

# Smithsonian

Fiscal Year 2012

# Smithsonian Institution Fiscal Year 2012 Budget Justification to Congress

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#### THE SMITHSONIAN INSTITUTION: MAKING PROGRESS

The Smithsonian Institution has a crucial role to play in the civic, educational, scientific, and artistic life of this nation. More than ever, the Institution is involved in the vital issues of the day and is making progress on many fronts. Changes are being implemented across the Smithsonian to spur creativity and innovation, and to highlight the Institution's unique ability to address pressing national and global issues. Thanks to help from the Administration and Congress, our Regents, the Smithsonian National Board, unit advisory boards, staff, and volunteers, the Institution is making great progress serving the public as well as internal stakeholders.

We're redesigning our management operations, redefining how we talk about the Institution with our branding initiative, using social media to reach new audiences, garnering significant new philanthropic support, finding new partners in the public and private sectors, supporting our scholars, enhancing and digitizing our collections, engaging new, diverse audiences at our museums and galleries, expanding our offerings online, and helping to change the face of education in America. We're making our collections, experts, and research more available to parents, students, teachers and lifetime learners. We created nearly 100 exhibitions in 2010, and welcomed 86 new baby animals at the National Zoo. There is much to be proud of at "America's museum;" the Smithsonian's future is certainly bright indeed.

The Institution's bold Strategic Plan is interdisciplinary, collaborative, and entrepreneurial. It focuses on four "Grand Challenges:" 1) Unlocking the Mysteries of the Universe; 2) Understanding and Sustaining a Biodiverse Planet; 3) Valuing World Cultures; and 4) Understanding the American Experience. Our four new Consortia, which address the four Grand Challenges, help foster a spirit of interdisciplinary collaboration that stimulates intellectual exchanges within the Smithsonian and beyond. The Consortia recently funded 29 competitive grants in our Grand Challenge Awards competition for a variety of interdisciplinary projects on such topics as: "Black Holes," "Recovering Lost Languages," our "Immigration and Migration Initiative," and much more.

The results of our work can be seen everywhere. Smithsonian scientists assess the consequences of climate change, keep aircraft safe from bird strikes, document and control invasive species, protect our soldiers from insect-borne disease, measure the impact of the Deepwater Horizon oil spill, and help the people of Haiti preserve their artistic and cultural heritage. The Institution has unmatched capacity to tackle biodiversity issues. For example, the Smithsonian Institution Global Earth Observatories network created a worldwide partnership to monitor the health of millions of trees in more than 20 countries.

We want to help change K-12 education in this country and we're reaching new audiences and broadening access through our education activities. We're nearing completion of an Institution-wide educational plan. On January 13, 2011, the Office of the Assistant Secretary for Education and Access and the Smithsonian Educators Exchange hosted a "Big Idea" meeting. Proposals for projects were organized around the following themes: Outreach to Youth and Schools; Visitor Experiences; Centers for Learning; Professional Development; and Creative Communities.

The Smithsonian launched "Shout," an interactive education program for students on environmental issues, with the Microsoft Partners' Learning and Taking It Global project. The first program is tree-banding, based on the methodology used at the Smithsonian Environmental Research Center and the Smithsonian Tropical Research Institute. The Institution will provide classrooms around the world with tree-banding kits containing tools and equipment that students can use to band up to 12 trees in their local community, and then send the tree-growth data they collect to Smithsonian scientists for analysis. Along with the Massachusetts Institute of Technology (MIT), and funding from a National Science Foundation Informal Science Education grant, we will offer "Vanished," a mystery game, from April through May 2011. Youth, ages 11–14, will collaborate with Smithsonian scientists and fellow players nationwide to unravel an interactive mystery short story. Through games, puzzles, online challenges, museum visits, and real scientific thinking, they will try to uncover the truth before time runs out.

For 26 years, the National Science Resources Center (NSRC) has leveraged the research and expertise of the Smithsonian and the National Academies of Science to develop science education programs. NSRC recently won a \$25.5 million grant from the Department of Education. NSRC then raised \$8 million in private matching funds for its initiative to transform Science, Technology, Engineering, and Mathematics (STEM) education in three project areas: two rural, North Carolina and Indiana, and one urban, Houston. With its partners, our Cooper-Hewitt, National Design Museum won a \$5 million Department of Education grant to improve art education in New York City schools.

Last summer, the Smithsonian co-hosted a rural education summit with the Secretary of Education at the National Museum of the American Indian. We also used a Pearson Foundation grant to hold 20 workshops for teachers and students. In addition, the Smithsonian recently conducted three successful interactive online education conferences: on President Lincoln, climate change, and how Smithsonian experts solve problems. To date, these conferences have included 34 hours of live programming and more than 33,000 participants from 135 countries, all U.S. states and territories, more than 3,500 cities, and six

continents. More conferences will be offered in the coming year.

Our redesigned website is getting a great response from users. Our free, easy-to-use Smithsonian visitor mobile application will be ready this spring. It is a radical new concept, with built-in interactive features that will allow the public to collaborate with the Institution and the Institution to use their tips and recommendations along with those of our experts. It is a dialogue that will be continually refreshed. These Web tools position the Smithsonian as a leader in mobile applications for museums. On central Smithsonian social media outlets alone, the Institution has more than 300 accounts and is rapidly developing others. We have more than 77,000 Facebook fans, and more than 245,000 Twitter followers. Our YouTube offerings have been viewed more than half a million times.

For 165 years, the Smithsonian has served our nation and the world as a source of inspiration, discovery, and learning. In these tough economic times, the Smithsonian, with its free museums and the remarkable scope of information accessible from its websites, has become an even more valuable resource for the American people than ever before.

As the largest museum and research complex in the world, the Smithsonian is supported by authoritative scholarship that connects Americans to their cultural heritage and also makes the Institution an international leader in scientific research and exploration. The Smithsonian has 19 museums and galleries, 20 libraries, numerous research centers, and the National Zoological Park. The Smithsonian has physical facilities in eight states and the District of Columbia, and operates in nearly 100 countries, at sites ranging from the equator to both poles.

Nearly 30 million people from across the country and around the world came to the Smithsonian during the past fiscal year. The 30 million visits speak to the quality and relevance of the nearly 100 new exhibitions the Smithsonian launched in 2010, and the hard work of everyone — staff, carpenters, curators, security officers, scholars, scientists, and historians — to make the Smithsonian an exciting, inspiring place.

We offer a variety of experiences for learners of all ages: exhibitions on African, Asian, Latino, and Native American art, presidents, painters, astronauts, the history of flight, the story of what it means to be human, and the story of what it means to be an American. We want all of these visits to the Smithsonian to become "journeys of discovery" as people continue to engage Smithsonian collections, curators, and educational resources on the Web. The reach of everything the Smithsonian does is expanded exponentially by education and outreach programs. As an international institution, the Smithsonian offers the

world a picture of America and America a picture of the world.

The Smithsonian has more than 6,000 employees, including approximately 500 scientists, and more than 6,500 volunteers. Additionally, the Institution has 166 affiliate museums in 41 states, the District of Columbia, Puerto Rico, and Panama. As part of our outreach programs, the Smithsonian Institution Traveling Exhibition Service, the largest traveling exhibition service in the world, reaches roughly five million people throughout the country each year. The Institution's presence is further expanded through Smithsonian Networks' Emmy Award-winning Smithsonian HD channel, which now reaches millions of households, and, thanks to our distribution agreement with Comcast, the country's largest cable distributor, we will double our television audience in the next two years.

The Smithsonian is becoming more entrepreneurial, with philanthropic giving exceeding \$158 million last year. We are also securing significant grants and contracts. For example, our Smithsonian Astrophysical Observatory, with its partners, secured a \$67 million NASA grant for solar winds research. This project involves collaboration with the University of California, Berkeley; MIT; and the Los Alamos National Laboratory in New Mexico.

A survey designed by the Office of Personnel Management resulted in the Smithsonian being named one of the 10 best places to work in the federal Government, ranking number four among large agencies. The combination of volunteer and philanthropic support, with our national and international reach makes the Smithsonian a worthy and important investment for the federal Government. Accordingly, the support of the Administration, the Congress, and the American people is vital to all Smithsonian activities and the success of our mission for "the increase and diffusion of knowledge."

Given these opportunities, challenges, and difficult budget realities, the Institution is becoming more innovative, disciplined, focused, nimble, and self-reliant than in the past. It faces a future that holds both exciting opportunities and imposing challenges. By working with the Administration and the Congress, the Smithsonian will aggressively address these challenges and take full advantage of its many new opportunities, using the Institution's Strategic Plan as a road map to excellence.

## SMITHSONIAN INSTITUTION FY 2012 BUDGET REQUEST SUMMARY

	FY 2010	FY 2011	FY 2012
Account	Appropriation	CR level	Request
Salaries and Expenses	\$636,161,000	\$636,161,000	\$636,530,000
Facilities Capital Base	105,000,000	105,000,000	100,000,000
Facilities Capital, NMAAHC	20,000,000	20,000,000	125,000,000
Total	\$761,161,000	\$761,161,000	\$861,530,000

For fiscal year (FY) 2012, the Smithsonian's request to fund essential operating expenses and facilities capital costs of the Institution's physical infrastructure is \$861.5 million. It includes \$636.5 million for Salaries and Expenses (S&E), \$100.0 million for Facilities Capital base funding, and \$125.0 million for the construction of the new National Museum of African American History and Culture (NMAAHC). A detailed summary from the FY 2010 appropriation to the FY 2012 request is provided in the table at the end of this section.

#### **SALARIES AND EXPENSES**

#### NON-DISCRETIONARY COSTS

- Salaries and Related Costs (FY 2011 CR: +\$4,141,000; FY 2012: +\$91,000) The FY 2011 CR budget funds the enacted 2.42 percent pay raise for FY 2010. The FY 2012 request contains no increase for pay requirements. The request does include adjustments required for Workers' Compensation for FY 2011 and FY 2012.
- Non-pay Items (FY 2011 CR: -\$2,127,000; FY 2012: +\$2,207,000) —
   The Institution's request includes additional funding, largely for inflation-related adjustments in utilities, rent, and other fixed operating costs.

   Details are provided in the S&E section of this budget submission.

#### PROGRAM CHANGES

The following details the program changes from the FY 2010 appropriation to the FY 2012 request (see chart at the end of this section for details of FY 2011 and FY 2012 adjustments). The budget request continues to place the programmatic increases into the broad categories of the Smithsonian's Strategic Plan. This links the funds directly to the Institution's overall mission. The Strategic Plan articulates four Grand Challenges that allow the Institution to integrate the work of many disciplines. To leverage the Institution's knowledge, the Smithsonian created consortia or centers around each of the Grand Challenges. These consortia are not new programmatic units, but work through existing museums and research centers to facilitate innovative scholarship and outreach.

#### **EXCELLENT RESEARCH (GRAND CHALLENGES)**

#### Unlocking the Mysteries of the Universe

• Universe — Research (FY 2011 CR: +\$200,000; FY 2012: +\$100,000) This budget request includes an increase for research through the "Universe theme" interdisciplinary consortium, using the Smithsonian's world-class collections and scholarly resources. Research will focus on applying the integrative research of the Smithsonian's scientists to today's big questions regarding the origin and evolution of the Earth, planets, stars, galaxies, and the universe, thereby yielding tremendous results through the collaborative efforts of scientists, scholars, and cultural experts.

#### Understanding and Sustaining a Biodiverse Planet

- Biodiversity Consortium (FY 2011 CR: +\$250,000; FY 2012: +350,000) This request includes an increase for research using the Smithsonian's world-class collections, field stations, and scholarly resources. Research will continue to focus on applying Smithsonian resources to the questions in the Institution's Strategic Plan, such as, how to sustain a biologically diverse Earth, and how does this diversity change across geography and through time.
- Global Change (FY 2011 CR: +\$250,000; FY 2012: +\$750,000) —
   This request includes funds to address global change issues and to continue to monitor global forests to measure the impact of change on forest organisms through the Smithsonian Institution Global Earth Observatories.
- DNA Barcoding (FY 2011 CR: +\$250,000; FY 2012: +\$250,000) —
   This request includes funds to help the Smithsonian maintain leadership in DNA barcoding, and in the archival preservation of frozen biomaterials for current and future uses which, in some cases, may be the only way to preclude complete extinction of the species.
- Encyclopedia of Life (FY 2011 CR: +\$500,000; FY 2012: +\$300,000)
   This request includes the ambitious project at the National Museum of Natural History, the Encyclopedia of Life, which will become a key repository of scientific information about virtually every form of life on Earth.

#### Valuing World Cultures

• World Cultures — Research (FY 2011 CR: +\$300,000; FY 2012: \$0) This request includes funds to study cultures around the world, with

particular emphasis on African, Asian, and Latin American studies. The Smithsonian will use its rich holdings to enhance our understanding of international cultures and will continue to focus on collecting in those areas where cultural heritage is endangered and, if not preserved, would result in a loss of knowledge to humankind.

#### Understanding the American Experience

American Experience — Research (FY 2011 CR: +\$300,000; FY 2012: +\$500,000) — This request includes funds to document, interpret, and present the rich and diverse cultures that make up our national heritage. New curators specializing in Latino and Asian American history will study the social, scientific, technological, and artistic heritage of the United States and will document the growing diversity and inclusivity of the American experience through artifacts, oral histories, photographs, performances, and craft traditions.

#### **BROADENING ACCESS**

Digitization and Web Support (FY 2011 CR: +\$500,000; FY 2012: \$500,000) — The Smithsonian is uniquely positioned to become the trusted source of information on the World Wide Web by using new technologies to share the Institution's vast collections and extensive research, along with the expertise of its scholars, scientists, researchers, museum specialists, and curators. This request supports dedicated staff and archival storage to help continue the process of digitizing the Smithsonian and thereby increase access to the Institution's collections for the American people.

#### STRENGTHENING COLLECTIONS

Collections Management (FY 2011 CR: +\$1,288,000; FY 2012: +\$500,000) — This request provides resources to improve the quality of preservation, storage, documentation, and accessibility of collections across the Smithsonian and is linked to the digitization request above. The request also includes funds for the National Museum of Natural History to address conservation, storage, preservation, and accountability issues based on the Museum's collections assessment. This request also includes resources to support animal welfare and safety for the living collections at the National Zoo.

#### **MISSION ENABLING**

• Improving Internal Controls (FY 2012: +\$330,000) — This funding request supports the Board of Regents' efforts to strengthen financial and logistical oversight of the Institution. The resources will help the

Institution eliminate the internal control deficiencies identified by the Independent Review Committee and validated by a consultant-supported assessment that highlighted critical weaknesses.

- Revised Security Plan Implementation (FY 2011 CR: +500,000;
   FY 2012: -\$1,209,000) A new strategic security plan has enabled the Institution to move to a security force with greater presence in museums, increased supervisory positions, and more clearly defined advancement potential. The Institution received \$1,000,000 in FY 2010 and included \$500,000 in the FY 2011 CR budget to implement the new security structure. The Institution can return approximately 80 percent (-\$1,209,000) of these increases, while still maintaining a greater security presence. The Institution is able to achieve these results by creating a hybrid force of unarmed contract security officers at lower-risk security posts.
- Information Technology (IT) Infrastructure Consolidation (FY 2012:
   -\$750,000) Currently, both the Smithsonian Office of the Chief
   Information Officer (OCIO) and individual units provide helpdesk and
   desktop support services to Smithsonian staff. The Institution is
   identifying the specific IT infrastructure support services that could be
   consolidated under the OCIO. The main objective of consolidation is to
   implement efficiencies with standard support procedures, hardware,
   and software.
- Unit Reductions (FY 2012: -\$3,550,000) Unit and Institution-wide programs are reduced in FY 2012 to redirect the funds to higher priority programs that will further the progress on the Institution's Strategic Plan. In addition, unit FTEs were reduced from the FY 2010 appropriation to more closely align to actual usage.
- Buyout Savings (FY 2011 CR: -\$3,700,000) The Smithsonian implemented an Institution-wide Buyout in FY 2011 as part of its effort to restructure its workforce in accordance with the Institution's Strategic Plan, and to help fill the gap in funding for salaries and benefits and other fixed expenses.
- Facilities Maintenance (FY 2011 CR: -\$2,652,000) This request includes an adjustment to Facilities Maintenance in FY 2011 to support other priority Institution goals. The Facilities Maintenance Program is funded at the same level in FY 2012, not including the \$2,107,000 transfer from the Smithsonian Tropical Research Institute.

#### **FACILITIES CAPITAL PROGRAM**

The FY 2012 budget request for the Facilities Capital Program (\$100,000,000) is critical to improve the deteriorating condition of some of the Institution's oldest buildings and maintain the current condition of other facilities through systematic renewal and repair.

