implement the audience data reporting system to collect education data from Smithsonian museums, research centers, and outreach offices
- Convene programs for Smithsonian staff that will foster a learning community around education topics
- Establish an Institution-wide national education outreach strategy to reach the nation's schools by working with leadership at the

- U.S. Department of Education and the heads of education in all 50 states.
- Align Smithsonian education resources with the standards of learning in all 50 states, and make these resources publicly available through interactive Web applications
- Convene an Institution-wide committee as well as working groups to foster collaboration and promote diverse public programming
- Improve management of reporting taxable income for Fellows
- Ensure that current policies and procedures are appropriate for processing fellowship and internship appointments and stipend payments
- Review current human resources policies and procedures to implement new changes to Human Resources Management System (HRMS)

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes a net increase of 1 FTE and \$1,890,000, which includes \$275,000 for necessary pay for existing staff funded under this line item and \$1,615,000 and 1 FTE in program support.

The request includes \$1,400,000 to expand the Fellowships and Scholarly Studies Programs and provide additional support for Smithsonian science staff. The request also includes 1 FTE and \$215,000 for Museum on Main Street (MoMS) program support. These program increases are as follows:

- (+\$1,000,000) To enable Smithsonian science staff to continue conducting scholarly research for the "increase and diffusion of knowledge." Additional support would make "start-up" or "seed" money available to develop new research efforts, and to reinvigorate research efforts that have been set back due to the lack of outside funding. The increase would support approximately 20 Smithsonian researchers.
- (+\$400,000) This increase is requested to raise the number of fellowships given by the Smithsonian Institution Fellowship Program each year, as well as the stipend levels provided. Each year, pre- and postdoctoral fellowships are awarded to graduate students and scholars to conduct research at Smithsonian facilities. Additional funding will enable ORTS to award five more postdoctoral fellowships and make the awards more attractive to research scholars.
- (+\$87,000, 1 FTE) This increase will permit SITES to hire one staff member at the GS-11 level to develop and tour new MoMS exhibitions.
 The immense popularity of these exhibits has fueled a level of demand far beyond even the most optimistic projections for staffing made when the

program first began. An additional staff member is required to meet that demand.

 (+\$128,000) This increase will enable SITES to keep pace with the rising indirect costs of the MoMS program. Exhibit refurbishments and exponential increases in shipping and insurance costs now consume an ever-growing percentage of the annual appropriation, thus eroding funds critically needed for exhibit development and production. The requested increase aims to restore a balance between the programmatic aspirations and the economic realities.

If the FY 2009 budget request is not allowed, the Smithsonian will be forced to cut back on its fellowships and Scholarly Studies awards. The development of new ideas, research initiatives, and collaboration of efforts with other scholars will come to a halt. In addition, the ability to attract young scholars will be diminished, thereby hindering the Smithsonian's efforts to accomplish its goal of Strengthening Research at the Institution. The pre-eminence of the United States in all areas of scientific endeavor, which has fueled economic expansion and an unparalleled standard of living in this country for decades, is threatened as American students fall further behind students in other countries. The Smithsonian is recognized as a leader in the development of new generations of scientists, through its training programs for graduate and postdoctorate scientists. Continued underfunding of these programs will limit America's competitiveness in science.

Furthermore, without this funding, the Smithsonian will be forced to cut back not only on the volume of exhibits in the MoMS program, but also — and more importantly — on the number of communities that receive the exhibits. SITES initiated MoMS 10 years ago, following a congressional mandate to share Smithsonian exhibitions with ever-broadening segments of the American public. The program began as a pilot with one exhibit and five states. Today, 560 rural communities in 41 states and territories have welcomed 246 Smithsonian exhibits to town. The trajectory of the MoMS program holds the promise of a Smithsonian exhibition presence in rural towns in all 50 states within the next five years. This FY 2009 increase request would place that goal well within reach.

COMMUNICATIONS

		APPLICATION OF OPERATING RESOURCES								
	FEDERAL APPROPRIATIONS					/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS			
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000		
FY 2007 ESTIMATE	26	2,083	18	2,454	0	8	0	0		
FY 2008 ESTIMATE	24	2,143	18	2,512	0	8	0	0		
FY 2009 ESTIMATE	25	2,367	18	2,508	0	8	0	0		

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	3	277	3	302	0	25
Provide reference services and information to the public	11	893	11	930	0	37
Exhibitions						
Offer compelling, first-class exhibitions	1	71	1	78	0	7
Collections						
Improve the stewardship of the national collections	0	70	0	70	0	0
Strengthened Research						
Research						
Engage in research and discovery	_1	55	1	57	0	2
Enhanced Management Excellence						
Management Operations						
Enhance the reputation of the Smithsonian by	8	777	9	930	1	153
maintaining good relations with the news media and						
with federal, state, and local governments						
Total	24	2,143	25	2,367	1	224

BACKGROUND AND CONTEXT

The Office of Communications consists of three departments: the Office of Public Affairs (OPA), the Visitor Information and Associates' Reception Center (VIARC), and Smithsonian Photographic Services (SPS).

OPA coordinates public relations and communications in conjunction with museums, research centers, and offices to present a consistent and positive image of the Institution. The Office develops programs to advance the Institution's objectives and acquaints the public with research, exhibitions, public programs, and other Smithsonian activities by working with the news media and issuing publications for staff and the public. OPA extends the Institution's communication message to the Web by overseeing content on the central website and the press room website. OPA also works with units throughout the Institution to establish and maintain guidelines and standards.

VIARC seeks to broaden the public's knowledge, appreciation, and enjoyment of the Smithsonian and to facilitate the goal of Increased Public Engagement by promoting participation in the Institution's programs and activities. VIARC also advances the goal of Strengthened Research by providing behind-the-scenes volunteers who assist staff in performing their research.

SPS enhances public access to the Smithsonian Institution (SI) through the free distribution (for educational use) of images, sales of images to publishers, and support of traveling exhibitions. In addition, SPS provides photographic support for Smithsonian administration, museums, and research centers. SPS produces images for exhibits and exhibit catalogues, brochures, posters, websites, and advertising. Additionally, SPS maintains a collection of more than three million historical images, and provides support to SI collection managers in the housing of photographic collections for preservation and research. SPS also takes the annual official photographs of members of the Supreme Court.

The FY 2009 budget request includes an increase of \$104,000 for necessary pay for existing staff funded under this line item, and a programmatic increase for \$120,000 and 1 FTE to provide staff support to the Regents' Governance and Nominating Committee.

MEANS AND STRATEGY

To achieve the goal of Increased Public Engagement, OPA directs its resources to nationwide mass-media publicity and to expanding relationships with minority communities through targeted radio and print advertising. OPA

publishes the Smithsonian annual report, visitors' brochures, and *Inside Smithsonian Research*, a newsletter devoted to scientific research. It also publishes *The Torch*, a monthly newspaper, and *Blue Bulletin*, a biweekly newsletter, to keep employees informed about Smithsonian staff projects and events at the Institution. OPA has primary responsibility for extending the Institution's communications message to the Web by overseeing content on the central and press room websites, and by working with units throughout the Institution to establish and maintain guidelines and standards.

VIARC advances the goal of Increased Public Engagement by disseminating information about public programs, exhibitions, events, and collections. VIARC has content responsibility for four segments of the Smithsonian website: Visitor Information, Events, Exhibits, and Encyclopedia Smithsonian. In addition, VIARC provides oversight and scheduling of information and end-panel placement for about 20 information signs on and near the National Mall; seven-day, year-round operation of the Smithsonian Information Center; recruitment, training, scheduling, and seven-day supervision of volunteer and staff information specialists at 15 museum information desks; operation of public inquiry mail and telephone information services, including the main Smithsonian telephone number; operation and oversight of the Castle Docent Program; and outreach to the local, national, and international tour and travel industries. VIARC oversees approximately 2,000 volunteers throughout the Smithsonian, representing one-third of the Smithsonian volunteer corps.

SPS advances the goal of Increased Public Engagement by providing access to the public through the free distribution (for educational use) of images via the Web and by supporting traveling exhibitions.

VIARC advances the goal of Strengthened Research through the "Behind-the-Scenes" volunteer program, which assists staff in performing their research. Volunteer assignments range from clerical tasks to highly complex research, conservation, and technical work.

To achieve Enhanced Management Excellence, OPA responds to all media inquiries in a timely manner with accurate, concise information, and initiates story ideas to the media about Smithsonian exhibitions, research, and programs. SPS maintains a collection of more than three million historical images and supports all SI collections managers in the documentation of collections for preservation and research.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences in a lifelong exploration and understanding of art, history, science, and culture (3 FTEs and \$302,000)

 Provide access to Smithsonian information for the public through the free educational distribution of images via the Web, sale of images to publishers, and support of traveling exhibitions

Provide reference services and information to the public (11 FTEs and \$930,000)

- Develop and maintain an integrated plan for communications, advertising, and marketing for the Institution to reach both general and target audiences
- Continue the Institution's targeted outreach campaign to traditionally underserved audiences, through radio stations (in English and Spanish), weekly newspapers, newsletters, and posters
- Recruit approximately 125 new volunteers to address normal volunteer attrition at the units' Visitor Information desks, and to accommodate the 2008 scheduled re-opening of the National Museum of American History
- Continue to provide accurate and timely information about Smithsonian events, activities, and exhibitions through 15 museum information desks and the Telephone Information Services Program in the Castle
- · Update the visitor information database at least once daily
- Maintain and update VIARC's content on the Smithsonian website to ensure the timeliness and accuracy of information
- Provide documentary photographic coverage of historically significant activities such as VIP visits and opening events

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (1 FTE and \$78,000)

- Provide support for publications, publicity, and documentation related to museums and at research centers SI-wide and through SI affiliations
- Produce photographic images for exhibit catalogues, brochures, posters, websites, advertising, and for use in exhibits

Improve the stewardship of the national collections for present and future generations (\$70,000)

 Maintain the collections of more than three million historical images, and support all Smithsonian collections managers in the documentation of their collections for preservation and research purposes

Strengthened Research

Engage in research and discovery focused on understanding the origin and evolution of the universe, Earth and planets, biological diversity, and human culture (1 FTE and \$57,000)

 Recruit approximately 300 Behind-the-Scenes volunteers in FY 2008 to assist research programs throughout the Institution by matching skills, knowledge, interests, and availability with project requirements

Enhanced Management Excellence

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (9 FTEs and \$930,000)

- Provide support to the Regents' Governance committee
- Respond to all media inquiries in a timely manner with accurate, concise information, generally within 24 hours
- Initiate positive stories to various media, including stories about exhibitions, research, facilities, new acquisitions, and staff
- · Organize events specifically for journalists
- Publish a monthly employee newspaper, The Torch, and the biweekly staff newsletter, Blue Bulletin

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget request includes an increase of \$224,000 and 1 FTE. Included is an increase of \$104,000 for necessary pay for existing staff funded under this line item. In addition, OPA is seeking a programmatic increase of \$120,000 and 1 FTE to provide staff support to the Regents' Governance Committee. The increase is as follows:

• (+\$120,000, +1 FTE) With the creation of the SI Board of Regents' Governance and Nominating Committee, OPA must provide staff support to work closely with the Governance Committee in making the Smithsonian website directly accessible to the public and more user friendly for implementing the governance reform recommendations. The requested funds will support a GS-12 position in OPA.

If the FY 2009 budget request is not allowed, OPA will not be able to provide staff support to the Regents' Governance and Nominating Committee and, therefore, will not be able to provide the Regents with the information they need for well-reasoned decision making, and the public with transparency into the management operations of the Smithsonian Institution.

INSTITUTION-WIDE PROGRAMS

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS							/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2007 ESTIMATE	1	6,953	0	0	0	0	0	0			
FY 2008 ESTIMATE	0	6,953	0	0	0	0	0	0			
FY 2009 ESTIMATE	0	12,703	0	0	0	0		0			

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	0	1,140	0	1,390	0	250
Collections						
Improve the stewardship of the national collections	0	985	0	3,985	0	3,000
Strengthened Research						
Research						
Engage in research and discovery	0	1,641	0	3,141	0	1,500
Enhanced Management Excellence						
Information Technology						
Modernize the Institution's information technology systems and infrastructure	0	3,187	0	4,187	0	1,000
Total	0	6,953	0	12,703	0	5,750

BACKGROUND AND CONTEXT

Since 1993, Congress has approved the creation of the following four Institution-wide funding programs:

- Research Equipment Pool
- Latino Initiatives Pool
- Collections Care and Preservation Fund
- Information Resources Management Pool

In 1993, Congress approved the Smithsonian's reallocation of funds to create two Institution-wide funding programs: the Research Equipment Pool to support the units' needs for state-of-the-art research equipment, and the Information Resources Management (IRM) Pool to systematically address information technology (IT) needs throughout the Institution. In FY 1995, the Institution first received funds to support the development of a third Institution-wide program, this one for Latino initiatives, including research, exhibitions, and educational programming. In FY 1998, Congress approved a \$960,000 increase to the IRM Pool specifically dedicated to collections information systems (CIS) needs. The FY 2006 appropriation included an increase of \$1 million to establish another Institution-wide program — the Collections Care and Preservation Fund (CCPF). The CCPF provides resources for the highest priority collections management needs throughout the Institution to improve the overall stewardship of Smithsonian collections. Like the other pools, CCPF resources are distributed annually to Smithsonian units on a competitive basis.

The FY 2009 budget request for Institution-wide programs includes an increase of \$5,750,000. The increase includes:

- \$1,500,000 for the Research Equipment Pool
- \$ 250,000 for the Latino Pool
- \$3,000,000 for the Collections Care and Preservation Fund
- \$1,000,000 for the IRM Pool for Collections Information Systems

ADDITIONAL BACKGROUND AND CONTEXT — COLLECTIONS CARE INITIATIVE

Smithsonian collections are a national and global resource accessed each year by millions of visitors and researchers who use traditional methods and cutting-edge technologies to explore every subject from aeronautics to zoology. Through its collections, the Smithsonian presents the astonishing record of American and international artistic, historical, cultural, and scientific achievement, with a scope and depth no other Institution in the world can match. Collections are acquired from tropical rainforests, archaeological sites, everyday life, the depths of the oceans and extraterrestrially. Whatever the source, the objects and specimens are preserved and maintained for public exhibition, education, and study.

Currently, Smithsonian museum collections total 137.1 million objects and specimens. In addition, the holdings of the Smithsonian contain 1.5 million library volumes, including rare books, and 89,000 cubic feet of archives. Among the vast collections are irreplaceable national icons, examples of common, everyday life, and scientific material vital to the study of the world's scientific and cultural heritage. The scope is staggering: from a magnificent collection of ancient Chinese bronzes to the Star-Spangled Banner; from a 3.5-billion-year-old fossil to the Apollo lunar landing module; from insects and meteorites to

paintings and memorabilia of the U.S. presidency. As the steward of the national collections, the Smithsonian has a unique responsibility to manage and preserve the collections held in trust for the public. This responsibility of preserving and making collections accessible is a historic tradition at the Smithsonian. The scope, depth, and unparalleled quality of these collections make it imperative to ensure that they are properly preserved and made accessible for current and future generations to enjoy and study.

Moreover, Smithsonian collections have a unique and significant role in addressing scientific and societal issues of the 21st century. For example:

- Scientific collections acquired a century or more ago are being used today to address challenges facing society, including global warming, invasive species, and deadly diseases such as avian flu.
- Smithsonian collections contribute to population recovery of endangered species, advances in reproductive biology, genome resource banking, medical research, forensic analysis, bio-security, and conservation policy worldwide.
- The encyclopedic collection at the National Museum of Natural History (NMNH) is an essential resource for scientists worldwide studying the earth sciences, the biological world, and human origins and cultures.

Collections care is not a single process or procedure, but a series of components that are interwoven, interdependent, and ongoing. The condition of facilities housing collections, the quality of storage and preservation, and the ability to document collections in manual and electronic formats directly affect the Smithsonian's ability to make collections available to scholars and the general public worldwide, and to protect and preserve them for future generations. Because collections care is fundamental to the Smithsonian's mission, there is a critical and urgent need for new resources to accomplish basic collections management activities for accountability, preservation, and accessibility of the collections.

During 2004 — 2005, the Smithsonian participated in the Heritage Health Index (HHI), a nationwide survey that documented the condition and preservation needs of the nation's cultural and scientific heritage. The survey found that Smithsonian collections are at risk of damage, deterioration, or loss due to declining resources for basic collections care that have resulted in substandard or insufficient storage, inadequate object housing, and adverse environmental conditions. The survey documented the following statistics:

- One-third of Smithsonian collections space is below acceptable quality
- Seventy-seven percent of Smithsonian units have experienced damage to their collections due to improper storage
- Seventy-five percent need additional collections space to accommodate all collections safely and appropriately

There is also an immediate need to enhance collections records with textual information and images, and to make this information available on the Web. The digitization of collections information and images is a mammoth task that will require numerous Smithsonian and contract staff to complete. Many records are skeletal and lack images, or still reside in legacy or manual documentation systems. Staff erosion and reduced funding have impaired the Smithsonian's ability to support electronic collections information systems on a sustainable level, thereby jeopardizing public delivery of digital content and images from Smithsonian collections. For example, the National Museum of Natural History has digital records for only 10 percent of the estimated 50 million collections records currently needed to document adequately its 126 million objects and specimens.

For the past three years, the White House has defined stewardship of federal scientific collections as a key priority that is critical for maintaining America's excellence and leadership in science and technology. Smithsonian scientific holdings are vital to research in biosecurity, invasive/endangered species, reproductive biology, genome resource banking, medical science, genetic diversity, climate change, forensic analysis, and conservation policy worldwide. In addition, Smithsonian cryo-collections support the use of new technologies in emerging Institution-wide and national research initiatives. The Smithsonian co-chairs the Interagency Working Group on Scientific Collections established by the Committee on Science of the National Science and Technology Council, to develop a coordinated strategic plan to maintain collections and further collections research. A survey of federal scientific collections conducted by the Working Group indicated that the vast majority of the collections are managed by the Smithsonian.

In June 2006, the Smithsonian Board of Regents demonstrated the importance of collections among the Institution's priorities by holding the first long-term planning meeting devoted solely to the content and management of Smithsonian collections. Particular focus was given to securing the means to address collections staffing, collections storage, and collections information systems challenges. The Regents' review concluded that there is an urgent need for additional resources to support key infrastructure components of collections management, and that an effective strategy for addressing Smithsonian collection challenges depends on a coordinated, Institution-wide approach.

In FY 2009, the budget estimate includes an increase of **21 FTE**s and **\$9,789,000** for the collections care initiative to continue making improvements (11 FTEs and \$8,058,000), and to support the digitization and public delivery of content and images from Smithsonian collections (10 FTEs and \$1,731,000).

MEANS AND STRATEGY - RESEARCH EQUIPMENT POOL

The Smithsonian's ambitious research agenda requires appropriate equipment to reach its goals. This basic equipment infrastructure requires regular maintenance, upgrades, and routine replacement. The current allocation barely addresses the Institution's maintenance needs. Enhanced research infrastructure can be used to develop new research capabilities, leverage support for research proposals in competition for external grants and contracts, support the discovery of knowledge, and increase the diffusion of knowledge. Without an increase to the Research Equipment Pool budget, Smithsonian research will fall behind. The FY 2009 budget estimate for the Research Equipment Pool is \$3,141,000, which includes an increase of \$1,500,000.

MEANS AND STRATEGY — LATINO INITIATIVES POOL

To achieve the goal of Increased Public Engagement through research and education initiatives, the Latino Initiatives Pool provides annual funding for Smithsonian programs that focus on U.S.-Latino experiences and contributions to science, history, art, music, and society. Pool funds enhance programs supporting exhibits, collections management, live programs, education, research, and community/public outreach. Projects are selected on a competitive basis from proposals that demonstrate effective deployment of the pool funds, other Smithsonian resources, and external funding. The FY 2009 budget estimate for the Latino Initiatives Pool is \$1,390,000, which includes an increase of \$250,000.

MEANS AND STRATEGY — COLLECTIONS CARE INITIATIVE

To achieve the goals of Increased Public Engagement and Enhanced Management Excellence, resources will be applied to address the most critical collections needs in two main areas:

- Collections care and preservation; and
- IRM Pool Collections information systems

The collections care and preservation resources will enable the Smithsonian to conduct an Institution-wide collections assessment program, preserve collections, and store them in better conditions for use, while the collections information systems resources will continue the digitization of collections information and images, and provide improved public access to the nation's collections through the Internet.

Collections Care and Preservation

The Smithsonian has taken a pragmatic and systematic approach to improve the stewardship of Smithsonian collections. Critical steps taken to date include:

- creation of the first-ever Smithsonian Collections Advisory
 Committee to establish the Institution's priorities for collections management and implement an action plan
- development of collections-specific performance goals and standards for senior management and museum directors
- revision of the Smithsonian's collections management policy and implementation standards
- development of short- and long-term collection goals for Smithsonian units
- development of an inventory of current Smithsonian collections storage space, including the identification of unit collections storage requirements
- o stabilization and treatment of specific collections at risk

In FY 2009, the Smithsonian will continue to build on these initiatives and follow an action plan for systematically addressing the critical preservation and storage needs of collections, including short- and long-term priorities, goals, and objectives.

• IRM Pool — Collections Information Systems

Collections information systems serve as cornerstones for accountability, public education, and research. Digitizing collections information helps achieve the goal of improving the stewardship and accessibility of the national collections via the Internet. CIS resources support the deployment, maintenance, and enhancement of unit-specific collections information systems; fund the continued digitization of collections; and improve access to digital information on collections for scientific inquiry and public use. Examples of past funded projects include:

- the migration of millions of records from obsolete legacy database systems to stable and supported collections information systems
- the digitization of more than 13 million collections records and images
- the enhancement of registration-level records with research findings, curatorial notes, and digital images
- the purchase and implementation of a single, commercial collections information system for the Smithsonian's six art museums as well as the National Air and Space Museum, the National Postal Museum, and the Anacostia Community Museum
- the purchase and customization of a digital asset management system used by multiple Smithsonian units

MEANS AND STRATEGY — INFORMATION RESOURCES MANAGEMENT POOL

IRM Pool funds support network operations and server administration. Specifically, funds are used for:

- upgrades and enhancements to the Smithsonian's information technology (IT) infrastructure
- contractor support in the Network Operations Center
- provision of Active Directory and desktop migration technicians
- network hardware/software maintenance
- digitization of collections information and images
- public delivery of Smithsonian digital assets

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement — Latino Initiatives Pool Engage and inspire diverse audiences (\$1,390,000)

- Continue to support Smithsonian collections, exhibitions, programs, research, educational activities, and other Smithsonian initiatives of interest to the Latino community, including the acquisition of additional relevant Latino art and artifacts
- Continue to facilitate the infusion of materials with relevant Latino themes and data into Smithsonian exhibits and programs to ensure that diversity is well-represented in Smithsonian venues
- Continue to develop internal and external partnerships to help bridge Smithsonian initiatives into the Latino community, and connect the Latino community with the Smithsonian

Increased Public Engagement — Collections Care Initiatives Improve the stewardship of the national collections for present and future generations (\$3,985,000)

- Maintain state-of-the-art collections management systems
- Enhance conservation, storage, and preservation of the National Collections
- Employ contractors to enhance online access to collections through cataloguing, photography, database administration, and technical services

Strengthened Research — Research Equipment Pool

Engage in research and discovery focused on understanding the origin and evolution of the universe, Earth and planets, biological diversity, and human culture (\$3,141,000)

- Acquire cutting-edge technology that will support priority focal areas of research defined by the Smithsonian Science Strategy and other Smithsonian research priorities in the arts and humanities
- Put core research equipment on a routine replacement cycle to support the Smithsonian's research mission and enhance the Institution's ability to compete for external funding
- Increase the Institution's capacity to conduct research by placing costly analytical equipment under contract to ensure that it is maintained and functioning properly

Enhanced Management Excellence - IRM Pool

Modernize the Institution's information technology systems and infrastructure (\$4,187,000)

- Support the Managed Information Technology Infrastructure initiative
- Support the Institution's information technology requirements
- Enhance Smithsonian collections information systems and public delivery of collections content and images through the Internet

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate for Institution-wide programs includes an increase of \$5,750,000. The increase includes:

- \$1,500,000 for the Research Equipment Pool
- \$ 250,000 for the Latino Initiatives Pool
- \$3,000,000 for the Collections Care and Preservation Fund
- \$1,000,000 for the IRM Pool for Collections Information Systems

Additional increases of **21 FTEs** and **\$5,789,000** for collections needs throughout the Institution are justified here as part of the FY 2009 Collections Care Initiative but included in the FY 2009 estimates for each museum identified below. The request for the FY 2009 Collections Care Initiative, including unit increases, IRM Pool, and CCPF increases, is **21 FTEs** and **\$9,789,000**.

Summary of FY 2009 Increases

Institution-wide Program Increases

Line Item	Items of Increase	FTE	\$000s
Institution-wide Programs	Research Equipment Pool		1,500
Institution-wide Programs	Latino Initiatives Pool		250
Institution-wide Programs	Collections Care and Preservation Fund		3,000
Institution-wide Programs	IRM Pool – Collections Information Systems		1,000
Total			5,750

Unit-based Collections Care Initiative Increases

Museum	Items of Increase	FTE	\$000s
National Museum of Natural History	Collections Storage Equipment	0	2,300
Cooper-Hewitt, National Design	Collections Storage Equipment	0	1,500
Museum (CHNDM)			
National Air and Space Museum	Collections Storage Equipment	0	200
National Museum of Natural History	Preservation Staff	5	420
National Museum of American History	Preservation Staff	5	420
Pan-Institutional units	Collections Storage Support	1	218
National Museum of American History	CIS - Documentation/Imaging Specialists	8	519
National Museum of Natural History	CIS – Database Administrator/Informatician	2	212
Total		21	5,789

EXPLANATION OF CHANGE — RESEARCH EQUIPMENT POOL

The FY 2009 budget estimate includes an increase of \$1,500,000. The increase will provide additional support for the Research Equipment Pool to upgrade and/or replace core equipment. The current allocation would be used primarily to fund the sorely needed maintenance requirements for current equipment. These service contracts are indispensable for ensuring that research equipment operates optimally (e.g., with proper calibration/measurements) throughout its functional life expectancy. The increase is:

 (+\$1,500,000) The proposed increase will be used to purchase new cutting-edge research equipment, ranging from stable isotope equipment and DNA extraction equipment to atomic-force microscopes that measure X-ray optics. Cutting-edge technology often comes in smaller, more portable packages which would also promote new and potentially less costly research techniques and methodologies.

The current Research Equipment Pool is inadequate for ensuring that Smithsonian scientists have the tools they need to make new discoveries and maintain a competitive edge over other leading research organizations. For example, stable isotope analysis — which is fundamental for many studies in physiology, ecology, hydrology, mineral sciences, bio-geochemistry, and Earth and atmospheric sciences — has become to ecology and earth sciences what DNA sequencing is to molecular biology, but this capability is not available at the Institution. Researchers struggle to succeed by outsourcing their work or simply abandoning research due to prohibitively high analytical fees and lengthy turnaround times. Funding this now essential equipment will support Institution-wide interdisciplinary, high-quality research in several disciplines. In addition, this equipment will support the training, education, and research of visiting students, postdoctorate scholars, interns, and collaborating researchers from various colleges and universities throughout the United States and the world. Moreover, this increase will provide SI researchers with access to the tools that should enable them to pursue the high-quality research that supports the excellence that is an integral part of the Smithsonian's mission to increase knowledge.

If the FY 2009 request is not allowed, the Institution will lose research capability as existing equipment becomes worn, obsolete, or inoperative, and the Smithsonian will surrender its historical leadership in core research competencies — especially in systematics, astrophysics, ecology, Earth sciences, physiology, genomics, and the restoration sciences. Without adequate funding to maintain research equipment in optimal condition, productivity and efficiency will suffer, and some laboratories may have to cease functioning altogether. More importantly, inadequate or obsolete

equipment will hinder the Institution's ability to attract the "best and brightest" research talent, and in some cases may result in loss of leadership and prestige that will be reflected in fewer peer-reviewed publications, reductions in external grants and contracts, and reduced productivity.

EXPLANATION OF CHANGE — LATINO INITIATIVES POOL

The FY 2009 budget estimate includes an increase of \$250,000 to support the following:

 (+\$250,000) This increase is requested to augment the efficacy of the Latino Initiatives Pool. Given the pool's objective to represent the U.S. Latino experience and the increased size of this community in the United States in the last 10 years, increased funds would allow greater outreach and increased programming to reach a growing, more diverse Latino audience.

If the FY 2009 request is not allowed, the Smithsonian Latino Center will not be able to fully represent the Latino community in all of its diversity, breadth and scope. There will also be less of an opportunity to partner with internal and external organizations which can help spread the work of the Center.

EXPLANATION OF CHANGE — COLLECTIONS CARE INITIATIVE

For FY 2009, the Smithsonian requests an increase of 21 FTEs and \$9,789,000 for the collections care initiative. The basis for this request is an urgent need for resources to support key infrastructure components of collections management. Many collections will not receive appropriate care without increased support for conservation treatments, preservation assessments, and storage equipment. Many of the Smithsonian's priceless collections are at risk as a result of substandard or insufficient storage, inadequate object housing, adverse environmental conditions, and declining resources for basic collections care. Throughout the Institution, there is a critical need to enrich digital collections records with textual information and images, continue implementing and maintaining state-of-the-art collections information systems, provide adequate digital storage, and increase public access to collections and their associated information.

The Smithsonian Board of Regents, senior management, and the Collections Advisory Committee acknowledge that an effective strategy for addressing Smithsonian collections challenges depends upon having a coordinated, pan-Institutional approach. In its 2006 report, the Smithsonian Collections Advisory Committee identified the need for collections space of sufficient quality and quantity as the Smithsonian's number one collections-

related priority. In addition, new resources are urgently needed to support collections care, preservation, and digitization efforts. The FY 2009 request supports a comprehensive, Institution-wide approach to collections care by:

- systematically replacing obsolete storage cabinetry and housing materials across the Institution, that are currently detrimental and hazardous to the collections, staff, and researchers, by purchasing compact storage equipment and stable materials
- incrementally reversing staff erosion and reduced funding that have impaired the Smithsonian's ability to support collections care and digitization on a sustainable level
- conducting collections assessments and preservation surveys to inform Institution-wide priorities and strategic plans for the allocation of collections care resources
- strategically targeting the stabilization and treatment of specific collections currently at risk of loss or damage

The collections care initiative is funded in the following two main categories:

Collections Care and Preservation (11 FTEs and \$8,058,000)

Collections Care and Preservation Fund (\$3,000,000)

The Smithsonian has developed a pragmatic approach to improve the stewardship of its collections, and the Smithsonian Collections Advisory Committee has developed an action plan to systematically address the critical needs of collections, including short- and long-term priorities, goals, and objectives. The Collections Care and Preservation Fund is the key to the successful execution of this plan, but the current level of funding is insufficient to meet the Smithsonian's collection needs.

This increase is requested to improve collections care, mitigate collections deterioration, and address the highest priority collections care needs throughout the Institution by:

- conducting a pan-Institutional collections assessment program, based on established museum benchmarks, to inform long-term strategic plans and performance metrics for collections care
- addressing the Smithsonian Inspector General's audit recommendations regarding deficiencies in collections inventory and security
- stabilizing, re-housing, and inventorying specific collections at risk throughout the Smithsonian, including film, fossils, textiles, botanical and marine mammal specimens, meteorites, minerals, DNA collections, graphic arts, and new media
- providing funds to continue purchasing compact storage units and housing for collections, as well as replacing obsolete cabinetry and materials detrimental to collections

- stabilizing, conserving, and storing the Smithsonian's photographic holdings of 13 million images
- providing funds to conduct collections-level assessments,
 preservation surveys, and inventories to establish priorities and
 strategic plans for the allocation of collections care resources
- Unit-based Collections Care and Preservation (11 FTEs and \$5,058,000)
 This increase is requested to address high-priority, unit-specific collections care needs and reduce collections at risk due to declines in collections care personnel. Additional detail is provided in the unit's justification material. The increases are as follows:
 - (+\$2,300,000) Provides the NMNH with funds to replace obsolete storage cabinetry detrimental to the collections. This increase will enable NMNH to replace existing substandard cabinets that have been contaminated with hazardous materials, are vulnerable to damaging environmental conditions due to warping, and are not secured with locks, all of which make the cabinets unacceptable by current professional standards. New compact storage and cabinetry will support efficient space use and will provide secure, chemically inert storage.
 - (+\$1,500,000) Provides the CHNDM with funds to purchase a compact storage system to house nearly 150,000 objects at the Museum's off-site collections facility. This increase is imperative to maximize use of off-site space and for the long-term care and preservation of the museum's collection. The storage system will enhance collections preservation and allow improved access and retrieval of objects for study, while protecting the collection from excess movement, dust, and the damaging emissions from materials housed in low-quality storage.
 - (+\$200,000) Provides the NASM with funds to purchase Museum-quality metal storage cabinets to replace the obsolete and hazardous wooden and sheet-metal units currently housing the Flight Materials and Clothing Collection. A recent chemical analysis by the Smithsonian's Museum Conservation Institute confirmed a high level of arsenic in existing cabinets, a health and safety hazard to staff and researchers as well as detrimental to collections preservation. These issues are compounded by overcrowded storage conditions and the potential for mold outbreaks, all of which will continue to worsen without this requested increase.
 - (+\$420,000, +5 FTEs) Provides the National Museum of American History (NMAH) with funds to hire five preservation staff members required to meet basic collections care requirements for the stability, protection, and accessibility of the Museum's collection holdings of 3.2 million objects. This increase

- will support the stabilization of artifacts through conservation treatment, re-housing to maximize storage space efficiency, and improved collections accountability and accessibility.
- (+\$420,000, +5 FTEs) Provides the NMNH with funds to improve collections conservation, collections accountability, and responsible access. This requested increase is in direct response to recent reports that indicate that national, professional standards are not being met in key areas. A 2006 Smithsonian Inspector General audit of collections security and inventory found that NMNH's collections are at risk of damage or loss, and that the Museum must improve inventory control, physical security, and oversight of users of the collections.
- (+\$218,000, +1 FTE) Provides safe and appropriate transport of museum collections and staff to and from the new Smithsonian Institution Service Center in Landover, Maryland, and to and from the National Mall museums for the Office of Exhibits Central, Smithsonian Institution Libraries, and the Office of Contracting.

Collections Information Systems (10 FTEs and \$1,731,000)
The FY 2009 budget estimate includes an increase of \$1,000,000 to the IRM/CIS Pool and 10 FTEs and \$731,000 for unit-specific CIS needs to provide sustainable base resources to support CIS initiatives.

Collections Information Systems Pool (\$1,000,000)

This increase will enhance Smithsonian collections information systems. The increase will support the continued digitization of collections, and improve access to the collections, digital information for scientific inquiry, and public use by providing funds for:

- deployment and implementation of commercial collections information systems to manage and provide access to Smithsonian collections at the National Museum of the American Indian, NMNH, National Museum of African American History and Culture, and Smithsonian Photographic Services
- contractors to enhance online access to collections through cataloguing, photography, database administration, and technical services
- deployment and implementation of a digital asset management pilot project for an enterprise program used by additional Smithsonian units
- hardware and software to preserve Smithsonian digital assets, maintain systems operability, and improve public accessibility to electronic collections information

Unit Collections Information Systems (10 FTEs and \$731,000) This increase will offset the erosion of staff and decreased funding that have impaired the ability of specific units to maintain collections information systems, sustain data migration, and keep abreast of

collections cataloguing. Additional detail is provided in each unit's justification material. The increases are as follows:

- (+\$519,000, +8 FTEs) Provides the NMAH with funds to hire six documentation specialists and two imaging specialists for the Museum's Collections Documentation Program. A recent analysis has determined that the data in the Museum's collection information system is inconsistent and unreliable due to the lack of sufficient resources. The requested increase will bring NMAH collections documentation to an acceptable minimum level for sound and responsible collections stewardship by improving collections data quality, quantity, and accessibility.
- (+\$212,000, +2 FTEs) Provides the NMNH with funds to hire a database administrator and informatician. The increase will allow the Museum to advance scientific understanding, expand the reach of Smithsonian science, and make NMNH collections more available to scientists and the public through continued implementation of the Museum's Research and Collections Information System (RCIS). The requested increase is mandatory to complete the migration of legacy records, extend system functionality, and maintain the Museum's leadership role in such international Web-based efforts as the Encyclopedia of Life and Barcode of Life.

If the FY 2009 increase is not allowed, there will be significant long-term consequences. Without increased funding for collections storage, staffing, and preservation, Smithsonian collections will continue to deteriorate, thereby increasing the eventual cost of conservation and the risk of further damage to or loss of the collections. Degraded collections and insufficient collections staffing undermine the Smithsonian's ability to produce and support high-quality professional research, exhibitions, public programming, and online access. Also without this increase, the Smithsonian will be unable to address the Inspector General's audit recommendations regarding deficiencies in collections inventory and physical security. The lack of funding will also hinder the Smithsonian initiative to strategically address Institution-wide critical collections care needs. If the FY 2009 request for the collections care initiative is not approved, the Smithsonian will not meet its collections stewardship responsibilities, leaving the Institution vulnerable to charges of poor trusteeship in its role as caretaker of the National Collections.

OFFICE OF EXHIBITS CENTRAL

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000	
FY 2007 ESTIMATE	30	2,749	10	840	0	0	0	0	
FY 2008 ESTIMATE	30	2,832	10	909	0	0	0	0	
FY 2009 ESTIMATE	30	3,023	10	886	0	0	0	0	

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/		FY 2008		FY 2009		ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement				_		
Exhibitions						
Offer compelling, first-class exhibitions	26	2,417	26	2,571	0	154
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	4	415	4	452	0	37
Total	30	2,832	30	3,023	0	191

BACKGROUND AND CONTEXT

The mission of the Office of Exhibits Central (OEC) is to provide comprehensive exhibition services to the Smithsonian Institution and the larger museum community, so that they can provide compelling, high-quality, cost-effective exhibitions that connect the American people to their history and cultural and scientific heritages.

To achieve the goal of Increased Public Engagement, the OEC will continue to expand its project management capability to ensure a more coordinated, full-service, and cost-effective approach to exhibit production. Of equal importance will be the expansion of the OEC's consultation and

exhibition planning services to improve the exhibition planning and development processes throughout the Institution. In addition, the OEC will increase the amount of unique work done in-house, outsource more production-oriented work, and broaden its collaborations with other Smithsonian units. The OEC will also continue to emphasize its innovation and modernization initiatives by expanding services offered via state-of-the-art, computer-controlled technology in the production units. With the recent merger of the OEC and the International Gallery Exhibition Services, the OEC is dramatically expanding its influence, not only within the Smithsonian but throughout the museum world, both nationally and internationally.

To achieve the goal of Enhanced Management Excellence, the OEC will ensure that its cost-reimbursement process is fair and reasonable, and will measure progress based on feedback from customers.

For FY 2009, the budget request includes an increase of \$121,000 for necessary pay for existing staff funded under this line item, and a program increase of \$70,000 to provide transportation of collections and staff to the Mall museums from the new facility in Landover, Maryland.

MEANS AND STRATEGY

As the Smithsonian's most comprehensive producer of exhibits, the OEC is dedicated to providing its Smithsonian clients with first-class exhibition design, editing, production, and installation services. Each year, the OEC designs and produces approximately 100 projects, large and small, for almost every office and museum in the Smithsonian. The Smithsonian Institution Traveling Exhibition Service (SITES) continues to be the OEC's largest client. The OEC has taken over the International Gallery Exhibition Services and is expanding its museum exhibition services throughout the museum community.

In FY 2009, most OEC resources will be focused on achieving the goal of Increased Public Engagement by:

- improving the quality of exhibition design, consultation, production, and installation services
- increasing and maintaining staff knowledge and expertise in state-ofthe-art technology, techniques, and advances in the exhibit field, and upgrading equipment to support emerging trends
- improving the exhibit development process

To accomplish these objectives, the OEC will outsource more of the routine, repetitive, non-exhibit work to private contractors, thus freeing up OEC staff with specialized experience to concentrate on exhibits that require

unique skills. The OEC will also build on well-established, collaborative relationships with other Smithsonian design and production units, and will expand its existing relationships and develop new ones with the many private exhibition design and production companies available today. These efforts will be carried out through the OEC's Project Management Office. Taken together, these initiatives should result in a more informed and expert staff (through a continued emphasis on training), the increased use of state-of-the-art, computer-controlled graphic production equipment, and an improved object preparation and storage capability.

The OEC has the following two objectives which support the Institution's goal of Enhanced Management Excellence:

- Providing leadership, technical advice, and guidance to staff and the museum community
- Improving administrative management functions in human resources, budget execution, fiscal data management, and procurement

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (26 FTEs and \$2,571,000)

- Expand the OEC's Computer Numeric Controlled (CNC) router services by five percent from FY 2006 levels, through the Office's innovation and modernization initiative
- Expand exhibition services offered through the Office of Special Exhibition Services by five percent from FY 2006 levels
- Maintain OEC consultation and exhibition planning services for the Smithsonian Institution at the FY 2007 level
- Maintain at the FY 2007 level the project management capability and resources necessary to sustain the OEC's services to the Smithsonian Institution

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (4 FTEs and \$452,000)

- Highlight the strategic plan, annual performance plan, mission, and vision of the OEC and the Smithsonian Institution at monthly staff meetings and weekly unit meetings so that OEC staff members are more aware of senior management goals for the Institution
- Support the diversity goals of the Institution by increasing use of the Supplier Diversity Program by five percent from FY 2007 levels

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget request includes an increase of \$191,000. Included is an increase of \$121,000 for necessary pay for existing staff funded under this line item. In addition, the OEC is seeking a programmatic increase of \$70,000 to provide transportation of museum collections and staff to and from the Mall museums. The increase is as follows:

(+\$70,000) With the completion of the new Smithsonian Institution Service Center (SISC) in Landover, Maryland, in October 2008, the OEC will be relocated more than 30 minutes from the Mall museums. In order to provide daily safe and appropriate transportation of museum collections and staff to and from the Mall museums, the OEC will purchase two vehicles. The OEC will purchase a 16-foot air-ride, climatecontrolled truck for the transport of collections to and from the Mall museums. In addition, the OEC will purchase a large passenger van for the transportation of staff to and from the Mall museums.

If the FY 2009 requested increase is not allowed, OEC will not be able to move museum collections and staff to and from the Smithsonian's Mall museums in a cost-effective and efficient manner, resulting in diminished capacity to serve museum clients, which in turn will increase costs and inflict delays on their projects.

MAJOR SCIENTIFIC INSTRUMENTATION

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS			NERAL RUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000					
FY 2007 ESTIMATE	0	3,886	0	0	0	0	0	0					
FY 2008 ESTIMATE	0	3,886	0	0	0	0	0	0					
FY 2009 ESTIMATE	0	13,036	0	0	0	0	0	0					

STRATEGIC GOAL: STRENGTHENED RESEARCH

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/		2008	FY	2009	Change		
Program Category	FTE	\$000	FTE	\$000	FTE	\$000	
Strengthened Research							
Research							
Engage in research and discovery	0	3,886	0	13,036	0	9,150	
Total	0	3,886	0	13,036	0	9,150	

BACKGROUND AND CONTEXT

Smithsonian science is engaged in research and discovery focused on the origin and evolution of the universe, the formation and evolution of Earth and similar planets, the discovery and understanding of biological diversity, and the study of human diversity and cultural change.

To achieve the goal of Strengthened Research, the Smithsonian uses its multi-year funding from the Major Scientific Instrumentation (MSI) line item to develop large-scale instrumentation projects that enable scientists working at the Smithsonian Astrophysical Observatory (SAO) to remain at the forefront of astronomy and astrophysics research. The Smithsonian's criteria for selecting and proposing MSI projects are: 1) the instrumentation will enable compelling scientific advances that would not otherwise occur (either at SAO or *anywhere else in the world*) for some time to come; 2) the instrumentation is novel and technically advanced, and *would not be developed* without SAO's contribution; and 3) the science enabled by the innovative instruments is consistent with the Smithsonian Institution's strategic plan, "Science

Matters: Priorities and Strategies." The fundamental role for federal appropriations is to support the basic scientific infrastructure that enables SAO to conduct research, compete for external grants and funding, publish in peer-reviewed journals, and inform the public about the latest scientific discoveries in an exciting and compelling manner. Because of the magnitude of the costs and the time required to fabricate major new instruments and reconfigure existing ones, the Institution requests that MSI funds for these projects be kept available until they are spent.