For FY 2012, this request continues major revitalization work at the National Zoological Park (\$17.0 million) and the National Museum of Natural History (\$8.0 million). It also includes funds to renovate the Smithsonian Environmental Research Center laboratory and access road (\$17.4 million); convert the uninhabitable school house at the Smithsonian Tropical Research Institute into an urgently needed research and laboratory facility in Panama (\$4.0 million); continue revitalization of the National Museum of American History (\$11.0 million); combine federal with private funds for the renovation and improvement of the mansion at Cooper-Hewitt, National Design Museum (\$7.0 million); complete the electrical system upgrade at the National Air and Space Museum (\$0.7 million); and provide for critical revitalization projects costing under \$5 million each throughout the Institution (\$19.7 million). This request accounts for planning and design of future projects estimated at \$15.2 million, and for the construction costs of the National Museum of African American History and Culture (\$125.0 million). Specific details are provided in the Facilities Capital section of this request.

#### SMITHSONIAN INSTITUTION FY 2012 BUDGET REQUEST BY APPROPRIATION ACCOUNT

	Amount	Amount	Amount
	FY 2011 CR	FY 2012	Changes from FY 2010 to FY 2012
SALARIES AND EXPENSES	FY ZUIT CR	Request	F1 2012
FY 2010 Appropriation/FY 2011 CR Level	\$636,161,000	\$636,161,000	
Non-Discretionary Cost Changes			
Salaries and Related Costs	4,141,000	91,000	4,232,000
Utilities, Postage, Rent, Communications, and Other	-2,127,000	2,207,000	80,000
Program Changes			
Excellent Research (Grand Challenges)			
Unlocking the Mysteries of the Universe			
Universe — Research	200,000	100,000	300,000
Understanding and Sustaining a Biodiverse Planet			
Biodiversity — Consortium	250,000	350,000	600,000
Global Change (including SIGEO)	250,000	750,000	1,000,000
DNA Barcoding	250,000	250,000	500,000
Encyclopedia of Life	500,000	300,000	800,000
Valuing World Cultures			
World Cultures — Research	300,000	0	300,000
Understanding the American Experience			
American Experience — Research	300,000	500,000	800,000
Broadening Access			
Digitization and Web Support	500,000	500,000	1,000,000
Strengthening Collections			
Collections Care and Preservation	900,000	0	900,000
Natural History Collections Program	250,000	250,000	500,000

SALARIES AND EXPENSES (continued)	FY 2011 CR	FY 2012 Request	Changes from FY 2010 to FY 2012
National Zoo (Animal Welfare/Safety)	138,000	250,000	388,000
Mission Enabling			
Improving Internal Controls	0	330,000	330,000
Security Implementation Plan	500,000	-1,209,000	-709,000
IT Infrastructure Consolidation	0	-750,000	-750,000
Unit Adjustments		-3,550,000	-3,550,000
Buyout Savings	-3,700,000		-3,700,000
Maintenance Adjustment	-2,652,000		-2,652,000
Salaries and Expenses Request	\$636,161,000	\$636,530,000	\$369,000

FACILITIES CAPITAL	Amount	Amount
	FY 2011 CR	FY 2012
Revitalization:		
Cooper-Hewitt, National Design Museum	8,850,000	7,000,000
National Museum of American History	18,000,000	11,000,000
National Museum of Natural History	16,600,000	8,000,000
National Zoological Park	11,400,000	17,000,000
SI Environmental Research Center	8,250,000	17,400,000
SI Tropical Research Institute (Gamboa)	4,000,000	4,000,000
National Air and Space Museum		750,000
Museum Support Center	5,000,000	0
Other Revitalization Projects	22,300,000	19,680,000
Facilities Planning and Design	10,600,000	15,170,000
Subtotal	105,000,000	100,000,000
Construction		
National Museum of African American History and Culture	20,000,000	125,000,000
Facilities Capital Request	\$125,000,000	\$225,000,000
REQUESTS, ALL ACCOUNTS	\$761,161,000	\$861,530,000

## SMITHSONIAN INSTITUTION SALARIES AND EXPENSES (S&E)

**Summary of Changes** 

	FY 2011 CR	FY 2012 Request	Change from FY 2010
	Amount	Amount	Amount
FY 2010 Enacted/FY 2011 S&E CR level	\$636,161,000	\$636,161,000	
Non-Discretionary Cost Changes			
Salaries and Related Costs	4,141,000	91,000	4,232,000
Utilities, Postage, Rent, Communications,			
and Other	-2,127,000	2,207,000	80,000
Total Non-Discretionary Cost Changes	2,014,000	2,298,000	4,312,000
Program Changes			
Excellent Research (Grand Challenges)			
Unlocking the Mysteries of the Universe	200,000	100,000	300,000
Understanding and Sustaining a			
Biodiverse Planet	1,250,000	1,650,000	2,900,000
Valuing World Cultures	300,000	0	300,000
Understanding the American Experience	300,000	500,000	800,000
Broadening Access			
Digitizing Collections	500,000	400,000	900,000
Making Collections Accessible on Web	0	100,000	100,000
Strengthening Collections			
Caring for the Nation's Collections	900,000	0	900,000
Caring for Natural History's Collections	250,000	250,000	500,000
Improving Animal Welfare and Safety	138,000	250,000	388,000
Mission Enabling			
Improving Internal Controls	0	330,000	330,000
Implementing Security Workforce Plan	500,000	-1,209,000	-709,000
Consolidating IT Infrastructure	0	-750,000	-750,000
Buyout Savings	-3,700,000	0	-3,700,000
Maintenance Adjustment	-2,652,000	0	-2,652,000
Total Program Changes	-2,014,000	1,621,000	-393,000
Unit Adjustments			
National Museum of the American Indian	0	-500,000	-500,000
National Museum of Natural History	0	-800,000	-800,000
Smithsonian Astrophysical Observatory	0	-350,000	-350,000
National Zoological Park	0	-250,000	-250,000
National Air and Space Museum	0	-150,000	-150,000
Smithsonian Tropical Research Institute	0	-300,000	-300,000
Multiple Administrative Programs		-1,200,000	-1,200,000
Total Unit Adjustments	0	-3,550,000	-3,550,000
S&E Budget Request	\$636,161,000	\$636,530,000	369,000

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#### **SMITHSONIAN INSTITUTION**

#### Salaries and Expenses

## Unit Detail of the FY 2010 Appropriations and the FY 2011 and FY 2012 Estimates (\$ in Thousands)

	FTE = Full-Time Equivalent		2010		FY 2011 Full-Year CR		2012 to Congress		SIS OF CH	ANGE
		Аррго	priduona		icai on	ricquest	to Congress	Costs		Increase
Page #		FTEs	\$000	FTEs	\$000	FTEs	\$000	\$000	FTEs	\$000
	MUSEUMS AND RESEARCH CENTERS									
	Unlocking the Mysteries of the Universe									
42	National Air and Space Museum	174	18,259	163	18,396	162	18,246	0	(1)	(150)
47	Smithsonian Astrophysical Observatory	113	24,323	109	24,385	106	24,035	0	(3)	(350)
52	Major Scientific Instrumentation	0	3,822	0	3,822	0	3,822	0	0	0
36	Universe Consortium	0	0	1	200	1	300	0	0	100
	Subtotal, Unlocking the Mysteries of the Universe	287	46,404	273	46,803	269	46,403	0	(4)	(400)
	Understanding and Sustaining a Biodiverse Planet									
58	National Museum of Natural History	360	47,622	364	48,413	363	48,163	0	(1)	(250)
70	National Zoological Park	220	23,190	221	23,352	218	23,352	0	(3)	0
76	Smithsonian Environmental Research Center	32	3,756	32	3,773	32	3,773	0	0	0
80	Smithsonian Tropical Research Institute	250	14,546	250	14,646	201	12,239	0	(49)	(2,407)
36	Biodiversity Consortium	0	0	4	750	9	2,100	0	5	1,350
	Subtotal, Understanding & Sustaining a Biodiverse Planet	862	89,114	871	90,934	823	89,627	0	(48)	(1,307)
	Valuing World Cultures									
89	Arthur M. Sackler Gallery/Freer Gallery of Art	45	6,113	45	6,135	45	6,135	0	0	0
93	Center for Folklife and Cultural Heritage	15	2,282	15	2,300	15	2,300	0	0	0
97	Cooper-Hewitt, National Design Museum	34	4,103	34	4,089	34	4,244	0	0	155
103	Hirshhorn Museum and Sculpture Garden	39	4,412	39	4,356	39	4,356	0	0	0
109	National Museum of African Art	29	4,504	29	4,461	29	4,461	0	0	0
35	World Culture Consortium	0	0	2	300	2	300	0	0	0
	Subtotal, Valuing World Cultures	162	21,414	164	21,641	164	21,796	0	0	155
	Understanding the American Experience									
117	Anacostia Community Museum	18	2,048	18	2,063	18	2,063	0	0	0
121	Archives of American Art	17	1,858	17	1,880	17	1,880	0	0	0
126	National Museum of African American History & Culture	46	12,894	46	13,324	46	13,437	113	0	0
136	National Museum of American History, Behring Center	171	22,349	171	22,437	171	22,637	200	0	0
144	National Museum of the American Indian	266	32,530	266	32,400	259	31,900	0	(7)	(500)
148	National Portrait Gallery	55	5,967	55	5,999	55	5,999	0	0	0
152	Smithsonian American Art Museum	92	9,245	92	9,343	92	9,343	0	0	0
36	American Experience Consortium	0	0	2	300	4	800	0	2	500
	Subtotal, Understanding the American Experience	665	86,891	667	87,746	662	88,059	313	(5)	0
	Total Museums and Research Centers	1,976	243,823	1,975	247,124	1,918	245,885	313	(57)	(1,552)

#### **SMITHSONIAN INSTITUTION**

#### Salaries and Expenses

## Unit Detail of the FY 2010 Appropriations and the FY 2011 and FY 2012 Estimates (\$ in Thousands)

	FTE = Full-Time Equivalent		2010 priations		2011 /ear CR		2012 to Congress		SIS OF CH Mandatory	ANGE
Page #		FTEs	\$000	FTEs	\$000	FTEs	\$000	<u>Costs</u> \$000	Program FTEs	Increase \$000
	MISSION ENABLING									
	Program Support and Outreach									
159	Outreach	62	9,669	62	9,612	62	9,291	0	0	(321)
165	Communications	24	2,457	24	2,494	25	2,594	0	1	100
168	Institution-wide Programs	0	10,839	0	11,628	0	10,928	0	0	(700)
176	Office of Exhibits Central	28	2,982	28	3,012	28	3,012	0	0	0
178	Museum Support Center	25	1,858	25	1,874	25	1,874	0	0	0
180	Museum Conservation Institute	24	3,119	25	3,236	25	3,236	0	0	0
184	Smithsonian Institution Archives	20	2,054	20	2,193	20	2,193	0	0	0
186	Smithsonian Institution Libraries	86	10,008	86	9,983	86	9,983	0	0	0
	Subtotal, Program Support and Outreach	269	42,986	270	44,032	271	43,111	0	1	(921)
190	Office of the Chief Information Officer	88	43,536	90	45,613	91	46,144	1,381	1	(850)
193	Administration	181	32,874	182	33,326	185	33,949	127	3	496
198	Office of the Inspector General	22	2,700	22	2,607	22	2,607	0	0	0
	Facilities Services									
200	Facilities Maintenance	347	72,935	347	70,000	391	72,107	0	44	2,107
203	Facilities Operations, Security and Support	1,317	197,307	1,317	193,459	1,317	192,727	477	0	(1,209)
	Subtotal, Facilities Services	1,664	270,242	1,664	263,459	1,708	264,834	477	44	898
	Total Mission Enabling	2,224	392,338	2,228	389,037	2,277	390,645	1,985	49	(377)
	GRAND TOTAL, SMITHSONIAN INSTITUTION	4,200	636,161	4,203	636,161	4,195	636,530	2,298	(8)	(1,929)

#### **SALARIES AND EXPENSES**

FY 2010 Appropriation	\$636,161,000
FY 2011 CR Level	\$636,161,000
FY 2012 Estimate	\$636,530,000

The Salaries and Expenses (S&E) account from the FY 2010 appropriation to the FY 2012 request is basically unchanged. The Institution realigned funds within the S&E account to cover non-discretionary costs and to address high-priority requirements associated with the Institution's Strategic Plan. Detailed changes are outlined on the previous chart and later in this section.

From the FY 2010 appropriation to the FY 2012 request, approximately \$4.3 million of the redirection is attributable to non-discretionary costs for sustaining base operations (utilities, rent, communications, etc.); \$7.9 million is for high-priority requirements supporting the Institution's Strategic Plan; and both of these increases are offset by consolidation efforts (-\$2.0 million); buyout savings (-\$3.7 million); maintenance adjustment (-\$2.6 million); and Institution-wide reductions (-\$3.5 million). The net increase from FY 2010 to FY 2012 is \$369,000.

#### **NON-DISCRETIONARY COSTS**

The Institution requests an increase of \$4,312,000 for non-discretionary costs from the FY 2010 appropriation to FY 2012. This includes \$4,232,000 for Salaries and Related Costs and \$80,000 for other non-discretionary costs for sustaining base operations (utilities, rent, communications, etc.). The detail below outlines the costs required for FY 2011 and FY 2012.

#### SALARY AND RELATED COSTS (+\$4,232,000)

- Salary Costs (FY 2011 CR: \$4,208,000; FY 2012: \$0) The FY 2011 budget includes an increase of \$4,208,000 for the annualization of the enacted January 2010 pay raise (2.42% for 1/4 of the year) and the difference in the budget vs. the enacted January 2010 pay raise (2.42% vs. 2.0%) for 3/4 of the year. The chart on the following page provides the unit detail. The FY 2012 request includes no salary increases.
- Workers' Compensation (FY 2011 CR: -\$67,000) The Workers' Compensation bill for FY 2011 is \$3,565,000, based on actual costs incurred from July 1, 2008 through June 30, 2009, as provided by the U.S. Department of Labor. The FY 2010 amount was \$3,632,000.
- Workers' Compensation (FY 2012: +\$91,000) This 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 2012 is \$3,656,000, based on actual costs incurred from July 1, 2009 through June 30, 2010, as provided by the U.S. Department of Labor. The FY 2011 amount is \$3,565,000.

FY 2011 and FY 2012 Increased Pay Cost (\$000s)						
Line Item	FY 2011 for Jan 2010 Annualization	FY 2012 Pay Raise	Total			
National Air and Space Museum	184	0	184			
Smithsonian Astrophysical Observatory	166	0	166			
National Museum of Natural History	452	0	452			
National Zoological Park	215	0	215			
Smithsonian Environmental Research Center	45	0	45			
Smithsonian Tropical Research Institute	106	0	106			
Arthur M. Sackler Gallery/Freer Gallery of Art	59	0	59			
Center for Folklife and Cultural Heritage	18	0	18			
Cooper-Hewitt, National Design Museum	32	0	32			
Hirshhorn Museum and Sculpture Garden	39	0	39			
National Museum of African Art	32	0	32			
Anacostia Community Museum	15	0	15			
Archives of American Art	22	0	22			
National Museum of African American History and Culture	112	0	112			
National Museum of American History, Behring Center	214	0	214			
National Postal Museum	7	0	7			
National Museum of the American Indian	248	0	248			
National Portrait Gallery	61	0	61			
Smithsonian American Art Museum	102	0	102			
Outreach	56	0	56			
Communications	37	0	37			
Office of Exhibits Central	30	0	30			
Museum Support Center	16	0	16			
Museum Conservation Institute	24	0	24			
Smithsonian Institution Archives	27	0	27			
Smithsonian Institution Libraries	82	0	82			
Office of the Chief Information Officer	152	0	152			
Office of Education	13	0	13			
Administration	220	0	220			
Inspector General	22	0	22			
Facilities Maintenance	367	0	367			
Facilities Operations, Security, and Support	1,033	0	1,033			
Total Increased Pay Costs	\$4,208	\$0	\$4,208			

#### UTILITIES, POSTAGE, RENT, COMMUNICATIONS, AND OTHER NON-DISCRETIONARY COSTS (\$ + \$80,000)

• (FY 2011 CR: -\$2,127,000; FY 2012: +\$2,207,000) — From the FY 2010 appropriation to the FY 2012 request, the Institution's budget increased +\$80,000 for utilities, postage, rent, communications, and other non-discretionary accounts, as detailed in the chart below. The decrease reflects consumption and rate changes in the utilities accounts, and inflationary increases as well as program needs in the rent accounts. In addition, the increase in the Communications and other accounts is requested to provide for fixed software licensing and maintenance; maintenance of the Institution's firewall and Internet bandwidth; and audit requirements.

The following table displays estimates from FY 2010 through FY 2012. The detail that follows addresses the specific changes impacting the FY 2012 accounts.