During the past 50 years, astronomers have made fundamental discoveries about the universe, such as the existence of more than 230 planets around nearby stars and the bizarre remnants of dead stars that emit large quantities of x-rays in the Milky Way Galaxy. Scientists have determined that the universe is about 14 billion years old and that it is populated with billions of galaxies, many of which have super-massive black holes at their centers. Research has produced strong evidence that the expansion of the universe has been accelerated by a mysterious and invisible "dark energy." Today, astronomers are poised to make the connections that will transform these discoveries into a coherent story of the cosmos from the Big Bang to the origins of life here on Earth. MSI funds are essential to meeting this objective.

Three SAO projects are included in the MSI line item: an array of submillimeter telescopes (i.e., Submillimeter Telescope Array, or SMA) on Mauna Kea, Hawaii; instrumentation for the converted Multiple Mirror Telescope (MMT) at SAO's Fred L. Whipple Observatory at Mt. Hopkins, Arizona; and the design and fabrication of the Giant Magellan Telescope (GMT) in northern Chile.

For FY 2009, the budget estimate includes a program increase of \$9,150,000 for design and construction of the GMT, preliminary conceptual design of two key instruments for the telescope, and design of the instrument fabrication facility at SAO.

MEANS AND STRATEGY

SAO's mission is to engage in astrophysical research and discovery. Observational astrophysics is the basic science responsible for the understanding of the universe and its components beyond Earth. SAO has made leading contributions to many key discoveries in astrophysics, including: 1) the remarkable discovery that the universe is accelerating; 2) the discovery of enormous patterns traced by galaxies in the universe; 3) the most compelling demonstration of the existence of super-massive black holes at the centers of most galaxies; 4) the discovery of very highenergy gamma rays; 5) the most convincing observational evidence for the

existence of dark matter; and 6) the discovery of planets orbiting other stars. SAO scientists contributed to these discoveries by utilizing key facilities that enable observations in several different bands of the electromagnetic spectrum (i.e., the broad range of light that is emitted by objects in the universe). These contributions have put SAO in the forefront of this generation of astronomers and astrophysicists, and have made SAO, with its partner, the Harvard College Observatory, the top choice of graduate- and postdoctoral-level young scientists. With the expanded capabilities requested, SAO will be positioned to make the next great contribution to the understanding of the universe and our place in it.

SAO's strength in observational astrophysics depends on its major ground-based facilities, the SMA and MMT, and the National Aeronautics and Space Administration's space-based facilities, the Chandra X-ray Observatory and the Spitzer Space Telescope. Access to both ground- and space-based observatories enables SAO scientists to conduct research that would be impossible with either type of observatory alone. SAO's future strength in ground-based observational astrophysics is critically dependent on equipping the SMA and MMT with powerful new instrumentation and developing the extremely large, next-generation telescope, the GMT. Maintaining its leadership depends on developing instruments and facilities that do not now exist. A team of talented scientists and engineers must work together, over a period of several years, to bring these tools into being, with support from multi-year MSI funding.

Giant Magellan Telescope (\$9,150,000)

The GMT, an extremely large, next-generation, optical and infrared telescope, will be constructed by a consortium of nine universities and observatories. In addition to SAO, the consortium developing this new telescope includes the Carnegie Observatories, Harvard University, University of Arizona, University of Michigan, Massachusetts Institute of Technology, University of Texas at Austin, Texas A&M University, and the Australian National University. The total capital cost of the GMT (estimated to be approximately \$600 million in 2007 dollars) will be shared among the members of the consortium during the decade that construction is expected to be completed. Over this multi-year period, SAO wishes to contribute \$180 million of MSI funding toward the design and development of the GMT, with the balance being raised by the other members of the consortium. This level of federal funding is essential to support the fundamental science infrastructure, attract private support, and maintain U.S. leadership in this field. SAO will draw heavily on its staff expertise in constructing, developing instrumentation for, and operating this large telescope.

The GMT is the top priority in SAO's Science Strategic Plan; is the top ground-based recommendation of the National Academy of Sciences Decadal Survey; and focuses on two of the broad research themes outlined in the Smithsonian's Strategic Plan: the origin and nature of the universe, and the formation and evolution of the Earth and similar planets. It will be made up of seven 8.4-meter primary mirrors, six of which will be off-axis and arranged in a floral pattern to produce a telescope with an effective aperture of 25.4 meters (83 feet). The GMT will possess a huge lightcollecting area (10 times that of the MMT) and a large field of view, almost encompassing the diameter of the full moon. This large field of view will enable astronomers to observe a broad swath of the universe at one time, making possible surveys to study the evolution of the large-scale structure of the universe and to search for rare and interesting objects. The GMT will also exploit adaptive optics to remove the blurring effect of viewing the universe through the Earth's atmosphere. Sophisticated sensors will measure the rapidly changing atmospheric conditions and calculate a correction that can be applied to the telescope optics. With these adaptive optics, a visual acuity 10 times better than the Hubble Space Telescope can be obtained without the enormous expense and almost insuperable technical difficulty of placing a huge telescope in space. This extremely fine resolution will enable astronomers to use spectroscopy to study distant planets and search for biomarkers of life. With FY 2009 MSI support, SAO will work on the design and construction of the telescope enclosure, mirrors, and adaptive optics; develop a preliminary conceptual design for two of the GMT's instruments, and complete a design study for the GMT instrument fabrication facility in Cambridge, Massachusetts.

Submillimeter Telescope Array (\$1,900,000)

The SMA, a collaborative project of SAO and the Academia Sinica Institute of Astronomy and Astrophysics in Taiwan, is made up of eight 20-foot-diameter antennas located on the summit of Mauna Kea, Hawaii, which function as one giant telescope. This facility operates at higher frequencies than those of any other major radio telescope, enabling scientists to probe in unprecedented detail the formation of new planets around other stars.

The SMA is now the most capable submillimeter observatory in the world. It can operate in three frequency bands, observing simultaneously in two of them. The 690 Gigahertz (GHz) receivers, operating at an unprecedented frequency (which is hundreds of times the frequencies used in television, cell phones, and WiFi systems), enable observations that have only been dreamed of before, and clearly illuminate the leadership position of those working with the SMA.

The capabilities of the SMA will be greatly expanded by the development and implementation of an atmospheric-phase monitoring system and new receivers. This will allow the eight separate antennas to be operated jointly when they are located at their greatest separations (up to half a kilometer) and at the highest operating frequencies. The SMA will have the resolution power of a telescope half a kilometer in size, an unprecedented capability at submillimeter wavelengths. SAO scientists will be able to make new and detailed observations of super-massive black holes at the centers of galaxies, and observe other solar systems where planets are forming around nearby stars.

In FY 2009, MSI support will be used to install an atmospheric phase monitoring system that will enable SAO scientists to exploit the longest array baselines (which provide the greatest visual acuity), and to complete and install new 400 GHz receivers with dual-polarization feeds and twice the present bandwidth, thereby greatly increasing the sensitivity of the array.

Multiple Mirror Telescope (\$1,986,000)

The MMT, a joint project of SAO and the University of Arizona, dedicated in 1979, was made up of six identical 1.8-meter telescopes in a single altitude-azimuth (naval-gun-type) mount. The original multiple-mirror design provided a state-of-the-art solution to the technological limitation in casting large mirrors at that time. Following advances in mirror-casting technology developed by the University of Arizona, in the 1990s SAO replaced the six smaller mirrors of the original MMT with a single mirror 6.5 meters in diameter, thus more than doubling the light-gathering capability of the telescope and increasing its field of view some 400 times.

The converted MMT is an extremely powerful telescope. The final instrument needed for it is Binospec, an imaging spectrograph with dual 8'x15' fields of view and a very compact layout for excellent stability. Binospec will enable SAO scientists to test the theory that galaxies form from mergers of smaller galaxies with halos of invisible dark matter. Astronomers will observe the motion of stars in neighboring galaxies to identify the disrupted fragments of galaxies that have merged. These mergers are accompanied by bursts of star formation, including the formation of compact globular clusters of stars. Spectroscopic studies of these star clusters will allow SAO scientists to measure the age and composition of neighboring galaxies, from which they will learn about the formation epoch of galaxy disks, bulges, and halos. In addition, Binospec will enable astronomers to study the formation of large-scale structure when the universe was only one-fifth of its current age. By combining these studies with spectroscopic studies and measurements of galaxies obtained via the Chandra X-ray Observatory, SAO scientists can create a map of the cosmic

web at that epoch. A complementary program will probe even further back in time to measure the environments of distant galaxies, and compare these measurements with those from theoretical astrophysical simulations being carried out at SAO using the Keck computer cluster. FY 2009 MSI support will be used to complete work on Binospec and ship it to the MMT for commissioning and its first research experiments.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Strengthened Research

Engage in research and discovery focused on understanding the origin and evolution of the universe, Earth and planets, biological diversity, and human culture (\$13,036,000)

- Achieve a leadership role in the design and construction of the GMT. The future of ground-based astronomy depends on the next generation of very large telescopes that can extend the reach of science and the resolution of images from deep space. The development of the GMT is essential to SAO's future in observational optical-infrared astrophysics, and to the Smithsonian Institution's goal of pursuing scientific excellence in the study of the origin and nature of the universe. Increased MSI funding in FY 2009 and future years will enable SAO to continue the engineering design and development of this telescope and its instruments. It will put SAO on the path to achieving its goal of a 25–30 percent stake in the completed GMT by 2017. The GMT will enable SAO scientists to study phenomena ranging from the properties of planets around other stars and biomarkers of life to the nature of cosmic dark energy and whether its properties vary over cosmic time
- Continue developing and implementing the atmospheric phasemonitoring system and constructing the new receivers needed to expand the capabilities of SAO's SMA. SAO scientists will be able to observe solar systems in which planets are forming, and supermassive black holes such as the one at the center of the Milky Way and those in other nearby galaxies
- Complete work on Binospec and ship it to the MMT for commissioning. Binospec will enable SAO scientists to conduct extremely efficient spectroscopic studies of very faint objects, study the formation and evolution of galaxies and other large-scale structure in the universe, and characterize the pervasive dark matter and dark energy in the cosmos

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 MSI budget estimate includes an increase of \$9,150,000. The increases are as follows:

- (+\$7,000,000) Provides resources for the design and construction of the GMT, including an enclosure, mirrors, and adaptive optics.
 Specifically, the funds will support the following:
 - \$4,600,000 for the production of the GMT's 8.4-meter diameter mirrors at the Mirror Laboratory at the University of Arizona (the first of the six 8.4-meter off-axis mirrors has been cast and is now being polished at the Mirror Lab), design and development of the telescope's secondary mirror and adaptive optics, and telescope design and engineering
 - \$1,540,000 for administrative, fiscal, operations and engineering management
 - \$860,000 for site monitoring and site preparation for construction of facilities at the Las Campanas (Chile) site of the Carnegie Institution, to include the capital costs during the construction phase
- (+\$1,850,000) Provides resources for a preliminary conceptual design of GMT's two first-light instruments, the Near Infrared Multi-Object Spectrograph and the Super High-Accuracy Radial Velocity Planet Searcher
- (+\$300,000) Provides resources to design the instrument fabrication facility at SAO in Cambridge, Massachusetts.

If the FY 2009 increase is not allowed, SAO cannot remain at the frontier of astronomical research. Its sustained reputation for high-quality astronomy and astrophysics research within the scientific community and among the general public will be diminished. Instead of increasing its technological capability to develop and maintain world-class facilities, Smithsonian science will experience a precipitous decline as reflected in fewer peer-reviewed publications, fewer external grants and contracts (approximately \$90 million per year), lower staff productivity, and lower morale. If SAO cannot fully participate in the next-generation, ground-based optical and infrared facility within the next decade, it will fall behind the rest of the world in making fundamental discoveries. In the race to complete an extremely large telescope, the United States is competing with research institutions and agencies in Europe and Asia. If the United States does not lead in this endeavor, it will lose its place as the premier center in the world and many of the nation's most talented young people will leave U.S. institutions to work on large telescopes developed by other nations.

MUSEUM SUPPORT CENTER

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS			GENERAL TRUST		R/SPONSOR GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000					
FY 2007 ESTIMATE	20	1,743	0	0	0	0	0	0					
FY 2008 ESTIMATE	25	1,784	0	0	0	0	0	0					
FY 2009 ESTIMATE	25	1,845	0	0	0	0	0	0					

STRATEGIC GOAL: INCREASED PUBLIC ENGAGEMENT

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY 2008		FY 2009		Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Collections						
Improve the stewardship of the national collections	25	1,784	25	1,845	0	61
Total	25	1,784	25	1,845	0	61

BACKGROUND AND CONTEXT

The Museum Support Center (MSC) is the principal off-site conservation and collections facility for the National Museum of Natural History's irreplaceable national collections. In addition, the MSC houses important collections from other Smithsonian museums, such as the National Museum of American History. Located in Suitland, Maryland, this facility houses more than 31 million objects. The MSC accommodates collections within three general types of storage media: collections in cabinets, open shelving for biological specimens preserved in alcohol, and high bay storage for very large objects such as totem poles, boats, meteorites, and large, mounted mammals.

The facility also houses laboratories for molecular systematics, conservation, and other specialized research. The MSC staff provides collections management services, including preservation and logistics, safety and pest control, and administrative, shipping, and receiving services. The staff also oversee security operations required for the proper care of museum collections,

and provide computer support services for administrative, research, and collections management data needs.

The Institution is not seeking additional programmatic funding for this line item. The FY 2009 budget request includes an increase of \$61,000 for necessary pay for existing staff.

MEANS AND STRATEGY

To support the goal of Increased Public Engagement, funding will be used to upgrade facilities to provide more accessibility to visiting researchers, students, museum professionals and designers, and others. Upgrades to electronic communications capabilities will increase access to collections by conservators and researchers. Enhanced preservation equipment and programs will increase the long-term use of the collections.

In FY 2009, funds will be used to complete moving collections stored in alcohol and other fluids from the Natural History Building (NHB) on the Mall to MSC, which can safely store the Museum's valuable biological collections. These collections are currently housed in non-code-compliant facilities. In addition, funds will be used to begin preparations for moving physical anthropology collections currently stored in the NHB to the MSC Pod 3, which is undergoing renovations.

STRATEGIC GOAL AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Improve the stewardship of the national collections for present and future generations (25 FTEs and \$1,845,000)

- Complete the relocation of vertebrate, invertebrate, and botanical collections stored in alcohol and other fluids from the MSC Pod 3 and NHB to the MSC Pod 5
- Complete the move of offices, laboratories, libraries, and archives to Pod 5
- Prepare plans for moving collections to the renovated Pod 3 and begin to prepare collections for relocation
- Ensure the safety of staff and collections by reducing the number of findings noted in the annual Management Evaluation and Technical Reviews, and ensure that safety programs are in place
- Continue to provide improved collections care: cleaning, storage (such as object supports and archival storage containers), and pest control
- Enhance facility systems for monitoring the environment
- Enhance support services to accommodate increase in staff activity and collections as staff and collections are relocated to MSC

SMITHSONIAN INSTITUTION ARCHIVES

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS			NERAL RUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000					
FY 2007 ESTIMATE	19	1,322	2	188	2	134	0	0					
FY 2008 ESTIMATE	15	1,387	2	194	1	91	0	0					
FY 2009 ESTIMATE	15	1,463	2	197	0	0	0	0					

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Provide reference services and information to the public	3	270	3	280	0	10
Collections						
Improve the stewardship of the national collections	10	875	10	910	0	35
Strengthened Research						
Research					i	
Ensure the advancement of knowledge in the	1	54	1	60	0	6
humanities						
Enhanced Management Excellence						
Management Operations						
Strengthen an institutional culture that is customer	1	188	1	213	0	25
centered and results oriented						
Total	15	1,387	15	1,463	0	76

BACKGROUND AND CONTEXT

The Smithsonian Institution Archives (SIA) is the institutional memory of a unique American cultural resource and steward of national collections. SIA serves the Smithsonian community, scholars, and the public by evaluating, acquiring, and preserving the records of the Institution and related documentary materials. In addition, it develops policies and provides

guidance for managing the Institution's vast archival collections, offers a range of reference, research, and record-keeping services, and creates products that promote understanding of the Smithsonian and its history.

The FY 2009 budget estimate includes an increase of \$76,000 for necessary pay for existing staff funded under this line item.

MEANS AND STRATEGY

In FY 2009, SIA will continue consolidating its off-site collections storage at the National Underground Storage facility, becoming less dependent on rented space in the Washington, DC area.

SIA will focus on capturing, preserving, and providing access to research materials on Smithsonian history. SIA will continue to support the needs of thousands of researchers seeking information from the Archives; provide online access to ever more information from or about the holdings; collaborate fully with units serving broad external audiences (such as The Smithsonian Associates, the Smithsonian Center for Education and Museum Studies [SCEMS], and the Affiliations Program); set archival collections management standards; and assist all Smithsonian units with the proper disposition of their files.

In FY 2009, SIA will disseminate results of the grant-funded project that developed a full electronic records program for the acquisition, preservation, and long-term accessibility of Smithsonian records. The program was designed to be a model for small and medium-sized, non-profit organizations to use in managing their electronic records. SIA will develop electronic records retention requirements for valuable electronic records held and created throughout the Institution. SIA will continue to provide paper conservation and preservation expertise to all units as needed.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Provide reference services and information to the public (3 FTEs and \$280,000)

- Conduct a minimum of three public presentations on SI history, drawn from the Archives' collections, to reveal to non-scholarly audiences the wealth of information in SIA
- Support SCEMS by providing at least one instructor to present two workshops for K-12 teachers and non-Smithsonian museum professionals

- Support the Affiliations Program and The Smithsonian Associates by giving at least five public lectures on Smithsonian history
- Respond, in accordance with service standards, to a minimum of 3,000 requests for information from the Archives' collections

Improve the stewardship of the national collections (10 FTEs and \$910,000)

- Manage risk, ensure accountability, maximize use of space, and appraise historically valuable records by creating records schedules for major units throughout the Smithsonian (2009 targets include the Smithsonian American Art Museum and the Treasurer's Office)
- Provide greater public access to information about SIA's holdings by adding or refreshing collections information on the SIA website and continuing to add 200 new records to the Smithsonian Institution Research Information System (SIRIS)
- Create or add substantive information to 250 records in the History of the Smithsonian catalogue in SIRIS
- Protect and preserve the Smithsonian's documentary heritage by rehousing a minimum of 500 cubic feet of materials
- Refine methods and processes for preserving historically valuable electronic records (such as email and websites), thereby ensuring future access to those records
- Develop plans for consolidating archival storage space to reduce unit costs and improve the storage environment

Strengthened Research

Ensure the advancement of knowledge in the humanities through original research (1 FTE and \$60,000)

- Develop an online "Using Archives" tutorial for use by remote and onsite researchers
- Sponsor interns and Fellows working on in-depth research projects based on SIA archival resources

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (1 FTE and \$213,000)

- Develop generic requirements and specifications for electronic records management that can be used as a model by other small to mediumsized, non-profit archival organizations for the management of electronic records
- Provide guidance and service to all units needing expertise in: records management; paper preservation and conservation; cold-storage requirements for collections; and other archival policies and procedures

SMITHSONIAN INSTITUTION LIBRARIES

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS			NERAL RUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000	
FY 2007 ESTIMATE	92	9,326	9	1,046	1	1,206	0	0	
FY 2008 ESTIMATE	97	9,551	10	1,030	0	2,031	0	0	
FY 2009 ESTIMATE	97	9,953	10	1,030	0	1,794	0	0	

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	1	80	1	71	0	-9
Provide reference services and information to the	19	1,469	19	1,495	.0	26
public						
Exhibitions						
Offer compelling, first-class exhibitions	0	62	1	65	1	3
Collections						
Improve the stewardship of the national collections	49	4,041	47	3,937	-2	-104
Strengthened Research						
Research						
Engage in research and discovery	8	1,252	8	1,442	0	190
Ensure the advancement of knowledge in the	6	862	6	953	0	91
humanities						
Enhanced Management Excellence						
Information Technology						
Modernize the Institution's information technology	0	36	1	80	1	44
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer	13	1,563	13	1,855	0	292
centered and results oriented						
Ensure that the Smithsonian workforce is efficient,	1	136	0	0	-1	-136
collaborative, committed, innovative, and diverse						
Enhance the reputation of the Smithsonian by	0	50	1	55	1	5
maintaining good relations with the news media and						
with federal, state, and local governments						
Total	97	9,551	97	9,953	0	402

BACKGROUND AND CONTEXT

As the largest and most diverse museum library in the world, the Smithsonian Institution Libraries (SIL) leads the Smithsonian in taking advantage of the opportunities of the digital society. SIL provides authoritative information and creates innovative services for Smithsonian Institution researchers, scholars, and curators, as well as the general public, to further their quest for knowledge. Through paper preservation and digital technologies, SIL ensures broad and enduring access to the Libraries' collections for all users.

For FY 2009, the budget estimate includes a total increase of \$402,000, which includes \$319,000 for necessary pay for existing staff funded under this line item, and a program increase of \$83,000 for additional transportation services related to the move to Pennsy Drive, which is further away from the National Mall than the current Smithsonian Institution Service Center (SISC) location.

MEANS AND STRATEGY

SIL's expanding and diverse Web content has fueled an exponential rise in users each year, and will continue to reach millions of students, teachers, researchers, scholars, and the general public. Through traveling exhibitions, public lectures, educational programs, and publications, SIL will increase its audiences nationwide in FY 2009. SIL also reaches individual researchers and members of the public in every state and many foreign countries by lending crucial books and articles through its interlibrary loan program. The Dibner Library and Baird Resident Scholar programs will continue to build collaborative partnerships with scholarly programs throughout the Institution and elsewhere.

In FY 2009, SIL will increase access to Smithsonian collections by adding new information to the Smithsonian Institution Research and Information System (SIRIS) and by further developing Web-based indexes. For example, SIL will expand indexing of its trade literature collection by adding records for trade literature at the Cooper-Hewitt, National Design Museum (CHNDM) Library, and other SIL libraries, to the records of more than 500,000 items housed in the National Museum of American History (NMAH) Library.

SIL will continue a vigilant program of collections management through the disciplined acquisition of the most significant library materials and collections documenting the nation's cultural and scientific heritage. SIL staff maintains strong, ongoing conservation efforts. SIL's master space plan responds to the growing need to consolidate collections and relieve

overcrowded libraries by providing environmentally sound off-Mall shelving for collections and housing for expanded conservation and imaging activities. After the Smithsonian vacates the SISC location and moves occupants, including SIL, to a more desirable and upgraded space, SIL will relocate even more of its collections there. At the same time, SIL will continue to coordinate efforts with planned renovations and master space plans of the NMAH, the National Museum of Natural History (NMNH), the Smithsonian Environmental Research Center (SERC), and other units. In FY 2009, SIL will continue to implement steps outlined in its master space plan by addressing the most critical needs for adequately organized and environmentally controlled collections space at the CHNDM Library and at the National Zoological Park (NZP) and its Conservation Research Center.

In addition, SIL will continue to inform the nation about its collections and create interest in them through its exhibition program, which shows the intrinsic beauty of books as artifacts and cultural icons, as well as the value of books for the information they provide as documentation for art and artifact collections. In FY 2009, SIL intends to open an exhibition featuring selections from its rich collection of "moveable books," marvels of paper engineering that range from the earliest printed works to pop-up books by top contemporary artists. SIL will continue to promote its traveling exhibition version, *Picturing Words*, to SI Affiliates and libraries nationwide. Staff has begun collaborating with NMNH staff to plan an exhibition focusing on interactions between Smithsonian scientists and the work of Charles Darwin, which will open in FY 2009 as part of the Darwin 200th birthday celebration.

SIL is escalating the publication of digital research products to give scholars the documentation they need for their research in all fields. These products include republication of significant out-of-print books and articles, original diaries and manuscripts, collections of archival literature, illustrations, topical exhibitions, and bibliographic guides and databases. In FY 2009, SIL will create new Web-based publications in its Sources and Critical Interpretations series. With the support of private funding, SIL will continue digitizing the legacy literature of biodiversity to contribute to the Biodiversity Heritage Library, as well as other scientific resources. SIL will also continue its partnership with the SI Scholarly Press by producing the electronic versions of new publications that form the SI Contributions series, and by hosting and maintaining the Scholarly Press's website. As part of its archival responsibility, SIL has established the Smithsonian Digital Document Repository to preserve and provide permanent access to the scholarly results of the Institution's research. In FY 2009, SIL will continue to work with the Institution's art and history museums to expand the content of the Repository. SIL will also expand the number of units contributing information about their staffs' research publications to the SI Research Bibliography.

In FY 2009, SIL will improve access to electronic journals and databases to make their contents easily available throughout the Smithsonian. In accordance with the Institution's goal of Strengthened Research, SIL will also deliver more information through the Web directly to researchers, with an emphasis on information resources in history and culture. SIL will provide metadata guidance and incorporate, as appropriate, emerging national metadata standards on an Institution-wide basis for SIL and SI digital publications and products.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (1 FTE and \$71,000)

 Enlarge SIL audience, expand degree of engagement in Washington, DC, and improve quality of SIL impact on audience through educational programs such as the Dibner Library Lecture and its publication

Provide reference services and information to the public (19 FTEs and \$1,495,000)

- Increase usage of the SIL website to advance knowledge of and access to SIL collections by adding content and improving accessibility
- Continue to offer high-quality information in response to queries and to loan library materials throughout the nation via the interlibrary loan service

Offer compelling, first-class exhibitions (1 FTE and \$65,000)

- Promote and present SIL traveling exhibitions, such as Picturing Words
- Open exhibition on moveable books in the NMAH Library Improve the stewardship of the national collections (47 FTEs and \$3,937,000)
- Expand access to SIL collections and their associated information in SIRIS and on the World Wide Web
- Continue disciplined acquisition of the most significant items and collections that document the nation's and the world's cultural and scientific heritages
- Maintain state-of-the-art processes for the physical storage, conservation, and preservation needed to ensure the longevity of the collections
- Improve library spaces for reader use and collection storage (e.g., CHNDM, NZP, and Freer and Sackler Gallery projects)
- Submit master space plan for the Institution's review and begin implementing recommendations

 Continue working with the Office of Facilities Engineering and Operations (OFEO) to complete the NMNH Northeast Quadrant Project

Strengthened Research

Engage in research and discovery (8 FTEs and \$1,442,000)

- Provide the science units (i.e., museums and research centers) with orientation to optimize scientists' use of library resources
- Expand unit contributions of their scientific research staffs' publications to the SI Research Bibliography and to the Smithsonian Document Digital Repository
- Publish electronic versions of SI Contributions and Studies Series, museum-oriented publications that can fulfill the publishing needs of the growing number of Smithsonian research units
- Continue digitization of biodiversity publications to build the resources needed for the Biodiversity Heritage Library

Ensure the advancement of knowledge in the humanities (6 FTEs and \$953,000)

- Provide the art and history museums with orientation to optimize researchers' use of library resources
- Promote art and history resources widely to Smithsonian researchers
- Expand unit contributions of their art and history research staffs' publications to the SI Research Bibliography and to the Smithsonian Document Digital Repository

Enhanced Management Excellence

Modernize the Institution's information technology systems and infrastructure (1 FTE and \$80,000)

- Upgrade SIRIS capabilities/functions for staff and public access
- Develop alternative approaches for providing Web-accessible (i.e., Web-enabled) holdings of SIL collections to researchers, scholars, and other users worldwide

Strengthen an institutional culture that is customer centered and results oriented (13 FTEs and \$1,855,000)

 Demonstrate further progress on development and implementation of process management and performance indicators, and ensure that performance metrics are consistent and integrated into individual performance goals

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (1 FTE and \$55,000)

Create publicity and provide the public with information about SIL

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of \$402,000. This increase includes \$319,000 for necessary pay for existing staff funded under this line item. In addition, SIL is seeking a programmatic increase of \$83,000 for additional transportation services related to the Pennsy Drive relocation.

The \$83,000 programmatic increase will enable SIL to provide additional transportation services for the delivery of items — from the collection to be housed at the new Pennsy Drive building — to SI researchers served by the 18 Libraries located throughout the Washington, DC metropolitan area. During the next five years, SIL will transfer 300,000 volumes of monographs and journals from its overcrowded branches on the National Mall to this location. The diverse collection houses materials that support all areas of Smithsonian research. The current delivery schedule is as efficient as it can be given existing resources within the existing geography. Researchers at the Smithsonian Institution and elsewhere have come to expect books and journals to be delivered to them within 24 hours. Through the interlibrary loan program, materials are loaned to libraries throughout the United States and worldwide. This flow of books and journals is critical to the exchange of information to support research. In addition to assisting the mission of SI research programs, SIL's conservation, preservation, imaging, and exhibition programs are also moving to Pennsy Drive. Books to be prepared for exhibition, repaired, or scanned must also be picked up and delivered to this location.

If the FY 2009 request is not allowed, SIL will be forced to cut back on the services it provides. SI researchers would suffer delays in receiving the resources they need for their work. At present, the close proximity of the SISC to the National Mall makes it possible for SIL to maintain a daily delivery schedule with one full-time and one part-time driver in its aging minivans. However, when the books and journals and various SIL functions are moved to the Pennsy Drive location, which is further away from the National Mall, the efficiency of the services that SIL offers will be impaired if no additional resources are made available.

ADMINISTRATION

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS			NERAL RUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS_						
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000					
FY 2007 ESTIMATE	253	64,110	185	30,248	9	2,085	1	60					
FY 2008 ESTIMATE	264	66,740	191	27,562	7	1,535	1	50					
FY 2009 ESTIMATE	295	83,685	191	28,551	6	1,293	1	45					

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT; STRENGTHENED RESEARCH; AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2008	FY	2009	Cł	nange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Public Programs						
Engage and inspire diverse audiences	3	274	5	535	2	261
Exhibitions						
Offer compelling, first-class exhibitions	0	185	0	189	0	4
Collections						
Improve the stewardship of the national collections	2	226	2	226	0	0
Strengthened Research						
Research						
Engage in research and discovery	7	854	7	895	0	41
Ensure the advancement of knowledge in the humanities	1	97	1	97	0	0
Enhanced Management Excellence						
Facilities						
Execute an aggressive, long-range revitalization program and limited construction of new facilities	0	42	0	0	0	-42
Security and Safety						
Provide a safe and healthy environment to support Smithsonian programs	1	103	1	107	0	4
Information Technology						
Modernize the Institution's information technology systems and infrastructure	85	37,300	102	51,378	17	14,078

Performance Objective/	FY	FY 2008 FY 200		2009	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	25	2,810	30	3,720	5	910
Ensure that the workforce is efficient, collaborative, committed, innovative, and diverse	62	11,282	64	11,710	2	428
Modernize the Institution's financial management and accounting operations	51	9,244	54	10,043	3	799
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	4	509	4	530	0	21
Modernize and streamline the Institution's acquisitions management operations	23	3,814	25	4,255	2	441
Total	264	66,740	295	83,685	31	16,945

BACKGROUND AND CONTEXT

The Smithsonian Institution Administration program provides vision, leadership, policy, and oversight associated with managing and operating the museums and research centers. Administration includes executive leadership provided by the offices of the Secretary, the Deputy Secretary/Chief Operating Officer, the Under Secretaries for Science and Art, as well as the central administrative activities of human resources, diversity, Government relations, financial, information, and contract management, as well as legal services.

For FY 2009, the budget estimate reflects a net increase of 31 FTEs and \$16,945,000. This amount includes \$1,453,000 for necessary pay for existing staff funded under this line item; \$25,000 for the annual Smithsonian financial statement audit; \$35,000 to conduct the annual inventory of one-third of the Institution's physical assets; \$135,000 for Workers' Compensation; \$220,000 to support Smithsonian-wide procurement training; \$600,000 for the increased cost of software licenses; and \$1,136,000 for increased communications costs, including the replacement of outdated network switches and routers. These amounts are justified in the Mandatory Costs section of this budget submission.

The FY 2009 estimate includes 31 FTEs and \$13,541,000 in programmatic increases to implement the Board of Regents' Governance and Nominating Committee recommendations for increased support; increases for the Institution's information technology (IT) infrastructure and support; support for Smithsonian Latino Center initiatives; and funding for warehouse support services. Also included is a programmatic reduction of (-\$200,000) to return one-time funding for the Smithsonian Human Capital and Workforce Restructuring Plan.

MEANS AND STRATEGY

The Institution will use appropriate management strategies to enhance the "increase and diffusion of knowledge" and achieve the Institution's goals. The following strategies are cross-cutting and central to performing the Smithsonian's mission of connecting Americans to their history and heritage, as well as to promoting innovation, research, and discovery in science:

- Support to the Board of Regents' committees
- Provide high-quality leadership and oversight for all policies, programs, and activities of the Institution's museums and research centers by attracting, recruiting, and retaining leaders with superior talent
- Manage human resources, foster diversity, and align human capital with the Institution's goals and performance objectives. Ensure that the right people are in the right jobs by implementing the recommendations of the Smithsonian's comprehensive workforce analysis study. Continue to conduct workforce and gap analyses, strengthen training policies and programs, develop succession planning, and evaluate and improve assessment tools for human resources performance
- Use state-of-the-art, secure information systems to modernize financial, human resources, facilities management, collections, education, and research processes
- Replacing network equipment, servers, desktop computers, scientific
 workstations on an industry best practice life cycle to increase reliability and
 improve the security of information systems and the data that they contain
- Leverage commercially available technology to enhance existing IT systems at the Smithsonian so that they will increase public access to and use of digital surrogates of collection objects and research data; and develop an Institutionwide Digitization Strategic Plan that addresses the creation, management, and use of these digital assets
- Maintain the Institution's telecommunications infrastructure to provide reliable, secure, cost-effective voice and data communications systems that support Smithsonian missions
- Meet federal requirements for providing timely and accurate financial information and improve the Institution's ability to integrate financial and performance management systems as part of the ERP effort
- Advance the Institution's mission in the most economic, efficient, and effective way by supporting audit, evaluation, investigative, contracting, and other advisory services
- Finalize and implement the Smithsonian Arts Strategic Plan and ensure public safety in the art museums

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Engage and inspire diverse audiences (5 FTEs and \$535,000)

- Work with Smithsonian units and museum directors to offer compelling, first-class exhibitions and other public programs highlighting Latino collections and contributions throughout the Institution
- Maintain dialogue with Smithsonian units and museum directors to develop and expand a national outreach effort to share the Smithsonian's resources with larger, more diverse audiences throughout America, particularly in the Latino community
- Maximize the effectiveness of cutting-edge technologies to increase access to first-class educational resources throughout the nation, and raise awareness of the Smithsonian's Latino Center via continued development of virtual gallery exhibitions, a Latino Virtual Museum, and the online availability of Latino-themed educational resources
- Strengthen capacity in science research by supporting the study of human diversity and cultural change
- Support collections-based studies that enhance existing databases, create new ones, and increase the potential of the collections for future scientific inquiry and public use — particularly in the area of Latino contributions

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (\$189,000)

- Increase collaboration and cooperation within the Institution and with external organizations to improve exhibition planning activities
- Assist with surveys of museum visitors and help develop marketing goals, strategies, and specific activities aimed at increasing visitation

Improve the stewardship of the national collections (2 FTEs and \$226,000)

- Issue reports on the National Collections, including *Collection Statistics*, and the *Financial Collections Disclosure* report
- Refine the Institution-wide information system for gathering collections management data, thereby improving the quality and timeliness of collections-related information
- Assist Smithsonian units in developing and implementing up-to-date collections management policies, collection plans, cyclical inventory plans, and digitization plans
- Establish Institution-wide performance metrics for collections management
- Advise Smithsonian senior management by providing data to support strategic planning for collections
- Provide leadership and programmatic support for the Smithsonian Collections Advisory Committee, including the production of collectionsrelated symposia, seminars, and project reports

Strengthened Research

Engage in research and discovery focused on understanding the origin and evolution of the universe, Earth and planets, biological diversity, and human culture (7 FTEs and \$895,000)

- Continue to monitor implementation of the Science Strategic Plan and focal areas of the science themes
- Increase cross-cutting collaboration in support of science themes and focal areas such as planets, biodiversity, and human diversity
- Increase support for the scientific research program, including forestbased research that can be used to measure the effects of global change, and support the next-generation telescope to explore the origin and evolution of the universe
- Reinstate colloquia and symposia in support of the science themes and focal areas
- Provide the infrastructure and tools necessary to sustain scientific research

Ensure the advancement of knowledge in the humanities through original research, including research on collections, that is reflected in publications, exhibitions/displays, and public programs (1 FTE and \$97,000)

 Continue provenance research on Smithsonian collections, which may include up to 2,000 objects in the Freer and Sackler collections, or may focus on up to 600 prints and drawings in the collections of the National Museum of American History and the Smithsonian American Art Museum

Enhanced Management Excellence

Provide a safe and healthy environment to support Smithsonian programs (1 FTE and \$107,000)

 Identify, reduce, and eliminate or control safety hazards in the art museums

Modernize the Institution's information technology (IT) systems and infrastructure (102 FTEs and \$51,378,000)

- Maintain the Smithsonian's telecommunications infrastructure to provide reliable, cost-effective voice and data systems which support Smithsonian missions
- Continue to implement and support the ERP system, including an upgrade to the latest PeopleSoft release
- Replace 25 percent of the Institution's desktop personal computers
- Implement periodic replacement of scientific workstations
- Deploy the Zoological Information Management System (ZIMS)
- Replace scientific computing and archive servers
- Implement centralized video teleconferencing system
- Expand the enterprise storage to meet increased demands, and replace obsolete automated tape backup systems

- Support Network Operations Center extended hours and expand periodic replacement of network servers to include unit application servers
- Implement VOIP technology at the Zoo's Conservation Research Center
- Replace the Smithsonian Institution Research Information System (SIRIS) that will no longer be supported by its vendor
- Create an Enterprise Digital Asset Network to provide seamless sharing and exchange of information amoung the Smithsonian's collections information systems and enterprise Digital Asset Management System.
- Create a central digitization office to serve as a focal point for standardizing digitization at the Smithsonian and lead the development of an Institution-wide Digitization Strategic Plan
- Enhance the Smithsonian's centralized Web infrastructure with design and search capabilities
- Implement the education Web portal
- Integrate the Smithsonian Security Management System (SMS) with the Human Resources Management System (HRMS)
- Implement the Electronic Records Management System

Strengthen an institutional culture that is customer centered and results oriented (30 FTEs and \$3,720,000)

- Guide the Smithsonian with modern business management techniques, provide quality legal counsel, and create a world-class management structure and team
- Provide financial leadership and guidance that reflect best business practices, exploit modern technology, and respond to unit needs
- Manage pan-Institutional accessibility services for visitors with disabilities
- Provide comprehensive accessibility training to staff, docents, and volunteers
- Strengthen management services in support of the Institution's mission, including initiatives in the President's Management Agenda
- Improve the quality of the experience for audiences by identifying, for possible adoption, 10 best museum and/or research practices
- Establish, meet, and improve upon standard tasks and time frames for major construction and exhibition design and fabrication of projects, consistent with best business practices
- Implement the Smithsonian Arts Strategic Plan
- Develop or refine mission statements and comprehensive five-year strategic plans for the units that report to the Deputy Secretary and Chief Operating Officer
- Maintain a strong financial infrastructure to allow the Smithsonian to more aggressively pursue competitive grants, endowments, and donor funds

Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse (64 FTEs and \$11,710,000)

- Build a cooperative environment among all Smithsonian staff by increasing communication and emphasizing each person's contribution to the Institution's mission
- Provide quality human resources services to a dynamic, widely diverse population, using modern techniques and best practices
- Continue the existing long-term work of implementing and evaluating the Institution-wide Human Capital Workforce Restructuring Plan to streamline and leverage the Institution's workforce
- Promote training and informational programs that support diversity as an integral part of the work culture
- Continue reshaping the Smithsonian workforce so that its diversity mirrors the applicable civilian labor force
- Meet procurement goals negotiated with the Small Business
 Administration regarding the use of small, minority, and women-owned businesses

Modernize the Institution's financial management and accounting operations (54 FTEs and \$10,043,000)

- Support implementation of the ERP financial modules by identifying requirements and documenting re-engineered business practices
- Audit and review financial management systems and functions to ensure the adequacy of controls and identify weaknesses
- Conduct accounting functions for units and continue compliance reviews and audits
- Present and justify the annual federal budget submission to the Office of Management and Budget and Congress

Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments (4 FTEs and \$530,000)

- Increase media contacts initiated by the Institution by 10 percent Modernize and streamline the Institution's acquisitions management operations (25 FTEs and \$4,255,000)
- Perform all contract management activities that support major Capital Facilities projects and exhibitions, including precontract, contract negotiation, and postcontract award activities, as well as warranty and contract close-outs
- Improve responsiveness to the training needs of customers
- Schedule and conduct annual physical inventory verification of capitalized and sensitive personal property assets for Smithsonian units to ensure that the PeopleSoft Asset Management database is maintained accurately
- Schedule and conduct annually required training classes for primary and alternate accountable property officers to ensure that the decentralized

property management functions comply with Smithsonian policies and procedures

FY 2009 REQUEST — EXPLANATION OF CHANGE

For FY 2009, the Administration budget estimate includes a total increase of 31 FTEs and \$16,945,000, which includes \$1,453,000 for necessary pay for existing staff funded under this line item; \$25,000 for the annual Smithsonian financial statement audit; \$35,000 to conduct the annual inventory of one-third of the Institution's physical assets; \$135,000 for Workers' Compensation; \$220,000 to support Smithsonian-wide procurement training; \$600,000 for increased cost of mission-critical, annually recurring software licenses; and \$1,136,000 for increased communications costs, including the replacement of outdated network switches and routers at SAO. These amounts are justified in the Mandatory Costs section of this budget submission.

Also included is a programmatic reduction of -\$200,000 to return one-time funding for the Smithsonian Human Capital and Workforce Restructuring Plan. The programmatic summary of 31 FTEs and \$13,541,000 for the FY 2009 increases is described in the following table.

Summary of FY 2009 Increases

Museum/Office	Items of Increase	FTE	\$000's
Office of General Counsel	Staff increase — Attorneys	2	358
Office of the Comptroller	Staff increase — Accountants	6	753
Office of Human Resources	Staff increase — HR specialists	3	372
OCIO	IT Web Outreach	4	1,505
OCIO	IT Administrative Systems	2	510
Subtotal	Governance	17	3,498
OCIO	IT: Infrastructure	2	3,568
OCIO	IT: Enterprise Architecture	0	254
OCIO	IT: Administrative Systems	1	513
Office of Contracting	Pennsy Drive Warehouse Support	1	65
Subtotal	Stewardship of National Treasures	4	4,400
OCIO	IT: Digitization	6	3,661
OCIO	IT: Scientific Computing	1	882
OCIO	IT: Educational Program Portal	1	847
Smithsonian Latino Center	Web and Public Program Managers	2	253
Subtotal	Increase and Diffusion of Knowledge	10	5,643
Total		31	13,541

Governance Support

- (+\$358,000, +2 FTEs) This increase is requested to fund salaries, benefits, and expenses for two GS-15 attorneys to support the additional workload incurred by the Office of the General Counsel (OGC) due to governance and other oversight tasks outlined in both the Regents' Governance Committee and Independent Review Committee (IRC) reports.
- (+\$753,000, +6 FTEs) This increase is requested for two GS-13 accountants to increase the Smithsonian's capacity to meet the continuing need for more accurate and reliable financial information, and to help prepare the Institution's financial statement audit. The positions will support critical requirements for financial analysis, reporting, and documentation of financial transactions to internal (e.g., Governance Committee and Board of Regents) and external (e.g., Office of Management and Budget, Treasury, and Government Accountability Office) auditors and reviewers. This increase is also requested to hire four GS-13 accountants to provide staff support to implement the recommendations of the Regents' Governance and Nominating Committee. These staff members will develop policies and procedures, conduct unit financial management training, strengthen internal controls, and monitor Institution-wide compliance with financial policies.
- (+\$372,000, +3 FTEs) This increase is requested to hire three full-time human resources specialists to serve as central business partners to the seven largest SI units. This increase will enable the Smithsonian to provide expert human resources advice and guidance to all units, which will improve the management and governance of the Institution. It is anticipated that this will improve the quality of recruitment and transaction packages, the timeliness of recruitment actions, thereby allowing the Institution to meet the Office of Personnel Management's timeliness model, and the Office of Human Resource's ability to communicate with Smithsonian employees and other key clients.
- (+\$1,505,000, +4 FTEs) To support IT Web Outreach and the Smithsonian Board of Regents' Governance and Nominating Committee, funding provided in this request includes:
 - \$374,000 and a GS-13 search engine specialist for enhanced enterprise search appliances using the Google Search appliance to enable visitors to search SI Webpages more effectively to find the requested information
 - \$248,000 and a GS-13 database designer/programmer and a GS-13 Web security specialist to enhance the Institution's expanding Web through improved data modeling and database design/optimization, which will improve the currency and presentation of information while increasing the security of the Smithsonian's Web presence.
 - \$297,000 and a GS-14 Web architect and a Web quality assurance contractor to manage the Smithsonian's main website redesign and to

develop and manage the Institution's Web strategy with the objective of making it easier to find information on Smithsonian websites, as well as to create a more consistent and predictable experience for the Web visitor while searching for information on the Smithsonian, and to increase transparency into Smithsonian operations.