# Federal Utilities, Postage, Rent, Communications, and Other Non-Discretionary Costs FY 2010-FY 2012 (Dollars in Thousands)

	FY 2010 Approp.	FY 2011 CR Level	FY 2012 Request	Change FY 2010 - FY 2012	Change CR level – FY 2012
Utilities:					
Electricity	23,413	21,672	21,242	-2,171	-430
Chilled Water	7,994	7,597	7,298	-696	-299
Steam	8,854	8,675	8,777	-77	102
Natural Gas	4,478	4,373	4,027	-451	-346
DC Gov't Water/Sewer	4,435	2,802	3,451	-984	649
Other Water and Fuel Oil	<u>931</u>	<u>1,031</u>	1,094	<u>163</u>	<u>63</u>
Subtotal, Utilities	50,105	46,150	45,889	-4,216	-261
Postage	1,790	1,836	1,661	-129	-175
Motor Fuel	370	370	370	0	0
Rent:					
Central	28,404	27,643	28,556	152	913
Unit	4,420	<u>5,366</u>	5,679	<u>1,259</u>	<u>313</u>
Subtotal, Rent	32,824	33,009	34,235	1,411	1,226
Communications	12,679	14,171	15,552	2,873	1,381
Other	1,461	1,566	1,602	141	36
Total	\$99,229	\$97,102	\$99,309	\$80	\$2,207

Changes described below are compared to the FY 2011 CR level.

**UTILITIES** (-\$261,000) — The utilities request supports electricity, chilled water, steam, natural gas, Washington, DC Government Water and Sewer, and other water and fuel-oil services. The request includes the following:

Electricity (-\$430,000) — Electricity is used to operate the Smithsonian's large
infrastructure. The major use of electricity is for air-conditioning that provides
essential climate control to protect the priceless national collections as well as
visitors and staff. The electricity estimate is reduced in FY 2012 to reflect the
lower utility rates, with small increases to support facilities and program
changes.

The budget estimate includes lower actual rates in FY 2011 for the Washington Metropolitan Area (-\$1,165,000); anticipated rate increases in FY 2012 for all accounts outside of the Metropolitan Area (+\$234,000); and an increase for the purchase of renewable energy certificates to meet federal and Smithsonian energy goals of 7.5 percent of electricity use (+\$27,000). The request also includes increases for start-up funds to support the Smithsonian's annual share of electricity costs for the Smithsonian-George Mason University Global Conservation Studies Program (+\$115,000); added electricity demands resulting from the National Museum of American History's (NMAH) garage in-fill project (+\$87,000) and increased laboratory and support facilities at the Smithsonian Environmental Research Center (+\$229,000); and anticipated decreased reimbursements due to lower electricity rates (+\$43,000).

- Chilled Water (-\$299,000) 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 request includes an anticipated 1 percent rate increase in FY 2012 (+\$33,000), which is offset by a decrease for lower-than-budgeted rate increases in FY 2011 (-\$329,000) and increased reimbursements due to higher rates (-\$3,000).
- Steam (+ \$102,000) The Smithsonian uses steam for heating and humidification, and to produce hot water for facilities on the Mall and in New York City. The estimate includes an anticipated 12 percent rate increase to the New York account (+ \$66,000), an increase for added steam demand due to the NMAH garage in-fill project (+ \$65,000), and a decrease in the GSA steam rate for facilities on the Mall (-\$29,000).

- Natural Gas (-\$346,000) The Smithsonian uses natural gas for heating and generating steam. The net estimate includes an adjustment for the effect of lower-than-budgeted rate increases in FY 2011 among all accounts (-\$519,000); anticipated rate increases in FY 2012 that range from 3 percent to 8 percent among all accounts (+\$177,000); additional funds for added steam demand due to the NMAH garage in-fill project (+\$2,000); and anticipated increased reimbursements due to higher rates (-\$6,000).
- DC Water and Sewer (+ \$649,000) Funds cover the costs of both water and sewer services provided by the District of Columbia Water and Sewer Authority (DCWSA). This increase represents rate and billing adjustments transmitted by DCWSA to the Smithsonian (+ \$657,000), which are offset by anticipated increased reimbursements (-\$8,000).
- Other Water and Fuel Oil (+\$63,000) Funds provide water service for facilities outside of Washington, DC, and fuel oil used in dual-fuel boilers and emergency generators as a backup to natural gas. The net request provides for an anticipated 4 percent rate increase for all water accounts outside of Washington, DC (+\$34,000), and an increase for start-up funds to support the Smithsonian's annual share of water costs for the Smithsonian-George Mason University Global Conservation Studies Program (+\$10,000). Also included are funds to support an anticipated rate increase of 6 percent among all fuel-oil accounts (+\$19,000).

**POSTAGE** (-\$175,000) — Funds provide for all official domestic and international mail services. The postage estimate is reduced in FY 2012 to more closely align with estimated costs. The proposed decrease is primarily attributed to the U.S. Postal Service's delayed 2.9 percent rate increase, and greater cost savings from reduced mail volume of postal mail due to the increased use of email and the World Wide Web (-\$175,000).

**RENTAL SPACE** (+ \$1,226,000) — The request includes a net increase for centrally funded lease requirements (+ \$913,000) and unit-funded, programmatic lease requirements (+ \$313,000), as follows:

 Central Rent (+\$913,000) — The increase provides additional base rent funds for leased office and storage space, as follows:

<u>Escalation (+\$879,000)</u> — Provides for annual rent increases in accordance with the actual terms of current lease contracts. Among the contracts, the annual escalation rate for base rent averages 3 percent, and operating and real-estate taxes are estimated at 8 percent above FY 2011 estimates.

Other Additional Base Rent (+ \$34,000) — Provides additional base rent required for increased storage-space needs for the Smithsonian's Center for Folklife and Cultural Heritage (CFCH). CFCH has outgrown its existing storage space at several locations and is in need of larger, more adequate space. The Center currently occupies 2,984 square feet of storage space located at 750 9th Street, NW, Washington, DC (Victor Building) in addition to 100 square feet of storage space in Rockville, Maryland. CFCH also uses more than 2,000 square feet of storage space at various locations off the Mall, much of which is below an acceptable level of quality. Also, the Victor Building lease for the storage space expires in FY 2012 and the Smithsonian does not plan to renew the lease because the layout of the space makes it difficult to access. In FY 2011, the Smithsonian plans to consolidate and relocate CFCH's storage space into approximately 8,000 square feet of leased storage space at a location to be determined.

The requested \$34,000 in additional funds, along with \$86,000 in base rent, will provide the estimated \$120,000 in annual lease costs for FY 2012. All move and relocation expenses will be funded from existing federal base resources.

 Unit Rent (+\$313,000) — Justified here, but included in the following museums' line items, are unit-funded rent increases needed to support Smithsonian programs. The increases are as follows:

National Museum of African American History and Culture (NMAAHC)

(+ \$113,000) — Supports increased annual rent costs for leased office and collections-storage space at the Capital Gallery and Pennsy Drive facilities.

NMAAHC's base rent escalation is calculated according to lease terms and averages 3 percent between the two leases. Operating expenses and real-estate taxes are estimated at 8 percent over FY 2011 estimates (+ \$113,000).

National Postal Museum (NPM) (+\$200,000) — This increase provides the remaining balance required to pay annual lease costs (+\$165,000) and utility expenses (+\$35,000) for leased space within the historic Postal Square Building, adjacent to NPM's existing leased space. A signed lease agreement between the Smithsonian and the U.S. Postal Service provides NPM with an additional 9,200 square feet of space to be used primarily for the exhibition of NPM's philatelic collection. NPM received a sizable donation to support the expansion of the Museum with trust funds. The lease allows for a major transformation of the Museum, giving it a substantial presence on the ground floor of a historic building, thereby providing expanded exhibition space and increasing NPM's visibility and attendance. The increase requested here and in the FY 2011 budget provides \$300,000 for estimated annual lease and utility costs in FY 2012.

**COMMUNICATIONS** (+ \$1,381,000) — The communications base supports the operations of the Institution's voice and data telecommunications infrastructure.

Item	(\$000s)
Increased bandwidth/leased line increase	240
Replace firewall/maintenance	330
License/maintenance increases	441
SharePoint maintenance	245
STARS hiring system	125
Total	1,381

- Increased bandwidth/leased line increase (+\$240,000) The requested funds include \$230,000 to increase bandwidth capacity from 200Mb to 600Mb, which is the minimum needed to meet the increased Internet audience and the demand for digital content, including larger files such as digital video, which will grow significantly during the next two years. If the Smithsonian maintains the current capacity, external visitors would experience very slow connectivity to Smithsonian websites, and Institution staff would also experience delays when trying to access Smithsonian or other websites. This is a crucial time for the Institution as Internet usage continues to grow and the Smithsonian is strategically committed to increase sharing Smithsonian knowledge and digital assets globally via the Internet in support of the Institution's new Strategic Plan goal to broaden access. The requested funds also cover increased leased line costs for current capacity (+\$10,000).
- Replace aging firewall hardware/maintenance (+\$330,000) Firewalls are needed to protect Smithsonian websites, desktops, and IT application systems and the information stored on these systems from security threats and inappropriate access. This increase will solve a major internal control issue. The Smithsonian continues to see an increased reliance on information technology that requires increasing network bandwidth. The current configuration of firewalls requires periodic upgrading with consistently larger capacity to coincide with the Smithsonian's increased Internet traffic. If one of these aging firewalls fails, the Institution could have a Web outage that would require bringing down internally hosted Smithsonian websites or applications.
- License/Maintenance (+\$441,000) The budget request supports annual increases in software license fees and hardware maintenance costs, as follows:

Item	\$000s
Proxy Server Maintenance	55
CISCO Maintenance — Telepresence	85
CISCO Maintenance — Whipple Upgrades	15
EMC Maintenance	75
Digital Asset Management System Maintenance	25

Security Software Maintenance	
Desktop computer power management software – Maintenance	
Facility Management System Maintenance and License	10
Scientific Software Application Licenses	
SITES TRAX Licenses and Maintenance	9
Horticulture Botanical Garden Maintenance	
Total	441

- SharePoint Maintenance (+ \$245,000) In FY 2009, the Institution obtained a nearly \$4 million donation of Microsoft SharePoint services and licenses. The Institution is increasingly using SharePoint and it is critical to our internal communications and overall administrative efficiency. Beginning in FY 2012, the Institution must pay maintenance and licensing costs for this donation. This maintenance and assurance includes significant discounts for any new upgrades, which will save the Institution several million dollars in upgrade fees. If we do not pay this each year, not only do we lose access to updates, patches, and technical support for that year, but we also forfeit future rights to get a new version of SharePoint at the significantly reduced price. Paying this fee reduces the Smithsonian's risk of incurring additional expenses by several million dollars.
- STARS Hiring System (+ \$125,000) The STARS Hiring Management System needs to be replaced. The Institution is at the end of the five-year contract with Monster Government Solutions. The Smithsonian Office of Human Resources worked with the Office of the Chief Information Officer, as well as other units using the automated hiring systems, and conducted a market analysis that showed the need to continue the Institution's access to the same types of systems used by the federal Government. This line item is important for helping the Smithsonian meet its equal employment opportunity goals for hiring minorities and members of underrepresented groups. Not funding this increased cost will prevent the Smithsonian from online recruiting to fill vacancies.

**OTHER** — **ADMINISTRATION** (+ \$36,000) — Justified here but included in the Administration line item are increases to cover contractually required inflation costs for the annual audit of the Smithsonian's financial statements and personal property inventory (+ \$18,000), as well as increased processing fees for the Smithsonian's payroll services provided by the National Finance Center (+ \$18,000).

#### **SUMMARY OF PROGRAM CHANGES**

The following addresses the Institution's Strategic Plan priorities, along with the program and unit changes from the FY 2010 Appropriation to the FY 2012 request.

Program/Unit changes	FY 2011 CR FY 2012 Request		Change from FY 2010			
	FTEs	\$000s	FTEs	\$000s	FTEs	\$000s
Excellent Research (Grand Challenges)						
Universe	1	200	0	100	1	300
Biodiversity	7	1,250	7	1,650	14	2,900
World Cultures	2	300	0	0	2	300
American Experience	2	300	2	500	4	800
Broadening Access						
<ul> <li>Digitization/Web Support</li> </ul>	2	500	2	500	4	1,000
Strengthening Collections						
<ul> <li>Collections Care Fund</li> </ul>	0	900	0	0	0	900
<ul> <li>Natural History Collections</li> </ul>	1	250	2	250	3	500
<ul> <li>National Zoo (Animal Welfare)</li> </ul>	1	138	0	250	1	388
Mission Enabling						
<ul> <li>Internal Controls</li> </ul>	0	0	3	330	3	330
<ul> <li>Revised Security Plan</li> </ul>	0	500	0	-1,209	0	-709
IT Infrastructure Consolidation	0	0	0	-750		-750
Buyout Savings	0	-3,700	0	0		-3,700
Maintenance Adjustment	0	-2,652				-2,652
Unit and Institution-wide Adjustments	0	0	<u>-24</u>	-3,550	<u>-24</u>	-3,550
Total S&E changes	16	-2,014	-8	-1,929	8	-3,943

#### **EXCELLENT RESEARCH (GRAND CHALLENGES)**

The Smithsonian's Strategic Plan for 2010–2015 articulates four Grand Challenges that provide an overarching strategic framework for Smithsonian programs and operations. The four Grand Challenges are:

- Unlocking the Mysteries of the Universe
- Understanding and Sustaining a Biodiverse Planet
- Valuing World Cultures
- Understanding the American Experience

Meeting these Grand Challenges will allow the Smithsonian to integrate the work of many disciplines within its museums and research centers, as well as broaden the Institution's external collaborations. The challenges are grounded in research and emphasize complementary education and outreach programs; together, they will influence how the Smithsonian directs its resources and focuses its energies.

The Institution has established Consortia in each Grand Challenge area that will fuse and optimize efforts across the Institution and coordinate work with our research partners to ensure that our combined efforts have the maximum effect. The consortia will also aid the Institution in attracting new funds for these efforts. However, all research will continue to be conducted by our existing museums and research centers. The specific increases requested are as follows:

#### Unlocking the Mysteries of the Universe

The Smithsonian has played a leading role in understanding the fundamental nature of the universe, dark matter, galaxy formation, and extreme explosive phenomena in the universe, and in developing the world's largest next-generation telescope. Now the Smithsonian will focus on applying the integrative research of its scientists to today's big questions regarding the origin and evolution of the Earth, planets, stars, galaxies, and the universe, yielding tremendous results through the collaborative energy of scientists, scholars, and cultural experts.

Universe — Research (FY 2011 CR: +\$200,000; FY 2012: \$100,000) —
 This request supports research that will be conducted through the Universe consortium using the Smithsonian's world-class collections and scholarly resources. Areas that will be studied include the origin and evolution of the Earth and solar system; the effects of geologic and meteoric phenomena on Earth's atmosphere and biosphere; and research into the next generation of ground- and space-based astronomical telescope mirrors and instrumentation that will enable the next generation of breakthrough research.

#### Understanding and Sustaining a Biodiverse Planet

In recent decades, Smithsonian research has advanced and synthesized knowledge that has contributed to the survival of at-risk ecosystems and species in an effort to improve our knowledge of biodiversity and its role in the healthy functioning of ecosystems for a sustainable planet. Moving forward, the Smithsonian will broker interdisciplinary research and harness its institutional power to expand its work and find innovative approaches to problems stemming from the loss of biodiversity, ecosystem degradation, and the effects of global change.

- Biodiversity Consortium (FY 2011 CR: +\$250,000; FY 2012: +\$350,000) The requested increase supports the Strategic Plan theme for integrative research on science-based means to ensure the coexistence of society and biodiversity, and to answer the questions "What is the fundamental biology of species and their distribution across space and time?" and "How do natural ecosystems function, and what services do they provide?" by supporting complementary programs of research and infrastructure.
- Global Change (FY 2011 CR: +\$250,000; FY 2012: +\$750,000) Smithsonian science supports many strands of the U.S. Global Change Research Program (USGCRP) by providing baseline data, measurements, and monitoring of change in the biosphere and atmosphere. These funds will support observation and monitoring capabilities to ensure a long-term, high-quality, and high-resolution record of the state of the natural variability and change in climate; improve our understanding of the natural and human-induced forces of change; and increase the accuracy of environmental models and projections of future conditions. This request will focus on forests through the expansion and sustainment of the Smithsonian Institution Global Earth Observatories (SIGEO) network and on other USGCRP priorities.
- DNA Barcoding (FY 2011 CR: +\$250,000; FY 2012: +\$250,000) This request recognizes the importance of "horizontal genomics" in modern biodiversity studies, thereby helping the Smithsonian maintain its leadership and expand its efforts in DNA barcoding (a technique for characterizing species of organisms using a short DNA sequence), and the archival preservation of frozen biomaterials for current and future uses. As the recognized U.S. leader in DNA barcoding, the Smithsonian must increase its capacity in research and training. These funds are heavily leveraged by private support and collaboration with other Government agencies and international science funding agencies.
- Encyclopedia of Life (FY 2011 CR: +\$500,000; FY 2012: +\$300,000) This request supports the Encyclopedia of Life (EOL), an online compendium of information about the world's known species. The first phase of this initiative was developed with support from the MacArthur and Sloan Foundations. The EOL incorporates the Biodiversity Heritage Library, a consortium of 10 of the world's largest natural history libraries which are digitizing their biodiversity print holdings. 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. In addition, the EOL will provide information that can be used by another major science initiative, the SIGEO, and, therefore, can contribute to a better understanding of larger-scale concerns such as the effects of global change.