- \$500,000 (one-time requirement for FY 2009) to redesign the Smithsonian Institution's home website at www.si.edu to make it easier to find and access information. Currently, while there is a vast amount of information available from Smithsonian websites, the Web visitor must often understand the organizational structure of the Smithsonian to find desired information.
- \$50,000 for additional funding for the National Zoo to cover the cost of additional media-streaming capacity. Maintaining the quality of the streaming delivery to the Internet, both in response time and resolution, is essential to keep up with the public demand for increased coverage of the live animal collection
- \$36,000 for Smithsonian American Art Museum/National Portrait Gallery public-facing educational technology. This request will ensure that publicfacing educational technology (i.e., audiovisual and multi-media programs) and content will continue to be maintained and kept fully available for every visitor to enjoy
- (+\$510,000, +2 FTEs) This increase is requested to support the acquisition and deployment of a new Electronic Records Management System (ERMS), which will facilitate the classification, retrieval, retention, archiving, and disposal of electronic records at the Smithsonian Institution. The requested funds will support the addition of two new positions, a GS-14 project manager who will implement and operate the ERMS, and a GS-13 system administrator who will support hardware, operating system, database, and hierarchical storage, as well as troubleshoot system integration issues. Funds will also support software integration, implementation, and training for using the ERMS.
- (-\$200,000) Represents return of one-time funding for key human capital initiatives for the Smithsonian Human Capital Workforce Restructuring Plan

Stewardship of National Treasures

- (+\$3,568,000, + 2 FTEs) To support IT infrastructure initiatives at the Smithsonian Institution, funds requested include the following:
 - 902,000 to provide enterprise backup solutions for the Smithsonian's
 many systems. Once data are stored, it must be backed up and stored off
 site at a secure location for protection in the event of a disaster. Currently,
 the Institution operates three automated tape backup (ATB) systems to
 meet the backup requirements. By FY 2009, two of the three ATBs will
 reach the end of their life span and will no longer be supported by their

- manufacturers. The Institution requests funding to replace the two oldest ATBs with newer, faster, and larger capacity backup solutions.
- \$1,272,000 to provide enterprise storage solutions for the Smithsonian's many systems. Enterprise storage at the Institution includes the storage area network (SAN), a network of large disk arrays that hold digital information with real-time access to word-processing documents, email, images of collection artifacts, and scientific data sets. SI requires continual planning and acquisition of SAN storage capacity to meet the everincreasing growth in demand. As SI continues to accelerate and expand its digitization efforts, the previously projected requirement will be grossly inadequate. In addition to growing collections storage requirements, scientific data sets currently being developed and analyzed by scientists on various media will have to be converted and included in the storage requirements. Therefore, funds are requested to purchase and maintain an additional 155 terabytes of raw data capacity to the SAN
- \$471,000 to support Network Operations Center (NOC) extended service hours for coverage 17 hours a day, seven days a week to support to the Institution's IT infrastructure, including: telephones, email, websites, facilities activities and monitoring, and security and user applications. Current base operating funds support NOC operations for 11 hours a day, five days a week, Monday through Friday even though the Smithsonian is open every day but Christmas, and the public visits its websites 24x7.
- \$250,000 to expand the Institution's server replacement program (every 4 years for Windows-based servers, and every 5 years for Unix-based servers) to include application servers being consolidated in the Smithsonian's Herndon Data Center from across the Institution and for which replacement costs are not funded. Many employees depend on these servers and the data that reside in them to perform their day-to-day work. The consolidation of unit servers into the Herndon Data Center will increase the number of servers that the Office of the Chief Information Officer (OCIO) must plan and fund for routine replacement. Funds will support replacing aging equipment that falls outside of current base funds for servers at the end of their life cycle
- \$349,000 and 1 FTE for centralized Video Teleconference Center (VTC) systems at the Smithsonian dispersed locations. Over the past year, the relocation of Smithsonian staff to less expensive real estate has increased the number of staff located off the Mall and resulting in a demand for increased VTC capabilities. Funds are requested to implement centralized management and support of the Institution's VTCs. Funds will be used to purchase a multi-media unified conferencing server, and reconfigure the current systems to support centralized management. In addition, OCIO will hire a GS-13 staff member to implement, manage, and support the VTC scheduling of the multi-media unified conferencing server
- \$274,000 and 1 FTE to support a secure wireless network at the Smithsonian Institution. The secure wireless network is a mission-critical

requirement for the museums, research centers, and administrative office in connecting to the Institution's IT infrastructure where a wired network is unsuitable, impractical, and/or cost-prohibitive for specific work locations and facilities. Maintaining the high standards of security will ensure a minimal risk of data breaches and loss of critical information. Funds will provide for maintenance of the secure wireless network infrastructure, as well as a GS-13 wireless network specialist to oversee the secure wireless network operations

- \$50,000 to establish a fail-over site for email communications in the event that the Herndon Data Center, which houses the Institution's email servers, suffers critical failure and/or loss. The fail-over site will provide email communications continuity for 6,000 Smithsonian email accounts and up to 500 personal digital assistants in use by mid-level and senior management
- (+\$254,000) to support Enterprise Architecture (EA) at the Smithsonian Institution. By following EA practices, the Institution will realize a cost savings by eliminating redundant systems and capturing efficiencies. Funds are requested for contractor support and software tools to integrate EA tools and processes with the Smithsonian's strategic and program goals and performance measurement processes. This will enable the Smithsonian to standardize business practices, realize efficiencies throughout the Institution, and meet the OMB Federal Enterprise Architecture requirement.
- (+\$513,000, +1 FTE) The upgrade of IT administrative systems follows:
 - \$447,000 and 1 FTE GS-14 IT project manager is required for the Office of Protection Services' Security Management System (SMS) that issues identification cards to staff, contractors, and volunteers. The Smithsonian is currently upgrading and expanding the capabilities of this system to comply with the mandates of Homeland Security Presidential Directive 12 and the supporting Federal Information Processing Standard 201. Funds are requested to provide contractor services to complete implementation of the electronic enrollment and background management systems; integrate the systems with the Smithsonian Human Resources Management System (HRMS); ensure life-cycle management services for SMS documentation and testing; and to hire a full-time GS-14 IT project manager
 - \$66,000 is required to support the MedGate system. MedGate complements the HRMS and provides functionality required by the Office of Occupational Safety and Environmental Management to ensure compliance with related health, safety, productivity, disability management, and regulatory compliance issues
- (+\$65,000, +1 FTE) This increase is requested to hire a WG-6 materials handler/driver, cover vehicle fuel costs, and to provide continual central

warehouse support services to the growing number of SI facilities and as the result of the relocation of the Office of Contracting warehouse to Pennsy Drive, Landover, Maryland. The additional distance between SI facilities will create more travel time for deliveries and the need for additional staff at the warehouse while deliveries are being made.

Increase and Diffusion of Knowledge

- (+\$3,661,000, + 6 FTEs) Over the past decade, the Smithsonian has made great strides in modernizing its basic information technology infrastructure. It has modernized its financial, personnel, travel, and facilities-support systems with enterprise solutions. It has built a state-of-the-art data center that houses its servers and storage. It has implemented commercial collections information systems to meet the stewardship responsibilities of its collections. Additional funds are requested to lay the technological foundation the Institution requires to push the digitization needed to ensure that the Smithsonian continues to meet its mandate for the "increase and diffusion of knowledge," leveraging 21st century technologies in ways unfathomed 161 years ago by Congress when it created the Institution.
 - \$382,000 and 2 FTEs to support SIRIS replacement. This action is critical because of the March 2007 announcement that Horizon's vendor, SIRIS/Dynix, is abandoning any further development of Horizon products. This poses a critical challenge to the Institution to review, plan, develop, purchase, and implement a new library and archival system to replace the current SIRIS (Horizon) product. Specifically, funds are requested to support the migration to a new SIRIS replacement system, including software, hardware, and licensing. In addition, funds will support two GS-13 IT systems specialists
 - \$1,694,000 and 2 FTEs to support the development and establishment of an Enterprise Digital Asset Network (EDAN) at the Smithsonian Institution to seamlessly share and exchange information among the Institution's existing collections information systems and digital asset management system. The EDAN will enable Smithsonian staff, scholarly and education researchers, search engines, and the public to access the Institution's digital assets regardless of where the asset is stored. It will also be the enabling technology for creating virtual exhibits and museums, interactive kiosks that link the collections housed in different museums, and tools to expand scholarly research. The EDAN provides these capabilities without duplicating data across networks, thereby saving storage and backup resources. The request will support contractor services for a data modeler, interface design, image delivery service, indexing software, and hardware. In addition, funds will support two positions: a GS-14 project manager, and a director of mission systems modernization who will assume management responsibility for the CISs and DAM

- \$993,000 for the DAM system, including hardware, software, maintenance, storage, asset import, and system setup and configuration costs. This funding will support an "enterprise" license, adding new functional modules, storage adapters, and a Web toolkit. The production system will include engineering, testing, end-user training, online storage, operations, and maintenance. An enterprise DAM is a key component to the Smithsonian's digital infrastructure and is the primary component of the EDAN architecture initiative. The DAM is essential to preserve and share the Smithsonian's wide array of digital assets. Without the development of an integrated, accessible digitized repository, the Institution's ability to execute its collections stewardship and preservation responsibilities will be threatened
- \$460,000 and 2 FTEs to support the formation of a central Smithsonian Digitization Office as recommended in the *Digitization Steering Committee* Report, dated March 2007. This office will develop an Institution-wide digitization strategic plan, serve as an information clearinghouse on digitization to units on standards, metadata, and provide forums for pan-Institutional exchanges of information on digitization projects and processes. Funding will support two positions, a GS-15 director, a GS-14 deputy director, as well as funds to train unit digitization staff
- \$132,000 to support the Art Collections Information System (ArtCIS) at the National Portrait Gallery. The ArtCIS has been fully operational in the Smithsonian's six art museums since December 1998. Funds will be used by NPG for contractor support to enhance incomplete, even skeletal, metadata of their collection objects, and to assist staff in writing SQL queries for complex reports
- (+\$882,000, +1 FTE) to support scientific computing infrastructure and initiatives at the Smithsonian Institution. Funds requested include:
 - \$574,000 to provide for the life-cycle replacement of scientific workstations, which have become a mission-critical tool for most researchers today. Much of the scientists' research cannot be done without scientific workstations and laptops needed to analyze their data sets, collect field observations, and operate specialized scientific instrumentation. The requested funds will replace approximately 148 scientific workstations per year on a four-year life cycle, which is based on rapid changes in both technology and software older scientific workstations frequently cannot handle newer software programs which require more memory and/or processing power than earlier versions
 - \$155,000 to upgrade and replace SAO computing and archive servers. Funds will upgrade and/or replace SAO's scientific computing infrastructure components on an industry best-practice life cycle. The volume of data generated by the new SAO instruments will dwarf that with which SAO scientists have worked in the past. As the data storage and archival

- storage requirements continue to expand exponentially, SAO needs to keep pace for data retrieval and analysis to function properly
- \$153,000 and 1 FTE to the NZP's ZIMS, a database repository, which will support specimen record keeping and scientific conservation-oriented collections management of the Zoo's living collection. The NZP is requesting additional funds for data migration from legacy systems to ZIMS, and additional staff consisting of one GS-9 database programmer/analyst. This position will be responsible for the maintenance and tuning of the ZIMS database as well as the coordination and integration of all data tools into one interface
- (+847,000, +1 FTE) to support the Smithsonian Educational Program Portal that is part of the Institution's EA submission. EA is a tool which can and should be used as part of a top-down management strategy to address problems brought about by process and system (data) fragmentation throughout the Smithsonian's IT systems. For FY 2009, the Institution plans for the public program and event registration portion of the portal to be implemented. This system will enable the public to register online and view the universe of educational and public programs offered at the Smithsonian. Data collected during this registration process will be analyzed to learn more about the public's consumption of the Institution's educational offerings, and the results will then be used to develop future educational programs and resources. Funds requested will provide for the purchase of software and hardware, consulting and data analysis, and support a GS-14 evaluation and data analyst.
- (+\$253,000, +2 FTEs) This increase is requested to support the Smithsonian Latino Center (SLC) personnel, GS-12 virtual Web program manager and GS-12 public programs manager, and additional resources for travel, supplies, and publications. Programming and exhibitions has significantly increased over the last year while SLC staff numbers have remained constant. For example, the SLC now hosts an annual fundraiser that attracts 700–1000 attendees and has instituted a programming series with features on Latin culture that include numerous cultural events and activities. As the SLC increases its profile, more organizations are seeking out partnering opportunities that would require increased program staff.

If the FY 2009 budget request is not allowed, the OGC will be unable to implement the changes recommended by the Regents' Governance and Nominating Committee and the Internal Review Committee in a timely manner.

Without this funding, the Smithsonian will not be able to support the increased requirements for financial analysis, reporting, and documentation of financial transactions by the Office of the Comptroller, Office of Facilities

Engineering and Operations, and OCIO to internal (i.e., Governance Committee and Board of Regents) and external sources (i.e., OMB, Department of the Treasury, and external auditors). The Institution would also assume the risk of a Qualified Audit Opinion and would not be able to implement the recommendations of the Regents' Governance and Nominating Committee.

The Smithsonian units without full-time business partners will continue to experience recruitment delays, quality control issues, and communication breakdowns if these increases are not allowed. Recruitment delays will prevent the units from accomplishing key mission-critical work, adversely affecting all Institution goals. The Office of Human Resources will not be able to meet demands from key internal customers on the need for enhanced human resources services, or meet the hiring timeliness requirements from OPM.

Furthermore, the OCIO will be unable to maintain the mature information technology enterprise solutions put in place over the past decade to adequately store and backup substantial amounts of data throughout the Institution, and to continue to operate the Institution's communications systems and networks as systems reach capacity or the end of their serviceable life. Failure to fund FY 2009 increases also will render the Institution unable to meet OMB-mandated enterprise architecture requirements, and will prevent the Institution from implementing technical solutions that would offer a single unified view of its digitized collections and research data both internally and to the world at large. It will also prevent us from improving the organization of the Smithsonian's Web presence to make it easier to find the information needed on the Smithsonian websites such as by offering the public a single access portal to educational programs, resources, products, and services. In addition, the Smithsonian would continue to rely on mostly inefficient manual processes in responding to ediscovery inquiries because it will not be able to implement an enterprise electronic records management system.

In addition, the SLC will not be able to effectively collaborate with potential partners, and increase its outreach and impact across the country. The lack of approval for increased funds may also hamper the SLC's ability to diversify its funding base and secure additional corporate and foundation support. Without this type of support, the SLC will not be able to maximize its technology, its Web presence, and other types of Latino-focused programming throughout the Institution.

Also, without the requested increases, the Office of Contracting will not be able to provide continual central warehouse support service, thereby delaying the Institution's units and interrupting program activities.

OFFICE OF THE INSPECTOR GENERAL

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS					OR/SPONSOR- SIGNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FT E	\$000				
FY 2007 ESTIMATE	15	1,834	2	262	0	0	0	0				
FY 2008 ESTIMATE	16	1,977	2	351	0	0	0	0				
FY 2009 ESTIMATE	21	2,532	2 351		0	0	0	0				

STRATEGIC GOAL: ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/		FY 2008		FY 2009		ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Enhanced Management Excellence						
Management Operations					-	
Strengthen an institutional culture that is customer centered and results oriented	16	1,977	21	2,532	5	555
Total	16	1,977	21	2,532	5	555

BACKGROUND AND CONTEXT

The Inspector General Act requires the Office of the Inspector General (OIG) to conduct and supervise audits and investigations relating to programs and operations of the Smithsonian Institution that are, in the judgment of the IG, necessary or desirable.

The OIG fulfills its mandate by conducting administrative and criminal investigations and engaging in audits and reviews of Smithsonian Institution operations and programs. The OIG's audits include annually required reports, such as the quality assurance review of the external auditor's financial statement audit and the Federal Information Security Management Act (FISMA) review. The OIG also conducts annual reviews of executive compensation and expenses, and reviews other areas listed in its audit inventory.

For FY 2009, the budget estimate includes an increase of \$85,000 for necessary pay for existing staff funded under this line item, and a program increase of 5 FTEs and \$470,000 to hire four auditors and one junior-level investigator or investigative analyst.

MEANS AND STRATEGY

The resources requested will be used to fund salaries, benefits, and support costs for staff engaged in audits, investigations, and other activities necessary to accomplish the OIG's mission. To balance its oversight responsibility with available resources, the OIG will continue to select areas for evaluation that:

- are the focus of congressional and executive branch attention;
- have high public interest and/or large dollar outlays;
- figure prominently in the Smithsonian's strategic plans and annual performance plans and reports; or
- have known performance and accountability or high-risk issues

The OIG's audit inventory for FY 2009 includes: travel and other expenses of Smithsonian executives; the modernization of the information technology (IT) infrastructure and development of IT investment strategies; the contracting practices of Smithsonian Business Ventures (SBV); collections information systems; the effectiveness of the Institution's processes for identifying, measuring, and managing risk; and the status of human capital and workforce restructuring efforts. In addition, the OIG will oversee the FY 2009 financial statement audit; conduct the annual FISMA review; and assist the Treasury Department and the Government Accountability Office in preparing Government-wide financial statements and performing agreed-upon procedures to explain material differences in intra-Governmental activity balances and related internal control deficiencies.

The investigative staff will continue to conduct investigations and criminal prosecutions, resolve complaints, and proactively engage the Institution's staff to detect and prevent waste, fraud, and abuse.

In addition, the OIG will continue to focus on high-risk, high-dollar areas, and to respond to requests for audits and reviews from the Board of Regents, the Secretary, and the Congress. The OIG will also continue to maintain a substantial inventory of areas identified as needing audit work.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Enhanced Management Excellence

Strengthen an institutional culture that is customer centered and results oriented (21 FTEs and \$2,532,000)

- Conduct reviews of Smithsonian executives' expenses to help ensure that the Institution is using its assets prudently and solely for the benefit of its mission
- Assess the Institution's IT investment strategies and determine whether (1) the Chief Information Officer has implemented sound strategies and practices for managing IT resources and meeting program area information needs, and (2) the IT infrastructure is being sufficiently modernized to support the activities of the Institution
- Determine whether SBV's contracting policies and procedures are in line with industry best practices, and whether SBV contracts are sufficiently competed to maximize revenues
- Examine a sample of the most expensive exhibits to determine if
 museum management adequately tracks exhibition-related
 expenses and financing, reasonably estimates the life-cycle costs
 of exhibitions, and identifies risks and sources of contingent funds
 when budgets are not met
- Determine whether opportunities exist to increase public access to collections information and enhance the state of collections information management, while at the same time reducing infrastructure and maintenance costs
- Evaluate the Institution's metrics process for measuring and tracking risk. Review management's effectiveness in (1) identifying and measuring risks and vulnerabilities, (2) evaluating and monitoring corrective action plans, and (3) providing alternatives and resources to eliminate the vulnerabilities and minimize the risks
- Assess the effectiveness of the Institution's motor vehicle fleet management
- Examine the Institution's progress in implementing human capital initiatives recommended by the Human Resources Research Organization
- Ensure that the Institution complies with FISMA requirements
- Provide oversight for the external auditors' annual financial statement audit

FY 2009 REQUEST — EXPLANATION OF CHANGE

For FY 2009, the budget estimate includes an increase of 5 FTEs and \$555,000. This amount includes an increase of \$85,000 for necessary pay for existing staff funded under this line item, and 5 FTEs and \$470,000 to fund four auditors and one junior-level investigator or investigative analyst. The increases are as follows:

- (+\$112,400, +1 FTE) Hire an IT auditor to perform internal and external vulnerability assessments and penetration testing, and to conduct reviews of the Institution's information systems, ensuring that they comply with the standards set by the National Institute of Standards and Technology.
- (+\$265,200, +3 FTEs) Hire 3 staff auditors to support reviews of capital spending, facilities revitalization, IT modernization, executive expenses and compensation, and other high-risk areas.
- (+\$92,400, +1 FTE) Hire 1 junior-level investigator to reduce the backlog of investigations and engage in proactive waste and fraud reduction efforts.

The additional five positions will substantially improve the OIG's ability to serve as the "gatekeeper" that the Governance Committee of the Board of Regents and the Independent Review Committee have recognized that the Institution requires.

If the FY 2009 request is not allowed, the OIG will be hampered in its ability to serve as the statutorily mandated, independent, and objective Office that helps ensure the integrity, efficiency, and effectiveness of the Institution's programs and operations. The OIG will be unable to perform critical oversight of IT modernization and project management, review financial system upgrades and controls, and prevent the inventory of high-risk areas requiring audit work from continuing to expand.

FACILITIES MAINTENANCE

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS					/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2007 ESTIMATE	307	51,277	0	75	0	36	0	0				
FY 2008 ESTIMATE	307	52,273	0	75	0	36	0	0				
FY 2009 ESTIMATE	377	77,735	0 75		0	18	0	0				

STRATEGIC GOAL: ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	· FY	2008	FY	2009	С	hange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Enhanced Management Excellence						
Facilities						
Implement an aggressive and professional maintenance program	300	48,698	370	73,121	70	24,423
Security and Safety				_		
Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers	7	3,575	7	4,614	0	1,039
Total	307	52,273	377	77,735	70	25,462

BACKGROUND AND CONTEXT

Facilities Maintenance focuses on facility preservation activities and encompasses the upkeep of property and equipment, or the work necessary to realize the originally anticipated useful life of a fixed asset. The Office of Facilities Engineering and Operations (OFEO) is responsible for the maintenance and repair of an infrastructure of approximately 10 million square feet of owned and leased buildings and structures, including 19 museums and galleries, 12 science centers, and the National Zoological Park (NZP). The buildings and structures range from the well-known museums to supporting structures such as quard booths, animal shelters, and hay barns.

The current replacement value of the Smithsonian-owned facilities is estimated to be \$4.7 billion.

The National Research Council (NRC) recommends that annual maintenance funding total 2 to 4 percent of the physical plant current replacement value. The Institution's FY 2006 replacement value is conservatively estimated at \$4.7 billion. This equates to minimum required funding of \$94 million, and full funding of \$188 million for maintenance and minor repair projects. These requirements have been validated through the Facility Condition Assessment process and Reliability Centered Maintenance (RCM) analysis, and were reviewed by the Government Accountability Office (GAO) in 2005. Additionally, as new and renovated museums and major exhibitions open, maintenance requirements rise dramatically due to technological advances and the increased number of systems supporting the Smithsonian's infrastructure.

In its April 2005 report to Congress, the GAO formally recognized the deteriorating condition of Smithsonian buildings and cited the seriously underfunded maintenance program as one of the principal causes. The GAO report confirmed the findings of the 2001 National Academy of Public Administration's review, and reiterated the need for an infusion of maintenance funds.

The Smithsonian's goal is to attain the minimal maintenance funding recommended by the NRC (\$94 million) in the near future. Most of the current maintenance funding is consumed with day-to-day emergencies and unplanned repairs created by insufficient maintenance. The quality, effectiveness, and longevity of repairs are compromised by the need to stretch inadequate resources to meet overwhelming needs. Accelerated degradation of building systems and components will continue to increase capital repair costs until the Smithsonian achieves at least the minimum maintenance funding of \$94 million.

The FY 2009 budget estimate includes an increase of 70 FTEs and \$25,462,000. This increase includes \$1,415,000 for necessary pay for existing staff funded under this line item and 70 FTEs and \$24,047,000 to continue strengthening maintenance and repair of the Smithsonian's most critical systems

MEANS AND STRATEGY

To support the Institution's goal of Enhanced Management Excellence, OFEO continues an aggressive, long-range facilities maintenance and minor repair program, using an RCM approach that includes benchmarking efforts

with other organizations such as the Association of Higher Education Facilities Officers (APPA). RCM is a widely accepted maintenance industry philosophy that incorporates a cost-effective mix of predictive, proactive, preventive, and reactive maintenance practices. Benchmarking efforts resulted in a staffing goal to achieve APPA's recommended level-2 standard for building maintenance, referred to as "Comprehensive Stewardship." The "Comprehensive Stewardship" level of maintenance will ensure that equipment and building components are in operating condition; that sufficient staffing is in place to respond to maintenance calls in a timely manner; and that electrical and mechanical systems are routinely upgraded.

With increased funding in FY 2009, the Institution can approach APPA's level 2 "Comprehensive Stewardship" service. OFEO will continue efforts to achieve the full staffing level of "Comprehensive Stewardship" because it is no less than what should be expected at the world's largest and most visited museum complex.

Additionally, OFEO will continue providing protection for the Institution's facilities, collections, staff, visitors, and volunteers through state-of-the-art physical security measures. Requested resources in FY 2009 will enable OFEO to maintain and enhance physical security systems throughout the Institution, and ensure that all security monitoring systems are maintained at the same levels.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Enhanced Management Excellence

Implement an aggressive and professional maintenance program (370 FTEs and \$73,121,000)

- Ensure that planned maintenance costs remain at 55 percent of total maintenance costs
- Maintain temperature and relative humidity levels within the target range 80 percent of the time
- Ensure that critical electrical power is available 99.9 percent of the time
- Ensure that meantime between repairs of vertical transportation units is more than 70 days

Provide world-class protection for Smithsonian facilities, collections, staff visitors, and volunteers (7 FTEs and \$4,614,000)

- Ensure that physical security protection systems operate as intended
 99 percent of the time
- Complete 100 percent construction of the perimeter barrier project at the National Museum of American History
- Initiate glass mitigation protection at the Donald W. Reynolds Center

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes an increase of 70 FTEs and \$25,462,000. This amount includes \$1,415,000 for necessary pay for existing staff funded under this line item; and 70 FTEs and \$24,047,000 to support new facility maintenance requirements, Institution-wide maintenance and minor repair projects and contracts, and physical security maintenance requirements. The increases are as follows:

- (+\$20,962,000, +52 FTEs) Funding is requested to approach APPA's level 2, "Comprehensive Stewardship," and begin to fully implement RCM methodologies. The requested funds provide \$7 million to support the maintenance and minor repair projects throughout the Institution and \$9,674,000 for contracts, supplies, materials, and equipment to support other general maintenance requirements. In addition, \$4,288,000 and 52 FTEs will support staff salaries and benefits for maintenance of building systems, plumbing requirements, window repairs, sheet-metal repairs, and inspection of fire and life-safety equipment throughout the Smithsonian, as follows:
 - 2 GS-13, general engineers (\$248,000)
 - 4 GS-12, engineering technicians (\$416,000)
 - o 2 GS-12, construction representatives (\$208,000)
 - o 22 WG-11, utilities system repair operators (\$1,738,000)
 - o 5 WG-11, electricians (\$395,000)
 - o 2 WG-11, machinists (\$158,000)
 - o 9 WG-10, painters (\$675,000)
 - o 2 WG-10, carpenters (\$150,000)
 - o 2 WG-10, masons (\$150,000)
 - o 2 WG-10, pipefitters (\$150,000)
- (+\$250,000) This increase provides for additional contract support at leased space in Herndon, Virginia, which houses the Institution's information technology data center. The funding will ensure most of the building system maintenance will be performed using RCM methodology.
- (+\$1,327,000, +14 FTEs) This increase supports the monitoring and performance of preventive maintenance on new building systems at the Donald W. Reynolds Center's (DWRC) courtyard enclosure and Pod 5 at the Museum Support Center to ensure optimum performance and extend the useful life of these critical building systems. The request provides for salaries and benefits for one GS-12 assistant building manager (\$104,000), ten WG-11 utilities systems repair operators (\$790,000),

and three WG-11 maintenance mechanics (\$237,000); and supplies and materials (\$196,000).

- (+\$558,000, +4 FTEs) This increase supports the National Zoological Park's (NZP) Asia Trail facilities to ensure that critical building systems are maintained to strict maintenance protocols, and that electrical systems are routinely inspected, tested, and maintained according to code. Funding will support the salaries and benefits of three WG-11 utilities systems repair operators (\$237,000) and one WG-11 electrician (\$79,000); as well as provide for supplies, materials, and equipment (\$242,000).
- (+\$400,000) This increase fully funds security system maintenance contracts to ensure that all security systems are properly maintained at the National Museum of the American Indian (NMAI), Steven F. Udvar-Hazy Center, the NZP, the National Postal Museum, and the DWRC in the same manner as other Smithsonian security systems. This will ensure the safety and security of staff, visitors, and collections.
- (+\$250,000) This increase funds maintenance contracts for the newly installed vehicle bollard security systems at the NMAI, National Air and Space Museum, National Museum of Natural History, and the National Museum of American History. These automated systems require substantial routine preventative maintenance to ensure their long-term operability and minimize downtime. Funding will ensure continuous operations and minimize security and safety risks.
- (+\$300,000) This increase provides for locksmith contractor services to supplement in-house staff due to increased requirements from new and renovated facilities. Funds will be used to secure and maintain locks, vaults, safes and critical collection storage areas at all Smithsonian locations. These contract services will also ensure that exhibit cases are secure and artifacts are protected.

If the FY 2009 request is not allowed, base funds will be inadequate to arrest the deteriorating condition of the Smithsonian's buildings and supporting infrastructure, thereby endangering the collections and placing staff and visitors' health and safety at increased risk. Furthermore, the quality, effectiveness, and longevity of repairs will be further compromised by the need to stretch existing resources to meet overwhelming needs. The Smithsonian's ability to maintain more reliable mechanical equipment, reduce energy usage, and improve the environment to safeguard the National Collections, staff, and visitors will be severely impaired. This may result in unacceptable environmental issues such as increased mold and microbe

proliferation, indoor air-quality problems, and potential and real hazards to staff and visitors. Lastly, the long-term implications of a continuing shortfall in maintenance funding include:

- Potential damage to the collections, and higher risk of theft or damage, due to the Institution's inability to provide a safe and secure environment for their preservation
- Potential damage to buildings due to flooding and fire if critical protection systems fail
- Potential collateral injuries to the public and staff, with associated litigation and adverse publicity
- Significant increase in energy costs as system efficiencies degrade
- Major increases to Facilities Capital Revitalization requirements

FACILITIES OPERATIONS, SECURITY, AND SUPPORT

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS			GENERAL TRUST		DONOR/SPONSOR- DESIGNATED		GRANTS NTRACTS				
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000				
FY 2007 ESTIMATE	1,317	166,312	10	6,200	5	480	0	0				
FY 2008 ESTIMATE	1,328	180,611	10	3,900	5	410	0	0				
FY 2009 ESTIMATE	1,415	193,945	10 3,900		5	317	0	0				

STRATEGIC GOALS: INCREASED PUBLIC ENGAGEMENT AND ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY :	2008	FY	2009	Change	
Performance Category	FTE	\$000	FTE	\$000	FTE	\$000
Increased Public Engagement						
Exhibitions						
Offer compelling, first-class exhibitions	8	717	8	741	0	24
Enhanced Management Excellence						
Facilities						
Improve the overall cleanliness and efficient operation of Smithsonian facilities	411	119,913	454	127,978	43	8,065
Security and Safety						
Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers	869	53,981	910	58,740	41	4,759
Provide a safe and healthy environment to support Smithsonian programs	40	6,000	43	6,486	3	486
Total	1,328	180,611	1,415	193,945	87	13,334

BACKGROUND AND CONTEXT

The Office of Facilities Engineering and Operations (OFEO) plays a major role in helping the Smithsonian Institution achieve its complex mission

by providing a safe, secure, and quality-built environment that enables museum staff to provide exemplary exhibits to more than 25 million visitors.

The Facilities Operations, Security, and Support (OSS) program within OFEO operates, secures, and supports the Smithsonian's physical infrastructure. OFEO provides operational services for approximately 12 million square feet of owned and leased facilities, including 19 museums and galleries, 10 research centers, and the National Zoological Park.

Resources within OSS support facilities operations, including activities such as fire protection; grounds care and landscaping; snow removal; pest control; refuse collection and disposal; custodial work; security services; and safety, environmental, and health services. Resources also support facilities planning, architectural/engineering design plans, as well as postage, utilities, and central rent costs.

For FY 2009, the budget estimate includes an increase of 87 FTEs and \$13,334,000. This amount includes \$3,945,000 for necessary pay for existing staff funded under this line item; \$2,896,000 for utilities, postage, and rent, which are justified in the Mandatory Costs section of this budget; and a programmatic increase of 87 FTEs and \$7,263,000 for cleanliness requirements and security support, offset by a reduction (-\$770,000) for non-recurring costs in FY 2008.

MEANS AND STRATEGY

To achieve the Institution's goal of Increased Public Engagement, OFEO will continue to develop exhibits and other public programs related to horticulture, architectural history, and historic preservation.

To achieve the goal of Enhanced Management Excellence, OFEO's resources will be focused on meeting the ongoing operational requirements of the Institution's facilities. OFEO has benchmarked the Institution's custodial staffing levels with other museums and professional organizations, including the Association of Higher Education Facilities Officers (APPA). In 2006, the Institution received the prestigious Award of Excellence from APPA in recognition of OFEO's excellence in facilities management, and its efforts to establish measurable performance standards and staffing levels for appearance and cleanliness, and efficient operations. Ultimately, the Institution intends to achieve APPA's appearance level 2, which is referred to as "Ordinary Tidiness." This level of appearance will provide an acceptable level of cleanliness that meets public expectations. In FY 2008, OFEO will only approach appearance level 3, "Casual Inattention." Although this level

of appearance is not totally acceptable, it will ensure a generally clean and odorless environment.

OFEO will also use base resources to continue providing protection for the facilities, staff, and volunteers, while also permitting an appropriate level of access to the National Collections. The Institution will continue to focus on security measures required to address elevated risks identified in the All-Hazard Risk Assessment conducted in 2006. Increased resources in FY 2009 will be used to continue implementing operational security measures to ensure that proper access controls and background/screening measures are implemented for all employees, contractors, and volunteers, as well as to ensure that the newly opened Donald W. Reynolds Center (DWRC) and the National Museum of the American Indian (NMAI) Mall Museum are adequately staffed.

In addition, OFEO will continue using base resources to provide a safe and healthy environment for the Institution's staff by concentrating its efforts on reducing occupational injuries and illnesses. As part of the new Health Risk Management initiative in FY 2007, OFEO analyzed data collected in FY 2006 from the first health risk assessment. With increased resources in FY 2009, OFEO will staff programs that will help decrease Workers' Compensation claims, employee absenteeism and turnover, and increase employee productivity and morale.

STRATEGIC GOALS AND FY 2009 ANNUAL PERFORMANCE GOALS

Increased Public Engagement

Offer compelling, first-class exhibitions at Smithsonian museums and across the nation (8 FTEs and \$741,000)

- Present academic lectures and tours relating to the history of the oldest Smithsonian facilities
- Complete installation of the 2009 orchid exhibit by January 2009
- Conduct a visitor survey of the 2009 orchid exhibit and compare results to previous exhibit surveys in an effort to improve visitors' experiences and help develop future exhibits

Enhanced Management Excellence

Improve the overall cleanliness and efficient operation of Smithsonian facilities (454 FTEs and \$127,978,000)

- Maintain cleanliness improvements achieved in FY 2008 and continue to improve operational efficiencies, cost and quality controls, and accountability
- Increase staffing to meet the APPA level 2, Ordinary Tidiness, performance standard for SI facilities

- Maintain a 95 percent rate of response to work requests that are within established time limits (i.e. 30 minutes for emergencies and two weeks for regular work requests)
- Maintain at 85 percent the percentage of work orders that are completed within 120 days

Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers (910 FTEs and \$58,740,000)

- Maintain crime rate for non-collection property at less than 7 crimes per million visitors, while ensuring that the crime rate for staff and visitors is not more than one crime per million visitors
- Ensure that the crime rate for intentional loss/damage to collections remains at zero
- Ensure that all new employees, all volunteers, and 70 percent of contractors have appropriate background investigations

Provide a safe and healthy environment to support Smithsonian programs (43 FTEs and \$6,486,000)

- Reduce occurrences of deficiencies/hazards that can cause serious injury and/or illness (Risk Assessment Code 1 and 2 findings) by 10 percent from the previous year to achieve progress toward achieving a zero-injury goal
- Reduce occupational injuries and illnesses by 18 percent from the FY 2003 baseline
- Implement an Occupational Health Risk Management Program aimed at reaching 10 percent of employees Institution-wide
- Achieve a 12 percent reduction in lost production day costs through injury and illness prevention and wellness programs

FY 2009 REQUEST — EXPLANATION OF CHANGE

The FY 2009 budget estimate includes a net increase of 87 FTEs and \$13,334,000. This amount includes an increase of \$3,945,000 for necessary pay for existing staff funded under this line item, and \$2,896,000 for utilities, postage, and rent, which are justified in the Mandatory Costs section of this budget. Also included is a programmatic increase of 87 FTEs and \$7,263,000 to improve the overall cleanliness level of all Smithsonian museums and facilities; support new and routine facilities operational requirements; ensure SI-wide security improvements; and support Occupational Health Risk Management program initiatives. Offsetting the increases is a reduction (-\$770,000) for non-recurring costs in FY 2008. The programmatic increases, and offsetting decrease, are as follows:

• (+\$1,316,000, +22 FTEs) This increase supports the salaries and benefits of custodians and laborers, now classified as building service

workers: 16 WG-03 building service workers (\$688,000), three WL-03 building service leaders (\$144,000), and three WS-03 building service worker supervisors (\$198,000). Funding will also provide supplies, materials, and equipment for custodial services (\$286,000). This increase provides the additional resources to approach APPA's appearance level 2, "Ordinary Tidiness." At this level, floors and base moldings shine; all vertical and horizontal surfaces are clean; lights all work and fixtures are clean; washrooms are clean and adequately supplied; and trash containers hold only daily waste and are clean and odor-free.

- (+\$411,000, +2 FTEs) Funding is requested to support the salaries and benefits of two WG-03 building service workers (\$86,000); and materials and cleaning supplies (\$75,000) to support both Asia Trail facilities at the National Zoological Park (NZP). In addition, funding will support contracts for various services, such as haying operations, pest control, and removal of animal waste, along with the maintenance and repair of service vehicles that support these new NZP facilities (\$250,000).
- (+\$783,000, +2 FTEs) This increase provides for additional operations support at the Udvar-Hazy Center and the leased space in Herndon, Virginia, which houses the Institution's information technology data center, to ensure appropriate levels of cleaning and operational services. The requested funding includes increased contract support (\$550,000); salaries and benefits for one GS-12 assistant building manager (\$104,000), and one GS-07 administrative assistant (\$59,000); and the one-time purchase of supplies, materials, and equipment (\$70,000) in support of these two facilities to ensure that the contracts are efficiently managed and contract staff work is closely monitored to meet contract specifications.
- (+\$722,000, +6 FTEs) This increase supports the DWRC Courtyard extension. The requested funds will ensure that the Courtyard and grounds are maintained in accordance with Smithsonian standards in use at other museums and facilities by providing for the salaries and benefits of two GS-08 horticulture positions (\$130,000) and four WG-03 building service workers (\$172,000). The requested funding also includes horticulture supplies and materials, staff cleaning supplies, and year-round maintenance of the lamps in the Courtyard and on the grounds (\$420,000).
- (+\$139,000, +3 FTEs) This increase supports the labor and cleaning requirements for the new Pod 5 storage facility at the Museum Support Center, which houses alcohol-preserved collections. Funding will support the salaries and benefits of three WG-03 building service workers

- (\$129,000), and provide supplies and materials (\$10,000) to ensure that the Pod 5 storage and laboratory areas are maintained in accordance with appearance standards for all Smithsonian facilities.
- (+ \$614,000, +8 FTEs) This increase supports mail and transportation services for Smithsonian staff recently relocated to leased space in Herndon, Virginia; Arlington, Virginia; L'Enfant Plaza and Capital Gallery in Washington, DC; and the soon-to-be leased Pennsy Drive facility in Landover, Maryland. The requested funding provides for the salaries and benefits of three GS-05 mail clerks (\$144,000) and a one-time purchase of a mail delivery truck (\$30,000). In addition, funding will provide for the one-time purchase of a shuttle bus (\$100,000); salaries and benefits for five WG-07 motor vehicle operators (\$310,000); and supplies, materials, and equipment (\$30,000) for mail and shuttle delivery to the leased facilities.
- (+\$2,004,000, +40 FTEs) This increase provides funding for an additional 40 security guards at DWRC and NMAI to ensure at least minimal security staffing at these facilities. Specifically, an additional 17 FTEs are requested to provide the minimal security staffing of 68 FTEs for the newly opened DWRC (\$816,000). An additional 23 FTEs are requested to provide the minimal security staffing of 60 FTEs at the NMAI Mall Museum (\$1,104,000). One-time funding of \$84,000 will provide for the purchase of uniforms, security supplies, and materials.
- (+\$447,000, +1 FTE) This increase will support contractor services and equipment to complete implementation of and provide maintenance for the Institution's credentialing and personnel security systems, which were started in FY 2008 to ensure compliance with Homeland Security Presidential Directive 12 (HSPD-12) and internal audits of the Inspector General. The requested funding provides for the salary and benefits costs for one GS-09 personnel/ID technician (\$72,000) to assist in issuing credentials and system data entry, maintenance contract support for the Homeland Security database, and provides for the expansion of the credentialing and personnel security databases to New York City, Panama, Hawaii, Arizona, and Massachusetts, while integrating the databases with the Institution's human resources systems and ensuring routine system maintenance is performed (\$375,000).
- (+\$452,000) This increase provides \$452,000 for the Department of Homeland Security's (DHS) Federal Protective Service (FPS) security services, including the cost of five contract guards, maintenance of capital equipment, and basic facility charges. DHS/FPS provides security services to the Custom House in New York City, a General Services

Administration-owned building that houses the NMAI's George Gustav Heye Center. As a result of the terrorist attacks on September 11, 2001, DHS/FPS increased security services at the building. A proposed agreement among FPS, the Smithsonian, and other tenants will replace FPS-contracted guards with Smithsonian security guards and court security officers, resulting in significant cost savings for the tenants of the Custom House. The requested funds pay the charges that NMAI has been assessed, as one of the tenants, for security costs associated with areas not monitored by the Smithsonian's security guards.

- (+\$375,000, +3 FTEs) This increase provides for the salaries and benefits of three GS-13 occupational health nurses (\$372,000) and support costs (\$3,000) to ensure that the Smithsonian complies with regulatory guidelines for the control of blood-borne pathogens, hearing conservation, respiratory protection, Department of Transportation exams for commercial drivers, and other federally mandated programs, such as the Presidential Directive on Safety, Health and Return-to-Employment (SHARE). Additionally, these positions will be used to ensure that Smithsonian programs, such as the flu vaccine program and the implementation of the annual health-risk assessment program, are accomplished. The implementation of such programs will ensure that lost time of employees will be reduced on an annual basis.
- (-\$770,000) Returns one-time FY 2008 funds for necessary expenses to implement the mandates of the Homeland Security Presidential Directive 12 for a common identification standard (\$-570,000), and funding for background investigations for existing contractors and volunteers (-\$200,000).