#### Valuing World Cultures

Throughout its history, the Smithsonian has contributed greatly to society's knowledge, understanding, and respect for the evolution of humanity and the diversity of the world's cultures. Building upon this strong foundation, the Institution will unite our museum and research center directors and other key scholars around an agenda focused on cross-cultural scholarship in our exhibits and educational programming. The Institution's collections, from the ancient to the contemporary, will be used to fully represent and understand the breadth of cultural creativity and diversity in our world.

This request funds research in history, art, and culture that encourages the study, appreciation, and preservation of the world's cultural heritage. Particular emphasis is given to researching those collections and forms of cultural heritage that are endangered, and, if not preserved, would result in a loss of knowledge to humankind.

• World Cultures — Research (FY 2011 CR: +\$300,000) — Globalization has brought peoples and cultures of different backgrounds around the world closer together, heightening the need for greater mutual understanding, appreciation, and communication. The United States is increasingly pursuing a policy of "soft" diplomacy — engaging people around the world through cultural exchanges and partnerships — in an effort to exert worldwide influence and promote human rights and democratic values, a major cornerstone of which is respect for the diversity of people and cultures. Leaders of museums and cultural institutions around the world look to the United States, and particularly the Smithsonian, for expertise and aid in preserving their own, often endangered, cultural heritage.

The funding will enable the Smithsonian to hire specialists in such fields as manuscript preservation, materials science, and site preservation to study cultures around the world, with particular emphasis on African, Asian, and Latin American studies. These specialists will use the Smithsonian's rich holdings to enhance our understanding of international cultures, and will use the Institution's expertise in preservation technology to promulgate knowledge, provide consultation, and deliver professional training throughout the world.

#### Understanding the American Experience

At present, the Smithsonian advances and synthesizes knowledge that contributes to understanding the American experience, particularly with regard to its history, art, and culture, as well as its connections to other countries and regions. Looking ahead, the Smithsonian will foster an Institution-wide approach to

understanding the American experience; one that encourages interdisciplinary project teams, documents the historic and ongoing accomplishments and creativity of the American people, and instills a greater understanding of the American experience both in our own citizens and in the global community.

The Institution will continue its research into the exploration of American history and the development of its contemporary culture. Particular attention will focus upon fully representing the diversity of the American people and examining how historical experiences and forms of artistic expression have defined various communities, forged a national culture, and connected Americans to other peoples around the globe.

American Experience — Research (FY 2011 CR: +\$300,000; FY 2012: +\$500,000) — The requested resources will enable the Smithsonian to better document, interpret, and present the rich and diverse cultures that have forged a national heritage that is uniquely American — a major focus of the Strategic Plan. Smithsonian research activities in history, art, and culture have not kept pace with the demographic changes in the United States, as well as with the increasing knowledge of the varied accomplishments, achievements, and stories of diverse communities which form the fabric of American society.

The funding will enable the Smithsonian to hire new curators specializing in Latino and Asian American history, and to study the political, social, scientific, technological, and artistic heritage of the United States, which has been created by the global influences and diverse cultures worldwide.

To meet these Grand Challenges, the Smithsonian has set clear strategic goals in the areas of Broadening Access to Institution resources; Revitalizing Education initiatives; Strengthening Collections; and Mission Enabling to advance the "increase and diffusion of knowledge." These goals will be achieved as follows:

#### **BROADENING ACCESS**

#### Digitization/Web Support

One of the key components of the Institution's Strategic Plan is to broaden access to the Smithsonian's collections, exhibitions, and outreach programs. The Institution will accomplish this goal by using new media and social networking tools to deliver information in customized ways that bring the Smithsonian's resources to audiences who cannot visit the museums and research centers in person. Digitizing the collections and making them accessible online are major Strategic Plan priorities. The increases highlighted below will assist in achieving this Institutional priority.

- Digitizing Collections (FY 2011 CR: +\$500,000; FY 2012: +\$400,000) —
   In FY 2009, the Institution established a Digital Asset Management System (DAMS) support branch to develop the Smithsonian's pilot DAMS into a full-enterprise production system with mature processes and production-quality data. The increase will be used to increase storage in the DAMS to support a greatly expanded number of digital assets contained in the system, including audio and video assets, and to provide the level of operational support and maintenance required for an Institution-wide system managing these critical assets.
- Web Support (FY 2012: +\$100,000) Funds are requested to monitor the Smithsonian's Web and new media presence, to ensure that the Institution's policies for websites, social media, mobile applications and other digital communications media are followed, and to support the Office of Communication and External Affairs' Web content manager and the Institution's Web and New Media Steering Committee.

#### REVITALIZING EDUCATION

Although no additional resources are requested in this budget, the Smithsonian will play a pivotal role in our nation's collective effort to strengthen education at every level. It will do so by creating stimulating learning experiences in science, technology, engineering, and mathematics (STEM); introducing learners to the problem-solving skills of design thinking; reinvigorating learning in the area of civic participation and the American experience; sharing and demonstrating the benefits of global partnerships and citizenship; and by supporting the creativity and innovation on which our nation was founded.

The Smithsonian Institution offers unique learning opportunities for learners of all ages, including: kindergarten through 12th grade, undergraduate, graduate, and post-doctoral students, and members of the general public. The Office of Education and Access is committed to providing quality learning experiences to the Institution's virtual and actual constituents who hail from every state in the union. While educators and K–12 learners are a priority for us, we are also committed to reaching families and individual learners where they live through our traveling exhibitions, online conferences, and the Smithsonian Affiliate membership program. The Smithsonian will provide Institution-wide coordination for all units engaging in education programming and will advance the goal of *Broadening Access* to the Smithsonian's resources and collections.

To date, the Smithsonian has produced multi-disciplinary online conferences that have attracted more than 20,000 learners; we are offering programs for young people and educators that enhance learning through the use of mobile and digital technologies; and we have developed educational applications and games that

teach audiences of all ages about our research. We are poised to do much more. By working with our partners from libraries, universities, the business community and the cultural sector, our experienced educators, innovative interactive technology staff, and world-renowned researchers have made the Smithsonian an important catalyst in the movement to develop interactive learning experiences in the 21st century.

#### STRENGTHENING COLLECTIONS

**Collections Management** — This request provides essential resources to meet professional standards of collections care and address the Institution's collections management needs.

- Collections Care and Preservation Fund (FY 2011 CR: +\$900,000) —
   This request provides resources for the Smithsonian to implement an Institution-wide collections assessment program, address the Smithsonian Inspector General's collections-related audit recommendations, and improve the preservation and storage of collections currently at risk of loss or damage. The funding increase will improve collections care, mitigate collections deterioration, and strategically address Institution-wide critical collections care needs by:
  - implementing an Institution-wide collections assessment program that guides long-term strategic plans for Strengthening Collections based on the resulting data
  - o stabilizing, rehousing, and inventorying specific collections at risk
  - providing funds to continue purchasing compact storage units and replacing substandard cabinetry, such as the purchase of museumquality storage for the National Air and Space Museum's small/mediumsized object collections and archives at the Udvar-Hazy Center
  - providing funds to continue to conduct collections-level assessments and surveys
- Natural History Collections Program (FY 2011 CR: +\$250,000; FY 2012: +\$250,000) This request provides the National Museum of Natural History (NMNH) with funds to address specific collections care deficiencies identified through the Museum's collections assessment, and improve the preservation, storage, and accessibility of the collections. This increase will enable NMNH to replace substandard storage cabinetry that is currently detrimental and hazardous to the collections; digitize original handwritten collection ledgers, thereby increasing their accessibility for scholarly use; and create electronic catalogue records and specimen images for important insect, animal, and plant specimens.

National Zoo (FY 2011 CR: +\$138,000; FY 2012: +\$250,000) — This request provides resources to support the welfare and care of the living collection. Excellence in animal care is paramount for maintaining the Zoo's accreditation by the Association of Zoos and Aquariums (AZA), as well as for maintaining compliance with the Animal Welfare Act. The requested increase will provide for an animal keeper and the necessary food, medicine, and enrichment supplies and pest management supplies needed to support the animal collection.

#### MISSION ENABLING

- Improving Internal Controls (FY 2012: +\$330,000) This request provides funds to strengthen the Institution's governance and financial internal controls as recommended by the Independent Review Committee (IRC). Funding the additional positions (\$330,000, 3 FTEs) will support the elimination of internal control deficiencies that were identified by the IRC, as reflected in the Regents' governance reform recommendations, and validated by a consultant-supported assessment that highlighted critical weaknesses. The new positions will support the development and conduct of specific control activities in the Office of Contracting and Personal Property Management.
- Revised Security Plan Implementation (FY 2011 CR: +\$500,000; FY 2012: -\$1,209,000) The implementation of a new strategic security plan enabled the Institution to move to a security force with greater presence in museums, increased supervisory positions, and more clearly defined advancement potential. The Institution received \$1,000,000 in FY 2010 and requested \$500,000 in FY 2011 to implement the new security structure. The Institution can return approximately 80 percent of those funds, while still maintaining a greater security presence. The Institution will be able to achieve these results by creating a hybrid force of unarmed contract security officers at lower-risk security posts. The implementation of this new security structure will enable the Institution to return to prior-year funding levels, resulting in a return of -\$1,209,000.
- Information Technology (IT) Infrastructure Consolidation (FY 2012:
   -\$750,000) Currently, both the Office of the Chief Information Officer
   (OCIO) and some individual units provide helpdesk and desktop support
   services to Smithsonian staff. The Institution is evaluating support services
   that could be consolidated under the OCIO. The main objective of
   consolidation is to implement efficiencies with standard support procedures,
   hardware, and software. An outcome of consolidation will be to provide a
   consistent and quality level of support for all Smithsonian units through a
   common management structure.

• Unit Reductions (FY 2012: -\$3,550,000) — The following resources are redirected to higher priority programs that will further the Institution's progress in implementing our Strategic Plan.

Unit	Program	\$ 000s	FTEs
Natural History	Reduce Repatriation program; temporary	-800	-5
	exhibits; and administrative programs		
Astrophysical Observatory	Reduce new instruments development	-350	-3
	and science programs		
Air and Space	Reduce aeronautics research	-150	-1
National Zoo	Close Kids' Farm	-250	-3
American Indian	Curtail visitor services program	-500	-7
Tropical Research Institute	Reduce research program	-300	-5
Reduce Administrative	Reduce desktop replacements, Institution-	-1,200	0
programs	wide pools (Research and Collections)		
Total		-3,550	-24

- Buyout Savings (FY 2011 CR: -\$3,700,000) The Smithsonian implemented an Institution-wide Buyout in FY 2011 as part of its effort to restructure its workforce in accordance with the Institution's Strategic Plan, and to help fill the anticipated gap in funding for salaries and benefits and other fixed expenses. Details of the unit savings are in the FY 2011 Congressional Justification Book.
- Facilities Maintenance (FY 2011 CR: -\$2,652,000) This request includes an adjustment to Facilities Maintenance in FY 2011 to support other priority Institution goals. The Facilities Maintenance Program is funded at the same level in FY 2012, not including the \$2,107,000 transfer from the Smithsonian Tropical Research Institute (STRI) to Facilities Maintenance. The transfer from STRI is a continuation of the FY 2004 integration of Smithsonian facilities management services into a single facilities organization, and to standardize operations and security support, as well.

**NO-YEAR FUNDING** — The following table provides the FY 2011 and FY 2012 Salaries and Expenses request for No-Year funding.

## **No-Year Funding Request**

(Dollars in Thousands)

Salaries and Expenses	FY 2011 CR Level	FY 2012 Request
No-Year Funds		
National Museum of African	13,324	13,437
American History and Culture		
National Museum of Natural History		
Exhibition Reinstallation	1,000	1,000
Repatriation Program	1,669	1,419
Major Scientific Instrumentation	3,822	3,822
Collections Acquisition	459	459
Total, No-Year	\$20,274	\$20,137

**OBJECT CLASS** — The following table provides an object-class breakout of resources for the Salaries and Expenses account.

### **Object-Class Request**

(Dollars in Millions)

Salaries and Expenses	FY 2011 CR Level	FY 2012 Request
Salaries and Benefits	408	409
Travel and Transportation	4	4
Rent, Utilities, Communications,	84	85
and Other		
Other Services	99	99
Supplies and Materials	18	17
Equipment	23	23
Total	\$636	\$637

# FEDERAL RESOURCE SUMMARY BY PERFORMANCE OBJECTIVE AND PROGRAM CATEGORY

The Smithsonian has developed its FY 2012 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 the Institution's strategic goals and by performance objectives under each goal.

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 summarizes the Institution's FY 2011 and FY 2012 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/	FY	2011	FY	2012	Cł	nange
Program Category	FTEs	\$000	FTEs	000	FTEs	\$000
Excellent Research						
Engage in research and discovery	449	69,793	447	70,206	-2	413
Ensure the advancement of knowledge in the						
humanities	117	16,679	119	17,114	2	435
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	56	8,026	59	8,746	3	720
Public Programs		-				
Provide reference services and information	145	16,309	137	15,810	-8	-499
Exhibitions		. 57555		107010		
Offer compelling, first-class exhibitions	429	53,419	426	52,515	-3	-904
	720	33,413	720	32,313	3	307
Revitalizing Education Engage and inspire diverse audiences	160	10.020	160	10 700	_	20
	163	18,829	163	18,799	0	-30
Strengthening Collections	4.40	50.050	440	50 445	4	0.1.0
Improve the stewardship of the national collections	443	58,658	442	58,445	-1	-213
Mission Enabling						
Facilities						
Improve the overall cleanliness and efficient	001	107 004	001	107.000		F00
operation of Smithsonian facilities	601	127,334	601	127,933	0	599
Implement an aggressive and professional	394	72,120	394	72,491	0	371
maintenance program  Execute an aggressive, long-range revitalization	394	72,120	394	72,491	0	3/1
program and limited construction of new facilities	1	2,508	1	2,585	0	77
Security and Safety	ı ı	2,300	1	2,303	0	, ,
Provide world-class protection for Smithsonian						
facilities, collections, staff, visitors, and volunteers	731	63,561	730	62,327	-1	-1,234
Provide a safe and healthy environment	52	8,013	51	8,039	-1	26
Information Technology	02	0,010	01	0,000		
Modernize the Institution's information technology						
systems and infrastructure	148	54,922	148	54,922	0	0
Management Operations		, ,		, -		
Strengthen an institutional culture that is customer						
centered and results oriented	176	22,438	177	22,546	1	108
Ensure that the Smithsonian workforce is efficient,						
collaborative, committed, innovative, and diverse	103	16,531	102	16,649	-1	118
Modernize the Institution's financial management		10/001	102	10,010	•	
and accounting operations	106	14,989	107	15,044	1	55
Enhance the reputation of the Smithsonian by		•		,		
maintaining good relations with the news media						
and with federal, state, and local governments	33	3,931	33	3,908	0	-23
Modernize and streamline the Institution's						
acquisitions management operations	47	6,327	49	6,633	2	306
Financial Strength						
Secure the financial resources needed to carry out						
the Institution's mission	9	1,774	9	1,818	0	44
TOTAL	4,203	636,161	4,195	636,530	-8	369

### GRAND CHALLENGES AND INTERDISCIPLINARY RESEARCH

		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 2010 ESTIMATE	0	0	0	0	0	79	0	0	
FY 2011 ESTIMATE	12	2,050	0	0	0	1,752	0	0	
FY 2012 ESTIMATE	21	4,300	0	0	0	2,359	0	0	

### STRATEGIC GOAL: EXCELLENT RESEARCH

### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY 2	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	8	1,450	15	3,200	7	1,750
Ensure the advancement of knowledge in the humanities	4	600	6	1,100	2	500
Total	12	2,050	21	4,300	9	2,250

### **BACKGROUND AND CONTEXT**

The Smithsonian's Strategic Plan for 2010–2015 articulates four Grand Challenges that provide an overarching strategic framework for Smithsonian programs and operations. Meeting these challenges will enable the Institution to integrate the work of many disciplines within the Smithsonian museums and research centers, as well as broaden our external collaborations. The challenges are grounded in research and emphasize complementary education and outreach programs; together, they influence how the Smithsonian directs its resources and focuses its energies. The Smithsonian has developed and implemented a Grand Challenges Awards initiative to advance cross-disciplinary, integrated scholarly efforts across the Institution that relate to one or more of the four Grand Challenges. Using a competitive internal process, the Smithsonian is distributing externally raised grant funds designated for the purpose of advancing research, broadening access, revitalizing education, and encouraging new ways of thinking that involve emerging technology. The grant funding may also help to leverage additional funding, both internal and external, thereby amplifying the scope

and breadth of crosscutting research initiatives. The Smithsonian uses the Grand Challenges to present the high-level view in the budget; funds are distributed through interdisciplinary consortia, but most of the actual expenditures are made by existing Smithsonian units.

The Smithsonian created interdisciplinary consortia around each of the four Grand Challenges to leverage the scholarship and experience that reside in each field of knowledge. These consortia, which can be virtual as well as physical, spark innovative research and educational programs, as well as broker partnerships with private and public entities that support these goals. In addition, the Smithsonian will fortify existing external relationships and forge new ones as potential collaborators emerge in priority areas. These consortia are not new programmatic units, but work through existing museums and research centers to facilitate innovative scholarship and outreach.

### The four Grand Challenges are:

- Unlocking the Mysteries of the Universe
- Understanding and Sustaining a Biodiverse Planet
- Valuing World Cultures
- Understanding the American Experience

When compared to the FY 2010 appropriation level, the budget estimate includes an increase of + \$4,300,000 and + 21 FTEs.

### FY 2012 REQUEST — EXPLANATION OF CHANGE

The specific FY 2012 increases for the Grand Challenges (+\$2,250,000, +9 FTEs) are as follows:

### Universe - Research (+ \$100,000)

The Smithsonian has played a lead role in understanding the fundamental nature of the universe, dark matter, galaxy formation, and extreme explosive phenomena in the universe, and the Institution is a principal contributor to the development of the world's largest next-generation telescope. The Smithsonian continues to focus on applying the integrative research of its scientists to today's big questions regarding the origin and evolution of the Earth, planets, stars, galaxies, and the universe, thereby harnessing the collaborative energy of scientists, scholars, and cultural experts.

This budget request includes an increase of \$100,000 to conduct research through the "Universe theme" interdisciplinary center, using the Smithsonian's world-class collections and scholarly resources. Areas of specific focus are the study of the origin and evolution of the Earth and solar system; the effects of geologic and meteoric phenomena on Earth's atmosphere and

biosphere; research into the discovery and characterization of exo-planets in the habitable zone; research using our rich collections, including the national meteorite collection; and research into the next generation of ground- and space-based astronomical telescope mirrors and instrumentation that will enable the next generation of breakthrough scientific research.

### Biodiversity — Research (+\$1,650,000, +7 FTEs)

The requested increase supports the Strategic Plan theme for integrative research on science-based means to ensure the coexistence of society and biodiversity, and to answer the questions "What is the fundamental biology of species and their distribution across space and time?" and "How do natural ecosystems function and what services do they provide?" by supporting complementary programs of research and the infrastructure needed to answer these questions.

- Biodiversity Consortium (+\$350,000, +1 FTE) This request includes an increase of \$350,000 for research using the Smithsonian's world-class collections, field stations, and scholarly resources. Research continues to focus on applying Smithsonian resources to the questions in the Institution's Strategic Plan, namely: (a) how biologically diverse is the Earth, and how does this diversity change across geography and through time?; (b) what does the planet's history teach us about the impacts of environmental change on the evolution and extinction of species?; (c) how do we better understand the life-sustaining services of ecosystems, and best sustain their contributions to human well-being?; (d) how do we secure the survival and recovery of ecosystems, habitats, and species; and (e) how can science better forecast environmental change?
- Biodiversity Global Change (+\$750,000, +3 FTEs) Smithsonian climate change-related research provides baseline data, measurements, and monitoring of change to the biosphere and atmosphere and tests new methods for data collection and analysis.

This request supports expansion of the Smithsonian's global network of forest plots and their integration into a system of Global Earth Observatories — SIGEO. SIGEO provides long-term scientific data about biodiversity, ecological, hydrological, soil, and meteorological processes associated with climate change at local spatial scales and, comparatively, at regional and global scales. This research platform enables Smithsonian scientists and their university and federal agency partners to better understand the storage and movement of carbon and water in tropical and temperate forests, as well as the impacts of climate change on the relationships of forests with wildlife, the atmosphere and sources of fresh water. SIGEO data improve forest change models and projections, and will better inform worldwide policy decisions related to carbon budgets,

nutrient cycling, hydrology, and biodiversity. The SIGEO network leverages and adds to related Government efforts coordinated through the United States Group on Earth Observations' interagency process (<a href="http://usgeo.gov">http://usgeo.gov</a>) and the USGCRP (<a href="http://globalchange.gov">http://globalchange.gov</a>). Increasing the SIGEO budget will stabilize long-term monitoring that extends back in time three decades; permit highly quantitative analyses of trees and carbon on individual forest plots and across the global network; promote further implementation of arthropod, vertebrate, soil, hydrology, and remote-sensing programs; and improve data quality and access.

- **Biodiversity DNA Barcoding** (+ \$250,000, +1 FTE) This request recognizes the importance of "horizontal genomics" and cybertaxonomy as 21st century innovations for taxonomy and biodiversity studies. DNA barcoding is a technique for using a short DNA sequence to characterize species of organisms. The Smithsonian is the recognized U.S. leader in this new and rapidly expanding field. The request enables the Smithsonian to continue to expand its capacity for barcoding, accelerate production of barcode data in high-priority taxonomic groups and applied projects, offer training to young researchers, and build the publicly available database. These investments will help the Smithsonian and the United States maintain our leadership in this technology. These funds support the work of the other biodiversity and climate change requests in this budget, and are heavily leveraged by private support (such as private foundation support to the Consortium for the Barcode of Life), collaboration with other Government agencies (such as the FDA, FAA, and NIH), and international science funding agencies (such as the International Barcode of Life challenge grant of \$50 million from Canada, especially Genome Canada).
- Biodiversity Encyclopedia of Life (EOL) EOL resources (+\$300,000, +2 FTEs) are justified in the National Museum of Natural History's budget narrative.

### World Cultures — Research

No additional resources are requested in the FY 2012 budget. The base funds in FY 2011 will enable the Smithsonian to hire specialists in manuscript preservation, materials science, and site preservation to study cultures around the world, with particular emphasis on African, Asian, and Latin American studies. These specialists will use the Smithsonian's rich holdings to enhance our understanding of international cultures, and will use the Institution's expertise in preservation technology to promulgate knowledge, provide consultation, and deliver professional training throughout the world.

Additionally, the Institution-wide consortia for world cultures enable the Smithsonian to define and implement a research agenda for cross-cultural

scholarship and exchanges. Particular emphasis is placed on collecting in areas where cultural heritage is endangered and, if not preserved, would result in a loss of knowledge to humankind. Our efforts range from preserving artifacts, such as manuscripts in Timbuktu, to documenting archaeological sites, such as the Indus Valley in Pakistan, to documenting the dying languages of the indigenous peoples of Africa, the Pacific islands, and the Americas.

### American Experience — Research (+ \$500,000, +2 FTEs)

The proposed funding (\$500,000, 2 FTEs) will enable the Smithsonian to continue to address the goals outlined in the Strategic Plan to document, interpret, and present the rich and diverse cultures that make up our national heritage. New curators specializing in Latino and Asian American history will study the political, social, scientific, technological, and artistic heritage of the United States, which has been created by the global influences of diverse cultures.

Additionally, the Institution-wide consortium for Understanding the American Experience enables the Smithsonian to support and coordinate efforts across Smithsonian museums and research centers; encourage interdisciplinary teams; foster partnerships with other scholarly organizations; develop new strategies for disseminating research results; and develop new sources of research funding. With these enhanced capabilities, the Smithsonian can develop a comprehensive approach to major research questions, and create exhibits, symposia, publications, and online offerings on such topics as the Civil War and civil rights, immigration and migration, American landscapes, and American democracy.

These funds will also enable the Smithsonian to undertake important new collection initiatives that will capture the growing diversity and inclusivity of the American experience. In addition to artifacts, we will also document our diverse culture with oral histories, biographies, archives, recordings, and visual representations, including photographs. We can also develop the Smithsonian's collections to capture the evanescent elements of our cultural heritage, such as through performances and craft traditions. Finally, the Institution will use this funding to develop collections plans to determine under-represented areas in our holdings, address those gaps through strategic acquisitions, and actively expand our collections to document the historic and ongoing accomplishments of the American people.

# Introduction, Unlocking the Mysteries of the Universe

The Smithsonian will continue to lead in the quest to understand the fundamental nature of the cosmos, using next-generation technologies to explore our own solar system, meteorites, the Earth's geological past and present, and the paleontological record of our planet.

RESEARCH Goal: The Smithsonian will continue to advance knowledge at the forefront of understanding the universe and the solid Earth.

ACCESS Goal: Inspire people to probe the mysteries of the universe and planetary systems.

UNITS primarily associated with this Grand Challenge:

- National Air and Space Museum
- Smithsonian Astrophysical Observatory
- Major Scientific Instrumentation

## **NATIONAL AIR AND SPACE MUSEUM**

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR- DESIGNATED		GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	174	18,259	41	5,798	20	3,294	5	1,244			
FY 2011 ESTIMATE	163	18,396	41	5,605	25	2,904	7	1,958			
FY 2012 ESTIMATE	162	18,246	41	5,605	25	2,904	7	1,958			

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

## Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	F١	2012	Cha	nge
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	4	1,303	3	1,153	-1	-150
Ensure the advancement of knowledge in the humanities	25	3,107	25	3,107	0	0
Broadening Access						
Public Programs						
Provide reference services and information	6	880	6	880	0	0
Exhibitions						
Offer compelling, first-class exhibitions	40	5,478	40	5,478	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	12	1,292	12	1,292	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national	48	2,852	48	2,852	0	0
collections						
Mission Enabling						
Information Technology	_					_
Modernize the Institution's information	9	1,043	9	1,043	0	0
technology systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is	19	2,441	19	2,441	0	0
customer centered and results oriented						
Total	163	18,396	162	18,246	-1	-150

### **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 6–8 million on-site visitors from around the world per year, making it one of the most visited museums in the world. In addition, NASM draws tens of millions of virtual visitors to its website and broadcast and webcast educational programming.

In FY 2012, NASM will collect and preserve the nation's aviation and space heritage, perform the necessary research for exhibits and the increase of knowledge about the solar system, and enhance educational programs, using a mixture of in-house and volunteer resources to convey excitement and information to diverse audiences.

For FY 2012, the budget estimate includes a decrease of -\$150,000 and -1 FTE as compared to the FY 2011 CR level. These resources are realigned to support the Institution's Strategic Plan. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$13,000 and -12 FTEs.

#### MEANS AND STRATEGY

Public Engagement — NASM continues to reach diverse audiences through exhibitions, Museum programming, and electronic outreach. The exhibitions incorporate written labels, interactive devices, and programming elements that appeal to a wide range of ages and interests. Based on the success of the newly renovated Pioneers of Flight exhibition, future plans will include components that are physically and intellectually accessible to the Museum's youngest visitors, ages 3–8. To illustrate complex concepts, exhibitions will continue to build on past success by using mechanical and computer interactive devices, which are appealing to most visitors but especially to school-age children and their families.

To further enhance visitors' experiences, NASM staff and volunteers will continue to provide a variety of Museum programs, from daily activities, such as the docent-led tours and science demonstrations that reach hundreds of thousands of visitors annually, to big family day events, such as the *Become a Pilot* Family Day that can reach more than 10,000 people in a day. NASM programs will continue to encourage visitors, especially school groups, to use the Museum's collections and experts to support life-long learning. NASM will seek to replicate the National Mall building's Early Childhood Education Program and the student Explainers Program at the Udvar-Hazy Center by FY 2012. The astronomy programs, which include the Public Observatory and educational programming in the planetarium, will remain an important component of STEM (science, technology, engineering and mathematics) education throughout FY 2012.

Electronic outreach continues to provide significant opportunities to engage new virtual audiences around the world, among those who may not be able to visit the Museum in person. In this arena, NASM has successfully used a variety of social media. FY 2012 and the future should see a growth in social media as well as an increase in mobile technology use. NASM continues to work with partners to produce educational broadcast programming and to archive the programs for future use. Production and dissemination of video will increase as it becomes easier and less expensive to create and access.

In March 2010, *Mars Revealed*, a new exhibit focusing on recent missions to Mars, was installed in the *Exploring the Planets* gallery. In May 2010, *Beyond: the Photographs of Michael Benson*, featuring dramatic images of the solar system, opened in NASM's *Flight and the Arts* gallery. In November 2010, the year's major exhibition effort, the *Barron Hilton Pioneers of Flight* gallery, featuring some of the museum's most significant aircraft, opened. The Museum's public observatory and telescope, installed on the southeast terrace in November 2009, continued its successful operation, providing an exciting new venue for educational outreach to visitors of all ages. Also in 2010, two new IMAX films opened: "Legends of the Sky" and "Hubble 3D."

In FY 2012, work will continue on two new planned exhibitions. One is *Time and Navigation*, which explores the relationship between timekeeping and navigation from the 18th century to the modern GPS era, on sea and land, and in air and space. The next stage of *Moving Beyond Earth*, the Museum's gallery on the Space Shuttle and the Space Station, will also be developed. NASM will also install aircraft and spacecraft in the Udvar-Hazy Center, rotate objects on exhibit, and upgrade galleries to reflect current trends in aviation and space flight and their history. NASM will also explore new ways to leverage the observatory's programming possibilities. The Museum will continue to expand its integrated website and on-site visitor information capabilities. These features 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 2012, NASM will continue to inspire and educate audiences at the National Mall Building and the Udvar-Hazy Center through new and updated exhibitions. *Moving Beyond Earth* Stage 2 will open in September 2011 and engage audiences with its many hands-on and computer interactive activities and educational programs broadcast from within the gallery. The *Jet as Art* exhibit, a temporary exhibit, will open in the Museum's West End Gallery and *First to Fight*, the U.S. Marine Corps' art exhibit, will open in the Museum's *Flight and the Arts* gallery, in honor of the centennial observance of Marine Corps aviation.

NASM will update existing exhibits such as *Space Race*, *The Wright Brothers & the Invention of the Aerial Age*, and the *World War I* gallery in addition to continuing design and production work on two major new exhibitions, *Time and Navigation* and *We Choose to go to the Moon*. Aircraft and spacecraft will continue to be moved into the Udvar-Hazy Center and an interactive exhibition will be developed to interpret the new Mary Baker Engen Restoration Hangar.

Collections — In early FY 2011, construction was completed on the Museum's Steven F. Udvar-Hazy Center. The complex now includes the museum's new conservation and restoration hangar and collections storage areas. The traditionally high level of craftsmanship shown in the NASM restoration program now will be matched by first-class facilities that can handle the various types of objects and materials that the Museum manages. Preparations continue for the move of the collections and restoration/conservation activities from the Paul E. Garber Facility in Suitland, Maryland, to the Udvar-Hazy Center, and will begin in earnest in FY 2011, pending adequate funding. NASM will continue its loan program, which encompasses more than 1,300 aviation and space artifacts, including some of the most sought-after artifacts of the last century: spacesuits and lunar spacecraft.

In order to make information on its collections available to the public, NASM will continue to migrate collections information to a publicly accessible website. The curatorial databases 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. To move this electronic outreach activity forward efficiently and effectively, in FY 2011 NASM will complete its digitization strategic plan, in alignment with the overall SI Smithsonian digitization plan released in 2010.

Scientific Research — To achieve the strategic goal of Excellent Research, NASM's Center for Earth and Planetary Studies conducts basic research related to planetary exploration, with an emphasis on Mars and the Moon, and curates galleries and public offerings in the space sciences. NASM scientists continue to work as members of the science teams for the Mars Exploration Rover, Mars

Express, Mars Reconnaissance Orbiter, Lunar Reconnaissance Orbiter, and MESSENGER missions. NASM scientists work with the data from these and other missions to solar system bodies, and seek to convey this exciting information to the public. In FY 2010, NASM submitted the first phase of an application for a grant to lead a \$400 million Mars Radar Mission. In FY 2011, the Museum will continue with the multi-stage submission of the proposal process for this major grant. Basic research continues to concentrate on the National Research Council and NASA priorities to determine the origin of solar system bodies and habitable planets, with an emphasis on understanding the past climate of Mars and publishing the results of this research in the scientific literature.

Historical Research — NASM will continue to lead in the field of flight history by publishing books and papers, and by making presentations at professional conferences on the history of aerospace technology, aviation, aerodynamics, space flight, and space sciences. Based on their research and expertise, the curatorial staff will continue to evaluate potential acquisitions for the national collections and respond to numerous public inquiries. NASM will also continue to upgrade exhibits dealing with aviation and space flight, thereby ensuring that current materials are available to the public.

Management — To achieve the Mission Enabling strategic goal, NASM has developed a single infrastructure to support the National Mall building, the Udvar-Hazy Center, and the Garber Facility. NASM relies on contracted facilities management and parking for the Udvar-Hazy Center. NASM has found its contractor solutions in these two areas to be a workable alternative for operating at a remote site where central Smithsonian support services are unavailable.

### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the budget estimate includes a decrease of -\$150,000 and -1 FTE. The decrease is for a senior curator position specializing in European and non-American aviation history. This position will be eliminated through attrition and the resources will be realigned to support the Institution's Strategic Plan.

**NONAPPROPRIATED RESOURCES** — General trust funds support research, education, exhibitions, and fund raising, including salaries and benefits. Donor/sponsor-designated funds support costs related to specific programs and projects. Fund raising is under way for future galleries and the endowment of public programs. Government grants and contracts support research and other scientific activities.