If the FY 2009 request is not allowed, OFEO will not be able to approach APPA level 2 "Ordinary Tidiness" appearance standards and will have no alternative but to remain at APPA level 3, "Casual Inattention." The world's most visited museum complex will maintain unacceptable custodial service levels. Without increased funding, OFEO will not have the necessary funds to continue implementing HSPD-12 requirements, properly conduct background investigations, and adequately staff the DWRC and NMAI museums; thereby leaving the Institution and its assets vulnerable to potential theft and terrorist attacks. Without the funding for the Occupational Health Risk Management Program, OFEO will not be able to support Institution-wide programs, which help ensure that employee lost time is reduced on an annual basis.





FACILITIES CAPITAL

FY 2007 Appropriation	\$98,554,760
FY 2008 Estimate	\$107,100,000
FY 2009 Estimate	\$167,800,000

STRATEGIC GOAL: ENHANCED MANAGEMENT EXCELLENCE

Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	F`	/ 2008	F۱	2009	С	hange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Enhanced Management Excellence						
Facilities						
Execute an aggressive, long-range revitalization program and limited construction of new facilities	48	87,380	48	130,297	0	42,917
Security and Safety						
Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers	0	8,840	0	13,850	0	5,010
Provide a safe and healthy environment	0	10,880	0	23,653	0	12,773
Total	48	107,100	48	167,800	0	60,700

BACKGROUND AND CONTEXT

The Facilities Capital Program underpins the Smithsonian's mission and represents a vital investment in the long-term interest of the nation. It is intended to provide modern facilities that satisfy public programming needs and facilitate world-renowned research efforts. However, many years of insufficient investment in both facilities capital and maintenance have led to growing, widespread deterioration and increasingly impaired performance of the Institution's physical plant.

The professional engineering study, *Smithsonian Institution Museums* and Facilities: Critical Assessment and Improvement Objectives, published in 2001, established a 10-year, \$1.5 billion requirement for capital revitalization of Smithsonian facilities. The National Academy of Public Administration (NAPA) study of that same year supported these findings, and the Government Accountability Office (GAO) report of April 2005 recognized that the Institution needs an investment of \$2.3 billion for revitalization,

construction, and maintenance in the coming decade. This amount includes requirements for anti-terrorism modifications and maintenance that were not addressed during the NAPA study. Funding levels of the past few years have allowed the Smithsonian to make some progress against the \$2.3 billion, but the amounts required for revitalization and maintenance have fallen far short of the documented need. Without question, there is an urgent need for major investment so that the Smithsonian can escape the current, never-ending crises of costly, unforeseen, breakdown repairs. Without sufficient capital support, the Institution will eventually fail in its mission.

MEANS AND STRATEGY

The FY 2009 request for the Facilities Capital Program represents a significant investment in the goal of Enhanced Management Excellence, with an increase of \$60.7 million from the level requested for FY 2008. With funding in the Facilities Capital Program, the Institution will focus on improving the safety and security of visitors, staff, volunteers, and collections, and will make incremental progress toward returning to and then sustaining Smithsonian facilities at a fully functional level in the next decade.

The *Critical Assessment* study records the full breadth of the commitment that must be made to preserve the physical plant of the Smithsonian and position it for the 21st century. It is a compilation of the knowledge learned from more than 200 architect-engineer consultant investigations and internal condition assessments. The facilities requirements known at this time fall into two major areas, both of which are essential: facilities capital and facilities maintenance.

The Facilities Capital Program entails both construction and revitalization activities; however, there are no major capital construction funds requested for this year's budget. Revitalization involves making major repairs or replacing declining and failed infrastructure to address the causes of advanced deterioration. Once completed, these projects will enable the Smithsonian to avoid the crippling failures in building systems that can create hazardous conditions for visitors and staff, harm animals, damage collections, and cause the irretrievable loss of precious scientific data.

Funding for facilities routine maintenance and minor repairs is included in the Institution's Salaries and Expenses request. These resources are critical to realize the intended design life and full economic value of Smithsonian facilities and protect the Institution's investment in revitalization. Underfunding maintenance devalues the Institution's capital investment by prematurely shifting increased costs to the Facilities Capital Program.

The Institution plans to use these combined resources during the next decade to arrest the downward spiral of deterioration and provide for safe, code-compliant, and functional facilities that support Smithsonian programs. Adequate future funding to meet both requirements is essential to sustain the viability of the Institution's physical plant.

The Institution completed a Program Assessment Rating Tool (PART) evaluation of the Facilities Capital Program during FY 2005 and received the highest PART rating score. This rating confirms the NAPA and GAO conclusions that these programs are effectively managed and, if fully funded, will achieve long-term results in improving the Institution's essential infrastructure.

STRATEGIC GOAL AND FY 2009 ANNUAL PERFORMANCE GOALS

Enhanced Management Excellence

Execute an aggressive, long-range revitalization program and limited construction of new facilities to ensure appropriate facilities in excellent condition that support the Smithsonian mission (48 FTEs and \$130,297,000)

- Improve the Facilities Condition Index (FCI) of Smithsonian buildings
- Reduce the \$1.5 billion backlog of revitalization requirements
- Complete 70 percent of construction of Asia Trail Phase II -Elephant Trails, at the National Zoological Park
- Complete design of swing space and initiate design for revitalization of the West Wing public space at the National Museum of American History (NMAH)-Kenneth E. Behring Center
- Complete revitalization of the West Wing basement, East Court basement and first floor, and Main Building tunnels; 80 percent of the West Wing ground floor; and 10 percent of window replacement at the National Museum of Natural History (NMNH)
- Complete 60 percent of the renovation of Pod 3 at the Museum Support Center
- Complete 80 percent of the electrical system replacement at the National Air and Space Museum
- Complete construction of replacement greenhouses at Suitland, Maryland
- Purchase Gamboa property in Panama and complete 50 percent construction of the Old School House replacement and site utilities infrastructure
- Complete programming for the National Museum of African American History and Culture

Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers (\$13,850,000)

- Complete the permanent perimeter security barriers at the NMAH
- Complete 25 percent of the glass mitigation project at the Donald W. Reynolds Center

Provide a safe and healthy environment (\$23,653,000)

- Complete critical fire-protection improvements at the National Zoological Park
- Complete 80 percent of the replacement of fire-protection systems at the Museum Support Center and complete replacement at other Smithsonian facilities
- Complete 30 percent of installation of backflow prevention valves and lightning protection at all Smithsonian buildings in the Washington, DC metropolitan area

FY 2009 REQUEST — EXPLANATION OF CHANGE

The Institution requests \$167,800,000 and 48 FTEs for the Facilities Capital Program in FY 2009 for Revitalization, and the Planning and Design funding needed to support these and future projects. This amount will enable the Smithsonian to keep pace with the NAPA- and GAO-recommended schedules for eliminating the current backlog of revitalization requirements by applying resources to complete the most critical design and revitalization work. Projects at the Zoo will be guided by the nearly complete master plan to correct the deteriorating conditions there. This request also recognizes the need to sustain progress in other priority areas, which include revitalizing the NMNH and the NMAH, and installing perimeter barriers to reduce the risk of terrorist attacks on the Smithsonian's iconic buildings. Several emerging priorities are also represented, including the need to address serious deficiencies in collection storage conditions, and to renovate or replace research and support facilities to protect the viability of ongoing operations.

If this request is not allowed, the Institution's facilities will continue to deteriorate, increasing the eventual cost of revitalization and the risk of further building closures.

The chart that follows summarizes the Institution's request for the highest priority projects for FY 2009, and the related future program requirements through FY 2013.

SMITHSONIAN INSTITUTION

Facilities Capital Program Summary FY 2009 – FY 2013

CATEGORY		Rece	eived		Request	OMB Request		F	uture Prog	ram	
\$Millions	Prior	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Outyears
REVITALIZATION											
Major Projects					İ					<u> </u>	
Arts & Industries Building	13.2	23.4	5.8				/				TBI
Greenhouse Replacement			Į.		2.8	8.2	V				
Hirshhorn Museum									7.3		18.5
Museum Support Center			i		10.0	15.0	/ 15.0		6.5	6.5	6.5
National Air and Space Museum				1.5	8.5					[[50.0
National Museum of American History	4.8	10.0	18.1	13.5			20.0	26.0	28.0		100.0
National Museum of Natural History	101.4	7.0	12.8	25.4	22.5	25.7	31.3	30.0	30.0	30.0	38.6
National Zoological Park	43.9	19.5	13.8	16.0	18.8	21.1	22.4	20.6	25.1	25.6	165.0
Quadrangle			i								64.5
Renwick Gallery											25.0
Donald W. Reynolds Center	121.0	44.4									
Suitland Collection Center										i 1	24.0
Smithsonian Castle	1.0		ĺ						10.0	45.0	100.0
STRI, Gamboa Development					1.5	9.5	,4		10.0	, , , , ,	
Udvar-Hazy Center						- 0,10	19			l i	5.0
Anti-Terrorism Protection			7.9	l	8.0	7.0	9.5	16.5	16.8	20.0	35.9
And Tonolish Frotoction			/		0.0	7.0	0.5	10.5	10.0	20.0	30.5
Other Revitalization Projects		6.0	14.4	26.3	20.5	51.1	34.7	27.2	33.1	26.7	ONGOING
SUBTOTAL	285.3	110.3	72.8	82.7	92.6	137.6	132.9	120.3	156.8	153.8	633.0
CONSTRUCTION											
NMNH, Museum Support Center Pod 5	9.9	6.9	17.8	5.4							
SAO, VERITAS Site Improvements	•	1.0									
SERC, Construction Mathias Lab Modules	3						12.0	25.0			
National Museum of African American							TBD	TBD	TBD		TB
History & Culture		ł									
Other Future Construction				1							142.5
SUBTOTAL	9.9	7.9	17.8	5.4	0.0	0.0	12.0	25.0	0.0	0.0	142.5
FACILITIES PLANNING & DESIGN	0.0	7.9	7.9	10.5	14.5	30.2	36.5	37.1	10.7	16.2	ONGOING
FACILITIES FLAIVIVIIVE & DESIGN	0.0	7.5	/.9	10.5	14.5	30.2	30.5	37.1	10.7	16.2	UNGOING
TOTAL REQUEST	295.2	126.1	98.5	98.6	107.1	167.8	181.4	182.4	167.5	170.0	ONGOING

SUMMARY TABLES AND PROJECT SHEETS

REVITALIZATION

Major Projects

This investment provides for the replacement of failing or failed major building systems and equipment, and for major renovation projects to preserve the buildings. It primarily includes the exterior envelope, HVAC, electrical, and other utility systems at the older buildings. Projects also entail modifications to ensure compliance with life-safety and Americans with Disabilities Act (ADA) codes, restoration of historic features, and modernization of the buildings to support current program requirements. Major projects are those that cost more than \$5 million.

<u>Facility</u>	Project	\$(000)
Museum Support Center	Renovate Pod 3, Collections Storage Improvements	15,000
National Museum of Natural History	Revitalize Public and Non-Public Space	25,700
National Zoological Park	Upgrade Fire Suppression, Life Safety & Infrastructure	7,600
	Repair Structural Systems, General Services Building	2,000
	Roof/Exterior Replacement and Repair	4,500
	Renew Seal/Sea Lion Facility, Phase I: Life Support Systems	7,000
Suitland Support Facility	Replace Greenhouses	8,200
Smithsonian Tropical Research Institute	Gamboa Development: Replace Old School House; Land Purchase; and Utility/Infrastructure Upgrade	9,500
Mall and Off-Mall Facilities	Construct/Install Anti-Terrorism Protection: Install Glass Mitigation at Donald W. Reynolds Center	7,000
TOTAL MAJOR PROJECTS		\$86,500

Other Revitalization Projects

These projects correct extensive and serious facilities deficiencies to materially extend the service life of systems. Unlike the major projects, these are smaller in scale, costing \$5 million or less, and usually involve capital repair or replacement of individual systems or components.

Facility	Project	\$(000)
Cooper-Hewitt Museum	Upgrade Mansion Electric Distribution and	
	Lighting	4,625
	Asbestos Abatement	1,500
Freer Gallery of Art	Replace Roof	1,275
	Upgrade Humidification System	700
Hirshhorn Museum and Sculpture Garden	Renovate Front Entrance/Blast Windows	2,500
Museum Support Center	Replace Switchgear Controllers/Switches	1,100
National Air and Space Museum	Improve Air Quality in Room P-703	1,500
National Museum of American History	Prevent Ground Water Infiltration Into Lower Level	2,900
	Replace Fifth Floor Windows	1,150
	Replace Motor Control Center Panels	550
National Museum of Natural History	Upgrade Collection Storage Electronic Security	2,000
National Zoological Park	Repair/renew Police Station	1,000
Quadrangle	Connect GSA Chilled Water System	1,500
Renwick Gallery of Art	Upgrade Access, Locker Rooms and Basement Repairs	800
	Modernize Electronic Security	800
Smithsonian Astrophysical Observatory	Construct Instrument Repair Facility	900
Suitland Support Facility	Install Fire Detectors and Alarms	1,200
	Provide Surge Protection for Site	1,300
	Demolish Buildings 15 and 18	3,000
Multiple Locations	Install Backflow Prevention/Fire Pumps	2,100
	Install Lightning Protection, Mall Buildings	1,000
	Construction Supervision and Admin	4,950
	Misc. projects \$500,000 and under	12,720
TOTAL OTHER PROJECTS		\$51,070
TOTAL REVITALIZATION		\$137,570

PROJECT TITLE: Renovate Pod 3, Collections Storage Improvements

INSTALLATION: Museum Support Center

LOCATION: Suitland, Maryland

FY 2009 COST ESTIMATE (Thousands of Dollars):

Renovate Pod 3 \$15,000

PRIOR-YEAR FUNDING:

Design \$2,500

Construction \$10,000

Subtotal \$12,500 \$12,500

FUTURE-YEAR FUNDING (FY 2010): \$15,000

Total \$42,500

BUILDING BACKGROUND:

Designed and built in 1983, the modern, precast concrete center is a research, conservation, and collection storage facility providing optimum environments for the storage, preservation, and study of Smithsonian collections. The original 524,000-square-foot facility has four large collection storage bays, referred to as pods, and an office-laboratory complex. The 120,000-square-foot fifth pod recently constructed provides code-compliant housing and laboratory space for natural history specimens stored in alcohol.

PROJECT JUSTIFICATION:

Pod 3 was originally intended for the storage of natural history specimens preserved in alcohol. The National Museum of Natural History (NMNH) engaged in a lengthy design process to complete the installation of a steel collections storage structure in Pod 3; this was necessary as the pod was not constructed with intermediate floors in order to permit maximum flexibility. In the face of fire and life-safety codes and the needs of the collections, it became impractical to upgrade Pod 3 to meet the standards required for alcohol storage. The alcohol collections now in Pod 3 are being moved to the newly completed Pod 5. This will free up valuable space in Pod 3 for the storage of other Smithsonian collections requiring high-quality environmental conditions and security, including physical anthropology collections, specimens needing cold storage or special gas storage, and art works. These collections are currently stored in substandard space in the museums and in leased space that does not meet climate control requirements for long-term preservation of collections.

PROJECT DESCRIPTION:

Pod 3 has a gross footprint of about 36,000 square feet. It contains an attached, interior, three-level (9,000-square-foot/level) structural system for collection storage, which covers one-third of the available floor space and is being used to store part of the NMNH wet alcohol collection. The revitalization

of Pod 3 will include demolishing the inefficient interior three-level structural system, all electrical equipment, and all existing sprinkler piping systems, and reconfiguration to provide additional collection storage for NMNH (36,000 square feet) and art collections for multiple art museums (36,000 square feet). The space will be divided into two permanent floors with separate areas for each collection type, with a new mechanical system independent from the rest of the building to provide appropriate environmental conditions for each space. The new space will meet all current fire codes, with a 2-hour fire rating for floor slabs and fire walls, and new fire-detection and suppression systems. The Institution requests \$15 million in FY 2009 to complete the renovation, and will request funding in future years to purchase storage equipment and move the collections into the building.

PROGRESS TO DATE:

The Institution is currently designing the project, with funding received in FY 2007.

IMPACT OF DELAY:

Once the current collections stored in alcohol are moved from Pod 3 into Pod 5, Pod 3 will become a one-floor storage area with inefficient space use and limited collections storage capability. Without the planned revitalization, the physical anthropology collections (now in NMNH) requiring special environmental conditions, and art collections (multiple leased locations), cannot be relocated out of currently inappropriate space. The result will be more rapid deterioration of collections items, higher security risks, and higher lease costs for the Institution. Failure to move collections from the NMNH will also delay the next major HVAC renovations of that building because work cannot be done with collections in those spaces.

PROJECT TITLE: Revitalize Public and Non-Public Space

INSTALLATION: National Museum of Natural History (NMNH)

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars):

Continue HVAC/Utility System Replacement

and Building Renovation \$25,700*

PRIOR-YEAR FUNDING

\$177,070

FUTURE-YEAR FUNDING (FY 2009-FY 2016)

Ongoing HVAC replacement and code improvements

\$159,850*

Total

\$362,620

BUILDING BACKGROUND:

The NMNH building opened to the public in 1910. The East and West wings were added in the early 1960s. Two infill buildings were constructed in the original building's East and West courtyards in the late 1990s. The gross interior square footage of the building is approximately one-and-a-half million square feet. The building includes 300,000 square feet of public museum space, with collections, laboratory, office, and building services spaces filling the remaining one million square feet. The Museum typically hosts five to six million visitors annually, and is one of the most visited museums in the world.

PROJECT JUSTIFICATION:

The building's mechanical and electrical systems were installed in the early 1960s, and are more than 40 years old, so they are in need of major renovations. Breakdowns of the mechanical system are frequent, repair parts are often difficult to procure, and the system does not provide the environmental air quality necessary for visitors on many crowded days, or for the display and preservation of Museum collections. The reliability of the electrical system is compromised by the deteriorated condition of the building's three main electrical switchgears, and the antiquated distribution system poses a safety hazard. In addition, a number of long-standing health and safety violations compromise the well-being of visitors and staff. Main stairwells and auditorium exit corridors are dark, violate building code, and are insufficiently served by smoke-evacuation fans. Dozens of building elevators constantly break down, occasionally trapping staff and visitors. Asbestosladen pipes in the utility tunnels are a health hazard and hamper proper maintenance and response to utilities failures. The windows in the original portion of the building are severely deteriorated.

^{*} Does not include funding in Planning and Design account to complete future design of revitalization project.

PROJECT DESCRIPTION:

Based on the master implementation plan completed in 1987, the Institution is struggling to complete a comprehensive renovation program in the NMNH building, which will replace the HVAC equipment, ductwork, electrical equipment and wiring, piping systems, and windows of the main building. Asbestos and lead will be abated or encapsulated; the fire-protection, communications, alarm, and emergency power systems will be upgraded; and stormwater systems and a hazardous-chemical control facility will be installed. To date, \$149.6 million has been appropriated for the revitalization project, and \$22.5 million is expected in FY 2008. The total cost of renovating NMNH is estimated to exceed \$360 million through FY 2016 (at current funding levels).

The Institution requests \$25.7 million in FY 2009 to continue the renovation. Specific work will include: HVAC replacement and associated renovation of the ground floor of the West Wing (\$3 million) and the southeast portion of the main building (\$2 million), the basement of the East Court (\$2 million), the West Wing basement (\$2 million), the sixth floor of the East Wing (\$4.5 million), and the northeast section of the main building ground floor (\$3.7 million); renovation or replacement of the emergency generators and the high-voltage vault (\$2.4 million); and lighting changes in the Rotunda and surrounding area (\$1 million) to improve safety; continuing replacement of the main building windows and north entrance (\$1.2 million); renovation of the air towers (\$1.9 million) to improve air quality; and renovation of the utility tunnels (\$2 million) to include removal of unused piping and conduit.

PROGRESS TO DATE:

Renovation of Halls 7–10 and 23–25 for the future \$22 million *Ocean Hall* exhibit, which is being funded by the National Oceanic and Atmospheric Administration (NOAA), is more than 95 percent complete. Renovation of Halls 27–30 is 70 percent complete. Design is nearing completion for other work planned for FY 2007, including the HVAC renovation of the West Wing basement, the southwest portion of the third floor of the Main Building, air towers, Hall 12, and renovation of 25 percent of the building's elevators. Design has begun on FY 2008 projects, including the HVAC renovation of the West Wing ground floor, East Court basement and First Floor, northeast Main Building ground floor, and utility tunnels. The space plan has been updated and a revised master plan is almost complete. They form the basis for the sequencing of future infrastructure renovations.

IMPACT OF DELAY:

If funding is delayed, building systems would continue to deteriorate and fail, and environmental conditions required for the Museum's collections and the visiting public could not be maintained. In addition, the Museum's exhibit re-installation program would not proceed according to the planned schedule, causing the continued prolonged closure of several important exhibition areas to the public.

PROJECT TITLE: Upgrade Fire Suppression, Life-Safety and Infrastructure INSTALLATION: National Zoological Park (NZP), Rock Creek Park and Front

Royal

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$7,600

PRIOR-YEAR FUNDING: \$14,108

FUTURE-YEAR FUNDING (FY 2010-FY 2013+): \$43,150

Total \$64,858

PROJECT JUSTIFICATION:

Much of NZP's current utility and fire-protection infrastructure is obsolete and failing, and does not meet the needs of the Zoo to protect and support its animals' safety. Correcting deficiencies in water service mains is crucial in providing critical fire-suppression systems in many of the unprotected areas of the Zoo, and to provide adequate water for the animals.

PROJECT DESCRIPTION:

The Institution requests \$7.6 million to install critical fire-protection and life-safety systems, at both Rock Creek Park and the Front Royal, Virginia facilities, including fire systems in the Mammals, Reptile, Think Tank, Amazonia, Boiler Plant, Visitor Center, General Services Building, and miscellaneous small buildings at Rock Creek (\$6 million); the final increment of replacement of the water main to the lower Zoo area to support future fire-sprinkler upgrades (\$1.5 million); and animal-holding buildings at Front Royal (\$0.1 million).

PROGRESS TO DATE:

The Institution has used previous funds to upgrade the high-voltage electrical service for the upper section of the Rock Creek facility, including new transformers and a new ductbank, as well as conduits, electric feeders, and switchgear from Connecticut Avenue to the Elephant House. Funds were also used to upgrade the fire-protection water supply and install fire hydrants at the Bird House Hill and the Research Hospital Hill. Additional fire-alarm, smoke-detection, and fire-suppression systems in critical areas of the Rock Creek Park and Front Royal facilities are in design. During FY 2006, the Zoo coordinated its Rock Creek utilities master plan with its fire-protection master plan, and developed concept designs for upgrading underground utilities for the park. Using information identified in both master plans, the Zoo is developing and implementing renewal projects in priority order to address the needs. A life-safety systems analysis of Front Royal was completed in FY 2006 and is also being used as the basis for budget requests.

IMPACT OF DELAY:

A delay in completing this work would endanger the animals, visitors, and staff, and would hamper the care and safety of the live animal collections.

PROJECT TITLE: Repair Structural Systems, General Services Building

INSTALLATION: National Zoological Park, Rock Creek Park

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$2,000

PRIOR-YEAR FUNDING:

Design \$472 Construction \$3,500

Subtotal: \$3,972 \$3,972

Total \$5,972

PROJECT JUSTIFICATION:

The General Services Building houses numerous critical functions at NZP, including the animal nutrition commissary, the maintenance and repair shops, and offices for safety, horticulture, exhibits, project management, engineering design and construction staffs, as well as parking for staff and visitors. Recent studies identified critical structural deficiencies that, if not repaired, will cause structural failure and localized collapse. The structural deficiencies are responsible for the cracks in the foundation walls that allow water into the commissary, which was cited by the USDA in November 2005 as a deficiency requiring immediate attention.

PROJECT DESCRIPTION:

This project will strengthen and repair structural deficiencies (e.g. cracked concrete, deteriorated steel reinforcement and degraded tie-back tension rods) in the General Services Building and in the retaining wall that supports the North Road, the major public and private thoroughfare through the Zoo. A total of \$3.5 million is expected in FY 2008 to begin the repairs. The Institution requests \$2 million in FY 2009 to complete this work.

PROGRESS TO DATE:

Studies to assess the condition of the structure and to develop concept solutions were completed in 2005. Funding for design of the structural repairs was provided in FY 2006 through reprogramming of funds from the deferred Wetlands project. Design is now under way, with construction expected to begin March 2008.

IMPACT OF DELAY:

Delay of the project will risk structural failure in the building and injury to staff or visitors. Deterioration of the building will accelerate, and the amount of intervention needed to correct the problems will increase and the costs will escalate. Until the work is completed, NZP will not be able to comply with the USDA requirement to stop water infiltration into the commissary.

PROJECT TITLE: Renew Façades, Roofs, and Skylights

INSTALLATION: National Zoological Park (NZP), Rock Creek Park

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$4,500

PRIOR-YEAR FUNDING: \$11,316

Total \$15,816

PROJECT JUSTIFICATION:

The roofs, skylights, and façades of several major buildings have major leaks, causing interior damage and threatening the well-being of the animals and research operations housed in them.

PROJECT DESCRIPTION:

A comprehensive study of Zoo roofs and exteriors, completed in FY 2005, identified and prioritized roof and façade repairs and renewals required now and over a 20-year renewal cycle. The highest priority roofs to be renewed in the current five-year plan are the Boiler Plant, Genetics and Propagation Building, Lion/Tiger building, Conservation Biology building, and the Vet Hospital. The Institution requests \$4.5 million in FY 2009 to complete the highest priorities in the current cycle of NZP roof and exterior renovations: the Boiler Plant, Propagation facility, the Lion/Tiger building, the Veterinary Hospital, Necropsy Building, Department Conservation Biology, Quarantine building, and the Property Yard Storage building.

PROGRESS TO DATE:

From earlier appropriations, the Smithsonian has completed renewing the façades, roofs, and skylights at the Elephant House, Small Mammal House, Amazonia Building, Great Ape Building and the Reptile Discovery Center. Extremely heavy rains during June 2006 caused flooding at Rock Creek and the Zoo barely averted a catastrophic flooding of the Genetics and Propagation Building. Such a flood would have caused several millions of dollars in damage to the genetics laboratory and equipment, and would have set back a number of world-class research projects many years. As a result of this near disaster, FY 2007 funds will be used to renew the Marmoset Building, including the façade and roof, in order to relocate the genetics laboratory to this building. During FY 2007, designs were completed for the projects planned for FY 2009.

IMPACT OF DELAY:

A delay in correcting the serious problems with the leaking façades, roofs, and skylights at the Zoo could endanger the animals and exacerbate the deterioration of building interiors and systems, as well as increase the cost of the work.

PROJECT TITLE: Renew Seal/Sea Lion Facility

INSTALLATION: National Zoological Park, Rock Creek Park and Front Royal

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars):

Renew life-support systems \$7,000

PRIOR-YEAR FUNDING:

Design life-support system renewal \$947

FUTURE-YEAR FUNDING (FY 2010-FY 2013):

Revitalization of Remaining Facility Systems \$20,000

Total \$27,947

PROJECT JUSTIFICATION:

The Seal and Sea Lion exhibit was designed to be an exhibition anchor for the Beaver Valley. The 30,000-square-foot facility was built in 1978, and includes individual exhibit pools for seals and sea lions, separate holding pools for both species, and a large structure housing the life-support systems, maintenance, storage, and support operations. Age and technology advances have left the seal and sea lion life-support systems and the associated facilities in need of major revitalization so that current U.S. Department of Agriculture and Association of Zoos and Aquariums (AZA) standards for the care of marine mammals may be met.

PROJECT DESCRIPTION:

This phased renewal project makes improvements and modifications to bring the facility into compliance with CFR Title 9 volume 1 – Specifications for the Humane Handling, Care, Treatment, and Transportation of Marine Mammals. The Institution requests \$7 million in FY 2009 for Phase 1, the renewal of the life support systems. The work will include replacing deteriorated plumbing pipes and valves, upgrading deteriorated pumps and filters, and providing a new chemical treatment system to clean and control water quality. Phase 2 will revitalize the *Seal and Sea Lion* Facility by reconfiguring holding pools, rehabilitating the large exhibit tanks, repairing the deteriorated rockwork and landscape, adding visitor amenities and addressing ADA concerns. Funds for this work will be requested in a future year.

PROGRESS TO DATE:

The concept design was developed using funding from 2006, and schematic design documentation was developed in 2007. The Institution will complete the design in FY 2008.

IMPACT OF DELAY:

If the life-support system fails, the seals and sea lions would perish. If the life-support systems degrade further, the holding facility would be closed and the animals relocated to another AZA approved institution. **PROJECT TITLE:** Replace Greenhouses **INSTALLATION:** Suitland Support Facility

LOCATION: Suitland, Maryland

FY 2009 COST ESTIMATE (Thousands of Dollars): \$8,200

PRIOR-YEAR FUNDING:

Planning \$400

Design/Construction \$2,800

\$3,200 \$3,200

Total \$11,400

BUILDING/SITE BACKGROUND:

The Smithsonian has leased a 55,000-square-foot greenhouse complex for its horticultural operations on the property of the Armed Forces Retirement Home (AFRH) in northwest Washington, DC since 1974. The complex includes 12 greenhouses, a headhouse for administrative and logistical functions, and a shade house. The complex houses the Institution's world-class orchid collection, and provides space to grow a wide variety of plant materials for exhibits, gardens, and special events which would be costly or impossible to obtain commercially.

PROJECT JUSTIFICATION:

The AFRH plans to lease the property where the greenhouse complex is currently located. AFRH could turn the site over to a developer as early as September 30, 2008, when the current lease expires, forcing the Smithsonian to acquire a new greenhouse facility. A thorough analysis of the horticulture program and greenhouse functions and operations determined that the most cost-effective method of maintaining the orchid collection and providing the needed plant materials is to replace the current greenhouses with a new facility at the Institution's Suitland, Maryland site.

PROJECT DESCRIPTION:

The proposed 55,000-square-foot facility will replace the existing complex with comparable administrative and growing space. Although the Institution's space requirement will actually grow in future years due to such new activities as the Butterfly House at NMNH — whose plant materials must be grown without pesticides to protect the live butterflies — other operating efficiencies will allow the horticultural function to stay within the same greenhouse square footage that they now occupy. The greenhouses will be built of a polycarbonate plastic material to reduce costs, and off-the-shelf prefabricated building kits will be used to reduce design requirements and expedite construction time. The Institution is using FY 2007 facilities planning and design funds to complete planning and concept design for the greenhouses, including selection of the site, and expects \$2.8 million in FY 2008 to initiate a design-build contract to replace the greenhouses. The

Smithsonian requests \$8.2 million in FY 2009 to complete construction of the greenhouse complex in order to provide vital space for the orchid collection and growing space to support exhibit activities.

PROGRESS TO DATE:

The Institution will complete planning and preliminary design for the greenhouses in FY 2007 in order to be ready to award a design/build contract in FY 2008. AFRH is unwilling to extend the Smithsonian's lease; therefore the Institution will continue to prepare a design/build RFP as the fastest way to obtain new greenhouses.

IMPACT OF DELAY:

Delay in funding this project will leave the Institution without a greenhouse facility when the AFRH turns the current complex over to its developer. As a result, the Institution will not be able to maintain its valuable orchid collection or provide interesting plantings in and around the monumental buildings on the National Mall without incurring significant additional operating costs such as leasing alternative space or buying a more limited selection of plant materials from commercial growers.

PROJECT TITLE: Gamboa Development: Replace Old School House

INSTALLATION: Smithsonian Tropical Research Institute (STRI)

LOCATION: Panama

FY 2009 COST ESTIMATE (Thousands of Dollars):

Purchase Gamboa site \$3,400

Replace Old Schoolhouse \$4,600 Upgrade Site Utilities & Infrastructure \$1,500

\$9,500 \$9,500

PRIOR-YEAR FUNDING (FY 2008):

Planning and design \$964

Demolish Schoolhouse, prepare site \$1,500

\$2,464 \$2,464

FUTURE-YEAR FUNDING (FY 2010-FY 2013): \$400

TOTAL \$12,364

BACKGROUND:

STRI is the principal U.S. organization devoted to research in tropical biology. Both scientific and human welfare depend on a continuing commitment to research in tropical biology for such things as finding untapped tropical resources to add to the important supply of food, pharmaceuticals, and fiber already supplied from the tropics, and to develop a better understanding of how to avoid further ecological catastrophes such as drought, starvation, and flooding caused by deforestation and overpopulation of tropical regions.

STRI is currently leasing (with an option to buy) 13 acres from the Republic of Panama at a location in Gamboa. Also, the Republic of Panama has given to STRI, free of charge, custodianship of 156 acres of adjacent forest. Gamboa is the central location of STRI's terrestrial research and the departure point for the ferry ride to Barro Colorado Island (BCI) Nature Monument, another key research site over which STRI maintains custodianship. Gamboa is a unique location in that it is protected by geography from encroachment of civilization and pollution, and is adjacent to the 55,000-acre Soberania National Park, considered the most accessible moist forest in central and northern South America, where habitats and species are found that are not present at BCI. The availability of space, natural light, and the relative absence of air pollution have dramatically benefited STRI's experimental plant research program. This program and others like it are critical to understanding the role that tropical plants and soils play in global climate change models, and for enriching our knowledge of tropical biodiversity.

PROJECT JUSTIFICATION:

Real-estate prices are expected to increase dramatically because of a recent transfer of public land to private ownership and the approved Panama Canal expansion. This will drive up lease and future purchase costs. Panama has recently indicated that it intends to give the Institution up to 14 months to commit to purchase the property, at an expected price of about \$3.4 million. The purchase of the property will secure this site for long-term research.

Future development at Gamboa will be further defined as part of the overall master plan for STRI, which is currently being updated. A key element of the plan will be to consolidate the Terrestrial Tropical Science program, from its current urban location to Gamboa, to take advantage of the excellent research conditions and more direct access to research sites. The research staff, currently located at three sites and in four different buildings, will be relocated to the Gamboa campus. STRI administrative staff, currently located in three buildings, will be relocated to the Tupper Center at the edge of Panama City, which will permit STRI to demolish or transfer approximately 48,000 square feet of old, expensive-to-maintain buildings in Panama City. This major consolidation will lead to an immediate improvement in administrative efficiency and will establish a critical mass of researchers in a single location, permitting improved flow of ideas and major equipment sharing, as well as shortening the distance to research sites.

PROJECT DESCRIPTION:

Anticipating the results of the master plan, the next step in developing the Gamboa site is the replacement of the Santa Cruz School to provide critical laboratory space for Terrestrial Tropical Science. The Institution expects \$1.5 million in FY 2008 to begin demolition of the existing structure and site work to prepare for the construction of the new one. The building has been unoccupied — and unoccupiable — for a number of years. A structural assessment determined that it would be more cost effective to replace the old facility with a comparably sized building (around 35,600 square feet) made of concrete and/or steel, with low-maintenance, pest-free materials that meet the full requirements for use as a laboratory building. In addition to the building itself, the basic utilities infrastructure will need to be upgraded to support the building and future development of the site. Specific requirements include the potable water and storage system, securing the perimeter, wastewater system, backup generator and transformer, parking and driveway, and improving the site drainage system.

For FY 2009, the Institution requests \$3.4 million to buy the 13-acre Gamboa site, \$4.6 million to construct the schoolhouse replacement for use as laboratory space, and \$1.5 million to upgrade the site utilities and infrastructure. The Smithsonian will request future funding to implement additional site development at Gamboa, as defined by the master plan, and to complete the schoolhouse replacement.

PROGRESS TO DATE:

STRI has begun planning for the schoolhouse, and is updating the earlier Facilities Master Plan to incorporate current requirements at Gamboa. In FY 2008, STRI will complete the demolition of the old schoolhouse.

IMPACT OF DELAY:

A delay in developing the Gamboa site would hamper STRI's ability to consolidate terrestrial operations at Gamboa, with a resulting loss of research synergy and operational efficiency. A delay in purchasing the land would further jeopardize Smithsonian ownership of planned improvements to currently leased land, and could result in greatly increased lease or purchase costs in the near future.

PROJECT TITLE: Construct/Install Anti-terrorism Protection

INSTALLATION: Mall and off-Mall Facilities

LOCATION: Washington, DC, New York, NY, and Panama

FY 2009 COST ESTIMATE (Thousands of Dollars):

Install glass mitigation at Donald W. Reynolds Center \$7,000 *

PRIOR-YEAR FUNDING (includes S&E and supplemental funding):

Design \$3,590

Construction of permanent physical

security barriers at Mall facilities \$25,325

Anti-shatter film (window hardening) \$1,400

\$30,315 \$30,315

FUTURE-YEAR FUNDING (FY 2010-FY 2013+)

\$98,600

Total

\$135,915 *

PROJECT BACKGROUND:

The Institution is responsible for the security and safety of an extensive and complex physical plant that houses museums and galleries in Washington, DC and New York City; the National Zoological Park in Washington, DC; and restoration and storage buildings and centers for research and education in numerous locations throughout the country and in the Republic of Panama. Since the terrorist attacks on New York City and Washington, DC on September 11, 2001, the Institution has developed a comprehensive plan for reducing the risk of a terrorist attack occurring at a Smithsonian museum, and for minimizing the damage to people, collections, and buildings should such an event take place. A series of consultations and risk assessments resulted in the following recommendations to mitigate against vulnerabilities: installation of physical barriers between the buildings and the street; installation of antishatter window film or interior retrofits to mitigate the effects of glass windows shattering during a blast event; increased building perimeter camera surveillance; improved building emergency voice systems; secured nonpublic building areas with electronic access control; electronic screening of mail and visitors for the most heavily visited museums; protection against chemical, biological, and radiological attacks; and mitigation against the effects of blasts and progressive collapse of buildings.

The Institution used funding from the FY 2002 anti-terrorism supplemental appropriation to install temporary physical barriers around most major museum buildings and increase security officer presence outside its buildings. Permanent capital improvements are included in the Capital Program.

^{*} Does not include design funding for future work included in Facilities Planning and Design.

PROJECT JUSTIFICATION:

The Smithsonian is included in the Department of Homeland Security's "National Strategy for the Physical Protection of Critical Infrastructures," dated February 2003, and the subsequent "Interim National Infrastructure Protection Plan," dated February 2005. Risk assessments conducted at the Smithsonian since September 11, 2001 recommended new security measures for all Smithsonian museums and facilities. As stated in the June 2005 GAO report, National Mall — Steps Identified by Stakeholders Facilitate Design and Approval of Security Enhancements, the National Mall encompasses some of our country's most treasured icons and serves as a public gathering place for millions of visitors each year. Furthermore, the popular recognition of the Smithsonian name, the American icons contained in its facilities, and the high level of public access and visitation distinguish the Smithsonian facilities from other Government office buildings and elevate the level of risk.

PROJECT DESCRIPTION:

The anti-terrorism program consists of Mall-wide site adaptations, modifications to building perimeters, and additions and modifications to building systems. The program will be implemented over several fiscal years, with an emphasis on the highest priority projects to reduce the Smithsonian's vulnerability to attack. The Institution requests \$7 million in FY 2009 to modify the windows at the Donald W. Reynolds Center (DWRC) to prevent glass from shattering into deadly shards in the event of an explosion in or near the building. Design of the project is complete.

PROGRESS TO DATE:

The Institution has completed risk assessments of all its major facilities; completed blast assessments of NASM, NMNH, NMAH, HMSG, SIB/AIB, and DWRC; installed temporary barriers around NMNH and NMAH; and partial barriers at HMSG, AIB/Quadrangle/Freer, and the Udvar-Hazy Center; and completed installation or awarded contracts for select closed-circuit television (CCTV), emergency voice (or PA) systems, and glass mitigation projects. Construction of permanent perimeter barriers at NASM is complete, and work at NMNH phase 1 construction will be complete in the summer of 2008. NMAH design is complete and the Institution expects \$8 million in FY 2008 to construct the barriers. The balance of the barriers at Mall facilities are designed to 35 percent. Glass mitigation at some facilities is complete through film application.

IMPACT OF DELAY:

If the requested funding is not provided, there is an increased likelihood of damage and injury to people, collections, and buildings in the event of a terrorist attack. The Smithsonian name, symbols of American culture and achievements, and the large numbers of public visitors make the Institution an attractive target to terrorists. The lack of necessary anti-terrorism protection increases the Institution's vulnerability.

Other Revitalization Projects

PROJECT TITLE: Upgrade Mansion Electric Distribution and Lighting

INSTALLATION: Cooper-Hewitt, National Design Museum

LOCATION: New York City, New York

FY 2009 COST ESTIMATE (Thousands of Dollars): \$4,625

PROJECT DESCRIPTION: The Mansion's electrical distribution system is in poor condition, does not meet current electrical codes in most respects, and lacks flexibility and capacity to accommodate modern design exhibits. The lighting system dates from the 1970s and does not meet the needs of a modern museum. As part of a major expansion of the Cooper-Hewitt Museum's exhibit spaces, the distribution system will be replaced and upgraded. The lighting system will also be upgraded. Combining this work with the expansion project will allow the project to be performed economically, with minimal additional impact to Museum operations.

PROJECT TITLE: Asbestos Abatement

INSTALLATION: Cooper-Hewitt, National Design Museum

LOCATION: New York City, New York

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,500

PROJECT DESCRIPTION: A 1992 study documented the presence of asbestos-containing materials (ACM) in many areas of the Cooper-Hewitt Museum. As part of a major expansion of the Museum's exhibit spaces, much work will be required through floors, in walls, and in other areas where ACMs are located. This project will provide for abatement of the asbestos encountered during the expansion. Combining this work with the expansion project will allow the project to be performed economically, with minimal additional impact to Museum operations.

PROJECT TITLE: Replace Roof

INSTALLATION: Freer Gallery of Art LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,275

PROJECT DESCRIPTION: The roof on the Freer Gallery of Art was replaced in 1993 as part of the most recent major renovation of the facility. The roof is a four-ply, built-up, asphalt-bitumen roof with gravel ballast. The facilities assessment report prepared by the Smithsonian in 2001 found early signs of deterioration, and estimated seven years of remaining useful life. Recent assessments by building management staff have found accelerated deterioration and leaks into the attic. The project will replace the roof, and will repair/replace gutters and drains. Delay in execution of the project will result in worsening leaks that put valuable collections at risk.

PROJECT TITLE: Upgrade Humidification System

INSTALLATION: Freer Gallery of Art LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars):

\$700

\$2,500

PROJECT DESCRIPTION: The steam humidification system at the Freer Gallery has reached the end of its useful life. Several leaks in the building are attributed to the buildup of metals in the piping, which causes blockages, condensation of steam, and leakage at pipe joints. The leaks have endangered valuable collection items. The project will replace the existing steam supply with a steam-to-steam generator, which will provide steam without the metal impurities. Piping and humidifiers will also be replaced. Delay in this project will result in system failure and worsening leaks that put valuable collections at risk.

PROJECT TITLE: Renovate Front Entrance/Blast Windows **INSTALLATION:** Hirshhorn Museum and Sculpture Garden

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars):

PROJECT DESCRIPTION: The entrance door on Independence Avenue, on the far side of the building from the National Mall, is the source of most of the Museum's visitors. Visitors must go one at a time through a single revolving door, encounter a makeshift security checkpoint, and then an escalator that takes them up to exhibits on the second floor. The door is not handicapped-accessible; visitors with disabilities must enter through emergency exit doors opened by a security guard on the far side of the lobby. Access to the Museum's information desk is blocked by the security desk, and the entry to the escalator leading to the lower-level gallery is not readily obvious. Way-finding, space for modern security equipment, and interior circulation are all woefully inadequate. The extensive ground-floor window wall currently has window film to mitigate against injury from shattered glass in the event of a significant explosion nearby, such as from a terrorist attack. This project will build new, accessible entrance doors on the Mall side of the building, provide sufficient and differentiated space for the programmatic elements occupying the lobby, and improve way-finding and circulation. The glass in the window wall will be replaced with blast-rated glass to provide upgraded protection to Museum employees and visitors. Delaying this project will allow inadequate conditions continue inhibiting the Museum's ability to perform its mission.