### 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 2010 ESTIMATE	113	24,323	86	18,350	14	3,529	240	93,847			
FY 2011 ESTIMATE	109	24,385	93	22,348	4	4,252	235	93,505			
FY 2012 ESTIMATE	106	24,035	93	22,348	4	4,252	235	93,505			

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; AND MISSION ENABLING

### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	100	22,395	97	22,045	-3	-350
Broadening Access						
Public Programs						
Provide reference services and information	4	550	4	550	0	0
Mission Enabling						
Information Technology						
Modernize the Institution's information technology	0	540	0	540	0	0
systems and infrastructure						
Management Operations						
Ensure that the workforce is efficient,	5	900	5	900	0	0
collaborative, committed, innovative, and diverse						
Total	109	24,385	106	24,035	-3	-350

### **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. The secondary mission is to be of service to the national and international astronomical communities, and to society in general, in areas associated with our primary mission. The Observatory has a strong record of achievement in developing

and successfully implementing large, complex, and innovative observational and theoretical research projects. SAO also supports the investigative research carried out by individual researchers and small groups. These varied activities create the distinctively fertile research environment that drives SAO's success.

SAO's work directly supports the first of the Grand Challenges outlined in the Smithsonian's Strategic Plan: Unlocking the Mysteries of the Universe. The goal calls for the Smithsonian to "advance knowledge at the forefront of understanding the universe and solid Earth."

Founded in 1890, SAO is the largest and most diverse astrophysical research institution in the world. SAO has helped develop some of the world's most sophisticated astronomical instruments, with high resolution at wavelengths across the electromagnetic spectrum, to probe the universe. Alone, and in powerful partnerships with the National Science Foundation, the National Aeronautics and Space Administration (NASA), and the Department of Energy, 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 6.5-meter diameter 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, the Spitzer Space Telescope, the Hinode telescope, and the Solar Dynamics Observatory); and locations as diverse as the high plateaus of northern Chile and the Amundsen South Pole Station. Headquartered in Cambridge, Massachusetts, SAO collaborates with the Harvard College Observatory to form the Harvard-Smithsonian Center for Astrophysics.

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 discovered and examined planets in orbits around other stars, 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 universe is 13.7 billion years old, 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 an unexpected mixture of some unseen "dark matter," with normal matter making up less than four 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 taking a lead role in the science of "precision astronomy," using past discoveries and advanced technologies to 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 and diversity of its observers, theorists, instrument developers, engineers, and laboratory experimentalists, and because SAO emphasizes multiple strategies that 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 cutting-edge facilities for the new generation of astronomers and astrophysicists. SAO's pre-eminence is underscored by the recognition that its scientists receive from leading scientific organizations. Dr. Margaret Geller received the American Astronomical Society's highest honor, the Henry Norris Russell Lectureship. She is also the recipient of the National Academy's James Craig Watson Medal for distinguished contributions to astronomy. Dr. Gaspar Bakos won the 2011 Newton Lacy Pierce Prize of the American Astronomical Society, and Dr. Christine Jones was elected an Honorary Fellow of the Royal Astronomical Society. These are only three examples of nearly a dozen awards received by SAO staff in 2010 and 2011. Together with its partner, the Harvard College Observatory, SAO is the top choice of graduate- and postdoctoral-level young scientists. Federal support makes this continued leadership possible.

For FY 2012, the budget estimate includes a net decrease of -3 FTEs and -\$350,000 when compared to the FY 2011 CR level. This reduction will impact the development of new instruments for use in space or at our ground-based observatories. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$288,000 and -7 FTEs.

### **MEANS AND STRATEGY**

To achieve the goal of Excellent 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, most notably the

Chandra X-ray Observatory, which is operated by SAO on behalf of NASA, and NASA's Solar Dynamics Observatory. 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 scientific 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, including dark energy and dark matter, as well as questions about the formation and evolution of Earth and similar planets. In addition, SAO scientists will continue their work on future space missions, collaborating with NASA and its research center on missions to study the sun, the x-ray universe, and the outer solar system.

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), by participating as keynote and/or invited speakers at such meetings, and by serving on a diverse range of astronomical and astrophysical review panels. 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.

To achieve the goal of Broadening Access, 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.

The goal of Mission Enabling 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.

### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the budget estimate includes a net decrease of -3 FTEs and -\$350,000. This reduction will be accomplished by not filling two key instrument scientist positions and may impact SAO's ability to develop new instruments for use in space or at our ground-based observatories. These resources will be realigned to support the Institution's Strategic Plan.

NONAPPROPRIATED RESOURCES — General trust funds come primarily from overhead charged on grants and contracts. SAO uses these funds to support administrative functions approved in the Indirect Cost Budget submitted to the Defense Contract Audit Agency and the Office of Naval Research, as required by Office of Management and Budget Circular A-122, Cost Principles for Nonprofit Organizations. Donor/sponsor-designated funds come primarily from restricted gifts from individuals, foundations, and corporations, which are earmarked for particular purposes; restricted endowment funds; and non-governmental grants and contracts. Government grants and contracts come from Government agencies for research in areas of SAO's expertise. SAO often conducts this research in cooperation with governmental, academic, and research institutions in the United States and abroad.

### MAJOR SCIENTIFIC INSTRUMENTATION

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	0	3,822	0	0	0	0	0	0			
FY 2011 ESTIMATE	0	3,822	0	0	0	0	0	0			
FY 2012 ESTIMATE	0	3,822	0	0	0	0	0	0			

### STRATEGIC GOAL: EXCELLENT RESEARCH

### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	0	3,822	0	3,822	0	0
Total	0	3,822	0	3,822	0	0

### 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.

The Smithsonian Astrophysical Observatory's (SAO) work directly supports the first of the Grand Challenges outlined in the Smithsonian Institution Strategic Plan: Unlocking the Mysteries of the Universe. This goal calls for the Smithsonian to "advance knowledge at the forefront of understanding the universe and solid Earth."

To achieve the goal of Excellent Research, the Smithsonian uses its multi-year funding from the Major Scientific Instrumentation (MSI) line item to develop large-scale instrumentation projects with advanced technologies that enable scientists at 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. 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 344 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 13.7 billion years old and that it is populated with billions of galaxies, many of which have supermassive 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, SAO scientists use advanced technologies to produce a coherent story of the cosmos from the Big Bang to the origins of life here on Earth. MSI funds are essential to continue to meet this objective.

Two SAO projects are included in the FY 2012 MSI line item: the Submillimeter Telescope Array (SMA) on Mauna Kea, Hawaii, and instrumentation for the converted Multiple Mirror Telescope (MMT) at SAO's Fred L. Whipple Observatory at Mt. Hopkins, Arizona.

For FY 2012, there is no increase in the budget estimate when compared to the FY 2011 CR level or the FY 2010 appropriation.

### **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 supermassive black holes

at the centers of most galaxies; 4) the discovery of very high-energy 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 using 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.

SAO's pre-eminence is underscored by the recognition that its scientists receive from leading scientific organizations. Dr. Margaret Geller received the American Astronomical Society's highest honor, the Henry Norris Russell Lectureship. She is also the recipient of the National Academy's James Craig Watson Medal for distinguished contributions to astronomy. Dr. Gaspar Bakos won the 2011 Newton Lacy Pierce Prize of the American Astronomical Society, and Dr. Christine Jones was elected an Honorary Fellow of the Royal Astronomical Society. These are only three examples of nearly a dozen awards received by SAO staff in 2010 and 2011. Together with its partner, the Harvard College Observatory, SAO is the top choice of graduate- and postdoctoral-level young scientists. Federal support makes this continued leadership possible.

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, including the Chandra X-ray Observatory, the Spitzer Space Telescope, and the Solar Dynamics Observatory. 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. Maintaining this leadership depends on developing instruments and facilities that do not now exist. A team of talented scientists and engineers must work together, over several years, to bring these tools into being, with support from multi-year MSI funding.

### Submillimeter Telescope Array (\$1,800,000)

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 equipped with sets of receivers that can be tuned over the principal atmospheric windows in the submillimeter range, so future improvements to the SMA will be centered on improving the sensitivity within each of these observing windows. The feasibility of conducting a particular scientific observation with the SMA is directly linked to instrument sensitivity. Given that the total collecting area of the array antennas is fixed, sensitivity is governed by three factors: the receiver noise, the instantaneous system bandwidth, and atmospheric transmission and stability.

Further improvements to the SMA can be achieved by adding duplicate sets of receivers similar to those currently in operations, thereby increasing receiver bandwidth, or by further mitigating atmospheric instabilities which result in loss of signal and poor image quality. Thanks to recent developments in microwave technology, it is now possible, with a modest development effort, to increase the receiver bandwidth by a factor of five over the original design. In the short term, this would enable the observation of multiple molecular species within a single receiver tuning; over the long term, by achieving a corresponding increase in the signal processing capacity of the SMA, the overall sensitivity of the SMA would be increased by the same factor.

These upgrades will improve SMA observing speed by a factor of up to 25 times the original capability for continuum observations and for spectral line surveys, thereby opening up the SMA to new discovery space. While the pioneering SMA observations to date have concentrated largely on the first high-resolution studies of individual objects, the proposed improvements will allow the SMA to address important scientific questions that can be answered only with observations of large samples that allow for statistical conclusions, considering evolutionary and environmental factors. For example, to determine proto-planetary disk mass and lifetime as a function of stellar mass and multiplicity, and to assess the role of environmental factors such as proximity to massive stars and their harsh radiation fields, scientists will require the finest angular-scale observations of dust continuum emission and molecular gas tracers from hundreds of young stellar systems in several nearby star-forming regions. Such large surveys will be feasible with increased SMA bandwidth.

In FY 2012, MSI funds will be used to develop, build, and install wideband 345 GHz receiver sets in each of the SMA antennas. MSI funds are requested in FY 2012 to develop a wide-band optical data transmission system and to begin developing a wide-band signal processor to handle the increased bandwidth from each antenna.

### Multiple Mirror Telescope (\$2,022,000)

The MMT, a joint project of SAO and the University of Arizona, dedicated in 1979, was originally made up of six identical 1.8-meter telescopes in a single altitude-azimuth (naval-gun-type) mount. The 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. This large mirror more than doubled the light-gathering capability of the telescope, and a set of large corrector lenses increased its field of view some 400 times.

The converted MMT is an extremely powerful telescope, but requires sophisticated instruments to analyze the light that it collects. Binospec, an imaging spectrograph with dual 8'x15' fields of view, will replace two generations of earlier spectrographs and is expected to become the dominant instrument used during dark moon phases.

SAO expects Binospec to be a "game-changer," enabling the MMT to compete on an equal footing with the largest telescopes in the world. Binospec's huge light grasp will enable SAO scientists to carry out the most advanced explorations of the structure and evolution of galaxies, the structure of the Milky Way, and the nature of dark matter and dark energy. Binospec's nimbleness in moving between spectroscopy and imaging will enable Smithsonian scientists to take the lead in exploiting transient events like supernova explosions and gamma-ray bursts to map the geometry of the universe and accurately detect objects at the furthest reaches of the universe. The scientific opportunities made possible by Binospec will help attract the critical next generation of astrophysicists who will exploit the power of the Giant Magellan Telescope in the next decades.

In FY 2012, MSI support will be used to continue work on Binospec. With additional external support (in the form of committed National Science Foundation funds competed for in the Telescope System Implementation Program), Binospec will be completed in FY 2013, when it will be shipped to the MMT for commissioning and its first research observations. SAO's expertise in building large and powerful instruments is a crucial capability in the era of extremely large telescopes that is now upon us. MSI funding is essential to continue conducting this vital research.

# Introduction, Understanding and Sustaining a Biodiverse Planet

The Smithsonian will use the resources of its scientific museums and research centers to significantly advance our knowledge and understanding of life on Earth, respond to the growing threat of environmental change, and sustain human well-being.

RESEARCH Goal: The Smithsonian advances and synthesizes knowledge that contributes to the survival of at-risk ecosystems.

ACCESS Goal: The Smithsonian inspires all generations of learners to turn knowledge of life on Earth into awareness and action aimed at improving sustainability.

UNITS primarily associated with this Grand Challenge:

- National Museum of Natural History
- National Zoological Park
- Smithsonian Environmental Research Center
- Smithsonian Tropical Research Institute

# **NATIONAL MUSEUM OF NATURAL HISTORY**

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2010 ESTIMATE	360	47,622	22	3,553	60	13,542	10	2,747				
FY 2011 ESTIMATE	364	48,413	19	3,013	66	10,100	12	2,306				
FY 2012 ESTIMATE	363	48,163	19	3,125	70	11,675	12	2,306				

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

## Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY 2011		FY 2012		Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	140	17,992	139	18,178	-1	186
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	4	514	4	511	0	-3
Public Programs						
Provide reference services and information	14	1,813	14	1,801	0	-12
Exhibitions						
Offer compelling, first-class exhibitions	27	4,554	27	4,277	0	-277
Revitalizing Education						
Education						
Engage and inspire diverse audiences	30	3,695	30	3,672	0	-23
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	117	15,204	117	15,109	0	-95
Mission Enabling						
Facilities						
Improve the overall cleanliness and efficient operation of Smithsonian facilities	3	490	3	487	0	-3
Implement an aggressive and professional						
maintenance program	3	386	3	384	0	-2
Security and Safety						
Provide a safe and healthy environment	1	188	1	188	0	0

Performance Objective/	FY 2011		FY 2012		Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Information Technology						
Modernize the Institution's information technology						
systems and infrastructure	15	2,324	15	2,310	0	-14
Management Operations						
Strengthen an institutional culture that is customer	4	598	4	594	0	-4
centered and results oriented						
Enhance the reputation of the Smithsonian by	1	107	1	106	0	-1
maintaining good relations with the news media and						
with federal, state, and local governments						
Ensure that the Smithsonian workforce is efficient,						
collaborative, committed, innovative, and diverse	2	195	2	195	0	0
Modernize the Institution's financial management and						
accounting operations	3	353	3	351	0	-2
Total	364	48,413	363	48,163	-1	-250

### **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 all four of the following Smithsonian Grand Challenges: Unlocking the Mysteries of the Universe; Understanding and Sustaining a Biodiverse Planet; Valuing World Cultures; and Understanding the American Experience. 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 collections, comprising more than 126 million natural history specimens and human artifacts, is at the core of its mission. This set of collections, the largest of its kind, is an unparalleled resource for collections-based 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 enable 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 (FAA) 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 that must be kept as vouchers for pharmacological and biomolecular research. Similarly, the U.S. Department of the Interior Minerals Management Survey relies on the NMNH as a trusted repository for the ecologically significant 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 vital clues 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 many 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 across 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.

For FY 2012, the budget estimate includes a net decrease of -\$250,000 and -1 FTE when compared to the FY 2011 CR level. The estimate includes program increases of \$250,000 for Collections Care and \$300,000 for the

Encyclopedia of Life, offset by program decreases of -\$250,000 for the Repatriation Program; -\$250,000 for all temporary exhibits; and -\$300,000 for awards and promotions. When compared to the FY 2010 appropriation level, the budget estimate includes an increase + \$541,000 and +3 FTEs.

### **MEANS AND STRATEGY**

To achieve the goals of Broadening Access and Revitalizing Education, funding will be used to replace outdated exhibits with integrated, multidisciplinary, and interactive exhibitions on the Mall and in other venues through traveling exhibits and electronic outreach across the country. Both the permanent and traveling exhibitions reflect best practices in visitor experience upgrades and informal science education, and these exhibits are developed as part of an array of public outreach activities. In FY 2010, NMNH welcomed nearly seven million visitors, and recent evaluations show that exhibitions now engage visitors for longer periods than they did 10 years ago. The effectiveness of NMNH exhibitions and presentations can be seen in the excitement they generate and their popularity with family audiences.

In FY 2012, NMNH will continue renovating its permanent exhibition halls but will eliminate federal support for new temporary exhibitions. Pending donated funds, the Museum will continue the planning and concept design for a massive renovation of its 40,000-square-foot Paleontology Halls. This project requires removing and conserving thousands of paleontological specimens, including more than 50 complete dinosaurs; the specimens will then be remounted for display in 2017. In addition to these major projects, donated funding supports scientific updates and visitor experience upgrades throughout the Museum's 350,000 square feet of exhibition space.

Planning for five new temporary exhibits in FY 2012 will depend on donor support because federal support for temporary exhibits will be eliminated. Five new temporary exhibitions are under consideration for FY 2012: *Beautiful Time* in the *African Voices Focus Gallery* (January 2012) and *X-Ray Vision* in the *Sant Ocean Hall* Focus Gallery (January 2012) are photography exhibits developed to support the themes of the halls in which they appear. *Nature's Best Photography* (April 2012), a perennial favorite with visitors, will feature award-winning photographs from around the world. *The Evolving Universe* (October 2011), an exhibition developed in conjunction with the Smithsonian Astrophysical Observatory, will explore how the Smithsonian's telescopes use radio, infrared, optical, ultraviolet, and x-ray technologies to bring back stunning, colorful, and sharp images from the very distant reaches of the universe, from as far back in time as the Big Bang event, to our own solar system. NMNH will also host a culturally focused exhibition to show the work of the Museum's cutting-edge Anthropology department.

NMNH will also continue to implement its interpretive plan to coordinate and integrate its many outreach efforts. This plan focuses the Museum's permanent and temporary exhibitions, educational programs, and Web outreach on the major research themes identified in the Science Strategic Plan: understanding the formation of the Earth and similar planets, discovering and understanding life's diversity, and exploring human diversity and cultural change.

In FY 2012, the Museum's fundamental commitment to education and outreach will be further deepened and expanded in support of the Smithsonian's strategic goal of Revitalizing Education. Building on the Museum's cutting-edge research, its vast collections, and exciting exhibitions such as the Sant Ocean Hall, David H. Koch Hall of Human Origins, Race: Are We So Different?, and Butterflies + Plants: Partners in Evolution, the Museum will reach out to a growing local, national, and international audience, including children and families, students and teachers, adults, and youth ages 13-18 who visit the Museum on the Mall or its extensive presence online. Outreach activities will include traveling exhibitions, distance learning, and in-depth, online resources, including the Ocean Portal, Human Origins website, and digitized collections, as well as long-standing programs of lectures, films, teacher education, and handson opportunities. These efforts serve visitors to our nation's capital and, through our innovations in educational technology, tens of millions of people around the globe who cannot visit the Museum in person. NMNH will continue to evaluate the effectiveness and impact of its public education and outreach efforts with focused audience research and evaluation.

Also in FY 2012, NMNH will implement a rich array of monthly on-site and online public programs to complement the Museum's exhibitions, including the Hall of Human Origins, and will present programs locally and nationally for the acclaimed traveling exhibition, Race: Are We So Different? This will include intergenerational programming, public lectures, and additional events for local and national audiences. NMNH will continue to prepare and disseminate new educational resources for the public, and for students and teachers, to support major exhibitions. In particular, NMNH will focus its science programs on greater outreach to the public and on increased public access to the collections through Web-based resources and use of distance-learning technologies. This includes maintaining engagement through the Ocean Portal and the Human Origins interactive educational websites, beginning development on a new Paleobiology website, and continuing to incorporate evolving social media. NMNH will continue to increase access to exhibits, research, and collections for people with disabilities as well as economically disadvantaged students. This includes enhancing educational resources to provide access for people with disabilities by training docents and using new media tools as well as using new partnerships and services to reach traditionally underserved audiences.

In 2012, pending donated funds to be raised, construction will be completed on a new Education Center designed to provide unprecedented access to the Museum's research, collections, and scientists. The collections and staff of the Naturalist Center will complete the transition back from Leesburg, Virginia, to the NMNH Museum on the Mall, extending access to the high-quality educational resources of the Center by hundreds of thousands of youth, families, and K–12 students each year. Scheduled to open in 2012, the Education Center will provide the Museum's many audiences with a major innovative facility for informal science education, and will include on-site and online programs to inspire the next generation of scientists.

A critical element of NMNH's plans for FY 2012 is the Museum's commitment to the stewardship of its federal scientific collections in support of the Smithsonian's strategic goal of Strengthening Collections. As was underscored by a recent survey of federal collections, these resources play an important role in public health and safety, homeland security, trade and economic development, medical research, and environmental monitoring. They also provide the foundation for the Museum's diverse research, exhibits, and public outreach programs. NMNH will continue to strengthen its commitment to cutting-edge research on and state-of-the-art stewardship of the collections, in partnership with affiliated federal agencies such as the Departments of Defense, Commerce, Agriculture, and the Interior. 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 its 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 strengthens the NMNH collections and connections with these countries. The NMNH is committed to training future generations of scientists by increasing the number of its postdoctoral fellowship awards and providing an entry-level research 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 2012, the NMNH will continue collections preservation and access projects related to strategic initiatives in preserving indigenous languages through preservation of manuscripts, recordings and moving images, and

photographs; preserving and digitizing fossil collections and associated paper records, and preserving biological specimens at ultra-cold temperatures to document biodiversity. In addition to these new strategic initiatives, other high-priority collections improvement projects identified through the comprehensive, quantitative assessment of the collections will continue. These include the processing of plant collections, inventory of selected ethnographic collections, re-housing of geological collections in need of microclimates to prevent deterioration, securing vertebrate collections cabinetry, re-housing at-risk marine mammal collections in new storage cabinetry, and inventories and record updates resulting from the transfer of collections to the newly renovated Pod 3 facility at the Museum Support Center.

NMNH will continue to significantly increase the number of specimen records in its electronic databases for scientists, the Research and Collections Information System, or RCIS, and to expand the availability of these invaluable and unique assets via the Internet to researchers, policy makers, and the public, both nationally and worldwide. NMNH will continue image digitization of selected plant, insect, and artifact collections.

To achieve the Smithsonian's goal of Excellent Research in FY 2012, NMNH will continue to implement its five-year strategic plan that is linked to the new Smithsonian Strategic 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. NMNH publications will have a more integrated quality, providing insights from all viewpoints of the Museum on pressing national and international topics.

The NMNH's strengths in research have been diversified and infused with some exciting new hires in the past few years, focusing on the following areas, which also link directly to the Smithsonian's Grand Challenge areas of research: maintenance, documentation, and analysis of indigenous languages of Mesoamerica; the integration of anthropology, art, and history to form interdisciplinary and cross-cultural approaches to the study of society; the origins, diversification, and evolution of social insects; chemistry at the coremantle boundary of our planet and its influence on geochemistry at the Earth's surface; discovery of unknown mammal species; the evolutionary and ecological histories of some four-limbed marine tetrapods that made the great transition from life on land to sea; and the paleoecology of whales and dolphins.

Highlights of research that NMNH scientists will continue in FY 2012 include: spacecraft-based research that has shown the planet Mercury is rich in iron and titanium oxides, suggesting that Mercury has a more complex geologic history than was previously thought; paleo-archeological research at Miles Point on the Chesapeake Bay Peninsula, demonstrating that the area was occupied more than 5,000 years before the presently accepted date for the human occupation of the Americas; astrophysical research that has determined that the time of formation of the very first solid grains in our infant solar system was four-and-a-half-billion years ago; a plan to sequence the genomes of more than 10,000 vertebrate species; work on ocean environments and circulation, focusing on past intervals and greenhouse climate; 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; studies of deep-sea invertebrates in the Gulf of Mexico, including exploration of poorly known regions such as cold seeps and petroleum seeps, which are home to diverse but still largely unknown communities of animals; 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 Paleogene eras; research as part of 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; and research into the spread of the earliest humans from Africa and Asia, with funding from NSF.

In addition, NMNH will continue its work on a new scientific effort started in 2007, the *Encyclopedia of Life*, which has the simple and compelling mission to gather and share knowledge about Earth's 1.9 million known living species and make it freely accessible online to anyone, anywhere in the world. The NMNH hosts the Secretariat (administrative and leadership hub) for the *Encyclopedia of Life* (EOL), funded through two foundation leadership grants. This Web-based, online database is expected to encompass these 1.9 million known species of animals, plants, and other life forms in about 10 years. 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 positioned 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 require the scientific expertise to provide related ecological and evolutionary information.

In FY 2012, the NMNH will support the goal of Strengthening Collections by completing the move of environmentally sensitive collections from the Natural History Building on the National Mall and other locations to the newly renovated Pod 3 at the state-of-the-art research, conservation, and collection storage facility at the Museum Support Center (MSC) in Suitland, Maryland. An additional focus for the Natural History Building in FY 2012 will be to continue renovating major building systems and improving security in the building, resulting in better collections housing, upgraded laboratory facilities for researchers, and more useful public space for exhibitions and educational opportunities. Finally, an important management focus of NMNH will be to support a robust and reliable information technology infrastructure for new online facilities, and to broaden access to the Museum's collections and research through Web programs that support NMNH-specific electronic outreach goals. This focus on Broadening Access will make collections data easily accessible via the Internet, maintain important collaborative Web projects such as the Ocean Portal and the Human Origins website, both launched in 2010, and help the Museum launch new websites and update them with current information.

### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the budget estimate includes a net decrease of -\$250,000 and -1 FTE. The estimate includes program increases of +\$250,000 for Collections Care and +\$300,000 for the *Encyclopedia of Life*; offset by program decreases of -\$250,000 for the Repatriation Program; -\$250,000 for all temporary exhibits; and -\$300,000 for awards and promotions. The programmatic increases and decreases are as follows:

• (+\$250,000) The request provides funding to support critical collections needs based on the NMNH's collection assessment, which was developed over the last two years. This assessment guides the Museum's priorities for collections management, including physical care, accountability, digitization, and information access. This review grouped NMNH's 126 million specimens and objects into discrete collections and scored them on 14 different criteria. The resulting master data set is a tool that enables timely analysis and consideration of the impact of different resource-allocation scenarios. Accordingly, FY 2012 funds will be focused on strategic high-priority projects that remedy deficiencies and improve the preservation and usability of the collections. Specific projects include: bringing the housing of marine mammals, selected fossils, and selected herbarium sheets to an acceptable status in non-reactive cabinetry that provides an appropriate barrier to environmental and pest assaults while preventing unauthorized access; creating electronic images of original handwritten collection ledgers, thereby creating backups and broadening

accessibility; and creating electronic catalogue records and specimen images for important insect, animal, and plant specimens. This investment in NMNH's collections will result in the accessibility of an additional 10,000 plant specimens, completing the project to digitize all of the Museum's ledgers (approximately 900 volumes), creating approximately 50,000 specimen records, and re-housing thousands of specimens in appropriate cabinetry.

- (+\$300,000) The *Encyclopedia of Life* (EOL) is a Web portal designed to provide free access to knowledge about all life on Earth. There are an estimated 1.9 million described living species, but no single resource that provides comprehensive access to existing information about them. This unprecedented research initiative is designed to broaden access to Smithsonian collections and knowledge, and share these resources with America and the world. It includes collaboration with other parts of the Smithsonian and leading institutions across the country and abroad. The first phase of this initiative was developed with support from the MacArthur and Sloan Foundations, and currently provides access to more than 400,000 species pages, as well as more than 31 million pages of literature related to biological diversity (available at www.eol.org). The next phase of this project involves a new version of EOL, adding and expanding key features and functional needs based on user surveys. In addition, EOL will expand information on an excess of 500,000 species pages and some 50 million pages of literature, as well as develop resources for students and teachers across the nation over the next three years. The proposed funding increase is critical to ensure the continued success and long-term sustainability of this research effort. As part of this work, the Museum proposes to establish an Encyclopedia of Life for North America, link information in the collections and libraries to EOL, and develop additional online educational resources.
- (-\$250,000) Funding for the Repatriation Program will be reduced by \$250,000 in FY 2012 which may limit the Repatriation Office's ability to respond to claims in a timely manner. However, the impact may be mitigated because the Repatriation office is currently fully staffed to fulfill our commitment. Travel funds will be reduced which would impact Native American representatives' travel to the Museum to consult on repatriation and for staff to attend national meetings.
- (-\$250,000) Federal support for all temporary exhibits at the Museum will be eliminated, and donated funds will be sought to support the four planned exhibits: Beautiful Time, X-Ray Vision, and Evolving Universe, as well as an anthropologically focused exhibition. Previously, federal support provided resources to pay for costs associated with hosting a

vibrant program of temporary exhibits. These resources will be realigned to support the higher priority increases outlined above for critical collections care and the *Encyclopedia of Life*.

 (-\$300,000) Support for promotions and awards for federal staff will be eliminated in FY 2012 to realign these funds to the programs described above. This will allow the Museum to continue making progress toward the highest priority goals in the NMNH strategic plan.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits of administrative personnel, development and business activities, and other program-related costs. The Museum raises funds from private sources to support research, exhibitions, public programs, and administrative functions. This includes securing donations from special events to promote new exhibitions and educational initiatives, and public outreach. Donor/sponsor-designated funds are critical to support exhibition hall renovation, such as the major gifts that are helping to fund the Museum's Human Origins Hall, which opened in March 2010, and fellowships for the Encyclopedia of Life project, through which a freely accessible webpage is being created for each of the Earth's 1.9 million known species. In addition, significant endowment gifts support the maintenance, updating, and educational programs for the Ocean Hall, as well as for the Museum's study of human origins. Other examples include the Johnson and Hunterdon endowments, which provide operational support for the Smithsonian Marine Station at Fort Pierce, Florida, in addition to supplying a significant portion of the base funds needed to run the NMNH research station at Carrie Bow Cay in Belize. The endowments also support research in the biodiversity, life histories, and ecology of marine organisms in the coastal waters of Florida by almost 50 scientists each year, including staff from NMNH, the Smithsonian Environmental Research Center, the Smithsonian Tropical Research Institute, and collaborators from universities nationwide.

The Museum continues to receive grants and contracts from both non-Government and Government institutions. The Museum was awarded grants and contracts totaling \$7.05 million in FY 2010 (mostly in multi-year grants), and anticipates awards totaling approximately \$4 million in FY 2011. These funds support both cutting-edge research and exhibitions, and demonstrate international collaboration in addition to cross-agency collaboration on shared projects and issues. For example, researchers in the Departments of Mineral Sciences and Paleobiology continue to receive significant grants from NASA and the NASA Jet Propulsion Lab for various research projects. The U.S. Air Force and the U.S. Department of Transportation continue to support the bird/aircraft strike hazard program that provides critical data to the FAA and other agencies on the types of birds that can get caught in airplane engines. Funds were provided to continue work on the Consortium for the Barcode of Life, an

international initiative devoted to developing DNA barcoding as a global standard for the identification of biological species. Also, the U.S. Department of Health and Human Services provided funding to identify invasive fish species, and the U.S. Park Service supported indigenous language documentation in the Bering Strait Region.

The effects of environmental change are documented, monitored, and assessed in a variety of ways. NMNH received support from the Earthwatch Institute to monitor and map changes in plant life in the California mountains. Important research on coral reefs, documenting changes in marine life in and around the reefs, was supported by several foundations. In addition, the U.S. Department of Defense continued to fund environmental monitoring in and around the St. Lucie Estuary and the Southern Indian River Lagoon, an area rich in biological diversity.

NMNH's leadership in training the next generation of scientists received a significant boost from the National Science Foundation, with funding to continue and strengthen the new Natural History Research Experience's Program through a multiple-year grant of nearly \$1 million total. The program was implemented with seed money from NMNH endowments in 2010, and now has solid funding for the next five years, through FY 2015.

As part of the Smithsonian's planned National Campaign, the Museum is committed to raising a minimum of \$200 million, over five to seven years, to support the strategic priorities outlined in the Museum's strategic plan for 2010–2015: *Knowledge for a Sustainable Future*.

# **NATIONAL ZOOLOGICAL PARK**

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS			GENERAL TRUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	220	23,190	5	1,597	19	4,641	6	921			
FY 2011 ESTIMATE	221	23,352	10	2,350	19	5,652	6	1,075			
FY 2012 ESTIMATE	218	23,352	10	2,350	19	5,652	6	1,075			

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	30	2,586	30	2,700	0	114
Broadening Access						
Exhibitions						
Offer compelling, first-class exhibitions	116	10,802	113	10,145	-3	-657
Revitalizing Education						
Education						
Engage and inspire diverse audiences	2	259	2	269		10
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	51	6,372	51	6,722	0	350
Mission Enabling						
Security and Safety						
Provide a safe and healthy environment	5	793	5	836	0	43
Information Technology						
Modernize the Institution's information technology	4	816	4	826	0	10
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer	9	1,126	9	1,226	0	100
centered and results oriented						
Enhance the reputation of the Smithsonian by	4	482	4	512	0	30
maintaining good relations with the news media						
and with federal, state, and local governments					_	
Ensure that the Smithsonian workforce is efficient,	0	116	0	116	0	0
collaborative, committed, innovative, and diverse						
Total	221	23,352	218	23,352	-3	0

#### **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; practicing conservation leadership; and providing excellent amenities and a transformational experience for its visitors.

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 goals of Excellent Research, Broadening Access, Strengthening Collections, and Revitalizing Education, the Zoo will offer compelling, first-class exhibits; judiciously build, refine, and care for its animal, biological materials, 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 Excellent Research, the Zoo will pursue focused research on life's diversity, including partnership-based and multi-disciplinary studies of extinction-prone species and their habitats. The NZP will expand programs that integrate research on both wild and captive populations of selected species. The Zoo will continue to develop strategic partnerships with other Smithsonian units and external organizations to complement its strengths in veterinary medicine, reproductive sciences, conservation genetics, ecology, conservation biology, and professional training.

In support of the Smithsonian's Mission Enabling goal, the Zoo will focus on increased attention to the 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, and the National Zoo received its Association of Zoos and Aquariums (AZA) reaccreditation in 2008.

For FY 2012, the budget estimate includes a net decrease of 3 FTEs. This includes an increase of \$250,000 for resources to support the welfare

and care of the living collection and a decrease of 3 FTEs and \$250,000 for the closing of the Kids' Farm. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$162,000 and -2 FTEs.

#### MEANS AND STRATEGY

To achieve the goals of Broadening Access and Strengthening Collections, the NZP continues 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 Smithsonian Conservation Biology Institute (SCBI) 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 include completion of Asia Trail II (Elephant Trails) and the renovation of the Seal and Sea Lion Facility and Exhibit, which will be close to completion with interpretive exhibits designed and fabricated for installation in mid 2012. Planning and programming continue for the future renovation of the Bird House facility and exhibits. These improvements support the highest level of animal care, and connect visitors to the Zoo's extensive breadth of science and research while educating and inspiring our visitors to understand the importance of conservation.