PROJECT TITLE: Replace Switchgear Controllers and Switches

INSTALLATION: Museum Support Center

LOCATION: Suitland, Maryland

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,100

<u>PROJECT DESCRIPTION:</u> The main electrical switchgear and controllers have outlived their useful life. The buss bars have pitted from frequent tripping, and are corroded and spalled to the point of being unsafe and unreliable. The associated controllers have been undependable for the past several years. Replacement parts are no longer available, forcing staff to make temporary modifications in many areas to keep the system operating.

PROJECT TITLE: Improve Air Quality in Room P-703

INSTALLATION: National Air and Space Museum (NASM)

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,500

PROJECT DESCRIPTION: The basement of the NASM was originally constructed as a parking garage. Many of the areas have been converted into full-time administrative space. Employees in these areas are subject to adverse environmental conditions that have resulted in more days lost to sick leave than for workers in other parts of the building. Studies have determined that, even though the indoor air quality is within the mandated minimums, the configuration of the walls prevents adequate air circulation. It has also been determined, by work in a nearby garage area, that many of the existing air ducts are not properly sized to move the air, resulting in "stale" air pockets and inadequate ventilation. Correcting these conditions requires major reconfiguration of the spaces as well as upgrades to the air supply and distribution systems serving this area.

PROJECT TITLE: Prevent Ground Water Infiltration Into Lower Level **INSTALLATION:** National Museum of American History (NMAH)

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$2,900

PROJECT DESCRIPTION: Because of its location in a high water table area, water infiltration into the NMAH is a major issue. The lower level slab was engineered to be a hydrostatic pressure slab. The 12-inch thick slab and the walls above grade have a continuous metallic-cement waterproof coating. However, over time moisture has seeped in through cracks and other penetrations in the floor and walls, and this condition is exacerbated in times of high precipitation. Many areas remain constantly wet and show evidence of deterioration. Furthermore, due to the topography of the site, the lower level is located two full stories below grade. The transition in grade is made by

retaining walls that align with the south side of the service entrance, including the ramps to the loading dock and the original bus entrance and staff parking area. This project will correct water infiltration problems on the lower level slab, around pipe penetrations, walls, and ceilings, and will waterproof areas located below grade as well. Delaying this project will allow unsatisfactory and inadequate conditions to continue to inhibit the Museum's ability to perform its mission and could negatively impact its collections and personnel activities.

PROJECT TITLE: Replace Fifth Floor Windows

INSTALLATION: National Museum of American History (NMAH)

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,150

PROJECT DESCRIPTION: The windows have extensive damage at the jambs, heads, and sills throughout the Fifth Floor. Eighty percent of the 103 windows have some sort of material deterioration. The damage appears as cracking, bubbling, and blistering of the plaster jambs; moisture spots on the ceiling; and rust on the diffuser cabinets below the sills. This damage is a result of moisture penetration around the windows and condensation caused by faulty design of the original window frames. In addition, there is mold on approximately half of the window jambs. This project replaces the existing windows with high-quality, thermally efficient, and blast-resistant windows. Also, it reseals the exterior of the Fifth Floor openings and repairs the damaged finishes surrounding the interior. Failure to correct the window system will result in continued deterioration, excessive staff maintenance time, and additional capital expenses to fix.

PROJECT TITLE: Replace Motor Control Center Panels

INSTALLATION: National Museum of American History (NMAH)

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$550

PROJECT DESCRIPTION: A total of 12 motor control center panels need full replacement due to their age and the unavailability of replacement parts. The Institution will replace the motor control center panels and relocate the variable speed drives to the air handlers to reduce the size and number of new control centers needed. Installing the new drives at the air-handling units will lower the risk of potential harmonics problems because the drives will be closer to the motors, and will make them easier to perform maintenance on. The new variable speed drives are energy efficient and will cost less to operate. Failure to replace the motor control center panels will result in continued deterioration, excessive maintenance costs, and equipment failure which could put the Museum collections in danger of deterioration due to fluctuations in temperature and humidity.

PROJECT TITLE: Upgrade Collection Storage Electronic Security **INSTALLATION:** National Museum of Natural History (NMNH)

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$2,000

PROJECT DESCRIPTION: Significant areas of collection storage within the NMNH lack adequate electronic security protection against unauthorized access. This project upgrades intrusion-detection systems to a level consistent with Smithsonian standards by providing access control and closed-circuit television integration on an uninterrupted power source. Delay in funding this project would leave the security risk to the Institution's priceless collections at an unacceptably high level.

PROJECT TITLE: Repair/Renew Police Station INSTALLATION: National Zoological Park (NZP)

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,000

PROJECT DESCRIPTION: The NZP police station houses the central security station, as well as public restrooms on the upper floor, the employee health unit, computer servers, and electronic security equipment on the lower floor. These areas are connected by a narrow circular stairway that does not comply with current building and accessibility codes. The restroom fixtures are obsolete and prone to breakage that causes flooding of water and sewage into the health unit and electronic equipment spaces below. This project will remove the dangerous circular stair and renovate the public restrooms by installing new plumbing, fixtures, and waterproofing membranes between the floors. Deferring the project will cause continued problems from water and sewage in the restrooms infiltrating into the employee health unit and damaging the sensitive electronic equipment. This creates the potential to interrupt or disable the electronic security surveillance for the NZP, putting staff, animals, and visitors at great risk.

PROJECT TITLE: Connect to GSA Chilled Water System

INSTALLATION: Quadrangle

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,500

PROJECT DESCRIPTION: The Quadrangle Building uses chilled water generated from a chiller plant on top of the Freer Gallery of Art for its HVAC needs. In 2001, the Smithsonian signed an agreement with GSA to obtain chilled water for HVAC systems in museums on the south side of the Mall. All connections to the GSA system have been made, except for the Quadrangle. The Institution is paying an annual fee to GSA for the full amount of chilled water needed for all

the South Mall museums, including the Quadrangle. This project will complete the connection of the GSA chilled water supply system to the Quadrangle's HVAC system. The chiller plant on the Freer Gallery's roof, redundant piping, and the equipment will all be removed. The estimated payback period for the project is three years. Delay in project execution will result in continued payments to GSA for chilled water that the Smithsonian will not able to use, and in increased maintenance outlays for repair of the failing chiller plant.

PROJECT TITLE: Upgrade Access, Locker Rooms, and Basement Repairs

INSTALLATION: Renwick Gallery of Art

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$800

PROJECT DESCRIPTION: The Renwick basement serves as an entry point for people with disabilities and houses locker facilities for the Office of Protection Services (OPS) security uniformed staff. Both of these functions are currently deficient. The accessible entrance and security desk require upgrades to modernize and improve the entrance experience, which currently does not meet the intent of the Americans with Disabilities Act (ADA). The OPS locker rooms need upgrading and parity for female and male staff. Miscellaneous safety repairs in the basement also require attention. Since the Renwick basement lacks swing space, these projects need to be designed and implemented as a single project. Delay of funding will mean continuing operation of sub standard facilities for the OPS guards and prevents the Renwick from fully complying with the ADA.

PROJECT TITLE: Modernize Electronic Security System

INSTALLATION: Renwick Gallery of Art

LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$800

PROJECT DESCRIPTION: The electronic security system in the Renwick Gallery is one of the Smithsonian's most antiquated systems. This project will upgrade the old software system that provides alarm monitoring and annunciation for all intrusion detection, and add more intrusion-detection sensors, closed-circuit television, and access control to make the system consistent with Smithsonian standards in other museums. Monitoring functions will be redirected to the Donald W. Reynolds Center via a virtual private network. Existing intrusion-detection devices and door hardware will be replaced. Delay in funding this project would increase the security risk to the Institution's collections, visitors, and staff.

PROJECT TITLE: Construct Instrument Repair Facility

INSTALLATION: Smithsonian Astrophysical Observatory (SAO)

LOCATION: Tucson, Arizona

FY 2009 COST ESTIMATE (Thousands of Dollars): \$900

PROJECT DESCRIPTION: The SAO is dedicated to the ongoing development of a new generation of large optical and infrared instruments. This requires that the instruments that make up the 6.5-meter Multiple Mirror Telescope (MMT) and other telescopes at the Fred L. Whipple Observatory be taken down and reconfigured on a continual basis. There is currently no appropriate space at the summit of Mt. Hopkins for this activity, which must take place six to eight times a year. The staff must now transport the very delicate and large instruments down the mountain by road to an alternate location to complete the necessary changes. The summit road is not fully paved and is very twisty, making movement of such equipment problematic. This project will construct a small building of 4,500 square feet to support the reconfiguration and assembly activities on the mountain, and will be just large enough to accommodate instruments the size of a small vehicle. The new building will eliminate the risks and inefficiencies involved in transporting large, delicate instruments down the mountain, and will support vital maintenance of the telescopes.

PROJECT TITLE: Upgrade Fire Detectors and Alarms, Buildings 7, 20, 21, 24,

and 31

INSTALLATION: Suitland Support Facility

LOCATION: Suitland, Maryland

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,200

PROJECT DESCRIPTION: The main control panel for the Garber campus is being replaced with a new panel that provides fire detection and annunciation as required by current codes. Although this new panel receives alarm signals from the existing terminal devices, the existing devices cannot signal the exact location of the fire within the alarmed zone. This project provides the upgraded terminal devices within the listed buildings to provide better annunciation of the fire location. This will permit quicker response and reduce the risk of damage. Future projects will upgrade the terminal devices in the remaining buildings in the compound.

PROJECT TITLE: Install Surge Protection for Site

INSTALLATION: Suitland Support Facility

LOCATION: Suitland, Maryland

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,300

<u>PROJECT DESCRIPTION:</u> The quality of electrical power service from the utility provider to the Silver Hill site is not very reliable. The voltage varies greatly, which puts the equipment at risk from voltage burnout failure. This lack of

protection has greatly added to the problems associated with the main fire-control panel in Building 24, which is being replaced. Additionally, lightning protection is minimal, with some buildings not protected at all, and lightning storms often damage the electrical equipment. This project will install surge protection equipment to serve the entire site. Completion of this project will ensure consistent power to the site and reduce expensive and preventable maintenance of equipment damaged by repeated power spikes.

PROJECT TITLE: Demolish Buildings 15 and 18

INSTALLATION: Suitland Support Facility

LOCATION: Suitland, Maryland

FY 2009 COST ESTIMATE (Thousands of Dollars): \$3,000

PRIOR-YEAR FUNDING: \$2,000

PROJECT DESCRIPTION: Several buildings at the Garber facility are insulated with a sprayed-on asbestos lining that was encapsulated with visqueen plastic sheeting in the late 1980s as a "temporary" measure. The sheeting has deteriorated due to age and heat, becoming very fragile and breaching without notice. So far, the encapsulation in Buildings 15 and 18 remains intact, but a recent failure in a nearby building pointed out the urgency of removing the American History collections from these two buildings before they become contaminated and inaccessible. Funding expected in FY 2008 (\$2 million) will stabilize, pack, and move the collections now stored in these buildings to new leased space (for which funding is requested in the Salaries and Expenses portion of the FY 2008 budget request). The Institution requests \$3 million in FY 2009 for the actual demolition of the buildings and disposal of the asbestos. Delay of this project will continue to put staff at risk of health hazards, and collections at risk of further contamination, thereby making asbestos abatement more costly and risky with time.

PROJECT TITLE: Install Backflow Prevention in Washington, DC Buildings

INSTALLATION: Multiple Locations **LOCATION:** Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$2,100

PROJECT DESCRIPTION: The District of Columbia Water and Sewer Authority (DC WASA) helped to pass legislation in 2001 that requires reduced pressure zone (RZP) preventers at each building's potable water service entrance. These preventers guard public health and safety by protecting potable water from contaminants and pollutants through cross-connection. In June 2001, DC WASA cited deficiencies at all cross-connections at Smithsonian buildings in Washington, DC and Suitland, Maryland, and issued a notice stating that corrections should be completed as soon as possible. Backflow preventers have been installed in the Arts and Industries Building. The Institution will install preventers on remaining buildings in Washington, DC and Suitland in multiple phases as funds are made available.

The work in some locations will also require the upgrade of fire and domestic water pumps where installation of backflow preventers affects the water pressure. Failure to install the backflow preventers risks contamination to the potable water sources and may endanger public health.

PROJECT TITLE: Install Lightning Protection in Mall/Off-Mall Buildings

INSTALLATION: Multiple Locations LOCATION: Washington, DC

FY 2009 COST ESTIMATE (Thousands of Dollars): \$1,000

PROJECT DESCRIPTION: When lightning struck the roof of the Smithsonian Castle and started a fire, it became very clear that lightning protection of Smithsonian buildings was not complete. Some buildings have no protection, while others have systems that have deteriorated and provide less than adequate protection. A study to be completed in FY 2008 will identify those structures on the Mall that need additional protection. This 2009 project will fund those needed upgrades. Design of lightning protection for off-Mall buildings will be completed in later years.

PROJECT TITLE: Construction Supervision and Administration

INSTALLATION: Multiple Locations LOCATION: Institution-wide

FY 2009 COST ESTIMATE (Thousands of Dollars): \$4,950

PRIOR-YEAR FUNDING (FY 2008): \$4,900

FUTURE-YEAR FUNDING (FY 2010): \$5,100

PROJECT DESCRIPTION: This request includes staff costs for permanent construction management staff required to supervise and administer construction contracts, as well as term and temporary staff required to perform specialized work associated with revitalization projects. A total of 48 FTEs will be funded from the \$5 million. Forty-three of the 48 FTEs are construction management engineers and will cost approximately \$4.4 million in FY 2009. The engineers directly supervise construction contractors to ensure that quality work is performed safely. In addition, they resolve issues that arise during construction, negotiate change orders, approve payments, and perform other administrative functions as contracting officer's technical representatives (COTRs). These necessary "owner functions" are critical to ensure that quality work is completed safely, on time, and within budget.

This request also funds five contract specialists who will support all aspects of the procurement process for acquiring the necessary contract services to execute the Capital Program. These five positions will cost approximately \$600,000 in FY 2009, and will provide essential expertise to ensure the timely award of planning, design, and construction contracts for the Capital Program.

FACILITIES PLANNING AND DESIGN

Feasibility studies, needs assessments, and design for capital projects are required before work can take place. Resources in this category include all costs for contract facility master planning, preliminary and final design for all revitalization and construction projects, special studies, and a small amount for facility engineering, capital leveraging, and research activities, similar to Department of Defense and National Aeronautics and Space Administration (NASA). The funding will enable development of project baselines, including costs, scope, and schedule, prior to receiving funding to perform the work.

In order to plan and design ahead of Capital Program execution, funding of about 10 to 15 percent of the following year's program is required each year. The funding requested for FY 2009 will provide necessary planning and design to at least the 35 percent stage for most projects included in the planned FY 2011 program, and will complete design for projects planned for FY 2010. This will move the Institution closer to meeting the National Academy of Public Administration's (NAPA) recommendation that firm baselines be established before funding requests to provide more accurate cost estimates and to enable timely award of construction contracts upon receipt of future-year funding.

The Institution requests a total of \$30,230,000 for planning and design in FY 2009. These funds will be used to design several major revitalization projects (at the National Museum of Natural History, the National Museum of American History, the National Zoological Park, the Hirshhorn Museum and Sculpture Garden, and for anti-terrorism projects at multiple locations) as well as to prepare designs for numerous smaller revitalization projects. This budget request will also enable the Smithsonian to continue the programming for the new National Museum of African American History and Culture; design the Mathias Laboratory Modules at the Smithsonian Environmental Research Center; and prepare comprehensive facilities master planning studies to guide future facilities decisions and other studies to ensure more effective use of existing space.

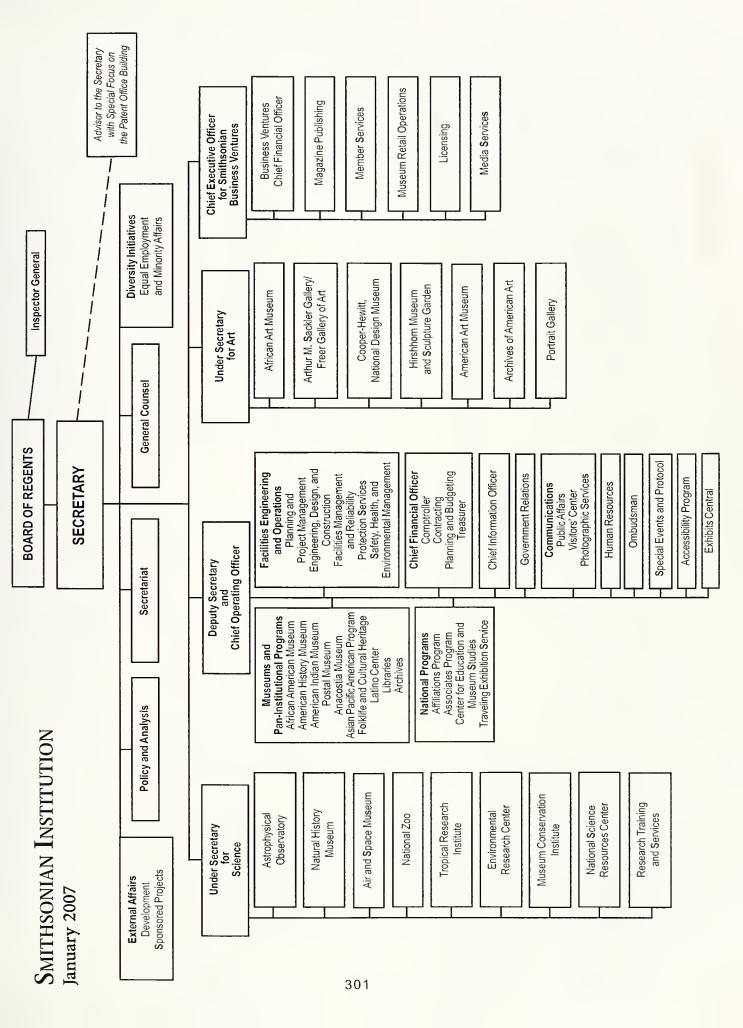
If these essential resources are not provided, the Institution will be unable to proceed with vital planning and design activities to ensure the successful execution of the long-range Capital Program. The result will be a significant delay in meeting the Institution's goals to return Smithsonian facilities to full functionality in the next decade.





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Suitland Support Facility: Replace Greenhouses SI Tropical Research Institute: Gamboa Development Office of Protection Services: Anti-Terrorism Protection National Museum of African American History and Culture Smithsonian Environmental Research Center: Construct Mathias Lab
Information Technology Projects
The Exhibit 300s for the systems that follow vary in length. While they have not been provided here, they have been sent electronically to the Office of Management and Budget, along with self-evaluations of each.
Enterprise Resource Planning (ERP) System Facilities Management System (FMS)
Art Collections Information System (ArtCIS) National Museum of the American Indian Collections Information System (NMAI CIS)
National Museum of American History Collections Information System (NMAH CIS)
Smithsonian Institution Research and Information System (SIRIS) National Museum of Natural History Research and Collections Information System (NMNH RCIS)
Smithsonian Astrophysical Observatory (SAO) Scientific Computing Managed Information Technology Infrastructure (MITI) Security Management System (SMS) Education Portal
Enterprise Digital Asset Network (EDAN) Electronic Records Management System (ERMS)
Projected Outlays by Account333
Trust Summary



VISITS TO THE SMITHSONIAN FY 2002-FY 2006

MUSEUM	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
MALL					
SI Castle	1,611,325	1,126,752	1,423,028	1,355,147	1,202,611
A&I Building ¹	938,107	841,019	250,743	3,564	0
Natural History	6,049,472	5,568,532	4,542,979	5,491,602	5,561,758
Air and Space/ Silver Hill ²	7,568,384	10,800,305	4,586,088	6,113,032	5,045,712
American Indian ³	0	0	112,097	2,468,524	1,620,692
Freer Gallery	392,380	308,839	360,231	322,175	420,319
Sackler Gallery	212,197	163,251	186,939	147,089	223,958
African Art	179,789	166,271	169,941	156,538	192,845
Ripley Center	267,011	249,819	184,679	193,995	233,226
American History⁴	3,994,498	2,720,327	2,848,114	3,064,083	2,874,640
Hirshhorn	687,118	625,580	668,132	715,836	749,313
OFF MALL					
DW Reynolds Center (AA/PG) ⁵	0	0	0	0	274,840
Renwick	141,018	173,818	134,035	133,608	165,103
Anacostia	27,339	28,353	22,017	24,098	42,805
Cooper-Hewitt	142,196	141,545	141,548	143,303	186,628
American Indian ⁶	316,763	290,220	250,738	304,100	233,696
National Zoo	2,162,500	1,724,228	1,878,823	1,854,423	2,480,967
Postal	317,155	300,318	347,228	463,070	439,048
Udvar-Hazy Center ⁷	0	0	1,490,750	1,260,971	1,019,885
TOTAL	25,007,252	25,229,17 7	19,598,110	24,215,158	22,968,046

¹The Arts and Industries (A&I) Building closed to the general public in January 2004. However, the Discovery Theater continued performances until November 2004 when theater operations were relocated to the Ripley Center.

²Installation of magnetometers in October 2003 resulted in more accurate visitor counts at NASM.

³The National Museum of the American Indian opened to the public in September 2004.

⁴The National Museum of American History closed to the public in September 2006.

⁵Closed to the public January 2000 through June 2006. Reopened in July 2006.

⁶Includes the George Gustav Heye Center in New York City, and the Cultural Resources Center in Suitland, Maryland.

⁷The Udvar-Hazy Center at Dulles opened to the public in December 2003.

SMITHSONIAN INSTITUTION

Facilities Capital Program

Detail of FY 2008- FY 2013 Program

FY 2009 Request to OMB

Prepared by the Office Of Facilities Engineering and Operations

September 2007

Definitions

REVITALIZATION

Revitalization activities correct extensive and serious deficiencies, materially extend service life, and add capital value.

Major Projects

Projects in this category are generally "whole house" renovations of existing buildings to replace major building systems and equipment, to extend service life and add capital value. Also includes modernization and upgrade work to incorporate new codes and standards. Most projects in this category will exceed \$5 million in total cost, and will be identified and described separately in budget submissions.

Other Revitalization Projects

includes correcting extensive and serious facilities deficiencies to materially extend the service life of systems and components. Projects Projects in this category are smaller in scale than major projects, usually involving single building systems or pieces of equipment. Work usually cost between \$100,000 and \$5 million.

CONSTRUCTION

Construction or acquisition (other than by lease) of additional physical plant assets, and renovation of newly acquired facilities to ready them for use. Projects in this category will be individual line items in the budget request.

FACILITIES PLANNING AND DESIGN

Identification and analysis of long-range revitalization and expansion needs, preparation of master plans, and design of specific capital program projects.

Priorities

Priority 1: Catastrophic Failure and Critical Life Safety Requirements

collections and/or facilities. Examples include: installation of new fire protection systems, active roof or facade leaks endangering people, Projects requiring immediate funding in order to correct severe safety hazards, active roof or system failures, and prevent the loss of life, collections or structural integrity of a building, or failure of a significant utility or security system or component.

Priority 2: Imminent Failure and Code Compliance Requirements

include: replacement or upgrade of fire detection and suppression systems, life safety and accessibility modifications, and replacement of Projects requiring funding at the first opportunity to avoid system failure or to correct serious safety or security deficiencies. Examples utility or security systems or components with frequent breakdowns or difficult repair.

Priority 3: Predicted Failure and Mission Viability Requirements

requirements. Examples include: replacement of systems or components whose life expectancy will be reached in the funding year, projects Predicted work that should be funded within 2-3 years in order to sustain system or building operability, or support programmatic with a short term energy or operational payback, or modification of space to meet critical programmatic (mission) requirements.

Priority 4: Moderate Risk Requirements

Projects that can be deferred 3-4 years without undue risk of failure or non-compliance with life safety codes. Examples include: non-routine repairs such as refurbishing doors for an entire facility, modifications required to support planned programmatic changes, or mid-term energy or operational efficiency requirements.

Priority 5: Programmed Future Requirements

Projects that are known to be needed but can be funded 5 or more years out without risk. Examples include: major revitalization of facilities planned beyond the five-year planning window but which should be completed within a ten-year period, or energy saving projects with a 6-7 year payback Priority Codes (PC) derived from the Priority Code Assignment Matrix are used to rank and program funding for all revitalization and construction projects. Projects compete for resources based on assigned priority codes. Given limited resources, this is a dynamic process intended to identify current budget year (BY) and subsequent out year (BY +1 - +4) funding in Smithsonian Institution's 5-Year Capital Plan for the most important projects. Work is divided into five priority codes which correlate to budget year programs.

Priority Code Assignment Matrix

Notes

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		Revitalization	Revitalization and Renewal		Construction
PRIORITY CODES					
PC 1 = BY	∢	മ	ပ	۵	ш
PC 2 = BY +1					
PC 3 = BY +2	Shell/	Code	Non-routine	Energy/	Alterations
PC 4 = BY +3	System	Compliance/	Capital	Operational	and
PC 5 = BY +4	Failure	Security	Repairs	Efficiency	Modifications

Condition Level Description	rel Des	ription
Condition	Level	Description
Catastrophic	_	Significant projects requiring immediate funding in order to correct severe safety hazards, active failures, and prevent the loss of facilities. A seet Innact: Optimental or irreversible failure immediate implementation
Critical	=	High priority projects requiring funding in the next fiscal year to avoid failure or correct serious safety/security deficiencies. Asset/Program Impact: Imminent failure, program begins in 1 - 3 years.
Routine	≡	Predicted work that needs funding within four years. Asset/Program Impact: Moderate risk, program begins in 4 - 5 years.
Can Defer	2	Work that can be deferred for five years. Asset/Program Impact: Negligible risk, program begins within 5+ years.

Revitalization and Renewal Activities Projects required to address advanced deterioration and avoid crippling
failures in building systems. Work includes rehabilitation, renovation, replacements, capital repairs, modernization and upgrade work to incorporate new codes & standards, general overhaul w/ multiple parts replacement.

PC 2

PC 2

PC 1

PC 1

Catastrophic

Examples: Roof and building piping leaks, utility system and equipment

⋖

System Failure

PC 3

PC 3

PC 3

PC 2

PC 2

Critical

20-4-0200

Code Compliance/ Security	ш	Examples: Fire detections and suppression system replacement or upgrade, life safety and accessibility modifications, and security equipment replacement/improvement and building modifications.
Non-routine Capital Repairs	O	Examples: One time repair work to correct significant problem that cannot be addressed on a routine basis, i.e., refurbishing doors for an entire facility, and replacement of individual component of HVAC system.
Energy/ Operational Efficiency	۵	Examples: Projects with a seven year cost-effective payback period.
		Construction Activities Projects required to fulfill SI mission. Acute areas include collection storage, laboratories and research office space.
Alterations & Modifications	ш	Approved master plan projects and work to sustain existing or changing missions.

PC 4

PC 4

PC 4

PC 3

PC 3

Routine

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PC 5

PC 5

PC 5

PC 5

PC 5

Can Defer

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SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

		,	o de la companya de l	SIOONE	000	000	01/10	5711	5743	0.173		FY08-Outyrs
cempus	uone207	caregory	rnomy	Category Fromy Project	8	6011			7112	1113 0417		lotal
Arts and Industries Building	dustries B	guiplin										
DC - Mall DC - Malf	AIB AIB	FPD	ω ω	Design Arts & Industries Bullding Restoration Arts and Industries Master Plan	00	00	0 0	00	00	0 0	TBD 800	TBD 800
DC - Mall	AIB	MR	ß	Restore Arts & Industries Building	0	0	0	0	0	0	TBD	TBD
				Subtotal: AIB	0	0	0	0	0	0	800	800
Anacostia Museum	Museum											
DC - Anacostia	AM	FPD	4	Anacostia Museum Master Plan	0	0	0	0	0	400	0	400
DC - Anacostia DC - Anacostia DC - Anacostia	AM AM AM	DR OR DR	6 4 6	Upgrade Lighting Controls Install Cold Storage Unit Expand Gallery Speces	000	000	000	000	200	000	0 50 500	200 50 500
				Subtotal: AM	0	0	0	0	200	400	550	1,150
Cooper Hewitt Museum	vitt Musec	E										
New York, NY	CHM	FPD	4	Update Cooper-Hewitt Master Plan	0	0	0	0	0	0	800	800
New York, NY	CHM	OR	2	Complete Miller-Fox Renovation	1,650	0	0	0	0	0	0	1,650
New York, NY	CHM	DR	2	Stabilize Mansion Fence	0	150	0	0	700	0	0	850
New York, NY	CHM	DR C	0, 0	Upgrade Mansion Electric Distribution & Exterior Lighting	0 0	4,625	0 (0 (0 (0 (0 (4,625
New York, NY	E E	ž 8	7 0	Asbestos Abatement	o 0	1,500	0 0	o c	o c	o c	o c	1,500
New York, NY	CHINA CHINA	, a	7 2	Extend rile Suppression System Rehabilitate & Waterproof Terrace	0 0	000	550		0	0 0	0 0	550
New York, NY	CHM	DR	'n	Replace Mansion Boilers	0	0	0	0	400	0	0	400
New York, NY	CHM	DR	ß	Replace Miller/Fox Roof	0	0	0	0	700	0	0	200
New York, NY	CHM	DR	2	Repeir Exterior Masonry	0	0	0	0	006	0	0	006
New York, NY	CHM	DR	2	Restore Entrance Canopy	0	0	0	0	0	0	200	200
New York, NY	CHM	RO 6	ω ,	Stabilize Mansion Sidewalks	0 (0 (0 (0 (0 (0 0	700	700
New York, NY	Z Z	5	4	hestore Gallery Floors, 1st & 2nd Floors	0	0	0	၁	0	0	200	200
				Subtotal: CHM	1,650	6,675	550	0	2,700	0	2,500	14,075
Freer Gallery of Art	y of Art											
DC - Mail DC - Mail	FGA FGA	OR DR	2 2 3	Replace Roof Upgrade Humidification System	00	1,275	00	00	00	00	00	1,275
DC - Mall DC - Mell	7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	H E E	w 4 a	Upgrade Accessible Entrance & Corridor Destore Building Exterior Clean Anant Fire Processin in Collections Storage	000	0 0 0	000	000	000	000	1,000	1,000 00,1
		;	۲	סופמון אמפוור דופן ייכנפכניסון כאינפוון יין כטופטניסון כניני פאפ	>	>	>	>	>	>))

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MR = Major Revitalization; OR = Other Revitalization; Con = Construction; FPD = Facilities Planning Design

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building

				2000							13	FY08-Outvrs
Camous	Location	Category Priority	Priority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
DC · Mall	FGA	OR	4		0	0	0	0	0	0	350	350
DC - Mall	FGA	OR	4	Correct Courtyard Window & Door Condensation	0	0	0	0	0	0	150	150
				Subtotal; FGA	0	1,975	0	0	0	0	2,600	4,575
Hirshhorn Museum and Sculpture Garden	luseum a	nd Sculpt	ure Ga	arden								
DC - Mall	HMSG	FPD	2	Design Restore/Repair Exterior Façade	0	730	0	0	0	0	0	730
DC - Mall	HMSG	FPD	'n	Design Restore & Waterproof Plaza & Foundation Walls	0	0	0	0	0	0	1,000	1,000
DC - Mall	HMSG	FPD	4	Update HSMG Master Plan	0	0	0	0	0	0	800	800
DC - Mall	HMSG	FPD	4	Design 4th Floor Rehabilitation	0	0	0	0	0	0	820	850
DC - Mall	HMSG	MR	2	Restore/Repair Exterior Façade	0	0	0	0	7,300	0	0	7,300
DC - Mall	HMSG	M M	n	Restore & Waterproof Plaza & Foundation Walls	0	0	0	0	0	0	10,000	10,000
DC - Mall	HMSG	MR	4	Rehabilitate 4th Floor	0	0	0	0	0	0	8,500	8,500
DC - Mall	HMSG	OR	2	Renovate Front Entrance/Blast Windows	0	2,500	0	0	0	0	0	2,500
DC - Mall	HMSG	OR	2	Rehabilitate Sculpture Garden	0	0	2,000	0	0	0	0	2,000
DC - Mall	HMSG	OR	2	Improve Fire Suppression in Collection Storage	200	0	0	0	0	0	0	200
DC - Mall	HMSG	OR	2	Upgrade Exhibit Lighting/Code Compliance	0	200	0	0	0	0	0	200
DC · Mall	HMSG	OR	n	Repair Exterior Lighting	0	0	200	0	0	0	0	200
DC - Mall	HMSG	OR	4	Renovate Chiller Room	0	0	0	0	0	350	0	350
DC - Mall	HMSG	OR	4	Replace Roof	0	0	0	0	0	0	2,500	2,500
				Subtotal; HMSG	200	3,730	2,500	0	7,300	350	23,650	37,730
Multiple Site Projects	Projects											
All Facilities	MULTI	FPD	1	Facility Planning and Design, Other Revitalization	3,950	3,000	3,000	3,000	3,000	3,000	3,000	21,950
Alf Facilities	MULTI	FPD	2	SI-Wide Facilities Master Planning	100	009	009	009	200	200	1,000	3,300
All Facilities	MULTI	FPD	'n	Upgrade Facilities Management System	0	0	0	0	0	0	200	200
All Facilities	MULTI	FPD	'n	Mall Site Improvement Master Plan	0	0	0	800	0	0	0	800
All Facilities	MULTI	FPD	n	Real Property and Space Utilization Studies	250	250	250	250	250	250	250	1,750
All Facilities	MULTI	FPD	'n	Admin/Support/Collection Storage Master Plan	0	0	800	0	0	0	0	800
All Facilities	MULTI	OR	1	Construction S&A	4,900	4,950	5,100	5,250	5,400	5,520	5,700	36,850
All Facilities	MULTI	OR	1	Miscellaneous Capital Repair	3,600	3,892	3,815	4,060	3,915	3,950	4,500	27,732
All Facilities	MULTI	OR	1	Reprographics and Library	200	200	200	500	500	200	200	3,500
All Facilities	MULT	OR	1	Provide Guard Services, All Locations	300	300	300	300	300	300	300	2,100
All Facilities	MULTI	OR	2	Provide Central Fire Pump & Upgrade Mains, Suitland (do w/ Backflow)	1,700	0	0	0	0		0	1,700
All Facilities	MULTI	OR	2		0	2,100	2,000	4,000	0	0	0	8,100
All Facilities	MULT!	OR	7	Install Lightning Protection in Mall/Off-Mall 8uildings	0	1,000	800	1,000	0	0		2,800
				Subtotal; MULTI	15,300	16,592	17,165	19,760	13,565	13,750	15,750	109,082

MR = Major Revitalization; OR = Other Revitalization; Con = Construction; FPD = Facilities Planning Design

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SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

				s(000)s								FY08-Outyrs	
Campus National A	Location Air and Spa	Campus Location Category Priority National Air and Space Museum	ority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total	
DC - Mall DC - Mall	NASM NASM	FPO	2 8	Design Mechanical System, Basement & 3rd Floor National Air and Space Museum Master Plan (incl. Garber & Hazy)	00	00	0 1,500	00	00	00	5,000	5,000	
DC - Mall DC - Mall	NASM NASM	M M	2 2	Replace Electrical Systems Replace Mechanical Systems	8,500	0 0	0 0	0 0	00	0 0	000,03	8,500	
DC - Mall DC - Mall	NASM	DR	~ ×	Waterproof Terrace at Perimeter Stairtower 6 Improvements	1,500	200	0 0	0 0	00	0 0	0 0	1,500	
DC - Mall DC - Mall	NASM			P-703 Renovate HVAC/Improve Indoor Air Quality Replace Ramsey Room Halon System	200	1,500	00	00	00	00	00	1,500	
DC - Mall DC - Mall	NASM NASM	A N	2 2	P-700 Renovate HVAC/Improve Indoor Air Quality 3700 Renovate HVAC/Improve Indoor Air Ouality	0 0	00	1,400	00	1,125	0 0	00	1,125	
DC - Mall	NASM	HO BO	0 m	Replace Condensate System Upgrade Accessible Egress (Interior)	00	0 0	700	0 0	0 250	00	00	700	
DC - Mall	NASM			Complete Irrigation System @ Jefferson Drive	00	00	00	00	0 0	00	100	100	
DC - Mall	NASM			Repair Datta Solar Reflection Pool	00	000	000	00	000	000	200	200	
DC - Mall DC - Mall	NASM	O. O.	ω 4	3500 Cooling Tower Well Infill with IT Offices/Equipment Rooms Replace Dimmers/Ceiling in Theater	00	00	00	0 0	00	00	200	1,200	
				Subtotal: NASM	10,200	1,700	3,600	0	1,375	0	57,020	73,895	
National A	Vluseum of	African Ame	ericar	National Museum of African American History and Culture									
DC - Mall DC - Mall	NMAAHC NMAAHC	FPD	2 2	Programming/Planning for NMAAHC Design National Museum of African American History & Culture	2,000	3,000	0 11,000	0 14,000	00	00	00	5,000	
DC-Mall	NMAAHC	CON	8	Construct National Museum of African American History & Culture	0	0	T8D	TBD	T8D	TBD	T8D	TBD	
National N	Auseum of	s National Museum of American History	istory	Subtotal: NMAAHC	2,000	3,000	11,000	14,000	0	0	0	30,000	
DC - Mall DC - Mall	NMAH NMAH	FPD		Design Swing Space for Wing Revitalization Design Renewal of West Wing	1,300	1,200	2,000	0 0	0 0	0 0	00	2,500	
DC - Mal!	NMAH	FPD	2 0	Design Renewal of East Wing Design Chiller Renlacement (if not under ESPC)	0 0	00	00	0 0	0 0	2,000	1,700	3,700	
DC - Mall	NMAH			Design Non - Public Space Infrastructure Update NMAH Master Plan	00	00	00	00	00	00	5,000	5,000	
:					((•	•	((0	
DC - Mall	NMAH		2 2 2	Provide Swing Space for Wing Revitalization Renew West Wing	00	00	20,000	26,000	28,000	000	0 0	54,000	
DC - Mall	NMAH	Σ Σ Ε		nenew East Wing Renew Non-Public Space Infrastructure	0 0	00	0 0	0 0	00	00	35,000 65,000	65,000	

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Building \$\\$(000)s\$

												FY08-Outyrs
Campus	Location	Category	· Priority	Category Priority Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
DC - Mall	NMAH	OR	1	Improve Roof System	0	485	0	0	0	0	0	485
DC - Mall	NMAH	OR	1	Prevent Ground Water Infiltration Lower Level (do with Swing Space)	0	2,900	0	0	0	0	0	2,900
DC · Mali	NMAH	OR	2	Improve Dibner Librery Fire Suppression	300	0	0	0	0	0	0	300
DC - Mall	NMAH	OR	2	Replace Motor Control Center Panels	0	550	0	0	0	0	0	550
DC - Mall	NMAH	OR	2	Replace Fifth Floor Windows	0	1,150	0	0	0	0	0	1,150
DC - Mell	NMAH	OR	2	Upgrade Fire Alarm/Life Safety Non Public Speces	0	0	1,000	1,000	0	0	0	2,000
DC - Mail	NMAH	OR	2	Improve Numismatic Fire Suppression System	0	0	200	0	0	0	0	200
DC - Mail	NMAH	OR	'n	Removal of the Snow Melt System/Terrace Leaks	0	0	0	0	300	200	0	800
DC - Mall	NMAH	OR	G	Repair Constitution Avenue Entry	0	0	0	0	550	0	0	550
OC - Mall	NMAH	OR	ຕງ	Belocate Accessibility Program Office	0	0	0	0	300	0	0	300
OC - Mall	NMAH	. H	, c-,	Relocate SI Photo Services from Lower Level	0	0	0	0	0	0	1.500	1,500
DC - Mall	NMAH	OR	4	Replace Podium and Fifth Floor Pavers	0	0	0	0	0	0	. 510	510
				O MANANA LI	1,600	10.285	23 500	000 22	79 150	005.0	109 710	205 745
				Subjudge Winter	200		200	000	2	200		2
National Museum of the American Indian	seum of	the Ame	rican l	Indian								
DC, Suitland, NYC NMAI	C NMAI	FPD	4	NMAI Master Plan, All Locations	0	0	0	0	0	1,000	0	1,000
			C		C	C	C C	c	c	c	c	C
Suitland, MD	NMAI-CHC		7 1	Heat Tabe Clamond Shape Vvindows & Apply UV Film on Large Falles	> (> (790	> (> (> 0	O	7.00
DC - Mall	NMA	NO HO	7	Realign Granite Pavers and Caulk Soft Joints	Э .	0	200	0	Э (O	> (200
DC - Mall	NMA	O. I	(r) (Improve Exiting from Amphitheater	0 (0 (0 (250	0 0	0 (0 0	250
New York, NY	NMA	OH	.n	Implement GGHC Space Utilization Plan	0	0	0	0	008,1	0	004	00/,1
				Subtotal: NMAI	0	0	450	250	1,300	1,000	400	3,400
National Museum of Natural History	seum of	Natural	History									
DC - Mall	NMN	FPD	2	Design Ongoing Revitalization	3,000	3,000	3,000	3,000	3,000	3,000	0	18,000
DC - Mall	NMNH	FPD	2	Update NMNH Master Plan	0	0	0	0	0	0	1,000	1,000
DC - Mall	NMN	FPD	5	Update Fort Pierce Master Plan	0	0	0	0	0	0	1,000	1,000
DC - Mali	NMN	MR	2	Renovate Main Building Windows/Entrances	2,750	1,200	1,700	1,000	1,300	1,000	0	8,950
DC - Mall	NMN	MR	2	Renovate Elevators	3,000	0	1,000	0	2,000	0	0	000′9
OC - Mall	NMNH	M	2	Renovate Air Towers/Balance Air Supply	1,550	1,900	0	550	0	0	0	4,000
OC - Mall	NMN	M	2	Renovate Ground Floor WW (LA8 Ph I)	5,700	3,000	0	0	0	0	0	8,700
OC - Mail	NMN	M	2	Renovate East Court (Basement, Ground, 1st Floor)	2,000	2,000	2,000	0	0	0	0	000′9
DC - Mall	NMN	MR	2	Renovate SE Main Ground FIr/Mezz, Ph I	000′9	2,000	0	0	0	0	0	8,000
OC - Mail	NMN	MR	2	Renovate Utility Tunnels	1,500	2,000	0	0	0	0	0	3,500
OC - Mail	NMN	MR	2	Renovate West Wing Basement Ph III	0	2,000	0	0	0	0	0	2,000
OC - Mall	NMN	MR	2	Renovate 6th Floor EW (LA8 Ph II)	0	4,500	2,500	0	0	0	0	000'2
oc - Mall	NMNH	M	2		0	3,700	7,800	0	0	0	0 1	11,500
OC - Mall	Y N N N	ω Σ	2	Renovate/Replace Emergency Generators & High Voltage Vault	0 (2,400	1,100	0 (0 (> •) (3,500
DC - Mail	Y N	Z :	2	Changes to Rotunda Area & Olocletian Lighting	0 (000,1	0 00	0 (0 (0 0)	000,1
DC - Mall	NMN	Σ	2	Renovate Basement EW, Ph II	0	0 (7,300	0	0 (0 (0 (005,7
DC - Mall	I NWN	Z :	C) (Renovate 1st Floor WW (LA8 Ph III)	0 (0 0	4,200	3,800	0 (0 0	0 0	8,000
DC - Mali	INWN.	Z Z	C/ (Renovate Grd Fir EW, Ph III	0 0	0 0	1,700	7,000	O 0	0 0	0 0	8,700
OC - Mail	HNMN C) Y Y	v ;	Henovate Halls Z-6 (Unosaurs)	Þ	>	7,000	12,000	OGS	>	>	000,0

MR = Major Revitalization; OR = Other Revitalization; Con = Construction; FPD = Facilities Planning Design

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232,440

40,750

33,000

33,990

33,000

34,300

28,900

25,500

Subtotal: NMNH

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Building

7,000 2,400 2,000 3,500 3,300 2,000 6,000 6,000 9,000 2,000 7,500 7,500 6,500 1,000 2,000 3,000 4,000 3,000 200 990 1,000 600 650 4,000 6,000 500 100 FY08-Outyrs 0000 2,050 2,000 7,500 7,500 6,500 1,000 2,000 3,000 000'1 650 450 3,000 4,000 900 100 38,550 100 FY13 Outyears 3,300 2,000 6,000 2,850 500 6,000 6.950 3,000 000'9 7,000 2,400 30,000 1,600 1,000 30,000 31,300 25,700 000000 00 22,500 Leb & Fume Hood Modernizations, Main Building Labs Lab & Fume Hood Modernizations, West Wing Labs Lab & Fume Hood Modernizations, East Wing Labs Renovate Stair Towers/Fire Egress (10 total) Spece Modernization & Improvements Public/Non-Public Separation Security Relocation of Columbia Film Archives Renovate NW 3rd Floor Main Bldg Renovate Attic Rotunda & Ceiling Install Staff Women's Restroom Finish Renovations Halls 28/29 Finish Renovate Halls 21 & 22 Botany Herberium Compactors Renovate NW Main GF/Mezz Renovete SW Mein GF/Mezz Renovete Rotunda & Hell 17 Renovete Baird Auditorium Renovate North Lobby GF Renovate 5th Floor WW Renovate 3rd Floor WW Renovate 4th Floor WW Chemical Control Facility Renovate 2d Floor WW Renovate 1st Floor EW Renovete 3rd Floor EW Renovete 5th Floor EW Renovate 2d Floor EW Renovete 3rd Floor EC Renovete NE 3 Main Renovate Hali 26 Renovate Hell 7E Project Subtotal Façade Lighting Projact. Priority Category MR MR MR MR MR MR MR MR MR MR MR MR MR MR MR OR OR Location NMNH NMN NMNH NMNH NMNH NMNH NMNH NMNH NMNH DC - Mall DC · Mall
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SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

FY08-	
	FY13 Outyears
	FY12
	FY11
	FY10
	FV09
	FY08
	Category Priority Project
	Location
	sndw

				8/00016								FY08-Outvre
Campus	Location	Category Priority Project	Priority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
National Zoological Park	logical F	ark										
DC - Rock Creek	NZP	FPD	1	Design Fire Protection Improvements, Phases 1-4	630	0	0	0	0	0	0	630
DC - Rock Creek	NZP	FPD	1	Design Infrastructure/Utility Systems, Phases 1, 2, 3	930	0	0	0	0	0	0	930
DC - Rock Creek	NZP	FPD	1	Plan/Design Seal/Sea Lion Facility, Phase I	700	0	0	0	0	0	0	700
DC - Rock Creek	NZP	FPD	1	Plan/Design Gate Closure Escape Prevention System	0	100	0	0	0	0	0	100
DC - Rock Creek	NZP	FPD	2	Plan/Design Flood Mitigation NZP Rock Creek	0	0	200	0	0	0	200	400
DC - Rock Creek	NZP	FPD	2	Design to Renew Seal/Sea Lion, Phase 2	0	1,500	0	0	0	0	0	1,500
DC - Rock Creek	NZP	FPD	7	Design North Road Pedestrian Safety & Vehicular Access	0	250	200	750	0	0	0	1,500
DC - Rock Creek	NZP	FPD	2	Design Bird House Hill Facilities Renewal	0	2,000	0	0	0	0	0	2,000
DC - Rock Creek	NZP	FPD	7	Design Infrastructure/Utility Systems, Phase 8	0	0	250	250	0	0	0	200
DC - Rock Creek	NZP	FPD	2	Design Infrastructure/Utility Systems, Phase 9	0	0	250	250	0	0	0	200
DC - Rock Creek	NZP	FPD	2	Plan/Design Savannah Exhibit	0	0	1,500	2,500	0	0	0	4,000
DC - Rock Creek	NZP	FPD	2	Plan/Design Apes Facility Replacement	0	0	0	200	2,000	0	0	2,500
DC - Rock Creek	NZP	FPD	2	Design Infrastructure/Utility Systems, Phase 4	0	0	0	0	0	350	350	700
DC - Rock Creek	NZP	FPD	2	Design Infrastructure/Utility Systems, Phase 5	0	0	0	0	0	250	250	200
DC - Rock Creek	NZP	FPD	n	Design Infrastructure/Utility Systems, Phase 6	0	0	0	0	0	0	750	750
DC - Rock Creek	NZP	FPD	Ġ	Design Infrastructure/Utility Systems, Phase 7 (Bird Hill)	0	009	0	0	0	0	0	009
DC - Rock Creek	NZP	FPD	'n	Design to Replace Electric Substation (Hawthorn St)	0	0	0	0	0	0	300	300
DC - Rock Creek	NZP	FPD	'n	Design Roof & Exterior MP Phases 11-15	0	0	0	0	0	300	0	300
DC - Rock Creek	NZP	FPD	Ç)	Plan/Design Phase 2 Renewable Energy/Geothermal	0	0	0	0	200	0	0	200
DC - Rock Creek	NZP	FPD	ćΩ	Plan/Design General Services Building Renewal & Addition for Swing Space	0	0	0	0	0	0	3,500	3,500
DC - Rock Creek	NZP	FPD	_G	Plan/Design Mid-Zoo Entry	0	0	0	0	200	200	200	1,500
DC - Rock Creek	NZP	FPD	(c)	Plan/Design Small Mammal Renewal	0	0	0	0	0	200	200	1,000
DC - Rock Creek	NZP	FPD	Ġ	Plan/Design to Renew Think Tank facility	0	0	0	0	0	200	200	1,000
DC - Rock Creek	NZP	FPD	B	Plan/Design Lower Bear, Rock Creek & Lot D Renewal (Migratory Bird Habit≀	0	0	0	0	0	0	3,000	3,000
DC - Rock Creek	NZP	FPD	Ġ	Plan/Design Visitors Center Renewal	0	0	0	0	0	0	1,500	1,500
DC - Rock Creek	NZP	FPD	n	Plan/Design Children's Discovery Zone	0	0	0	0	0	0	1,500	1,500
DC - Rock Creek	NZP	FPD	n	Design to Improve Olmsted Walk Accessibility	0	0	0	0	0	0	300	300
DC - Rock Creek	NZP	FPD	n	Plan/Design Lion Tiger Building Replacement	0	0	0	0	0	0	3,000	3,000
DC - Rock Creek	NZP	FPD	4	Plan/Design Vehicle Barriers for Visitor Center	0	0	0	0	0	0	150	150
DC - Rock Creek	NZP	FPD	4	Plan/Design Connecticut Ave Entrance Renewal	0	0	0	0	0	0	750	750
DC - Rock Creek	NZP	FPD	4	Plan/Design Upper Bear, Anteater, Forest Carnivore, Lemur Island Renewal	0	0	0	0	0	0	4,000	4,000
DC - Rock Creek	NZP	FPD	4	Design Valley Revitalization for Marine Exhibit	0	0	0	0	0	0	4,000	4,000
DC - Rock Creek	NZP	FPD	4	Plan/Design Lab/Office Addition Research Area	0	0	0	0	0	0	3,000	3,000

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SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

on on	location	Category Priority	Joritv	s(000)s	FYOR	FY09	FY10	FY11	FY12	FY13 Outvears	tveacs	FY08-Outyrs Total
المرادة المرادة	NZD	- Legaria	-	Decide Vetarinery Harnitel renewal		, с					750	750
	NZP NZP	5 6	1 4	Design Vereilliai y 1103ptrai renewai Plan/Design Service Road to RH Hill	o c	0	o c	0 0	0	, c	750	750
	NZPFR	FPD		Plan/Design Fire Protection & Life Safety Projects	0	100	0	100	0	0	0	200
	NZPFR	FPD	2	Plan/Design Utility & Power Distribution - CRC	0	200	0	0	0	0	0	200
	NZPFR	FPD	G	Plan/Design Renewable Energy, CRC	0	0	0	0	250	0	0	250
Front Royal, VA NZ	NZPFR	FPD	3	Plan/Design Consolldated Maintenance Building	0	0	0	0	0	0	009	009
Front Royal, VA NZ	NZPFR	FPD	6)	Plan/Design OPS Security & Police Station	0	0	150	0	0	0	0	150
Front Royal, VA NZ	NZPFR	FPD	4	Plan/Design Sewer & Stormwater Management System Improvements - CRC	0	0	0	0	0	1,000	0	1,000
Front Royal, VA NZ	NZPFR	FPD	ო	Plan Site Improvements Training & Education Center - CRC	0	0	0	0	0	0	1,000	1,000
DC - Rock Creek NZ	NZP	MR	1	Asia Trail	000'6	0	0	0	0	0	0	000'6
DC - Rock Creek NZ	NZP	MR	1	Repair Structural Systems General Services Building	3,500	2,000	0	0	0	0	0	5,500
DC - Rock Creek NZ	NZP	MR	1	Install Emergency Generator, Visitors Center	400	0	0	0	0	0	0	400
DC - Rock Creek NZ	NZP	MR	1	Fire Protection Phase 2: Ape House, Lion/Tiger Bldg, Bird House	2,000	0	0	0	0	0	0	2,000
DC - Rock Creek NZ	NZP	MR	1	Fire Protection Phase 3: Mammals, Reptile, Think Tank, Amazonia, AT1	0	3,000	0	0	0	0	0	3,000
DC - Rock Creek NZ	NZP	MR	1	Fire Protection Phese 4: Boiler Plant, Misc. Small Bldgs, Visitor Center, GSB	0	3,000	0	0	0	0	0	3,000
DC - Rock Creek NZ	NZP	MR	1	Utility MP Phase 1: Water Power & Telecom to Vet Hosp/Research	1,500	0	0	0	0	0	0	1,500
	NZP	MR	1	Utility MP Phase 2a: Water Main to Lower Zoo (Adems Mill to Amazonia)	2,000	0	0	0	0	0	0	2,000
Rock Creek	NZP	MR	1	Utility MP Phase 2b: Water Main to Lower Zoo (Amazonia to Apes)	0	1,500	0	0	0	0	0	1,500
	NZP	MR	1	Utility MP Phase 3: Water, Storm, Steam, Telecom Apes to GSB	0	0	0	5,000	0	0	0	5,000
Rock Creek	NZP	MR	1	Renew Seel/Sea Lion Fecility, Phase 1: Life Support Systems	0	7,000	0	0	0	0	0	7,000
	NZP	MR	1	Renew Roof/Exterior Boiler Plant, Propagation, Lion/Tiger	0	2,000	0	0	0	0	0	2,000
Rock Creek	NZP	MR	1		0	2,000	0	0	0	0	0	2,000
	NZP	MR	1	Install Gate Closure Escape Prevention System	0	200	0	0	0	0	0	200
Creek	NZP	MR	2		0	0	0	1,000	0	0	1,000	2,000
Rock Creek	NZP	MR	2	Renew Seal/Sea Lion Facility, Phase 2: Facility Revitalization	0	0	7,000	13,000	0	0	0	20,000
Rock Creek	NZP	MR	2	Improve Pedestrian Safety & Vehiculer Access at Zoo Entry & North Road	0	0	0	0	10,000	0	0	10,000
Rock Creek	NZP	MR	2	Renew Bird House Hill Facilities	0	0	10,000	0	0	0	0	10,000
Rock Creek	NZP	MR	2	Utility MP Phase 8: Replace Storm, Sanitary, Telecom, Water Lot B to Lot E	0	0	0	0	2,000	2,000	0	4,000
Rock Creek	NZP	MR	2	Utility MP Phase 9: Replace Storm, Sanitary, Telecom Conn. Ave to Lot B	0	0	0	0	2,000	2,000	0	4,000
Rock Creek	NZP	MR	2	Renovate Cheetah Hill for Africen Savannah	0	0	0	0	10,000	10,000	0	20,000
Rock Creek	NZP	MR	2	Replace Apes Facility	0	0	0	0	0	10,000	0	10,000
Rock Creek	NZP	MR	2	Utility MP Phase 4: Replace Water, Steem, Telecom Think Tenk to Sm. Man	0	0	0	0	0	0	6,000	2,000
Rock Creek	NZP	MR	2	Utility MP Phase 5: Replace Storm, Sanitary, Steam & Telecom Mid to Lowe	0	0	0	0	0	0	4,000	4,000
Rock Creek	NZP	MR	G	Utility MP Phese 6: Replace Storm, Sanitary, Telecom, Water Beaver Valley	0	0	0	0	0	0	6,000	000'9
Rock Creek	NZP	MR	'n	Utility MP Phase 7: Replace Storm, Sanitary, Telecom Bird House Hill	0	0	5,000	0	0	0	0	5,000
Rock Creek	NZP	MR	'n	Replace Electric Substetion (Hawthorn St)	0	0	0	0	0	0	2,000	2,000
Rock Creek	NZP	MR	'n	Renew Roof & Exterior Roof MP Phases 11-15	0	0	0	0	0	0	2,000	2,000
Rock Creek	NZP	MR	G	Install Phase 1 Renewable Energy Systems	0	0	0	0	1,000	0	0	1,000
Rock Creek	NZP	MΒ	'n	Install Phase 2 Renewable Energy Systems	0	0	0	0	0	1,500	1,500	3,000
Rock Creek	NZP	MΒ	G	Improve Olmsted Walk for Accessibility	0	0	0	0	0	0	3,000	3,000
Rock Creek	NZP	MR	ß	Renew Small Mammal Bldg	0	0	0	0	0	0	2,000	2,000
	NZP	MΑ	co.	Renew Mid-Zoo Entry	0	0	0	0	0	0	10,000	10,000
Rock Creek	NZP	MΒ	'n	Renew Think Tank	0	0	0	0	0	0	5,000	5,000
Rock Creek	NZP	MR	co.	Renovate Lower Bear, Rock Creek, & Lot D for Migratory Bird Habitat	0	0	0	0	0	0	10,000	10,000
DC - Rock Creek NZ	NZP	M.	co.	Renew Visitors Center	0	o	0	0	0	0	10,000	10,000

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

	olad saconos		Boolone	FVOR	FV09	FV10	FV11	FV12	FV13 Outvages		FY08-Outyrs Total
	and dinge		rujeti	· ·						20041	000
2	MR	8	Renovate Lower Zoo for Children's Discovery Zone	0	0	0	0	0	0	2,000	2,000
2	MR	3	Replace Lion/Tiger Building	0	0	0	0	0	0	20,000	20,000
2	MR 4	4	Install Vehicle Barriers at Visitor Center	0	0	0	0	0	0	1,500	1,500
2	MR	4	Renew Connecticut Ave Entrance	0	0	0	0	0	0	5,000	5,000
2	MR 4	4	Renew Upper Bear, Anteater, Forest Carnivore, Lemur Island	0	0	0	0	0	0	30,000	30,000
2	MR 4	4	Renovate Velley for Marine Exhibit	0	0	0	0	0	0	20,000	20,000
2	MR 4	4	Install Service Road to BH Hill	0	0	0	0	0	0	5,000	5,000
2	MR 4	4	Renew Veterinary Hospital	0	0	0	0	0	0	5,000	6,000
2	MR	2	Fire Protection Plan Phase 1: Install Central Fire Alarm reporting system	100	0	0	0	0	0	0	100
2	MR	2	Fire Protection Plan Phase 2: Animal Holding Facilities	0	100	100	100	0	0	0	300
2	MR	2	Fire Protection Plan Phase 3: Dffice & Support Areas	0	0	0	0	100	0	0	100
2	MR	2	Install Emergency Generator, Research Core	300	0	0	0	0	0	0	300
2	MR	2	Improve Electric Power Distribution & Bury Overhead Utilities	0	0	250	200	0	0	0	750
2	MR	n	Fire Protection Plan Phase 4: Private Residences	0	0	0	0	0	100	o	100
2	MR	m	Install Renewable Energy Systems, CRC	0	0	0	0	0	0	2,000	2,000
2	MR .	n	Construct OPS Security & Police Station, CRC	0	0	0	1,000	0	0	0	1,000
2	MR 4	4	Upgrade Sewage Disposal System and Stormwater Management	0	0	0	0	0	0	6,000	000'9
			Project Subtotal	18,800	21,100	22,350	20,600	25,100	25,600	165,000	298,550
0	DR 1	1	Replace Greenhouse	300	0	0	0	0	0	0	300
	DR 1	1	Improve Animal Pools & Containment Phase 1: Bird House & Active Leaks (I	200	0	0	0	0	0	0	200
	DR	2	Improve Animal Pools & Containment Phase 2 Valley	0	0	0	300	0	0	0	300
0	OR	2	Repair/Renew Police Station (Design FY06\$)	0	1,000	0	0	0	0	0	1,000
0	OR .	2	Renew Service Infrastructure Ph 1: Lower Zoo Toilets, Keeper Rooms, Walk:	0	150	0	0	0	0	0	150
0	OR .	2	Renew Service Infrastructure Ph 2: Upper Zoo Toilets, Keeper Rooms, Walks	0	0	200	0	0	0	0	200
0	OR .	2	Renew Service Infrastructure Ph 3: Mid-Zoo Toilets, Keeper Rooms, Walks, I	0	0	0	200	0	0	0	200
	DR	B	Design Phase 3 Improve Animal Pools & Containment Lower Zoo	0	0	20	0	0	0	0	90
0		3	Improve Animal Pools & Containment Phase 3 Lower Zoo	0	0	0	400	0	0	0	400
	DR	m	Design Phase 4 Improve Animal Pools & Containment Mid-Zoo	0	0	0	90	0	0	0	50
	DR	n	Improve Animal Pools & Containment Phase 4 Mid-Zoo	0	0	0	0	250	0	0	250
	DR	m	Renovate DCB staff areas	0	0	0	0	0	200	0	200
	DR .	m	Implement Holt House Stabilization	0	0	0	0	0	0	250	250
	DR	m	Design/Relocate NZP server room to DCB Bldg	0	0	0	0	0	0	006	900
O	CDN	n	Construct Site Improvements Training & Education Center, CRC	0	0	0	0	0	0	20,000	20,000
O	CON	8	Construct Consolidated Maintenance Shop	0	0	0	0	0	0	4,000	4,000
0	CON	m	General Services Building Renewal & Space Addition	0	0	0	0	0	0	20,000	20,000
0	CON	4	Construct Lab/Office Addition Research Area	0	0	0	0	0	0	20,000	20,000
			Subtotal; NZP	21,860	27,000	25,450	25,900	2B,600	29,500	261,300	419,610

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

			s(nnn)s							ц	FV08-Outiers
Campus Location Quadrangle: Nationa	al Museun	n of Af	Campus Location Category Priority Project Quadrangle: National Museum of African Art, Sackler Gallery, Ripley Center	FY08	FY09	FY10	FY11	FY12	FY13 Outyaars		Total
ì						,			•	•	
OC - Mell OUAD	FPD	n	Ouadrangle/Freer Mester Plan	0	009	0	0	0	0	0	009
OC - Mall OUAO	FPD	n	Oesign Mechenical & Electrical System Replacement	0	0	0	0	0	860	0	850
OC - Mall OUA0	FPD	9	Oesign Roof Replacement	0	0	0	0	0	0	5,000	5,000
		(c	c	c	c	c	c	0	a
	Σ	מ	Replace Mechanical & Electrical Systems	> 1	> 1	> 1	> 1	> 1) (006,0	000,0
OC - Mall OUAO	MR	2	Replace Roof	0	0	0	0	0	0	26,000	96,000
		•		C	(C	c	C	c	c	
	OR	co.	Reconfigure Sackler Collection Storage Space	0	0	0	0	200	0 '	> (000
OC - Mall OUAO	OR	n	Connect GSA Chilled Water System	0	1,500	0	0	0	0	0	1,500
OC - Mall OUAO	OR	က	Repair Pavilion Roofs	0	0	0	0	0	1,000	0	1,000
OC - Mell OUAD	OR	4	Clean Agent Fire Protection System in Collections Storage, Sackler	0	0	0	0	0	0	200	200
OC - Mail OUAD	OR	5	Repair Interior Stone	0	0	0	0	0	0	250	250
			Subtotel: QUAD	0	2,100	0	0	200	1,850	70,250	74,700
Renwick Gallery											
OC - Lefavette Park RG	FP0	2	Benwick Mester Pan	0	0	0	400	0	0	0	400
OC - Lafayette Parl RG	FPO	1 m	Oesign Major Restoretion	0	0	0	0	0	0	3,000	3,000
				;	The state of the s	400	-	Mary and a		4	4
DC - Lafeyette Parl RG	M	М	Restore Renwick Gallery	0 - 200 g - 20		on the first of the first one the first on the first on the first on the first on the first one the fir	0	O CONTRACTOR OF THE PROPERTY O	O	25,000	25,000
OC - Lefayette Parl RG	OR	2	Modify Attlc Access Catwelks	0	300	0	0	0	0	0	300
OC - Lafayette Parl RG	OR	2	Replace Ceiling In Gellery 104	0	350	0	0	0	0	0	350
OC - Lefeyette PerHRG	OR	2	Upgrade Access, OPS Locker Rms & Basement Repairs	0	800	0	0	0	0	0	800
OC - Lefayette Parl RG	OR	n	Remediate HVAC & Electrical Systems	0	0	0	0	0	0	1,000	1,000
OC - Lafayette Parl RG	OR	n	Repair Entrence Stairs	0	0	0	200	200	50	0	400
OC - Lefayette Parl RG	OR	т	Repair Exterior Stone Joints	0	0	0	0	009	0	0	009
			Subtotal: RGA	0	1,450	0	009	800	0	29,000	31,850
Donald W. Reynold	s Center f	or Am	Donald W. Reynolds Center for American Art and Portraiture (formerly Patent Office Building)								
OC - Gallery Place POB	FPO	c)	Update DWRC Master Plan	0	0	0	0	0	0	009	009
DC - Gallery Place POB	OR	2	Waterproof East Moat	0	150	0	0	0	0	0	150
DC - Gallery Place PO8	OR	2	Provide Skylight Scrims for West and South Wings	0	250	0	0	0	0	0	250
OC - Gellery Place POB	OR	2	Replace Material and Loading Dock Lifts	0	0	250	0	0	0	0	250
OC - Gellery Place POB	OR	n	Upgrade Lendscape	0	0	0	0	0	2,000	0	6,000
OC - Gallery Place POB	OR	m		0	0	0	0	250	0	0	250
OC - Gallery Place *POB	OR	m c	Resurface & Improve Orainage at F Street Portico	0 0	0 0	0 0	0 0	350	0 0	0 0	350
UC - Gellery Mece PUB	5	ת	Upgrade Auditorium Acoustics and Finishes	>	>	>	>	900	0	>	000
			Subtotel: POB	0	400	250	0	006	5,000	0	099'9

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

				s(000)s							¥	FV08-Outvre
Campus	Location	Category Priority Project	Priority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
Security and Anti-Terrorism Throughout SI	Inti-Ter	rorism Th	rough	nout SI								
All Fecilities	SECURITY	FPD	2	Design Quad & HMSG Perimeter Barriers	0	1,400	0	0	0	0	0	1,400
All Facilities S	SECURITY	FPD	2	Design Glass Mitigation, RGA/FGA/SIB/CHM/GGHC/NMAfA/NPM	490	450	450	280	0	0	0	1,670
All Fecilities S	SECURITY	FPD	2	Design Glass Mitigation, NASM	0	200	2,000	0	0	0	0	2,500
All Fecilities S	SECURITY	FPD	2	Design Glass Mitigation, Tupper	0	90	0	0	0	0	0	20
All Fecilities S	SECURITY	FPD	2	Design Tupper Perimeter Security	0	200	0	0	0	0	0	200
All Facilities S	SECURITY	FPD	2	Feasibility/Design Air Intakes for Chem/Bio/Radio Mitigation	0	200	0	300	0	0	0	200
All Facilities S	SECURITY	FPD	2	Design Emergency Voice System, NZP	0	0	200	300	0	0	0	500
All Facilities S	SECURITY	FPD	'n	Design Dff-Mall Perimeter Barriers, RGA	0	0	200	250	0	0	0	450
All Facilities S	SECURITY	FPD	n	Design Electronic Access Control, NASM	0	0	30	0	0	0	0	30
All Facilities S	SECURITY	FPD	c)	Design Glass Mitigation, Hazy	0	0	0	100	200	0	0	300
All Facilities S	SECURITY	FPD	co.	Design Off-Mall Perimeter Barriers, Reynolds/RGA	0	0	0	009	0	0	0	009
All Facilities S	SECURITY	FPD	4	Design Off-Mall Perimeter Barriers, Hazy	0	0	0	100	400	0	0	500
All Facilities S	SECURITY	FPD	4	Design Perimeter Camera Systems, Off Mall	0	0	0	0	105	0	0	105
				Anti-Terrorism Design Project Subtotal	490	2,800	2,880	1,930	202	0	0	8,805
All Facilities S	SECURITY	FPD	2	Design Security System Modernizations, Multiple Locations	350	900	330	510	250	100	1,000	3,440
All Facilities S	SECURITY	FPD	2	Study Multi-Hazard Risk Mitigation	0	150	150	0	0	0	0	300
All Facilities S	SECURITY	MR	1	Construct NMAH Perimeter Barriers	8,000	0	0	0	0	0	0	8,000
All Facilities	SECURITY	MR	2	Construct NMNH Barriers at 12th & Madison Drive	0	0	1,800	0	0	0	0	1,800
All Facilities	SECURITY	MR	2	Install POB Glass Mitigation	0	7,000	2,000	0	0	0	0	9,000
All Facilities	SECURITY	MR	2	Construct Tupper Perimeter Security/Safety/Accessibility	0	0	1,500	0	0	0	0	1,500
All Facilities	SECURITY	MR	2	Install Freer Glass Mitigation	0	0	1,200	0	0	0	0	1,200
All Facilities S	SECURITY	MR	2	Install Capital Gallery Glass Mitigation	0	0	300	0	0	0	0	300
All Facilities	SECURITY	MR	2	Install Renwick Glass Mitigation	0	0	2,200	0	0	0	0	2,200
All Facilities	SECURITY	MR	2	Install Tupper Glass Mitigation	0	0	200	0	0	0	0	200
All Facilities	SECURITY	MR	2	Construct Quad & HMSC Perimeter Barriers	0	0	0	14,000	0	0	0	14,000
All Facilities	SECURITY	MR	2	Install Cooper-Hewitt Glass Mitigation	0	0	0	1,000	0	0	0	1,000
All Facilities S	SECURITY	MR	2	Install GGHC Glass Mitigation	0	0	0	1,000	0	0	0	1,000
All Facilities S	SECURITY	MR	2	Install NMAH Electronic Access Control (Public/Staff Separation)	0	0	0	450	0	0	0	450
All Facilities S	SECURITY	MR	2	Install Castle Glass Mitigation	0	0	0	0	3,000	0	0	3,000
	SECURITY	MR	2	Install NASM Glass Mitigation	0	0	0	0	10,000	10,000	25,000	45,000
	SECURITY	MR	2	Install Postal Museum Glass Mitigation	0	0	0	0	1,000	0	0	1,000
	SECURITY	MR	2	Install Emergency Voice System at NZP	0	0	0	0	2,500	0	0	2,500
All Facilities S	SECURITY	MR	c,	Install NASM Electronic Access Control (Public/Staff Separation)	0	0	0	0	250	0	0	250
All Facilities S	SECURITY	MR	Э	Construct POB Barriers	0	0	0	0	0	5,000	0	5,000
All Facilities S	SECURITY	MR	c,	Construct Renwick Barriers	0	0	0	0	0	2,000	0	2,000
All Facilities S	SECURITY	MR	ćΩ	Install Hazy Gless Mitigation	0	0	0	0	0	3,000	0	3,000
All Facilities S	SECURITY	MR	ćΩ	Install NMAfA Stained Glass Protection	0	0	0	0	0	0	200	200
All Facilities S	SECURITY	MR	(C)	Install Anacostia Museum Security Fence, Gate & Guard Booth	0	0	0	0	0	0	1,000	1,000
All Facilities S	SECURITY	MΒ	4	Construct Hazy Barriers	0	0	0	0	0	0	5,000	5,000
All Facilities S	SECURITY	MR	4	Modify Air Intakes for Chem/Bio/Radio Mitigation	0	0	0	0	0	0	4,000	4,000
All Facilities S	SECURITY	MR	4	Provide Perimeter Camere Systems, Off Mall Buildings	0	0	0	0	0	0	700	700

MR = Major Revitalization; OR = Other Revitalization; Con = Construction; FPD = Facilities Planning Design

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

FY08-Outyrs	Total	113.600	B00	2,000	2,000	300	1,000	200	1,000	1,000	400	1,050	1,000	200	2,000	300	3,000	009	200	1,000	400	200	1,000	20,450	146,595		1,500	300	100	350	22B	150	200	200	200	100	200	200	3,000	2,000	006	009	950	09
	tyears	35.900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,000	0	0	1,000	400	200	0	4,900	41,B00		0	0	0	0	0	0	0	0	0	0	0	0	3,000	0	0	009	950	0
	FY13 Outyears	20.000	0	0	0	0	0	0	0	0	0	0	1,000	0	2,000	300	0	200	200	0	0	0	1,000	5,300	25,400		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (0
	FY12	16.750	0	0	0	0	1,000	0	1.000	1,000	0	1,050	0	200	0	0	0	0	0	0	0	0	0	4,550	22,255		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0 (0
	FY11	16.450	0	0	2,000	0	0	0	0	0	400	0	0	0	0	0	0	0	0	0	0	0	0	2,400	21,290		0	0	100	0	0	0	0	0	0	0	0	200	0	1,000	0	0	0	0
	FY10	9.500	0	0	0	300	0	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	13,360		0	100	0	0	0	0	0	0	0	0	0	0	0	1,000	0	0	0	09
	FY09	2.000	B00	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,800	13,650		1,500	0	0	350	228	0	200	200	200	100	0	0	0	0	006	0		0
	FY08	8.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	B,B40		0	200	0	0	0	150	0	0	0	0	200	0	0	0	0	0	0	0
\$(000)\$	ty Project	Anti-Terrorism Project Subtotal	Modernize Electronic Security, Renwick Gallery	Upgrade Collection Storage Electronic Security, NMNH	Modernize Electronic Security, Control Rm, Perimeter, CHM	Upgrade Perimeter Gates & Controls, NZP-Rock Creek	Modernize Elect. Security, Intrusion Detection & Access Control, NZP	Upgrade Intrusion Oetection & Access Control, Apollo Orive	Modernize Electronic Security, SERC	Modernize Electronic Security, GGHC	Upgrade Gallery Electronic Security Infrastructure, Quadrangle	Modernize Security Systems, MSC	Modernize Electronic Security, STRI	Upgrade Collection Storage Electronic Security, NMAH	Modernize Exhibit/Gallery Electronic Security, NASM		Modernize Exhibit/Gallery (Paleo) Electronic Security, NMNH	Upgrade Intrusion Oetection & Access Control, Front Royal	Modernize Electronic Security, NPM	Revitalization Operable Security Bollards	Modernize Security Systems, Garber	Upgrade Locker Rooms, NASM	Install Security Fence, Gate & Guard Booth, AM	Modernize Security Systems Subtotal	Subtotal: Security & Antl-Terrorism	atory	SAO Master Plen, Tucson, Hawaii & Cambridge	Fire Hazard Risk Assessment, Cambridge Buildings	Design Construct Hilo Control Building Extension	Replace Guardrails, Mt. Hopkins Road	Install New Large Water Tenk	Improve Fire Sefety, SMA	Repair MMT Floor	Site-Wide Radio Fire Alarm System, FLWO	Install Summit Antennae Fire Suppression System	Install Spectrograph Fire Suppression System	Install Fire Suppression, Summit Control Building	Install Microwave Link Summit to Tucson	Repair/Replace Summit Oorm	Repair/Improve Whipple Road	Construct Instrument Repair Facility		Construct Expansion of Summit Facility for Additional Lab Space	Replace FM Repeater
	Category Priority		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			bserva	2	2	'n	1	1	1	1	2	2	2	2	2	2	2	2	<i>σ</i> (m ('n
	Categor		OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR			ysical G	FPD	FPD	FPD	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR (OR U	OR
	Location		SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY	SECURITY			Astrophy	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO	SAO
	Cempus		All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Facilities	All Fecilities	All Fecilities	All Facilities	All Fecilities	All Facilities			Smithsonian Astrophysical Observatory	AZ, MA & HI	Cambridge, MA	Tucson, AZ	Tucson, AZ	Tucson, AZ	Hawaii	Tucson, AZ	Tucson, AZ	Tucson, AZ	Tucson, AZ	Tucson, AZ	Tucson, AZ	Tucson, AZ	Tucson, AZ	Tucson, AZ	Hawaii	Hawaii	Tucson, AZ

MR = Major Revitalization; OR = Other Revitalization; Con = Construction; FPD = Facilities Planning Design

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SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

				signals								FY08-Outyrs
Campus	Location	Category Priority	Priority	/ Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyeers	utyeers	Total
Tucson, AZ	SAD	DR	B	Replace Fire Alarm System at Basecamp & Ridge Dorm	0	0	0	300	0	0	0	300
Tucson, AZ	SAD	OR	E	Long Term MMT Instrument Accommodation	0	0	0	0	0	0	200	200
Cembridge, MA	SAD	OR	4	Upgrade Computer Room at 60 Garden Street	0	0	0	0	0	0	235	235
Haweii	SAD	OR	4	Install Hilo Base Building Generator	0	0	0	0	0	0	200	200
Tucson, AZ	SAO	OR	4	Construct Visitor's Expansion	0	0	0	0	0	0	200	200
Tucson, AZ	SAD	OR	4	Replace HVAC	0	0	0	0	0	0	200	200
Hawaii	SAD	CDN	ы	Construct Hilo Control Building Extension +	0	0	0	0	0	0	1,000	1,000
				Subtotal: SAO	550	3,678	1,160	1,600	0	0	6,885	13,873
Smithsonian Environmental Research Center	. Environ	nental Re	searc	h Center								
Edgewater, MD	SERC	FPD	2	Design Mathias Lab Modules (Replace Trailers)	0	3,500	0	0	0	0		3,500
Edgewater, MD	SERC	FPD	က	Design Alcohol Storage Building	0	0	0	200	0	0	0	200
Edgewater, MD	SERC	FPD	က	Design Annex to Reed Center	0	0	0	0	0	0	150	150
Edgewater, MD	SERC	FPD	က	Design Auditorium	0	0	0	0	0	0	200	200
Edgewater, MD	SERC	FPD	က	Design Experimental Research Facility	0	0	0	0	0	0	400	400
Edgewater, MD	SERC	FPD	က	Design SERC Library	0	0	0	0	0	0	200	200
Edgewater, MD	SERC	FPD	ო	Design New Lab Building	0	0	0	0	0	0	1,200	1,200
Edgewater, MD	SERC	FPD	60	Design Visitor Reception	0	0	0	0	0	0	200	200
Edgewater, MD	SERC	OR	2	Replace HVAC Systems	0	0	4,000	0	0	0	0	4,000
Edgewater, MD	SERC	OR	2	Improve Utility Systems	0	200	0	0	0	0	0	200
Edgewater, MD	SERC	OR	2	Construct Fire Protection Water Distribution System	0	200	0	0	0	0	0	200
Edgewater, MD	SERC	DR	က	Construct Improvements to Entrance Road	0	0	0	0	1,600	0	0	1,600
Edgewater, MD	SERC	DR	က	Renovate Schmidt Building	0	0	0	0	0	0	1,500	1,500
Edgewater, MD	SERC	DR	cΩ	Install Utility Connection to Waterfront	0	0	0	0	0	0	1,000	1,000
Edgewater, MD	SERC	DR	က	Repair Corn Island Facilities	0	0	0	0	0	0	2,000	2,000
Edgewater, MD	SERC	OR	n	Construct Improvements to Security	0	0	0	0	009	0	0	009
Edgewater, MD	SERC	OR	n	Construct Trail System Improvements	0	0	0	0	0	0	150	150
Edgewater, MD	SERC	CON	2	Construct Mathias Lab Modules (Replace Trailers)	0	0	12,000	25,000	0	0	0	37,000
Edgewater, MD	SERC	CON	B	Construct Alcohol Storage Building	0	0	0	0	0	0	2,000	2,000
Edgewater, MD	SERC	CDN	ß	Construct Annex to Reed Center	0	0	0	0	0	0	1,500	1,500
Edgewater, MD	SERC	CDN	n	Construct Auditorium	0	0	0	0	0	0	2,000	2,000
Edgewater, MD	SERC	CDN	B	Construct Library	0	0	0	0	0	0	2,000	2,000
Edgewater, MD	SERC	CDN	n	Construct New Lab Building	0	0	0	0	0	0	12,000	12,000
Edgewater, MD	SERC	CDN	n	Construct Visitors Reception	0	0	0	0	0	0	2.000	2,000
Edgewater, MD	SERC	CDN	ß	Construct Experimental Research Facility	0	0	0	0	0	0	4,000	4,000
				Subtotal; SERC	0	4,500	16,000	25,200	2,200	0	32,500	80,400

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)\$

				s(000)\$							4	FY08-Outvrs
Campus Smithsonia	Location an Institut	Smithsonian Institution Building (Castle)	Priority (Cas	Project Stle)	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
DC - Mall DC - Mall	SIB	PPO PPO	2 2	Castle Master Plan/Historic Structures Report Design Restoration Project & Swing Space	009	250	000'2	0 2,000	00	00	00	B50 14,000
DC · Mall	SIB	MR	2	Renovate Smithsonian Castle	0	0	0	0	10,000	45,000	100,000	155,000
DC - Mall	SIB	OR	2	Replace Fire Alarm	0	450	0	0	0	0	0	450
				Subtotal: SIB	009	700	7,000	7,000	10,000	45,000	100,000	170,300
Smithsonia	ın Tropic	Smithsonian Tropical Research Institute	Instit	tute								
Panama	STRI	OR	1	Replace Gamboa Old Schoolhouse, Phase I	1,500	4,600	400	0	0	0	0	6,500
Panama	STRI	MR	2	Gamboa Oevelopment Land Purchase	0	3,400	0	0	0	0	0	3,400
Panama	STRI	MB	1	Upgrade Site Utilities & Infrastructure, Gamboa	0	1,500	0	0	0	0	0	1,500
Paname	STRI	OR	1	Replace BCI Visitor's Center	0	0	650	0	0	0	0	650
Panama	STRI	OR	1	Improve BCI Fire Protection System	0	325	0	0	0	0	0	325
Panama	STRI	OR	1	Bocas del Toro Fire Protection System, Phase 2	0	250	0	0	0	0	0	260
Panama	STRI	OR	1	Bocas del Toro Sewage Treatment Plant	0	200	0	0	0	0	0	200
Panama	STRI	OR	2	Upgrede Electrical System at Tupper Center	0 (0 (250	0 (0 (0 (0 (250
Paname	STRI	OR OR	2	Repair/Replace Oormitories Galeta	0 (0 (250	0 (0 (0 (0 (250
Paname	STRI	OR	2 0	Provide Back Up Chiller Unit Tupper/Tivoli Complex	0	0	245	o c	5 6	0	0 0	245
Panama	מדמ		7 0	Reinforce Structures, but scientific Joims & bigante Unice/Dorms Beinforce Structure Mace Building 359	o c	140	0 0	o c	o c	o c	o c	140
Penama	STRI	OR	, c	Replace Tramway, BCI) O	2 0	630	0	0	0	0	020
Paname	STRI	OR	ı m	Safety Improvements/Enlarge Gamboa Pier Site	0	0	0	750	0	0	0	750
Panama	STRI	OR	'n	Repair Coibita Facilities	0	0	0	009	0	0	0	009
Paname	STRI	OR	n	Construct New Oormitory Bocas	0	0	0	450	0	0	0	450
Panama	STRI	OR	3	Improve BCI Emergency Evacuation (Helipad) & Erosion Control	0	0	0	250	0	0	0	250
Penama	STRI	OR	B	Relocete Culebra Admin Offices/Resolve Serious Leaks	0	0	0	230	0	0	0	230
Paname	STRI	OR	'n	Improve Façade All Naos Buildings - w New Fence	0	0	0	200	0	0	0	200
Paname	STRI	OR	B	Replace Gamewarden's Office at BCI	0	0	0	175	0	0	0	175
Panama	STRI	OR O	<i>ω</i> <	Replace Crane at Gamboa Dock	0 0	0 0	0 0	125	0 6	0 0	0 0	125
Panama	מבט מבט	5 8	1 4	Constituti New Mook of eak Water, INdos	0 0	0 0	0 0	> <	900	250	o c	900
Panama	STRI	OR	4	Move Crane) o	0	0	o 0	200	90	0	200
Panama	STR	OR	'n	Construct New Bookstore & Visitor Center Tupper (A&M)	0	0	0	0	290	0	0	290
Panama	STRI	OR	4	Repair/Replace Diving Locker and Boat Shop area, Naos	0	0	0	0	225	0	0	225
Panama	STRI	OR	ß	Construct New Galeta Conference Center	0	0	0	0	175	0	0	175
Panama	STRI	OR	4	Relocate Exhibits, Classrooms, Lunchroom Bocas	0	0	0	0	125	0	0	125
Panama	STRI	OR	4	Boat House & Crane at Bocas Station	0	0	0	0	0	0	110	110
Panema	STRI	OR	c)	Renovate Tupper building Cafeteria (A&M)	0	0	0	0	0	0	120	120
Penama	STRI	CON	'n	Replace STRI Floating Lab (R/U Urraca)	0	0	0	0	0	0	7,000	7,000
				Subtotal: STRI	1,500	10,415	2,615	2,780	2,720	350	7,230	27,610

MR = Major Revitalization; OR = Other Revitalization; Con = Construction; FPD = Facilities Planning Design

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Building \$(000)s

				8(000)2							4	FY08-Outvrs
Campus	Location	Category Priority Projact	Priority	Projact	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
Suitland Co	ollections	Center (C	ultural	Suitland Collections Center (Cultural Resources Center, Suitland Support Facility & Museum Support Center)	ipport Cel	nter)						
Suitland, MD	MSC	FPD	2	Design Mechanical & Electrical Systems Upgrade	0	0	1,000	1,000	0	0	0	2,000
Suitland, MD	MSC	FPD	ß	Design Pod 6 Construction	0	0	0	0	0	0	5,000	5,000
Suitlend, MD	SSF	FPD	5	Design Infrestructure Revitalization	0	0	0	0	0	0	2,000	2,000
Suitland, MD	MSC	MR	2	Renovate Pod 3/Collections Storage Improvements	10,000	15,000	15,000	0	0	0	0	40,000
Suitland, MD	SSF	MR	2	Replace Greenhouses	2,800	8,200	0	0	0	0	0	11,000
Suitland, MD	MSC	MR	2	Upgrade/Balance Mechanical & Electrical Systems (Pod 1,2, 4, Labs)	0	0	0	0	6,500	6,500	6,500	19,500
Suitland, MD	SSF	MR	9	Revitalize Infrastructure	0	0	0	0	0	0	24,000	24,000
Suitlend, MD	MSC	OR	1	Improve Fire Detection & Protection	2,500	0	0	0	0	0	0	2,500
Suitland, MD	SSF	OR	2	Detectors & Alarms, Buildings 7, 20, 21, 24, 31	0	1,200	0	0	0	0	0	1,200
Suitland, MD	SSF	OR	2	Detectors & Alarms, Buildings 25, 26, 28, 34	0	0	1,200	0	0	0	0	1,200
Suitland, MD	SSF	OR	2	Detectors & Alarms, Buildings 17, 19	0	0	0	009	0	0	0	009
Suitland, MD	SSF	OR	2	Detectors & Alarms, Remaining Buildings	0	0	0	0	1,000	0	0	1,000
Suitland, MD	SSF	OR	2	Install Fire Separation, Building 19	0	300	0	0	0	0	0	300
Suitland, MD	SSF	OR	2	Provide Surge Protection for Site	0	1,300	0	0	0	0	0	1,300
Suitland, MD	MSC	OR	2	Replace Steam Condensate System	0	0	2,500	0	0	0	0	2,500
Suitland, MD	SSF	OR	1	Bank Stabilization/Erosion Control Between Buildings 6 & 31	0	200	0	0	0	0	0	200
Suitland, MD	SSF	OR	2	Demolish Buildings 15 & 1B, Move Collections	2,000	3,000	0	0	0	0	0	5,000
Suitland, MD	SSF	OR	2	Fire Separation Between Collections and Mechanical Room (bldg?)	0	300	0	0	0	0	0	300
Suitland, MD	MSC	OR	2	Replace Switchgear Controllers and Switches	0	1,100	0	0	0	0	0	1,100
Suitland, MD	SSF	OR	S	Repair Loading Dock, Building 2B	0	150	0	0	0	0	0	150
Suitland, MD	MSC	OR	co	Restore NMAH Conservation Lab	0	0	880	0	0	0	0	880
Suitland, MD	SSF	OR	'n	Demolish Buildings 1 - 6, 22 & 23, Move Collections	0	0	2,300	2,000	0	0	0	4,300
Suitland, MD	SSF	OR	co	Demolish Building 27, Move Collections	0	0	0	0	1,400	0	0	1,400
Suitland, MD	SSF	DR	B	Demolish Building 10	0	0	0	0	0	3,000	0	3,000
Suitland, MD	SSF	DR	n	Improve Environmental Conditions, Bldg 21	0	0	0	0	0	0	1,500	1,500
Suitland, MD	SSF	DR	B	Horticulture Support Building Fire Egress	0	0	0	0	400	0	0	400
Suitland, MD	MSC	DR	S	Osteoprep Lab Freezer Shed & Emergency Generator	0	0	0	200	0	0	0	200
Suitland, MD	MSC	OR	'n	Botany Greenhouse Improvements	0	0	0	0	250	0	0	250
Suitland, MD	MSC	OR	'n	Fume Hood Improvements & Lab Modernizations, Sect. A & B Labs	0	0	0	200	0	0	0	200
Suitland, MD	MSC	OR	S	Fume Hood Improvements & Lab Modernizations, Sect C-F Labs	0	0	0	0	350	0	0	350
Suitland, MD	MSC	OR	n	Fume Hood Improvements & Lab Modernizations, Sect G & Pods	0	0	0	0	0	400	0	400
Suitland, MD	MSC	OR	'n	Fume Hood Improvements & Lab Modernizations, Greenhse/Bldg 26	0	0	0	0	0	0	450	450
Suitland, MD	SSF	OR	m	Renovate Buildings 7 & 31	0	0	0	0	0	0	4,000	4,000
Suitland, MD	MSC	CDN	т	Construct Pod 6	0	0	0	0	0	0	45,000	45,000
				Subtotal: Suitland	17,300	31,050	22,880	4,000	006'6	006'6	BB,450	1B3,4B0

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Building \$\\$(1000)\$

Steven F. Udvar-Hazy Center Chantilly, VA U-Hazy MR 4 Roof R. Chantilly, VA U-Hazy MR 4 Roof R. Chantilly, VA U-Hazy MR 4 Roof R.	Center Center FPO MR	dority 4	Project Design Roof Replacement Roof Replacement Install Snow Milication	<i>FY08</i> 0 0 0	6709	0 0 0 0	0 0	FV12 0 0	FY13 Outyears 0 5,0	. 0 0 0	5,000
	: r	4 4	Upgrade Emergency Power	0	0	0	0	0	0	1,000	1,000
U-Hazy OR	r	4	Replace Perimeter Gates with Security Gates	0	0	0	0	0	0	1,500	1,500
U-Hazy OR	r	4	Regrade and Stabilize Perimeter Road	0	0	0	0	0	0	750	750
U-Hazy OR	œ	4	Add Emergency Access Road @ North End of Mein Hangar	0	0	0	0	0	0	006	006
		-	Subtotal: Hezy	0	0	0	0	0	0	12,650	12,650

TOTAL REQUEST
107,100
167,800
181,780
182,380 167,455
167,455
170,000
903,795

1,880,510

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Category \$(000)s

Campus Location		Category Priority Project	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		FY08-Outyrs Total
REVITALIZATION	z										
Major Revitalization	_										
DC - Mall AIB	MR	n	Restore Arts & Industries Building	0	0	0	0	0	0	TBD	TBD
	M	2	Restore/Repair Exterior Façade	0	0	0	0	7,300	0	0	7,300
DC - Mall HMSG	M	ь	Restore & Waterproof Plaza & Foundation Walls	0	0	0	0	0	0	10,000	10,000
DC - Mall HMSG	MR	4	Rehabilitate 4th Floor	0	0	0	0	0	0	8,500	8,500
Suitlend, MD MSC	MR	7	Renovate Pod 3/Collections Storage Improvements	10,000	15,000	15,000	0	0	0	0	40,000
Suitland, MD MSC	MR	2	Upgrade/Balance Mechanical & Electrical Systems (Pod 1,2, 4, Labs)	0	0	0	0	6,500	6,500	6,500	19,500
	MR	2	Replace Electrical Systems	8,500	0	0	0	0	0	0	8,500
	MR	2	Replace Mechanical Systems	0 (0 (0	0 (0 (0 (50,000	50,000
	MR:	7 (Provide Swing Space for Wing Revitalization	0 (0 0	20,000	0 00	0 00	0 0	0 0	20,000
DC - Mall NMAH	H 5	ν ς	Henew West Wing	. c	o c	o c	000,000	000,00	o c	35 000	35,000
	2 E	1 4	Renew Non-Public Space Infrastructure	0	0	0	0	0	0	65,000	65,000
	Σ	. 2	Renovate Main Building Windows/Entrances	2,750	1,200	1,700	1,000	1,300	1,000	0	8,950
	MR	2	Renovate Elevators	3,000	0	1,000	0	2,000	0	0	000′9
	MR	2	Renovate Air Towers/Balance Air Supply	1,550	1,900	0	550	0	0	0	4,000
DC - Mall NMNH	MM	2	Renovate Ground Floor WW (LAB Ph I)	5,700	3,000	0	0	0	0	0	8,700
DC - Mall NMNH	MR	2	Renovate East Court (Basement, Ground, 1st Floor)	2,000	2,000	2,000	0	0	0	0	000'9
DC - Mall NMNH	MR	2	Renovate SE Main Ground Floor/Mezz, Ph I	000′9	2,000	0	0	0	0	0	8,000
DC - Mall NMNH	MR	2	Renovate Utility Tunnels	1,500	2,000	0	0	0	0	0	3,500
DC - Mail NMNH	MR	2	Renovate West Wing Basement Ph III	0	2,000	0	0	0	0	0	2,000
	MR	2	Renovate 6th Floor EW (LAB Ph II)	0	4,500	2,500	0	0	0	0	7,000
DC - Mall NMNH	M	2	Renovate NE Main Ground FIr, Ph IV (w/SEEC)	0	3,700	7,800	0	0	0	0	11,500
	MR	2	Renovate/Replace Emergency Generators & High Voltage Vault	0	2,400	1,100	0	0	0	0	3,500
	MR	2	Changes to Rotunda Area & Diocletian Lighting	0	1,000	0	0	0	0	0	1,000
DC - Mall NMNH	M	2	Renovate Basement EW, Ph II	0	0	7,300	0	0	0	0	7,300
	M	2	Renovate 1st Floor WW (LAB Ph III)	0	0	4,200	3,800	0	0	0	8,000
Mail	Z :	2	Renovate Ground Fir EW, Ph III	0 (0 (1,700	7,000	0 (0 (0 (8,700
	Ψ :	2 (Renovate Halls 2-6 (Dinosaurs)	o «	o (2,000	12,650	350	0 0	o 0	15,000
DC - Mail NMNH	¥ 2	V (Renovate Stair Towers/Fire Egress (TO total)	o (> C	O (000,	000, 1	00+,-	> 0	4,000
	N M	v c	RETOVATE TWO MAIN OF MIEZZ	o c	o c	o c	001	000	o c	o C	6,000
	MB	1 2	Renovate 3rd Floor WW	0	0	0	0	0	6,000	0	6,000
	MR	2	Renovate 4th Floor WW	0	0	0	0	0	000′9	0	000'9
DC - Mall NMNH	MR	2	Renovate SW Main GF/Mezz	0	0	0	0	0	6,950	2,050	000'6
DC - Mall NMNH	MR	2	Renovate 1st Floor EW	0	0	0	0	0	0	7,500	7,500
DC - Mall NMNH	MR	2	Renovate 2d Floor EW	0	0	0	0	0	0	7,500	7,500
DC - Mall NMNH	MR	7	Renovate 3rd Floor EW	0	0	0	0	0	0	6,500	6,500
DC - Mali NMNH	MR	n	Renovate Hall 26	0	0	0	1,000	3,000	0	0	4,000
	MR	က	Renovate 5th Floor WW	0	0	0	0	7,000	0	0	7,000
DC - Mail NMNH	MR	ო	Renovate Baird Auditorium	0	0	0	0	2,400	0	0	2,400

MR = Major Revitalization; OR = Other Revitalization Con = Construction; FPD = Facilities Planning Design

Program by Category \$(000)s

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

		,			i	i	i	ì	i	0		FY08-Outyrs
Campus	Location	990ry	Priority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears	years	Total
DC - Mall	NMNH	MB	n	Renovate Attic Rotunda & Ceiling	0	0	0	0	2,000	0	0	2,000
DC - Mail	NMN	MR	₍₂₎	Renovate NE 3 Main	0	0	0	0	650	2,850	0	3,500
DC - Mall	NMN	MR	8	Renovate NW 3rd Floor Main Bldg	0	0	0	0	0	3,300	0	3,300
DC - Mall	NMN	MR	S	Install Staff Women's Restroom	0	0	0	0	0	200	0	200
DC - Mall	NMNH	MM	3	Renovate North Lobby GF	0	0	0	0	0	2,000	0	2,000
DC - Mall	NMN	MR	S	Finish Renovations Halls 28/29	0	0	0	0	0	0	2,000	2,000
DC - Mall	NMNH	MR	ς.)	Renovate Hall 7E	0	0	0	0	0	0	1,000	1,000
DC - Mall	NMN	MM	8	Renovate Rotunda & Hall 17	0	0	0	0	0	0	2,000	2,000
DC - Mall	NMNH	MR	S	Renovate 3rd Floor EC	0	0	0	0	0	0	3,000	3,000
DC - Mell	NMN	MR	S	Finish Renovate Halls 21 & 22	0	0	0	0	0	0	4,000	4,000
DC - Mall	NMNH	MR	S	Renovate 5th Floor EW	0	0	0	0	0	0	3,000	3,000
DC - Rock Creek	NZP	MR	1	Asia Trail	000'6	0	0	0	0	0	0	9,000
DC - Rock Creek	NZP	MR	1	Repair Structural Systems General Services Building	3,500	2,000	0	0	0	0	0	5,500
DC - Rock Creek	NZP	MR	1	Install Emergency Generator, Visitors Center	400	0	0	0	0	0	0	400
Rock	NZP	MR	1	Fire Protection Phase 2: Ape House, Lion/Tiger Bldg, Bird House	2,000	0	0	0	0	0	0	2,000
DC - Rock Creek	NZP	MR	1	Fire Protection Phese 3: Memmals, Reptile, Think Tank, Amazonia, AT1	0	3,000	0	0	0	0	0	3,000
DC - Rock Creek	NZP	MR	1	Fire Protection Phase 4: Boiler Plant, Misc. Small Bldgs, Visitor Center, GSB	0	3,000	0	0	0	0	0	3,000
DC - Rock Creek	NZP	MM	1	Utility MP Phase 1: Water Power & Telecom to Vet Hosp/Research	1,500	0	0	0	0	0	0	1,500
DC - Rock Creek	NZP	MR	1	Utility MP Phase 2a: Water Main to Lower Zoo (Adams Mill to Amazonia)	2,000	0	0	0	0	0	0	2,000
DC - Rock Creek	NZP	MR	1	Utility MP Phase 2b: Water Main to Lower Zoo (Amazonia to Apes)	0	1,500	0	0	0	0	0	1,500
DC - Rock Creek	NZP	MM	1	Utility MP Phase 3: Water, Storm, Steam, Telecom Apes to GSB	0	0	0	5,000	0	0	0	5,000
DC - Rock Creek	NZP	MR	1	Renew Seal/Sea Llon Facility, Phase 1: Life Support Systems	0	7,000	0	0	0	0	0	2,000
DC - Rock Creek	NZP		1	Renew Roof/Exterior Boiler Plant, Propagation, Lion/Tiger	0	2,000	0	0	0	0	0	2,000
DC - Rock Creek	NZP	MR	1	Renew Roof & Exterior Vet Hosp, Necropsy, DCB, Quarantine, Prop Yd Stor.	0	2,000	0	0	0	0	0	2,000
DC - Rock Creek	NZP	MR	1	Install Gate Closure Escape Prevention System	0	900	0	0	0	0	0	900
DC - Rock Creek	NZP	MR	2	Install Flood Mitigation Measures	0	0	0	1,000	0	0	1,000	2,000
DC - Rock Creek	NZP		2	Renew Seel/Sea Ljon Facility, Phase 2: Facility Revitalization	0	0	7,000	13,000	0	0	0	20,000
DC - Rock Creek	NZP	MR	2	Improve Pedestrian Safety & Vehicular Access at Zoo Entry & North Road	0	0	0	0	10,000	0	0	10,000
DC - Rock Creek	NZP	MR	2	Renew Bird House Hill Facilities	0	0	10,000	0	0	0	0	10,000
DC - Rock Creek	NZP	MR	2	Utility MP Phase B: Replace Storm, Sanitary, Telecom, Water Lot B to Lot E	0	0	0	0	2,000	2,000	0	4,000
DC - Rock Creek	NZP	MR	2	Utility MP Phase 9: Replace Storm, Sanitary, Telecom Conn. Ave to Lot B	0	0	0	0	2,000	2,000	0	4,000
DC - Rock Creek	NZP	MR	2	Renovate Cheetah Hill for African Savannah	0	0	0	0	10,000	10,000	0	20,000
DC - Rock Creek	NZP		2	Replace Apes Facility	0	0	0	0	0	10,000	0	10,000
DC - Rock Creek	NZP		2	Utility MP Phase 4: Replace Water, Steam, Telecom Think Tank to Sm. Man	0	0	0	0	0	0	000′9	6,000
DC - Rock Creek	NZP		2	Utility MP Phase 5: Replace Storm, Sanitary, Steam & Telecom Mid to Lowe	0	0	0	0	0	0	4,000	4,000
Rock	NZP		co	Utility MP Phase 6: Replace Storm, Sanitary, Telecom, Water Beaver Valley	0	0	0	0	0	0	000′9	000'9
DC - Rock Creek	NZP		3	Utility MP Phase 7: Replace Storm, Sanitary, Telecom Bird House Hill	0	0	5,000	0	0	0	0	5,000
DC - Rock Creek	NZP		3	Replace Electric Substation (Hawthorn St)	0	0	0	0	0	0	2,000	2,000
DC - Rock Creek	NZP	MR	S	Renew Roof & Exterior Roof MP Phases 11-15	0	0	0	0	0	0	2,000	2,000
DC - Rock Creek	NZP	MR	çs	Install Phase 1 Renewable Energy Systems	0	0	0	0	1,000	0	0	1,000
DC - Rock Creek	NZP		3	install Phase 2 Renewable Energy Systems	0	0	0	0	0	1,500	1,500	3,000
DC - Rock Creek	NZP	M	S	Improve Olmsted Walk for Accessibility	0	0	0	0	0	0	3,000	3,000
DC - Rock Creek	NZP		m	Renew Small Mammal Bldg	0	0	0	0	0	0	5,000	5,000
DC - Rock Creek	NZP	MR	m	Renew Mid-Zoo Entry	0	0	0	0	0	0	10,000	10,000
DC - Rock Creek	NZP		3	Renew Think Tank	0	0	0	0	0	0	6,000	5,000
DC - Rock Creek	NZP	MR	m	Renovate Lower Bear, Rock Creek, & Lot D for Migratory Bird Habitat	0	o	0	0	0	0	10,000	10,000

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Category \$(000)s

				s(000)s							FY08-Outyrs
Campus Location		Category Priority		FY08	FY09	FY10	FY11	FY12	FY13 Outyears	tyears	Tota/
DC - Rock Creek NZP	MR	R 3	3 Renew Visitors Center	0	0	0	0	0	0	10,000	10,000
DC - Rock Creek NZP	MR	R &	Renovate Lower Zoo for Children's Discovery Zone	0	0	0	0	0	0	5,000	5,000
DC - Rock Creek NZP	MR	R	Replace Llon/Tiger Building	0	0	0	0	0	0	20,000	20,000
DC - Rock Creek NZP	MR	A 4	f Install Vehicle Barriers at Visitor Center	0	0	0	0	0	0	1,500	1,500
DC - Rock Creek NZP	MR	A 4	7 Renew Connecticut Ave Entrance	0	0	0	0	0	0	5,000	5,000
DC - Rock Creek NZP	MR	A 4	7 Renew Upper Bear, Anteater, Forest Carnivore, Lemur Island	0	0	0	0	0	0	30,000	30,000
DC - Rock Creek NZP	MΜ	A 4	7 Renovate Valley for Marine Exhibit	0	0	0	0	0	0	20,000	20,000
DC - Rock Creek NZP	MR	A 4	t Install Service Road to BH Hill	0	0	0	0	0	0	2,000	5,000
DC - Rock Creek NZP	MR	4	7 Renew Veterinary Hospital	0	0	0	0	0	0	2,000	5,000
Front Royal, VA NZPFR	MR	R 2	? Fire Protection Plan Phase 1: Install Central Fire Alarm reporting system	ystem 100	0	0	0	0	0	0	100
				0	100	100	100	0	0	0	300
Front Royal, VA NZPFR	I MR			0	0	0	0	100	0	0	100
Front Royal, VA NZPFR	MR		lnstall Emergency Generator, Research Core	300	0	0	0	0	0	0	300
Front Royal, VA NZPFR	I MR		Improve Electric Power Distribution & Bury Overhead Utilities	0	0	250	200	0	0	0	750
Front Royal, VA NZPFR	I MR		Fire Protection Plan Phase 4: Private Residences	0	0	0	0	0	100	0	100
Front Royal, VA NZPFR	MR	3		0	0	0	0	0	0	2,000	2,000
Front Royal, VA NZPFR	I MR	3	3 Construct OPS Security & Police Station, CRC	0	0	0	1,000	0	0	0	1,000
Front Royal, VA NZPFR	MR	4	Upgrade Sewage Disposal System and Stormwater Management	ent 0	0	0	0	0	0	000′9	000′9
DC - Mall QUAD	MR		Replace Mechanical & Electrical Systems	0	0	0	0	0	0	B,500	B,500
DC - Mall QUAD	MR	R 5	Replace Roof		0	0	0	0	0	26,000	26,000
DC - Lafayette Parl RG	MR	R 3	Restore Renwick Gallery	0	0	0	0	0	0	25,000	25,000
All Facilities SECURITY	RITY MR	R 1	Construct NMAH Perimeter Barriers	В,000	0	0	0	0	0	0	B,000
All Facilities SECURITY	AITY MR	R 2	2 Construct NMNH Barriers at 12th & Madison Drive	0	0	1,800	0	0	0	0	1,800
All Facilities SECURITY	RITY MR		2 Install POB Glass Mitigation	0	7,000	2,000	0	0	0	0	000'6
All Facilities SECURITY	AITY MR	R 2	2 Construct Tupper Perimeter Security/Safety/Accessibility	0	0	1,500	0	0	0	0	1,500
All Facilities SECURITY	RITY MR		2 Install Freer Glass Mitigation	0	0	1,200	0	0	0	0	1,200
All Facilities SECURITY	RITY MR		2 Install Capital Gallery Glass Mitigation	0	0	300	0	0	0	0	300
All Facilities SECURITY	RITY MR		2 Install Renwick Glass Mitigation	0	0	2,200	0	0	0	0	2,200
All Facilities SECURITY	_		2 Install Tupper Glass Mitigation	0	0	200	0	0	0	0	200
All Facilities SECURITY			_	0	0	0	14,000	0	0	0	14,000
All Facilities SECURITY				0	0	0	1,000	0	0	0	1,000
All Facilities SECURITY	RITY MR				0	0	1,000	0	0	0	1,000
All Facilities SECURITY			_		0	0	450	0	0	0	450
All Facilities SECURITY	_		_	0	0	0	0	3,000	0	0	3,000
				0	0	0	0	10,000	10,000	25,000	45,000
All Facilities SECURITY				0	0	0	0	1,000	0	0	1,000
All Facilities SECURITY	RITY MR		Install Emergency Voice System at NZP	0	0	0	0	2,500	0	0	2,500
All Facilities SECURITY					0	0	0	250	0	0	250
All Facilities SECURITY				0	0	0	0	0	2,000	0	5,000
All Facilities SECURITY	SITY MR		3 Construct Renwick Barriers	0	0	0	0	0	2,000	0	2,000
All Facilities SECURITY	RITY MR		3 Install Hazy Glass Mitigation	0	0	0	0	0	3,000	0	3,000
All Facilities SECURITY	AITY MR		3 Install NMAfA Stained Glass Protection	0	0	0	0	0	0	200	200
All Facilities SECURITY	RITY MR		Install Anacostia Museum Security Fence, Gate & Guard Booth		0	0	0	0	0	1,000	1,000
All Facilities SECURITY	RITY MR		4 Construct Hazy Barriers	0	0	0	0	0	0	2,000	5,000
All Facilities SECURITY	AITY MR	A 4	Modify Air Intakes for Chem/Bio/Radio Mit	0	0	0	0	0	0	4,000	4,000
All Facilities SECURITY	AITY MR	A 4	provide Perimeter Camera Systems, Off Mall Buildings	0	0	0	0	0	0	200	700

MR = Major Revitalization; OR = Other Revitalization Con = Construction; FPD = Facilities Planning Design

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Category \$(000)s

					Ċ	i c	,	,	243	27.12		FY08-Outyrs
Campus	Location	Category Priority	Priority		2108	2017	1110		2112	2 2 2 2	niyears	Inioi
DC - Mall	SIB	MR	2	Renovate Smithsonian Castle	0	0	0	0	10,000	45,000	100,000	155,000
Suitland, MD	SSF	MR	2	Replace Greenhouses	2,800	8,200	0	0	0	0	0	11,000
Suitland, MO	SSF	MR	9	Revitalize Infrastructure	0	0	0	0	0	0	24,000	24,000
Panama	STRI	MR	1	Replace Gamboa Old Schoolhouse, Phase I	1,500	4,600	400	0	0	0	0	6,500
Panama	STRI	MR	2	Gamboa Development Land Purchase	0	3,400	0	0	0	0	0	3,400
Panama	STRI	OR	1	Upgrade Site Utilities & Infrastructure, Gamboa	0	1,500	0.	0	0	0	0	1,500
Chantilly, VA	U-Hazy	MR	4	Roof Replacement	0	0	0				2,000	5,000
				C. Hessel Major Bautalisation	72 100	86 500	98 550	93 050	123.650	127,100	632.950	1.233.900
				SUDDICIAL Wiejul nevitalization	2017	200,00		2000	00000	221/12	2021200	200/20=/1
Other Revitalization	alization											
DC - Anacostia	AM	OR	m	Upgrade Lighting Controls	0	0	0	0	200	0	0	200
DC - Anacostia	AM	OR	4	Install Cold Storage Unit	0	0	0	0	0	0	50	50
DC - Anacostie	AM	OR	2	Expand Gallery Spaces	0	0	0	0	0	0	200	200
New York, NY	CHM	OR	2	Complete Miller-Fox Renovation	1,650	0	0	0	0	0	0	1,650
New York, NY	CHM	OR	2	Stabilize Mansion Fence	0	150	0	0	700	0	0	850
New York, NY	CHM	OR	2	Upgrade Mansion Electric Oistribution & Exterior Lighting	0	4,625	0	0	0	0	0	4,625
New York, NY	CHM	OR	2	Asbestos Abatement	0	1,500	0	0	0	0	0	1,500
New York, NY	CHM	OR	7	Extend Fire Suppression System	0	400	0	0	0	0	0	400
New York, NY	CHM	OR	2	Rehabilitate & Waterproof Terrace	0	0	550	0	0	0	0	550
New York, NY	CHM	OR	2	Repair Exterior Masonry	0	0	0	0	900	0	0	006
New York, NY	CHM	OR	2	Restore Entrance Canopy	0	0	0	0	0	0	200	200
New York, NY	CHM	OR	G	Replace Mansion Boilers	0	0	0	0	400	0	0	400
New York, NY	CHM	OR	E	Replace Miller/Fox Roof	0	0	0	0	700	0	0	700
New York, NY	CHM	OR	E	Stabilize Mansion Sidewalks	0	0	0	0	0	0	700	700
New York, NY	CHM	OR	4	Restore Gallery Floors, 1st & 2nd Floors	0	0	0	0	0	0	200	200
DC - Mall	FGA	OR	2	Replace Roof	0	1,275	0	0	0	0	0	1,275
DC - Mail	FGA	OR	2	Upgrade Humidification System	0	700	0	0	0	0	0	700
DC - Mali	FGA	OR	3	Upgrade Accessible Entrance & Corridor	0	0	0	0	0	0	009	009
DC - Mall	FGA	OR	4	Restore Building Exterior	0	0	0	0	0	0	1,000	1,000
DC - Mall	FGA	OR	4	Clean Agent Fire Protection System in Collections Storage	0	0	0	0	0	0	200	200
DC - Mail	FGA	OR	4	Replace Gallery Lighting Systems	0	0	0	0	0	0	350	350
DC - Mall	FGA	OR	4	Correct Courtyard Window & Ooor Condensation	0	0	0	0	0	0	150	150
DC - Mail	HMSG	OR	2	Renovate Front Entrance/Blast Windows	0	2,500	0	0	0	0	0	2,500
DC - Mail	HMSG	OR	7	Rehabilitete Sculpture Garden	0	0	2,000	0	0	0	0	2,000
OC - Mall	HMSG	OR	2	Improve Fire Suppression in Collection Storage	200	0	0	0	0	0	0	200
oc - Mall	HMSG	OR	2	Upgrade Exhibit Lighting/Code Compliance	0	500	0	0	0	0	0	200
OC - Mall	HMSG	OR	B	Repair Exterior Lighting	0	0	200	0	0	0	0	200
DC - Mall	HMSG	OR	4	Renovate Chiller Room	0	0	0	0	0	350	0	350
DC - Mall	HMSG	OR	4	Replace Roof	0	0	0	0	0	0	2,500	2,500

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Category \$(000)s

											-	FY08-Outyrs
Campus	Location	Category	Category Priority		FY08	FY09	FY10	FY11	FY12	FY13 Outyears	tyears	Total
Suitland, MD	MSC	OR	1	Improve Fire Detection & Protection	2,500	0	0	0	0	0	0	2,500
Suitland, MD	MSC	OR	2	Replace Steam Condensete System	0	0	2,500	0	0	0	0	2,500
Suitland, MO	MSC	OR	2	Replace Switchgear Controllers and Switches	0	1,100	0	0	0	0	0	1,100
Suitland, MO	MSC	OR	'n	Restore NMAH Conservation Lab	0	0	880	0	0	0	0	880
Suitlend, MD	MSC	OR	n	Osteoprep Lab Freezer Shed & Emergency Generator	0	0	0	200	0	0	0	200
Suitlend, MD	MSC	OR	'n	Botany Greenhouse Improvements	0	0	0	0	250	0	0	250
Suitlend, MD	MSC	OR	'n	Fume Hood Improvements & Leb Modernizations, Sect. A & 8 Labs	0	0	0	200	0	0	0	200
Suitland, MD	MSC	OR	n	Fume Hood Improvements & Leb Modernizations, Sect C-F Labs	0	0	0	0	350	0	0	350
Suitland, MD	MSC	OR	8	Fume Hood Improvements & Leb Modernizations, Sect G & Pods	0	0	0	0	0	400	0	400
Suitland, MO	MSC	OR	B	Fume Hood Improvements & Lab Modernizations, Greenhse/Bldg 26	0	0	0	0	0	0	450	450
All Facilities	MULTI	OR	1	Construction S&A	4,900	4,950	5,100	5,250	5,400	5,550	6,700	36,850
All Facilities	MULTI	OR	1	Miscellaneous Capitel Repair	3,600	3,892	3,815	4,060	3,915	3,950	4,500	27,732
All Facilities	MULTI	OR	1	Reprographics and Library	200	200	200	200	200	600	600	3,500
All Facilities	MULTI	OR	1	Provide Guard Services, All Locations	300	300	300	300	300	300	300	2,100
All Facilities	MULTI	OR	2	Provide Central Fire Pump & Upgrade Mains, Suitland (do w/ Backflow)	1,700	0	0	0	0		0	1,700
All Facilities	MULTI	OR	2	Install Backflow Prevention/Fire Pumps/Generators	0	2,100	2,000	4,000	0	0	0	8,100
All Facilities	MULTI	OR	2	Install Lightning Protection in Mall/Off-Mall Buildings	0	1,000	800	1,000	0	0		2,800
DC - Mall	NASM	OR	1	Waterproof Terrace at Perimeter	1,500	0	0	0	0	0	0	1,500
DC - Mall	NASM	OR	2	Stairtower 6 Improvements	0	200	0	0	0	0	0	200
DC - Mall	NASM	OR	2	P-703 Renovate HVAC/Improve Indoor Air Quality	0	1,500	0	0	0	0	0	1,500
DC - Mall	NASM	OR	2	Replace Ramsey Room Halon System	200	0	0	0	0	0	0	200
DC - Mall	NASM	OR	2	P-700 Renovate HVAC/Improve Indoor Air Quality	0	0	0	0	1,125	0	0	1,125
DC - Mall	NASM	OR	2	3700 Renovate HVAC/Improve Indoor Air Quality	0	0	1,400	0	0	0	0	1,400
DC - Mall	NASM	OR	2	Replace Condensate System	0	0	200	0	0	0	0	200
DC - Mali	NASM	OR	ო	Upgrade Accessible Egress (Interior)	0	0	0	0	250	0	0	250
DC - Mall	NASM	OR	ო	Complete Irrigation System @ Jefferson Drive	0	0	0	0	0	0	100	100
DC - Mali	NASM	OR	B	Replace Irrigation and Water Supply for Flight Garden	0	0	0	0	0	0	320	320
DC - Mall	NASM	OR	'n	Repair Delta Solar Reflection Pool	0	0	0	0	0	0	200	200
DC - Mall	NASM	OR	n	3500 Cooling Tower Well Infill with IT Offices/Equipment Rooms	0	0	0	0	0	0	1,200	1,200
DC - Mall	NASM	OR	4	Replace Oimmers/Ceiling in Theater	0	0	0	0	0	0	200	200
DC - Mall	NMAH	OR	1	Improve Roof System	0	485	0	0	0	0	0	485
DC - Mall	NMAH	OR	1	Prevent Ground Water Infiltration Lower Level (do with Swing Space)	0	2,900	0	0	0	0	0	2,900
DC - Mali	NMAH	OR	2	Improve Dibner Library Fire Suppression	300	0	0	0	0	0	0	300
DC - Mall	NMAH	OR	2	Replace Motor Control Center Panels	0	220	0	0	0	0	0	650
DC - Mali	NMAH	OR	2	Replace Fifth Floor Windows	0	1,150	0	0	0	0	0	1,150
DC - Mall	NMAH	OR	2	Upgrade Fire Alarm/Life Safety Non Public Spaces	0	0	1,000	1,000	0	0	0	2,000
DC - Mall	NMAH	OR	2	Improve Numismatic Fire Suppression System	0	0	200	0	0	0	0	200
DC - Mall	NMAH	OR	B	Removal of the Snow Melt System/Terrace Leaks	0	0	0	0	300	200	0	800
oc - Mall	NMAH	OR	n	Repair Constitution Avenue Entry	0	0	0	0	550	0	0	550
DC - Mall	NMAH	OR	B	Relocate Accessibility Program Office	0	0	0	0	300	0	0	300
OC - Mall	NMAH	OR	'n	Relocate SI Photo Services from Lower Level	0	0	0	0	0	0	1,500	1,500
DC - Mall	NMAH	OR	4	Replace Podium and Fifth Floor Pavers	0	0	0	0	0	0	510	510

September 2007

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Category

				s(000)s								FY08-Outyrs
Campus Location		Category Priority	riority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
DC - Mall NMAI		OR	2	Realign Granite Pavers and Caulk Soft Joints	0	0	200	0	0	0	0	200
DC - Mail NMAI		OR	3	Improve Exiting from Amphitheater	0	0	0	250	0	0	0	250
New York, NY NMAI		OR	n	Implement GGHC Space Utilization Plan	0	0	0	0	1,300	0	400	1,700
	NMAI-CRC (OR	2	Heat Tape Diamond Shape Windows & Apply UV Film on Large Panes	0	0	250	0	0	0	0	250
DC - Mail NMNH		OR	2	Public/Non-Public Separation Security	0	200	0	0	0	0	0	200
DC - Mall NMNH		OR	S	Chemical Control Facility	0	0	0	0	066	0	0	066
OC - Mall NMNH		OR	S	Relocation of Columbia Film Archives	0	0	0	0	0	0	1,000	1,000
OC - Mall NMNH		OR	4	Botany Herbarium Compactors	0	0	0	0	0	0	009	009
OC - Mall		OR	4	Space Modernization & Improvements	0	0	0	0	0	0	650	650
DC - Mall NMNH		OR	4	Lab & Fume Hood Modernizations, West Wing Labs	0	0	0	0	0	0	100	100
OC - Mall NMNH		OR	4	Lab & Fume Hood Modernizations, Main Building Labs	0	0	0	0	0	0	450	450
DC - Mall NMNH		OR	4	Lab & Fume Hood Modernizations, East Wing Labs	0	0	0	0	0	0	100	100
DC - Mall NMNH		OR	4	Façade Lighting	0	0	0	0	0	0	300	300
DC - Rock Creek NZP		OR	1	Replace Greenhouse	300	0	0	0	0	0	0	300
DC - Rock Creek NZP	_	OR	1	Improve Animal Pools & Containment Phase 1: Bird House & Active Leaks (I	200	0	0	0	0	0	0	200
DC - Rock Creek NZP		OR	2	Improve Animal Pools & Containment Phase 2 Valley	0	0	0	300	0	0	0	300
DC - Rock Creek NZP		OR	2	Repair/Renew Police Station (Oesign FY06\$)	0	1,000	0	0	0	0	0	1,000
DC - Rock Creek NZP		OR	2	Renew Service Infrastructure Ph 1: Lower Zoo Toilets, Keeper Rooms, Walk	0	150	0	0	0	0	0	150
DC - Rock Creek NZP	_	OR	2	Renew Service Infrastructure Ph 2: Upper Zoo Toilets, Keeper Rooms, Walks	0	0	200	0	0	0	0	200
DC - Rock Creek NZP		OR	2	Renew Service Infrastructure Ph 3: Mid-Zoo Toilets, Keeper Rooms, Walks,	0	0	0	200	0	0	0	200
DC - Rock Creek NZP	_	OR	3	Design Phase 3 Improve Animal Pools & Containment Lower Zoo	0	0	20	0	0	0	0	90
DC - Rock Creek NZP		OR	n	Improve Animal Pools & Containment Phase 3 Lower Zoo	0	0	0	400	0	0	0	400
DC - Rock Creek NZP	_	OR	G	Design Phase 4 Improve Animal Pools & Containment Mid-Zoo	0	0	0	20	0	0	0	20
DC - Rock Creek NZP	_	OR	62	Improve Animal Pools & Containment Phase 4 Mid-Zoo	0	0	0	0	250	0	0	250
DC - Rock Creek NZP	_	OR	c,	Renovate OCB staff areas	0	0	0	0	0	200	0	200
DC - Rock Creek NZP	_	OR	c,	Implement Holt House Stabilization	0	0	0	0	0	0	250	250
DC - Rock Creek NZP		OR	(J)	Oesign/Relocate NZP server room to DCB Bldg	0	0	0	0	0	0	900	006
DC - Gallery Place POB		OR	2	Waterproof East Moat	0	150	0	0	0	0	0	150
DC - Gallery Place POB		OR	2	Provide Skylight Scrims for West and South Wings	0	250	0	0	0	0	0	250
DC - Gallery Place POB		OR	2	Replace Material and Loading Oock Lifts	0	0	250	0	0	0	0	250
DC - Gallery Place POB		OR	c,	Upgrade Lendscape	0	0	0	0	0	5,000	0	5,000
		OR	(J)	Replace Wood Flooring in Luce Center	0	0	0	0	250	0	0	250
		OR	'n	Resurface & Improve Orainage at F Street Portico	0	0	0	0	350	0	0	350
ary Place		OR	co.	Upgrade Auditorium Acoustics and Finishes	0	0	0	0	300	0	0	300
OC - Mall OUAD		OR	(L)	Reconfigure Sackler Collection Storage Space	0	0	0	0	200	0	0	200
DC - Mall OUAO		OR	co.	Connect GSA Chilled Water System	0	1,500	0	0	0	0	0	1,500
OC - Mall QUAD		OR	co.	Repair Pavilion Roofs	0	0	0	0	0	1,000	0	1,000
OC - Malf QUAD		OR	4	Clean Agent Fire Protection System in Collections Storage, Sackler	0	0	0	0	0	0	200	200
DC - Mall OUAD		OR	5	Repair Interior Stone	0	0	0	0	0	0	250	250
DC - Lafayette Parł RG		OR	2	Modify Attic Access Catwalks	0	300	0	0	0	0	0	300
DC - Lafeyette Perl RG		OR	2	Replece Ceiling in Gallery 104	0	350	0	0	0	0	0	350
DC - Lafayette Parl RG		OR	2	Upgrade Access, OPS Locker Rms & Basement Repairs	0	800	0	0	0	0	0	B00
DC - Lafayette Parl RG		OR	3	Remediate HVAC & Electrical Systems	0	0	0	0	0	0	1,000	1,000
OC - Lafayette Parl RG		OR	co.	Repair Entrance Stairs	0	0	0	200	200	0	0	400
OC - Lefayette Parl RG		OR	3	Repair Exterior Stone Joints	0	0	0	0	009	0	0	009

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Category \$(000)s

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Program by Category \$(000)s

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

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SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM Program by Category \$(000)s

221,025	57,645	26,700	33,150	27,190	34,770	0/0/19	20,500	Subtotal: Other Revitalization				1
006	006	0	0	0	0	0	0	Add Emergency Access Road @ North End of Main Hangar	4	OR	U-Hazy	Chantilly, VA
750	750	0	0	0	0	0	0	Regrade and Stabilize Perimeter Road	4	OR	U-Hazy	Chantilly, VA
1,500	1,500	0	0	0	0	0	0	Replace Perimeter Gates with Security Gates	4	OR	U-Hazy	Chantilly, VA
1,000	1,000	0	0	0	0	0	0	Upgrade Emergency Power	4	OR	U-Hazy	Chantilly, VA
3,000	3,000	0	0	0	0	0	0	Install Snow Mitigation	4	OR	U-Hazy	Chantilly, VA
120	120	0	0	0	0	0	0	Renovate Tupper building Cafeteria (A&M)	2	OR	STRI	Panama
110	110	0	0	0	0	0	0	Boat House & Crane at Bocas Station	4	OR	STRI	Panema
125	0	0	125	0	0	0	0	Relocate Exhibits, Classrooms, Lunchroom Bocas	4	OR	STRI	Panama
225	0	0	225	0	0	0	0	Repair/Replace Oiving Locker and Boat Shop area, Naos	4	OR	STRI	Paname
200	0	0	200	0	0	0	0	Move Crane	4	OR	STRI	Panama
850	0	350	200	0	0	0	0	Construct New Mangrove Walkwey Bocas (A&M)	4	OR	STRI	Penama
902	0	0	906	0	0	0	0	Construct New Rock Breakwater, Naos	4	OR	STRI	Panama
175	0	0	175	0	0	0	0	Construct New Galeta Conference Center	η	OR	STRI	Pename
290	0	0	290	0	0	0	0	Construct New Bookstore & Visitor Center Tupper (A&M)	η	OR	STRI	Paneme
125	0	0	0	125	0	0	0	Replace Crene at Gamboa Oock	B	OR	STRI	Panema
175	0	0	0	175	0	0	0	Replace Game warden's Office at BCI	'n	OR	STRI	Panama
200	0	0	0	200	0	0	0	Improve Façade All Neos Buildings - w New Fence	B	OR	STRI	Panama
Total	tyears	FY13 Outyears	FY12	FY11	FY10	FY09	FY08	Project	Priority	Category Priority Project	Location	Campus
FY08-Outyrs	7											

,	:				FVOR	FVOO	FV10	FV11	FV12	FV13 Outlingers	utware	Total
Campus	Location	Aloga	rnomy	roject	8				7			900
Panama	STRI	OR	ß	Improve Façade Ali Neos Buildings - w New Fence	0	0	>	200	>	>	>	007
Panama	STRI	OR	'n	Replace Game warden's Office at BCI	0	0	0	175	0	0	0	175
Panema	STRI	OR	G	Replace Crane at Gamboa Oock	0	0	0	125	0	0	0	125
Paneme	STRI	OR	n	Construct New Bookstore & Visitor Center Tupper (A&M)	0	0	0	0	290	0	0	290
Pename	STRI	OR	n	Construct New Galeta Conference Center	0	0	0	0	175	0	0	175
Panama	STRI	OR	4	Construct New Rock Breakwater, Naos	0	0	0	0	906	0	0	906
Penama	STRI	OR	4	Construct New Mangrove Walkwey Bocas (A&M)	0	0	0	0	200	320	0	820
Panama	STRI	OR	4	Move Crane	0	0	0	0	200	0	0	200
Paname	STRI	OR	4	Repair/Replace Oiving Locker and Boat Shop area, Naos	0	0	0	0	225	0	0	225
Panama	STRI	OR	4	Relocate Exhibits, Classrooms, Lunchroom Bocas	0	0	0	0	125	0	0	125
Panema	STR	OR	4	Boat House & Crane at Bocas Station	0	0	0	0	0	0	110	110
Panama	STRI	OR	5	Renovate Tupper building Cafeteria (A&M)	0	0	0	0	0	0	120	120
Chantilly, VA	U-Hazy	OR	4	Install Snow Mitigation	0	0	0	0	0	0	3,000	3,000
Chantilly, VA	U-Hazy	OR	4	Upgrade Emergency Power	0	0	0	0	0	0	1,000	1,000
Chantilly, VA	U-Hazy	OR	4	Replace Perimeter Gates with Security Gates	0	0	0	0	0	0	1,500	1,500
Chantilly, VA	U-Hazy	OR	4	Regrade and Stabilize Perimeter Road	0	0	0	0	0	0	750	750
Chantilly, VA	U-Hazv	OR	4	Add Emergency Access Road @ North End of Main Hangar	0	0	0	0	0	0	900	006
				Subtotal: Other Revitalization	20,500	51,070	34,770	27,190	33,150	26,700	57,645	251,025
				TOTAL REVITALIZATION	92,600	137,570	133,320	120,240	156,800	153,800	690,595	1,484,925
CONSTRUCTION	CTION											
Suitland, MD	MSC	CON	n	Construct Pod 6	0	0	0	0	0	0	45,000	45,000
DC-Mall	NMAAHC	CON	2	Construct National Museum of African American History & Culture	0	0	TBO	TBD	TBO	TBD	TBD	TBO
DC - Rock Creek	NZP	CON	G	General Services Building Renewal & Space Addition	0	0	0	0	0	0	20,000	20,000
OC - Rock Creek	NZP	CON	4	Construct Lab/Office Addition Research Area	0	0	0	0	0	0	20,000	20,000
Front Royal, VA	NZPFR	CON	ო	Construct Site Improvements Training & Education Center, CRC	0	0	0	0	0	0	20,000	20,000
Front Royal, VA	NZPFR	CON	B	Construct Consolidated Maintenance Shop	0	0	0	0	0	0	4,000	4,000
Hawaii	SAO	CON	B	Construct Hilo Control Building Extension +	0	0	0	0	0	0	1,000	1,000
Edgewater, MD	SERC	CON	2	Construct Mathias Lab Modules (Replace Trailers)	0	0	12,000	25,000	0	0	0	37,000
Edgewater, MD	SERC	CON	B	Construct Alcohol Storage Building	0	0	0	0	0	0	2,000	2,000
Edgewater, MD	SERC	CON	η	Construct Annex to Reed Center	0	0	0	0	0	0	1,500	1,500
Edgewater, MD	SERC	CON	ε	Construct Auditorium	0	0	0	0	0	0	2,000	2,000
Edgewater, MD	SERC	CON	B	Construct Library	0	0	0	0	0	0	2,000	2,000
Edgewater, MD	SERC	CON	η	Construct New Lab Building	0	0	0	0	0	0	12,000	12,000
Edgewater, MO	SERC	CON	η	Construct Visitors Reception	0	0	0	0	0	0	2,000	2,000
Edgewater, MO	SERC	CON	η	Construct Experimental Research Facility	0	0	0	0	0	0	4,000	4,000
Panama	STRI	CON	3	Replace STRI Floating Lab (R/U Urraca)	0	0	0	0	0	0	7,000	7,000
				TOTAL CONSTRUCTION	0	0	12,000	25,000	0	0	142,500	179,500

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Category \$(000)s

			s(nnn)s							щ	FY08-Outyrs
Campus	Cetegory Priority Project	Priority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyeers		Total
FACILITIES PLANNING AND DESIGN	NING AN		ESIGN								
DC - Mall AIB	FPD	3	Design Arts & Industries Building Restoration	0	0	0	0	0	0	180	TBD
DC - Mall AIB	FPD	B	Arts and Industries Master Plan	0	0	0	0	0	0	800	800
DC - Anacostia AM	FPD	4	Anacostia Museum Master Plan	0	0	0	0	0	400	0	400
New York, NY CHM	FPD	4	Update Cooper-Hewitt Master Plan	0	0	0	0	0	0	800	800
DC - Mall HMSG	FPD	2	Design Restore/Repair Exterior Façade	0	730	0	0	0	0	0	730
DC - Mali HMSG	FPD	8	Design Restore & Waterproof Plaza & Foundation Walls	0	0	0	0	0	0	1,000	1,000
DC - Mell HMSG	FPD	4	Update HSMG Master Plan	0	0	0	0	0	0	800	800
DC - Mall HMSG	FPD	4	Design 4th Floor Rehabilitation	0	0	0	0	0	0	820	850
Suitland, MD MSC	FPD	2	Design Mechanical & Electrical Systems Upgrade	0	0	1,000	1,000	0	0	0	2,000
	FPD	co	Design Pod 6 Construction	0	0	0	0	0	0	2,000	5,000
All Facilities MULTI	FPD	1	Facility Planning and Design, Other Revitalization	3,950	3,000	3,000	3,000	3,000	3,000	3,000	21,950
All Facilities MULTI	FPD	2	SI-Wide Facilities Master Planning	100	009	009	900	200	200	1,000	3,300
All Facilities MULTI	FPD	c)	Upgrade Facilities Management System	0	0	0	0	0	0	200	200
All Facilities MULTI	FPD	B	Mall Site Improvement Master Plan	0	0	0	800	0	0	0	800
All Facilities MULTI	FPD	B	Real Property and Space Utilization Studies	250	250	250	250	250	250	250	1,750
All Facilities MULTI	FPD	B	Admin/Support/Collection Storage Master Plan	0	0	800	0	0	0	0	800
DC - Mall NASM	FPD	2	Design Mechanical System, Basement & 3rd Floor	0	0	0	0	0	0	5,000	5,000
DC - Mall NASM	FPD	B	National Air and Space Museum Master Plan (incl. Garber & Hazy)	0	0	1,500	0	0	0	0	1,500
	FPD	7	Programming/Planning for NMAAHC	2,000	3,000	0	0	0	0	0	5,000
DC - Mali NMAAHC	FPD	2	Design National Museum of African American History & Culture	0	0	11,000	14,000	0	0	0	25,000
DC - Mall NMAH	FPD	2	Design Swing Space for Wing Revitalization	1,300	1,200	0	0	0	0	0	2,500
DC - Mall NMAH	FPD	8	Design Renewal of West Wing	0	4,000	2,000	0	0	0	0	6,000
DC - Mell NMAH	FPD	8	Design Renewal of East Wing	0	0	0	0	0	2,000	1,700	3,700
DC - Mall NMAH	FPD	2	Design Chiller Replacement (if not under ESPC)	0	0	0	0	0	2,000	0	2,000
DC - Mall NMAH	FPD	4	Design Non - Public Space Infrastructure	0	0	0	0	0	0	5,000	5,000
DC - Mall NMAH	FPD	5	Update NMAH Master Plan	0	0	0	0	0	0	1,000	1,000
DC, Suitland, NYC NMAI	FPD	4	NMAI Master Plan, All Locations	0	0	0	0	0	1,000	0	1,000
DC - Mali NMNH	FPD	2	Design Ongoing Revitalization	3,000	3,000	3,000	3,000	3,000	3,000	0	18,000
	FPD	5	Update NMNH Master Plan	0	0	0	0	0	0	1,000	1,000
	FPD	2	Update Fort Pierce Master Plan	0	0	0	0	0	0	1,000	1,000
	FPD	1	Design Fire Protection Improvements, Phases 1-4	630	0	0	0	0	0	0	630
	FPD	1	Design Infrastructure/Utility Systems, Phases 1, 2, 3	930	0	0	0	0	0	0	930
	FPD	1	Plan/Design Seal/Sea Lion Facility, Phase I	200	0	0	0	0	0	0	700
DC - Rock Creek NZP	FPD	1	Plan/Design Gate Closure Escape Prevention System	0	100	0	0	0	0	0	100
DC - Rock Creek NZP	FPD	7	Plan/Design Flood Mitigation NZP Rock Creek	0	0	200	0	0	0	200	400
DC - Rock Creek NZP	FPD	7	Design to Renew Seal/See Lion Phase 2	0	1,500	0	0	0	0	0	1,500
DC - Rock Creek NZP	FPD	7	Design North Road Padestrien Safety & Vehicular Access	0	250	200	750	0	0	0	1,500
DC - Rock Creek NZP	FPD	7	Design Bird House Hill Facilities Renewal	0	2,000	0	0	0	0	0	2,000
DC - Rock Creek NZP	FPD	2	Design Infrastructure/Utility Systems, Phase 8	0	0	250	250	0	0	0	200
DC - Rock Creek NZP	FPD	2	Design Infrastructure/Utility Systems, Phase 9	0	0	250	250	0	0	0	200

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Category

FY08-Outyrs	Total	4,000	2,500	700	200	750	009	300	300	200	3,500	1,500	1,000	1,000	3,000	1,500	1,500	300	3,000	150	750	4,000	4,000	3,000	750	750	200	200	250	009	150	1,000	1,000	009	009	B50	5,000	400	3,000	1,500	000
	tyeers	0	0	350	250	750	0	300	0	0	3,500	200	200	200	3,000	1,500	1,500	300	3,000	150	750	4,000	4,000	3,000	750	750	0	0	0	009	0	1,000	0	009	0	0	5,000	0	3,000	0	(
	FY13 Outyeers	0	0	350	250	0	0	0	300	0	0	200	200	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	0	0	B50	0	0	0	0	
	FY12	0	2,000	0	0	0	0	0	0	200	0	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250	0	0	0	0	0	0	0	0	0	0	0	•
	FY11	2,500	500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	400	0	0	•
	FY10	1,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150	0	0	0	0	0	0	0	0	0	
	FY09	0	0	0	0	0	009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	200	0	0	0	0	0	0	009	0	0	0	0	1,500	
	FY08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	y Project	Plan/Design Sevanneh Exhibit	Plen/Design Apes Facility Replacement	Design Infrestructure/Utility Systems, Phase 4	Design Infrastructure/Utility Systems, Phase 5	Design Infrastructure/Utility Systems, Phase 6	Design Infrastructure/Utility Systems, Phase 7 (Bird Hill)	Design to Replace Electric Substation (Hawthorn St)	Design Roof & Exterior MP Phases 11-15	Plan/Design Phase 2 Renewable Energy/Geothermal	Plen/Design General Services Building Renewal & Addition for Swing Space	Plan/Design Mid-Zoo Entry	Plan/Design Small Mammal Renewal	Plan/Design to Renew Think Tank facility	Plan/Design Lower Bear, Rock Creek & LotD Renewal (Migratory Bird Habita	Plan/Design Visitors Center Renewal	Plan/Design Children's Discovery Zone	Design to Improve Olmsted Walk Accessibility	Plan/Design Lion Tiger Building Replacement	Plan/Design Vehicle Barriers for Visitor Center	Plan/Design Connecticut Ave Entrance Renewal	Plan/Design Upper Bear, Anteater, Forest Carnivore, Lemur Island Renewal	Design Valley Revitalization for Marine Exhibit	Plan/Design Lab/Office Addition Research Area	Design Veterinary Hospital renewal	Plan/Design Service Road to BH Hill	Plan/Design Fire Protection & Life Safety Projects	Plan/Design Utility & Power Distribution - CRC	Plan/Design Renewable Energy, CRC	Plan/Design Consolidated Maintenance Building	Plan/Design OPS Security & Police Station	Plan Site Improvements Training & Education Center - CRC	Plan/Design Sewer & Stormwater Management System Improvements- CRC	Update DWRC Master Plan	Quadrangle/Freer Master Plan	Design Mechanical & Electrical System Replacement	Design Roof Replacement	Renwick Master Plan	Design Major Restoration	SAO Master Plan, Tucson, Hawaii & Cambridge	
	Priority	2	2	2	2	m	n	n	E	n	В	т	B	B	n	n	n	т	n	4	4	4	4	4	4	4	7	7	n	n	ო	က	4	5	B	B	Ю	2	B	2	
	Category Priority	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	FPD	1
	Locetion	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZP	NZPFR	NZPFR	NZPFR	NZPFR	NZPFR	NZPFR	NZPFR	PDB	QUAD	QUAD	QUAD	* RG	FRG	SAD	
	Cempus	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	DC - Rock Creek	Front Royal, VA	Front Royal, VA	Front Royal, VA	Front Royal, VA	Front Royal, VA	Front Royal, VA	Front Royal, VA	DC - Gallery Place	DC - Mall	DC - Mall	DC - Mall	DC - Lafayette Pari RG	DC - Lafayette Parl RG	AZ, MA & HI	

1,883,910

181,780 182,380 167,455 170,000 907,395

167,800

107,100

TOTAL REQUEST

SMITHSONIAN INSTITUTION FEDERAL FACILITIES CAPITAL PROGRAM

Program by Category \$(000)s

											Ū.	FY08-Outvrs
Campus	Location	Category Priority	Priority	Project	FY08	FY09	FY10	FY11	FY12	FY13 Outyears		Total
All Facilities	SECURITY	FPD	2	Design Quad & HMSG Perimeter Barriers	0	1,400 °	0	0	0	0	0	1,400
All Facilities	SECURITY	FPD	2	Design Glass Mitigation, RGA/FGA/SI8/CHM/GGHC/NMAfA/NPM	490	450	450	280	0	0	0	1,670
All Facilities	SECURITY	FPD	2	Design Glass Mitigation, NASM	0	200 /	2,000	0	0	0	0	2,500
All Facilities	SECURITY	FPD	2	Design Glass Mitigation, Tupper	0	. 20	0	0	0	0	0	20
All Facilities	SECURITY	FPD	2	Design Tupper Perimeter Security	0	200 -	0	0	0	0	0	200
All Facilities	SECURITY	FPD	2	Feasibility/Design Air Intakes for Chem/Bio/Radio Mitigation	0	200	0	300	0	0	0	200
All Facilities	SECURITY	FPD	2	Design Emergency Voice System, NZP	0	0	200	300	0	0	0	200
All Facilities	SECURITY	FPD	2	Design Security System Modernizations, Multiple Locations	350	006	330	510	250	100	1,000	3,440
All Facilities	SECURITY	FPD	2	Study Multi-Hazard Risk Mitigation	0	150	150	0	0	0	0	300
All Facilities	SECURITY	FPD	'n	Design Off-Mall Perimeter Barriers, RGA	0	0	200	250	0	0	0	450
All Facilities	SECURITY	FPD	n	Design Electronic Access Control, NASM	0	0	30	0	0	0	0	30
All Facilities	SECURITY	FPD	n	Design Glass Mitigation, Hazy	0	0	0	100	200	0	0	300
All Facilities	SECURITY	FPD	n	Design Dff-Mall Perimeter Barriers, Reynolds/RGA	0	0	0	009	0	0	0	009
All Facilities	SECURITY	FPD	4	Design Dff-Mall Perimeter Barriers, Hazy	0	0	0	100	400	0	0	200
All Facilities	SECURITY	FPD	4	Design Perimeter Camera Systems, Off Mall	0	0	0	0	105	0	0	105
Edgewater, MD	SERC	FPD	2	Design Mathias Lab Modules (Replace Trailers)	0	3,500	0	0	0	0	0	3,500
Edgewater, MD	SERC	FPD	က	Design Alcohol Storage Building	0	0	0	200	0	0	0	200
Edgewater, MD	SERC	FPD	ဗ	Design Annex to Reed Center	0	0	0	0	0	0	150	150
Edgewater, MD	SERC	FPD	ъ	Design Auditorium	0	0	0	0	0	0	200	200
Edgewater, MD	SERC	FPD	S	Design Experimental Research Facility	0	0	0	0	0	0	400	400
Edgewater, MD	SERC	FPD	ო	Design SERC Library	0	0	0	0	0	0	200	200
Edgewater, MD	SERC	FPD	က	Design New Lab Building	0	0	0	0	0	0	1,200	1,200
Edgewater, MD	SERC	FPD	n	Design Visitor Reception	0	0	0	0	0	0	200	200
DC - Mali	818	FPD	2	Castle Master Plan/Historic Structures Report	009	250	0	0	0	0	0	850
DC - Mall	SI8	FPD	2	Design Restoration Project & Swing Space	0	0	7,000	2,000	0	0	0	14,000
Suitland, MD	SSF	FPD	5	Design Infrastructure Revitalization	0	0	0	0	0	0	2,000	2,000
Chantilly, VA	U-Нагу	FPD	4	Design Roof Replacement	0	0	0	0	0	0	200	200
				TOTAL FACILITIES PLANNING AND DESIGN	14,500	30,230	36,460	37,140	10,655	16,200	74,300	219,485

SMITHSONIAN INSTITUTION PROJECTED OUTLAYS IN THE OUTYEARS FY 2009 - FY 2013 (Dollars in Millions)

	FY 2009	600	FY 2010	010	FY 2011	.011	FY 2	FY 2012	FY 2013	013
	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays
Salaries & Expenses	673	661	692	689	712	709	732	730	754	751
Facilities Capital	168	106	181	143	182	168	168	168	170	166
Total	841	767	873	832	894	877	006	898	924	917

TRUST FUNDS

In addition to support provided by federal appropriations, the Smithsonian Institution receives trust funds to expand and enrich its programs. The following provides an overview of all sources of funding.

The Institution's trust funds include general trust funds with limited or no restrictions on their use, designated funds restricted by the donor or sponsor, and Government grants and contracts. Projections are subject to the uncertainty of the size of donations, grants, and contracts; to fluctuations in visitor attendance; and to the volatility of the economy, which directly affects the return on the endowment and donor giving, as well as restaurant, mail order, and museum shop revenues, memberships, and other business activities. The Institution's gross operating revenue, less the expenses of the auxiliary activities, represents the net operating revenue available for programmatic and related purposes. The following table summarizes the sources of trust operating funds.

	FY 2007	FY 2008
(Dollars in Millions)	Estimate	Estimate
General Trust	68.5	62.6
Donor/Sponsor-Designated	137.0	111.6
Government Grants and Contracts	105.1	105.6
Total Available for Operations	\$310.6	\$279.8

SOURCE AND APPLICATION OF TRUST FUNDS — The following sections describe the sources of each category of trust funds as well as a general account of how they are used.

General Trust Funds — The sources of general trust funds are investment income; earnings from unrestricted endowments; net proceeds from the museum shops, mail order, and food service concessions; sales of Smithsonian books, records, and other products based on designs and objects in the collections; theater/planetarium operations at the National Air and Space Museum and the Samuel C. Johnson IMAX Theater in the National Museum of Natural History; rental of exhibitions of the Smithsonian Institution Traveling Exhibition Service; membership programs (including *Smithsonian* and *Air and Space* magazines); the sale of posters, exhibition brochures, catalogues, and other publications; and admission fees. Projected sources of FY 2008 general trust funds total \$62,600,000. These funds are used to support administrative programs such as central management, legal counsel, accounting, personnel, contracting, and budget, as well as education, research and public programs, scholarly studies, and exhibitions.

Donor/Sponsor-Designated Funds — Designated trust funds include gifts, grants, and earnings on endowments from individuals, foundations, organizations, and corporations that specify the purpose of the funds. Designated funds in FY 2008 are projected to total \$111,600,000. Generally, these funds support a particular exhibition or program, or are used to manage the Smithsonian collections and/or support research projects.

Government Grants and Contracts — Various Government agencies and departments provide grants and contracts for projects that only the Smithsonian can manage because of its expertise in a particular area of science, history, art, or education, and because of its ability to respond quickly to certain needs. For FY 2008, Government grants and contracts are projected to be \$105,600,000. Of this amount, \$85,500,000 is provided for astrophysical research and development carried out by the Smithsonian Astrophysical Observatory.



Projections incorporating a 3.5% January 2008 Pay Raise versus a 3.0% Pay Raise FY 2008 and FY 2009 Necessary Pay Request Smithsonian Institution

Description	FY 2008 Budget Request to Congress using 3.0%	FY 2008 Budget Request to Congress Revised @ 3.5%	FY 2008 Change in Necessary Pay Requirement	FY 2009 Federal Decision Papers using 3.0%	FY 2009 Federal Decision Papers using 3.5%	FY 2009 Change In Necessary Pay Requirement
Included in Budget Request. Unfunded 2007 Pay Raise (2.64% vs 2.2%) Unfunded 2008 Pay Raise (3.5% vs 3.0%)	1,132,000	1,132,000	0 o	0	1,338,000	n/a 1,338,000
Annualization of 2007 Pay Raise (1/4 Yr @ 2.64%) Annualization of 2008 Pay Raise (1/4 Yr @ %)	2,307,000	2,307,000	0 n/a	2,740,000	3,205,000	n/a 465,000
2008 Pay Raise (3/4 Yr at %) 2009 Pay Raise (3/4 Yr at %)	7,913,000	9,235,000	1,322,000 n/a	000'206'6	9,944,000	37,000
2009 1 Additional Workday over 2007 (261 vs 260) SubTotal Salary and Benefits	11,352,000	12,674,000	n/a 1,322,000	1,493,000	15,985,000	5,000
Workers' Compensation Total Regusested	54,000	54,000	1 322 000	135,000	135,000	1 845 000
Not Included in Budget Request: 2 Additional Workdays in FY 2008 (262 vs 260)	2,765,000	2,778,000	13,000	0000		o de la constanta
Grand Total Requested plus 2 Additional Workdays	14 171 000	15 506 000	1.335.000			

Grand Total Requested plus 2 Additional Workdays

- FY 2008 Congressional Budget Request based on FY 2005 Salary and Benefit actuals

- FY 2008 Congressional Budget Request did not include \$2,765,000 for two additional workdays in FY 2008 (262 vs 260 in FY 2007)

- FY 2009 Decision Papers based on FY 2006 Salary and Benefit actuals

- \$3,000 Difference between FY 2008 Increase (\$1,335,000) and FY 2009 Unfunded 2008 Pay Raise (\$1,338,000) is attributable to rounding on the detailed spreadsheets - Workers' Compensation bill for FY 2009 is \$3,405,000 (rounded up from \$3,404,589.05) versus a base of \$3,270,000 equals an increase of \$135,000 from Department of Labor



SMITHSONIAN INSTITUTION Seleries and Expenses Unit Deteil of the 2007, 2008, end 2009 Estimates (in Thousands)

A1A2 Worksheet for FY 2009 Justification to OMB

FTE = Full-Time Equivalent	FY 2007 Estimate	F P	FY 2008 Request to	FY	FY 2009 Request to	ANALYSIS OF CHANGE	S OF CH	ANGE				Detaile	Detailed Analysis of Program Chango	of Program	r Change	0			
		ပိ	Congress	0	OM8				Manda	Mandatory Costs			d.	Program Changes	hanges			Proposed Re-orgs	Re-orgs
						Mandatory	Pro	Program &	Nec. Pay & Utilities&	Utilities&									
						Costs	ď	Reorgs	Related Costs	Rent	Other	Ė	Increases.	Docreases	303	Non-recur	ecur		
TINO	FTEs \$000	FTEs	\$000	FTEs	\$000	\$	FTEs	\$000	\$000	\$000	\$000	FTEs	\$000	FTEs \$	\$ 000\$	FTEs	\$000	FTEs	\$000
MUSEUMS AND RESEARCH CENTERS	1,975 215,195 2,114 231,541	2,114	231,541	2,175	259,525	10,281	61	17,703	8,131	2,150		19	17,703	1			1	,	1
PROGRAM SUPPORT AND OUTREACH	247 37,567	256	38,205	258	55,949	926	7	16,788	926	1	1	7	16,788	,			1		
ADMINISTRATION	253 64,110	264	66,740	295	83,685	3,604	31	13,341	1,588	1,136	880	31	13,541				(200)		'
OFFICE OF THE INSPECTOR GENERAL	15 1,834	16	1,977	21	2,532	85	ស	470	85			r2	470		1				
FACILITIES SERVICES	1,624 217,589	1,635	232,884	1,792	271,680	8,256	157	30,540	5,360	2,896		157	31,310				(220)	1	٠
GRAND TOTAL, SMITHSONIAN INSTITUTION	4,114 536,295	4,285	571,347	4,541	673,371	23,182	256	78,842	16,120	6,182	880	256	79,812	1	,		(026)		
Distribution of S&E:		_																	
One Year (000 end 102) 4,096 524,798	4,096 524,798		4,229 549,801	4,485	639,217	22,424	256	66,992	15,734	5,810	880	256	67,962	,	,		(026)	1	
NZP Two Year (Fund 108)	0	0	0	0	0	0	0	0	-			٠		,	,	,			
Fellowships Two Year (Fund 109 and 120)	0 1,583	-	1,578	-	2,979	-	0	1,400	1	1			1,400				•		٠
No Year (100)	18 9,914	52	19,968	55	31,175	757	0	10,450	385	372	1	•	10,450		,		1	•	1
TOTAL S&E	TOTAL S&E 4,114 536,295		4,285 571,347	4,541	673,371	23,182 . 256	. 256	78,842	16,120	6,182	880	256	79,812				(076)		

Notes: FY 2007 reflects the Revised Opertion Plan submitted to OMB

G:009-OMB Book/FY 2009 OMB A1A2.xls Tab: Detail



SMITHSONIAN INSTITUTION Selaries and Expenses Unit Deteil of the 2007, 2008, end 2009 Estimates (In Thousands)

A1A2 Worksheot for FY 2009 Justification to OMB

FTE = Full-Time Equivalent	FY 2007 Estimate	- 6	FY 2008 Request to	FY	FY 2009 Request to	ANALYSIS	ANALYSIS OF CHANGE	ш				Detailed Analysis of Program Change	of Program Ci	ange		
		_	Congress	0	омв				Mande	Mandatory Costs			Progrem Changes	ges	Propose	Proposed Re-orgs
						Mendatory Costs	Program & Reorgs		Noc. Pay & Related Costs	Utilities.8. Rent	Other	Increases	Decreases	Non-recur		
TIND	FTEs \$000	00 FTEs	\$000	FTEs	\$000	ş	FTEs \$(000\$	\$000	\$000	000\$	FTEs \$000	FTEs \$000	0 FTEs \$000	FTEs	\$000
COLLINS CITY CAN INCIDENT										******						
American Museums																
Anecostie Community Museum	16 1,5	1,952 21	1,993	22	2,161	09	-	108 X	09	4		1 108				
Canter for Folklife and Cultural Heritage		_		18	2,286	68		<	99	1	•					•
National Museum of African American History & Culture (No-Year)	5 2,8	2,894 41	•	41	14,937	705		×,300	333	372	•	. 1,300	•			٠
National Museum of American History, Behring Center	186 20,7	20,708 190	21,282	203	23,928	1,457	13 1	(881 /	848	609	•	13 1,189			•	•
NMAH One Year	179 20,	20,004 183	3 20,560	196	23,176	1,427	13 1	189	818	609		13 1,189			_	
NMAH NoYear - 9/11 Bearing Witness Exh (017014)	0	0	0 0	0	0			•			•					
National Postal Museum	7	704	7 722	7	752	30	1		30		•				_	
National Museum of the American Indian	263 31,213	213 283	32,000	283	32,952	952	,	•	952	7	٠		•		·	٠
NMA! One Year	263 31.	31.213 283	3 32,000	283	32,952	952	,	٠	952						'	
NMAI No Year - NMAI Operations (017005)	0	0	0 0	0	0	•		•			•				_	
NMA! No Year - Other (017010)	0	0	0 0	0	0			•			•					
NMAI No Year - FY02 Anti-Terrorist Security Supplimntl (017011)	0	0	0 0	0	0			٠								
Subtotal, American Museums	487 58,935	935 553	3 70,425	267	76,264	3,242	14 2	2,597	2,261	186	•	14 2,597	6 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	The party of the p		
Art Museums						i					_					
Archives of American Art				6 1	1,843	81		•	81	•	•	•				
Arthur M. Seckler Gallery/Freer Gallery of Art				27	960'9	229		•	229		4				•	
Cooper-Hewitt, National Design Museum				39	5,548	999		1,500	126	539	٠	1,500	٠			
Hirshhom Museum & Sculpture Garden		_		47	4,405	151		•	151		٠		•			•
HMSG One Year		4	4	47	4.356	151		•	121						*	
HMSG No Year - Collections Acq (017001)				0	49	•		-							•	
National Museum of African Art	30 4,	4,301 37		38	4,609	122	-	87	122	•	•	1 87	•		•	
NMAfA One Year			4	38	4.484	122	-	87	122			1 87			1	
NMAfA No Year - Collections Acq (017001)		_		0	125			•							•	
National Portrait Gellery				23	5,837	238	•	•	238		,				•	•
NPG One Year	2	co.	2	59	5,545	238		•	238		•				_	
NPG No Year - Collections Acq (017001)		292	0 292	0	292	•		•			•					
POB one-time Move/Re-installation Costs (2 year)			0 0	0	0	•		•			-					
Smithsonian American Art Museum	92 8,	8,362 98	3 8,601	66	1,006	393	-	77	393	•	•	1 77			•	•
SAAM One Year	92 8,	8,362 98	8 8,601	66	1/0/6	393	-	77	393		-	1 77			_	
SAAM No Year S&E - Collections Acq (017001)	0		0 0	0	0			•			-				1	•
POB one-time Move/Re-installation Costs (2 year)	0	0	0 0	0	0	•	,	·	`,		-				_	,
Subtotel, Art Museums	321 32,	32,772 356	33,866	358	37,409	1,879	2 1	1,664	1,340	539	•	2 1,664	The state of the s	O . O . O . O . O . O . O . O . O . O .		

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SMITHSONIAN INSTITUTION
Salarles and Expenses
Unit Deteil of the 2007, 2008, and 2009 Estimates (in Thousands)

A1A2 Worksheet for FY 2009 Justification to OMB

	ξ	FV 2007	À	FY 2008	7	FV 2009	ANAI VSIS OF CHANGE	OF CHA	NGF				Dotoiled A	o ainten	Dotallad Analysis of Program Change	00000			
FTE = Full-Time Equivelent	Est	Estimete	Reg	Request to	Requ	Request to			!										
			. ⁵ 0	Congress	ō	OM8				Manda	Mandatory Costs			Pri	Program Chenges	les		Propose	Proposed Re-orgs
							Mendetory	Prog	Progrem &	Nec. Pay &	Utilities&								
							Costs	Re	Reorgs	Related Costs	Rent	Other	Increases	sos.	Decreases	Noi	Non-recur		
UNIT	FTEs	\$000	FTEs	\$000	FTEs	\$000	\$	FTEs	\$000	\$000	\$000	\$000	FTEs	000\$	FTEs \$000	FTES	\$000	FTEs	\$000
Science Museums and Besearch Canters																			
Netional Air and Space Museum	171	16,860	174	17,337	174	18.775	988		450	208	280			450			٠		
Netlonel Museum of Naturel History	390	44,919	398	46,052	413	52,920	1,736	15	5,132	1.736	'		15	5.132				•	•
NMNH One Year	377	42,251	384	43,368	399	50,184	1,684	15	5,132	1,684	,	,	15	5.132					
NMNH One Year - IESP (010002)	0	0	0	0	0	0		٠	•										
NMNH No Year - Exh Reinstallation (017004)	0	1,013	0	1,013	0	1,013			•										
NMNH No Year - Repatriation Program (017006)	13	1,655	14	1,671	14	1,723	52	•	•	52		,						'	
NMNH No Year - Other (017010)	0	0	0	0	0	0		٠	•	٠	٠				٠				
National Zoologicel Park	202	20,737	215	21,842	225	24,476	824	10	1,810	824	٠	•	10	1,810					•
NZP One Year	202	20,737	215	21,842	225	24,476	824	10	1,810	824			10	1,810					
NZP One Year - IESP (010002)	0	0	0	0	0	0		٠	٠		,							'	
NZP One Year - Add'l Sec Staff (010009) & Anti-Terrsm (010008)	0	0	0	0	0	0	•	•										'	
NZP Facilites Operations	0	0	0	0	0	0		٠	٠									'	
NZP Two Year - USAID - NAMIBIA (025001)	0	0	0	0	0	0		٠	٠										
NZP No Year - FY02 Anti-Terrorist Security Supplemental (017011)	0	0	0	0	0	0	٠	٠	٠			•						•	
NZP No Year - FY03 Anti-Terrorist Security Supplemental (017012)	0	0	0	0	0	0	•	•	٠	-								•	
Smithsonian Astrophysical Observetory	108	22,844	113	23,330	118	25,165	985	s	820	635	350	•	ß	850			•		٠
SAO One Year	108	22,844	113	23,330	118	25,165	985	5	850	935	350	•	ĸ	850				•	
SAO Facilities Maintenance	0	0	0	0	0	0	•	٠				•							
Museum Conservation Institute	9	2,936	23	3,029	23	3,122	93		•	93	1	٠	,				•	•	•
Smithsonien Environmental Research Center	31	3,128	34	3,222	34	3,349	127		•	127	•						٠	•	
SERC One Year	31	3,128	34	3,222	34	3,349	127	٠	•	127		٠						'	
SERC One Year - JESP (010002)	0	0	0	0	0	0	,	٠	•									٠	
Smithsonian Tropical Research Institute	247	12,064	248	12,438	263	18,045	407	15	5,200	407		٠	15	5,200			٠	•	*
STRI One Year	247	12,064	248	12,438	263	18,045	407	15	5,200	407		٠	15	5,200	٠			•	
STR! One Year - IESP (010002)	0	0	0	0	0	0			•									•	
STRI No Year - FY02 Anti-Terrorist Security Supplemental (017011)	0	0	0	0	0	0		٠	•								٠	٠	
STRI Social Security	0	0	0	0	0	0			•		,	•						,	
Subtotel, Science Museums and Reseerch Centers	1,167	123,488	1,205	127,250	1,250	145,852	5,160	45	13,442	4,530	630	-	45 1	13,442	0		•	0	1
Total Museum and Because		104	_				000	5	1		,			(
Total Museums and nesearch Centers	1,375	1,975 215,195	ļ	2,114 231,541	2,175	529,525	10,281	19	17,703	8, 131	2,150		61	17,703	٠			•	

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SMITHSONIAN INSTITUTION
Salarias and Expanses
Unit Detail of tha 2007, 2008, and 2009 Estimates (in Thousands)

A1A2 Worksheet for FY 2009 Justification to OMB

ETE - Euff Time Conjuntation	FY 2007	_	FY 2008	FY	FY 2009	ANALYSIS	ANALYSIS OF CHANGE	ш				Detailed Analys	Detailed Analysis of Program Change	ange		
			Congress	-	OMB				Mandat	Mandatory Costs			Program Changes	800	Pu	Proposed Re-orge
			,			Mandatory Costs	Program & Reorgs	æ	Nec. Pay & Related Costs	Utilities & Rent	Other	Increases	Decreases	Non-recur		
TINU	FTEs \$000	FTES	\$000	FTEs	\$000	\$	FTEs \$(\$000	\$000	\$000	\$000	FTEs \$000	FTEs \$000	FTEs	\$000	FTEs \$000
PROGRAM SUPPORT AND OUTREACH		_													-	
Outreech)5 65		99	11,559	275	-	1,615	275	•	٠	1 1,615	ı	,		,
Smithsonian Institution Traveling Exhibition Services - One Year	39 4,504	-	0 4,599	41	4,979	165	-	215	4 165			1 215				,
-SITES No Year - 9/11 Bearing Witness Exh (017014)	0		0 0	0	0	•		•	,		*					
Smithsonian Center for Education and Museum Studies	14 1,445		14 1,472	14	1,524	52		•	52							1
Smithsonian Affiliations Program			2 273	2	288	15		•	15		•					,
National Science Resources Center		0	0 0		0	•		•			*					,
Office of Research Training and Services	٦	34	٦		3,358	19		1,400	61 79		•	0 1,400	0 0	0	0	0
LOffice of Research Training and Services - One Year		351	361	4	379	18		•	18		•				•	,
L2-Yr Fellowships (Fund 109/025002)		0		0	0	•		•		'	•				•	,
L2-Yr Fellowships (Fund 120/025805)	0 1,583		1 1,578	_	2,979	-		1,400	1	,	•	- 1,400			•	,
L2-Yr Scholarly Studies Prgm (Fund 120/025905)				0	0	•	,	•		•	•				•	,
Smithsonian Institution Scholarly Press					1,410	24		•	24	•	•		,			,
Communications	7	_	2		2,367	104	-	120	104	•	•	1 120			•	,
VIARC		_			575	21		,	21							,
Office of Public Affairs	-	_	-	_	1,221	43	-	120	43	•	•	1 120	. 0		•	
Smithsonian Photographic Services	909 6				571	40		•	40							
Institution-wide Progrems			_		12,703	•	<u>د</u>	5,750	•	,	•	. 5,750				,
Research Equipment - One Year 010004	0 1,641		0 1,641		3,141	•	,	1,500				1.500	0			
Research Equipment - No Year (017007)	0	0	0	0	0	•		•							•	
Information Resources Management Pool - One Year						•		•								
Unformation Resources Management - General	2		2		2,263	•		•			•					
Linformation Resources Management - CIS		_	0 924		1,924	•	,	000,1				1,000	0			,
Unformation Resources Management - No Year (017008)		_			0	•	,	•		,	•					,
Latino Programming - One Year (010003)	0 1,140		1,1	_	1,390	•		250	~			. 250			•	
-Latino Programming - No Year (017009)		0	0 0	0	0	,		,								
Collections Care Initiative			900	-	900 6	•		, 60				000 6				
Collections Care & Preservation for their		_		> <	606.5	•	,	3	,			00°r				,
Lother Collections Initiatives	o c			-	0 0	• •										
Office of Exhibits Central	30 2.749		2.8	·	3.023	121		20	121			. 70				,
Major Scientific Instrumentation (017000) (No-Year)					13,036		6	9,150	·			9,150				
Museum Support Center			25 1,784	25	1,845	61		,	19	•	•	,		,	,	,
Operations One Year			25 1,784		1,845	61		•	19				,			,
Equipment and Move One Year (017007)	0	0	0 0	0	0	•		•			-				_	
Equipment and Move No Year (017002/017003)	0	0	0 0	0	0	,		•			•				,	,
Smithsonian Institution Archives				15	1,463	9/		•	92	,	,					
Smithsonien Institution Libraries	92 9,326	97	7 9,551	97	9,953	319		83	319	•	1	. 83		,	,	,
Total December Comment of December	100	-	000	Č	1	C	,	9	i i			7				
iotal riugialii Support allu Outreach	- 1	4	1	739	55,348	900	1	10,788	956			2 10,78			-	



SMITHSONIAN INSTITUTION Salarias and Expansas Unit Datail of the 2007, 2008, and 2009 Estimatas (In Thousands)

A1A2 Worksheet for FY 2009 Justificetion to OMB

ETC - E. Il Timo Controlone	FY 2007	-	FY 2008	FY	FY 2009	ANALYSIS	ANALYSIS OF CHANGE	ge ge				Detailed An	alysis of F	Datailad Analysis of Program Change	əbi			
		_	Congress		OMe			and an	Manda	Mandatory Costs			Drog	Program Change			Proposed Do com	
			50.50			Mandatory Costs	Program & Reords	S S	Nec. Pay & Related Costs	Utilities&	Other	Increases		Decreases	Non-recur		an poson us	Sin J
UNIT	FTEs \$000	FTEs	s \$000	FTEs	\$000	s.	FTEs	\$000	\$000	\$000	\$000	FTEs \$	0	FTEs \$000	FTES	\$000	FTEs	\$000
ADMINISTRATION																		
Office of the Secretary	6 683	_		7	727	26		•	26	•		,		1	•	•	,	•
- Office of Oiversity Initiatives			1,064	<u>ნ</u>	1,107	43		•	43	٠	•	,		•	٠	•	,	1
- Office of General Counsel	-	_	-	14	1,945	74	2	358	74	•		2	358	1		•	,	•
Office of Policy and Analysis		_		7	363	33		•	33			1		1	,	٠	٠	
Office of the Chief Financial Officer	2 353			e	370	12		,	12	,				•	٠	•	,	'
L Si Audit Costs			0 273	0	333	9		,	•	•	09			1	٠	•	1	•
Office of the Comptroller	വ		LD.	39	6,333	182	9	753	182			9	753	•		•	,	,
L Si Netional Finance Center Costs	0 525	-	0 525	0	525	•		•	1		•			1		•	,	1
L Wage Works					0	•		•	,			1				,	,	
Office of Contracting			(*)	.,	3,811	110	-	92	110			1	65			•	,	'
L Paper/GSA Disposal	0 224				224			•	٠			٠		,	•	'	1	'
L SI-Wide Procurement Training		0	0 0	0	220	220	٠	,		•	220	,		•		-	,	,
Office of Planning, Management and Budget	11 1,400		2 1,435	12	1,496	61		•	19		•	1		•		•	,	'
^L Unalloceted	0 636		0 986	0	986	•		•		•		•			٠	-	,	•
- Office of the Treasurer					0		,	•			•	1		•		'		1
Office of the Chief Information Officer - SUMMARY	85 26,151		•	_	40,142	1,200	17	11,740	009		009	17 11	11,740			,	,	•
Office of the Chief Information Officer	83 8,966			88	19,390	1,200	15	8,172	009		009	15	8,172			1		1
Enterprise Resource Planning System (ERP5)		_	8 9,924	00	9,924	•		1			1					•		
- Managed IT Infrastructure				гo	9,774	•	2	3,568			•	2	3,568					
- IT Security	0 1,055			0	1,054			•								-		
LIT - Hotocaust Website				0	0	1		-									,	
Utility, Communications	0,		=		11,224	1,136		•	•	1,136	'					•		
Office of the Under Secretary for Art	4 570		6 580		595	15		•	15		1			1		•		•
Office of the Under Secretary for Science - SUMMARY					1,403	53			53	'	•		1			•		•
Office of the Under Secretary for Science	12 1,327		1,3	_	1,403	53		•	. 23				-			•		
Office of the Under Secretary for Science - IESP (010002)				_	0			'			•	,				•	,	٠
Office of Deputy Secretary/Chief Operating Officer					169	38		•	38		'	,	1			•		
- National Collections Program	7		7	_	226	•		•		'	•	ı						1
- Director for Netional Programs		_			0	•	,	•	•			,				•		1
F Office of Government Relations					230	21		-	21	1		•		1		•	٠	•
F Office of Human Resources	44 5,136			4	5,830	174	m	172	174		•	m	372			(200)		٠
- Workers' Compensation	m	9	0 3,270		3,405	135		•	135	1	•			•		1	٠	1
L Unemployment Compensation		- 62		0	369	•		٠	•	٠	1		8		٠	٠		
L Commuter Benefits (WageWorks)	0 228	88	0 228	0	228	•		•			•		1	•	٠		٠	1
- Office of Special Events and Protocol	101		1 104	-	111	7		٠	7		1			1		•	٠	٠
- Smithsonian Letino Center	1 229	6	3 234	D.	491	4	7	253	4	•		2	253		1	•		
INCIT A CITAINING A LATOR							č			,								
IOTAL ADMINISTRATION	253 64,110		264 66,740	732	83,685	3,604		13,341	1,588	1,136	880	31	13,541			(200)		•
L Office of inspector General	15 1834	_	16 1 977	21	2 532 By	23 V RE	Ľ	470	85			Ŀ	470					
		-)	•			-	,				-		-



SMITHSONIAN INSTITUTION Saleries and Expenses Unit Detail of the 2007, 2008, and 2009 Estimates (in Thousands)

A1A2 Worksheet for FY 2009 Justification to OMB

	FY 2007		FY 2008	FY	FY 2009	ANALYSIS OF CHANGE	OF CHAN	39				Detailed A	nalysis of	Detailed Analysis of Program Chango	hango				
rig = rui-ime aquivaient	esumate		Congress	ō ō	OMB			·	Mandat	Mandatory Costs			Pr	Program Changes	səbu		Pro	Proposed Re-orgs	orgs
`			•			Mandatory	Program &	1	Nec. Pay &	Utilities&	7								,
b	0000		0004	ť	000	Costs	9	9	coco costs	0000	Ctmer	Increases		Decreases		2-10			9
	F1ES 300	+	1	FIES	2000	n	Z L		2000	2000	2000	FIES	+	ries so	OO FIES	2000	+	ries S	2000
Facilities Meintenence	307 51,277	77 307	7 52,273	377	77,735	1,415	0,	24,047	1,415	g .		20	24,047						
Facilities Operations, Security and Support	1,317 166,312		1,328 180,611	1,415	193,945	6,841	87	6,493	3,945	2,896	•	87	7,263		,		(022)	,	
Utilities	0 42,248	248	3 46,514	0	48,985	2,471		•		2,471	•					-			
Central Rent	0 19,175	175	24,622	0	25,047	425				425	•							,	,
Facilities Operations, Security and Support Main	1,146 95,761	761 1,157	7 100,075	1,244	110,124	3,556	87	6,493	3.556			87	7,263				(077)		
S&8 OPS Security System Modernization	0	0	0 0	0	0	•		•		•									
S&8 Cost of Additional Security Staff	171 9,1	9,128 17	9,400	171	9,789	389		•	389										
OPSNo-Year Improvements	0	0	0	0	0														
OPSNo-Year 02 Anti Terrorist	0	0	0	0	0	•		•		•	•								
OPS - CIS E Court Equip	0	0	0	0	0														
Total Facilities Services	1,624 217,589		1,635 232,884	1,792	271,680	8,256	157	30,540	5,360	2,896		157	31,310		,		(022)		,
SUBTOTAL, SMITHSONIAN INSTITUTION	4,114 536,295	95 4,285	5 571,347	4,541	673,371	23,182	256	78,842	16,120	6,182	880	256	79,812			6) -	(076)	,	
UNALLOCATED REDUCTION	0	•	0	0	0	•	•	•		1	,	1			,				
GRAND TOTAL, SMITHSONIAN INSTITUTION	4,114 536,295	95 4,285	5 571,347	4,541	673,371	23,182	256	78,842	16,120	6,182	880	256	79,812			- (9	(920)		'
GRAND TOTAL, SMITHSONIAN INSTITUTION	4,114 535,2	_		- 1	673,371	23,182		78,847	16,120	0,182	880		7,816				(9	(0/6)	. (0/6)

Notes:



SMITHSONIAN INSTITUTION Salaries end Expenses Unit Detail of the 2007, 2008, and 2009 Estimates (In Thousends)

A1A2 Worksheet for FY 2009 Justification to OMB

	EV 2007	700	FV 20	808	FV 2009	600	PISVIDAD	ANALYSIS OF CHANGE	Ē			Dataila	d Analysis	Detailed Analysis of Program Change	Chance				
FTE = Full-Time Equivalent	Estimate	ete	Request to	at to	Request to	st to								and the second	6				
			Congr	988	OMB	80			N	Mandatory Costs	sts			Program Changes	hanges		_	Proposed Ra-orgs	-orgs
							Mandetory	Progrem &		Noc. Pay & Utilities&	S&								
				-			Costs	Reorgs	Related Costs	sts Rent	0.00	ir. Inc	20280	Decreases		Non-recur	Sar		
UNIT	FTEs \$000	\$000	FTEs \$000	\$000	FTEs	\$000	45	FTEs \$000	000\$ 0	\$000		\$000 FTEs \$000	\$000	FTEs	\$ 000\$	FTEs \$000 FTEs \$000	_	FTEs	000\$
STRI One Year - BCI Fed/Trust Fund (019001)	9	0	æ	0	` 9	0	•		•		***************************************						·		

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