NZP staff continues 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 opportunities for fund raising and developing relationships with niche audiences. During 2010, the website hosted about 10,000 pages and attracted more than 17 million visits, thereby maintaining its position as one of the most popular Smithsonian websites.

The NZP continues to renovate and modernize the Zoo's exhibit, staff and visitor areas. Projects to upgrade extant fire-detection and suppression systems and to install new systems will continue in FY 2012 at Rock Creek Park, with the first of several smoke-evacuation projects, and will continue at Front Royal with emergency lighting upgrades and design for ongoing fire-suppression projects.

New master plans completed for both the Zoo's Rock Creek Park and Front Royal facilities are guiding future planning and development at both sites. The Bird House and Migration Exhibit will have program documents completed and conceptual design prepared, and construction of the Zoo perimeter fence for Rock Creek Park will begin. 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. Similar components are being incorporated into the planning process for the major renovation of the Bird House.

To achieve the goal of Excellent Research, the NZP continues to address significant scientific and conservation issues of key species and critical habitats through field and captive studies. 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 giant panda, cheetah, tiger, clouded leopard, blackfooted 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 are also engaged in a variety of collaborative studies on forest ecology and climate change as part of the Smithsonian's Global Earth Observatory (SIGEO) and the National Science Foundation's National Ecological Observatory Network (NEON) initiatives. NZP scientists will continue to share their 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 continues 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.

As part of this effort, the Zoo continues to be a major center of conservation-based training. In FY 2010, 14 undergraduate students attended the Smithsonian Institution-George Mason Semester at the Front Royal SCBI facility. The three-month-long, hands-on program was a resounding success, and will be continued each year from September through December. In 2010, the Smithsonian-Mason Global Conservation Studies Program also trained 19 participants in three two-week-long intensive residential graduate and professional training courses. Held at the SCBI's Front Royal facilities, these courses were: Effective Conservation

Leadership (January 2010); Conservation Conflict Resolution (May 2010); and Experimental Design and Ecological Statistics (August 2010). Additionally, the SCBI Global Tiger initiative, a partnership with the World Bank, the 13 Tiger Range Countries (TRCs), and other agencies and organizations, hosted an Executive Leadership Forum (ELF) and a Training of Trainers Course in 2010. The ELF was the largest assembly of high-level policy and decision makers from TRCs to outline global tiger recovery plans before the International Tiger Forum in Russia. The Training of Trainers conservation practitioners' course was composed of 25 participants selected from a pool of 150 applicants from seven tiger range countries: Bangladesh, Bhutan, India, Nepal, Malaysia, Russia and Thailand. More than 35 resource persons from five countries (Bhutan, England, India, Nepal and the United States), contributed to the course. Participants strengthened their basic understanding of the broad and complex range of global tiger conservation issues through participatory, hands-on classroom and field activities.

As part of their Revitalizing Education initiatives, NZP conservation and science staff convened 11 workshops, and trained more than 316 professionals in various conservation specialties. In 2010, the NZP sponsored 101 interns, in addition to residents and postgraduates, in ongoing research projects. Additionally, the NZP conducted more than 100 education programs for elementary, middle, and high school students in the National Capital Region. NZP began educational partnerships with the Boys and Girls Clubs of Greater Washington and the George Mason University Youth Summit on the Environment, reaching more than 200 students in two programs. NZP trained 185 teachers on educational resources and engaging science skills they can use in the classroom and launched its first-ever, week-long intensive training, *Saving Endangered Species: A Teacher Boot Camp*, for 10 teachers. As part of this effort, teachers downloaded 3,465 educational resource and lesson packets.

In support of the Smithsonian Mission Enabling goal, 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 living 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 living collection, visitors, facilities, and staff. A major task for FY 2012 will be to continue implementing the Zoological Information Management System (ZIMS).

### FY 2012 REQUEST — EXPLANATION OF CHANGE

The FY 2012 budget estimate includes a net decrease of 3 FTEs. This includes an increase of \$250,000 for resources to support the welfare and care of the animal collection and a decrease of 3 FTEs and \$250,000 for the closing of the Kids' Farm. The programmatic actions are as follows:

- (+\$250,000) This request provides resources to support the welfare and care of the animal collection. Excellence in animal care is paramount for maintaining the Zoo's accreditation by the AZA as well as for maintaining compliance with the Animal Welfare Act. The requested increase of \$250,000 will provide the necessary animal food, medicine, and enrichment and pest management supplies needed to support the living collection.
- (-\$250,000, -3 FTEs) This request includes a reduction of -\$250,000 and -3 FTEs to close the Kids' Farm and to realign these funds to the program increases described above. This reduction will also enable the Zoo to better support the core mission goals in its strategic plan (i.e., conserve endangered species), as well as the upcoming, higher priority Seal and Sea Lion Exhibit. The FTE reductions will be accomplished through attrition and/or reduction-in-force, as necessary.

NONAPPROPRIATED RESOURCES — General trust funds support salaries and benefits of the director and general operational requirements for adequate animal care, professional training in conservation sciences, and animal acquisitions. Donor/sponsor-designated funds support the costs related to specific programs and projects, including field and captive studies on Sahelo-Saharan antelopes, cheetahs, giant pandas, Asian elephants, tigers and clouded leopards, ecological studies on migratory birds, and the documentation and monitoring of biodiversity and habitat quality in selected sites around the world. A large percentage of these funds supplement federal funding for renovating and modernizing the Zoo. Private donations for Asia Trail II, "Elephant Trails," contribute to a portion of construction costs and support all exhibit interpretive design and implementation. Government grants and contracts support a wide array of scientific studies on the biology and habitats of endangered and threatened species. NZP education, visitor services, and volunteer programs are funded almost exclusively by the Friends of the National Zoo (FONZ).

## SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS			GENERAL TRUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000			
FY 2010 ESTIMATE	32	3,756	10	662	5	1,140	41	4,407			
FY 2011 ESTIMATE	32	3,773	7	708	8	8 1,129		3,967			
FY 2012 ESTIMATE	32	3,773	7	708	8	1,129	44	3,967			

# STRATEGIC GOALS: EXCELLENT RESEARCH; REVITALIZING EDUCATION; AND MISSION ENABLING

## Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Cha	inge
Program Category	FTE	\$000	FTEs	\$000	FTEs	\$000
Excellent Research						
Research						
Engage in research and discovery	24	3,030	24	3,030	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	1	105	1	105	0	0
Mission Enabling						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	4	420	4	420	0	0
Modernize the Institution's financial management and accounting operations	3	218	3	218	0	0
Total	32	3,773	32	3,773	0	0

#### 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.

SERC achieves the goal of Revitalizing Education by engaging and inspiring diverse audiences through school-based programs, teacher training,

public outreach, and a professional training program dedicated to producing the next generation of scientists.

Research and discovery remain the core activities at SERC. Scientists use the 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.

SERC will continue to update and streamline management systems and functions, and advance construction of its Facilities Master Plan. In FY 2011, SERC will break ground on the long-awaited renovation of the Mathias Laboratory, including replacement of many temporary trailers on the campus, thus helping to ensure the safety and protection of staff, Fellows, volunteers, and visitors. The project is scheduled for completion in FY 2013.

For FY 2012, the budget estimate includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$17,000.

#### **MEANS AND STRATEGY**

SERC has used its website to provide more information to the public about environmental issues in general and the Center's research and education programs in particular. On-site education will focus on serving approximately 18,000 students and members of the general public. SERC will continue to expand its successful distance-learning programs to improve access for traditionally underserved audiences, as well as those participants located away from the SERC campus.

SERC has strengthened its public outreach programs and continues to participate in the National Park Service's Chesapeake Gateways Network. Through partnerships with various agencies within the Maryland State government and the Gateways program, SERC has begun to develop a series of new trails and visitor experiences on the historic 575-acre Contee Farm, which was acquired in 2008. In addition to providing a lecture series, workshops, and expert consultation for the public, teachers, and public officials, SERC remains open to the general public six days a week. In addition to offering formal programs to the public, SERC encourages visitors to explore the Center's many trails through forests and fields, as well as more than 12 miles of shoreline along the Chesapeake Bay.

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.

SERC has an advantage in furthering its research goals and priorities by operating its 2,650-acre site on the Chesapeake Bay. Using the unique assemblage of forests and agricultural fields, 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. SERC has been selected as a partner site in the National Ecological Observation Network (NEON). As such, the SERC campus will become a node for environmental data collection that will feed a national network established to observe and interpret changes in our terrestrial environments. During its 46year 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.

In 2012, SERC will be completing the update of its five-year strategic plan to ensure a strong alliance with the recently completed Smithsonian Strategic Plan. 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 impacts 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.

SERC continues to implement its comprehensive Facilities Master Plan through projects that provide critical infrastructure improvements and allow for controlled and operationally sustainable growth over the next 25–30 years. SERC is improving its management of research by developing better tools to account for its overhead activities, and by ensuring tighter management controls and increased oversight of sensitive information for its employees, volunteers, and others. SERC will continue to ensure the safety and protection of volunteers, staff, and visitors by sustaining its excellent safety record and continuing programs of supervised inspections and staff involvement.

**NONAPPROPRIATED RESOURCES** — General trust funds support fundraising and intern/fellowship programs. In addition, core administrative support is funded through an indirect cost surcharge applied to extramural research awards. Donor/sponsor-designated funds provide critical operating support related to specific programs and projects in research, public education, and professional training. The bulk of SERC's scientific research program of more than \$4.5 million is supported by Government grants and contracts.

# SMITHSONIAN TROPICAL RESEARCH INSTITUTE

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS			NERAL RUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	250	14,546	34	1,361	38	6,373	14	1,738			
FY 2011 ESTIMATE	250	14,646	20	1,200	40	6,100	12	1,700			
FY 2012 ESTIMATE	201	12,239	20	1,200	40	6,100	14	1,700			

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	99	8,551	97	8,167	-2	-384
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	7	262	6	254	-1	-8
Public Programs						
Provide reference services and information	16	397	15	386	-1	-11
Revitalizing Education						
Education						
Engage and inspire diverse audiences	2	411	3	399	1	-12
Mission Enabling						
Facilities						
Improve the overall cleanliness and efficient operation of Smithsonian facilities	0	29	0	0	0	-29
Implement an aggressive and professional maintenance program	44	1,734	0	0	-44	-1,734
Security and Safety						
Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers	30	659	29	634	-1	-25
Provide a safe and healthy environment	2	104	1	87	-1	-17
Information Technology						
Modernize the Institution's information technology systems and infrastructure	5	315	5	306	0	-9

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	8	885	9	753	1	-132
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	5	209	5	213	0	4
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse	4	126	ω	137	-1	11
Modernize the Institution's financial management and accounting operations	13	572	14	537	1	-35
Modernize and streamline the Institution's acquisitions management operations	15	392	14	366	-1	-26
Total	250	14,646	201	12,239	-49	-2,407

### **BACKGROUND AND CONTEXT**

In 2010, the United States and the Smithsonian started celebrating a century of scientific research in Panama. From the humble beginnings of a single research station on Barro Colorado Island (BCI), located in the middle of the Panama Canal, the Smithsonian Tropical Research Institute (STRI) is now 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 1,200 resident and visiting scientists, representing 44 states in the United States and 42 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.

The relevance, quality, and performance of STRI scientists is top tier, as evaluated by a Visiting Committee of outside experts. In their last review, the Visiting Committee used National Research Council criteria to measure the productivity and impact of STRI science compared to 142 of the best university research departments in the United States; STRI scientists ranked first in all measures of scientific relevance (e.g., publication citations), quality (e.g., scientific honors), and productivity (e.g., publication numbers). In addition, the number of young scientists who choose STRI as the base for their graduate and postgraduate research training provides an annual measure of the relevance and quality of STRI science to the future of tropical biology and

policy. FY 2010 marked the eighth year in a row that the number of visiting scientists and students choosing to base their research at STRI has increased from the previous year.

The long-term research conducted by STRI scientists and collaborators is a critical contribution to the Smithsonian Institution's 2010–2015 Strategic Plan "A Smithsonian for the 21st Century," set forth in 2009, particularly through its contributions to the Grand Challenge, *Understanding and Sustaining a Biodiverse Planet*. However, STRI also contributes to *Unlocking the Mysteries of the Universe* through its Paleontology program and to *Valuing World Cultures* through its Anthropology and Archeology programs.

A major goal of the 2010-2015 Strategic Plan for the Smithsonian is the implementation of interdisciplinary centers aimed at sparking innovative research and education programs, and brokering partnerships. The best current example of such an interdisciplinary center is the Smithsonian Institution Global Earth Observatories (SIGEO), which have built on a unique research infrastructure that began at STRI in 1980. STRI leads the SIGEO initiative, which is discussed in this justification under the Biodiversity Consortium. SIGEO successfully links global change expertise across Smithsonian science units, including the Smithsonian Environmental Research Center (SERC), the Smithsonian Conservation Biology Institute (part of the National Zoo), the National Air and Space Museum (NASM), National Museum of Natural History (NMNH), and the Smithsonian Astrophysical Observatory (SAO). To date, the Smithsonian has directed more than 12 FTEs and \$1,808,000 per year in federal funds, and more than \$38 million from other federal and private sources, toward the global network of Earth observatories. As one of the premier U.S.-led international partnerships, SIGEO integrates the SI network of forest dynamics plots with the U.S. Group on Earth Observations (USGEO), and promotes an international Global Earth Observation System of Systems (GEOSS) to further advance the progress of science across borders. Each forest plot is managed in each country by one or more partner institutions, and the SIGEO network is a partnership involving more than 50 institutions and hundreds of scientists from around the world.

STRI and SIGEO directly support the Administration's goals in the environmental sciences, and send a strong message regarding the U.S. commitment to providing objective, long-term data needed for understanding global change. In the context of Global Earth Observatories, 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), the National Science Foundation (NSF) National Ecological Observation Network (NEON), and the National Aeronautics and Space Administration (NASA).

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 the remote sensing of forests at landscape scales monitored from space-based observatories.

For FY 2012, the budget estimate includes a net decrease of -\$2,407,000 and -49 FTEs. This includes a permanent transfer of -\$2,107,000 and -44 FTEs from STRI to the Office of Facilities Engineering and Operations to complete the integration of STRI's facilities and maintenance operations into the central office in Washington, DC. It also reflects a programmatic decrease of -\$300,000 that is planned to result in a reduction of -5 FTEs. The reduction of programs will be absorbed by reducing travel, public outreach activities, and the forest ecology program.

When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$2,307,000 and -49 FTEs.

### **MEANS AND STRATEGY**

As part of its core mission, STRI continues to enhance the Smithsonian's platform for long-term research on biodiversity, ecosystems, and global change. As part of this effort, STRI administers the SIGEO network of dynamic forest plots that now spans 34 sites in 20 countries, including 16 percent of all tree species. The network's overall aim is to forecast the effects of global change on forest function and biodiversity in tropical and temperate forests, and to provide objective and rigorous scientific data quickly to scientists, policy makers, and people around the world via the Internet.

Global climate systems and life on the planet are in flux. Policy makers and scientists need long-term data on the fluctuations in primary productivity of forests around the globe, as well as information on changes in the abundance and distribution of biological diversity, to distinguish the components of global change that can be ascribed to planetary processes from those that may be caused by human activity. The Smithsonian Institution is building on its unique research infrastructure to provide the required data by expanding its global network of dynamic long-term tropical forest plots into the temperate zone, and by collecting additional data on vertebrates, insects, and soil microorganisms, in addition to the trees that scientists have monitored for three decades. Smithsonian researchers will answer the following questions: Does climate change significantly alter forest biomass, and does the rate of carbon sequestration by forests vary with latitude, hydrological condition, and soil fertility? How are the diversity and the relative abundance of forest organisms changing over time and space?

What components of observed changes are due to human activities? How can people modify their behavior and economies to ameliorate any changes that policy makers deem to be detrimental to global society?

The Smithsonian Institution is uniquely positioned to use SIGEO to broaden interdisciplinary research on complex ecosystems on a global scale. It will do this by expanding its extensive tropical forest-monitoring program into temperate regions, and by significantly integrating science units within the Smithsonian. As a result of an \$8 million grant from the Hong Kong Shanghai Banking Corporation (HSBC), STRI, SERC, NZP, and NMNH are already participating in cross-unit research aimed at forecasting the consequences of global change on forest function and biodiversity.

Currently, SIGEO leverages huge intellectual horsepower; the network is extremely well used by independent, university-associated faculty and network partners. More than 200 scientists have published research from the SIGEO 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. Also, Harvard and Yale universities have provided \$9 million, in addition to \$10 million pledged from a single private donor, to support the network for the next five years, maintain partnerships with SIGEO, and strengthen the network's basic and social research programs.

SIGEO has established 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 (CO<sub>2</sub>). A publication by SIGEO scientists, using 25 years' worth of data from two forest plots (in 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 worldwide.

In FY 2012, SIGEO will continue to cement the inter-unit advances involving STRI, SERC, NZP, and NMNH, resulting from an \$8 million grant by the HSBC to study the consequences of global change on carbon sequestered by the world's forests. Tropical and temperate forests are believed to behave differently with regard to carbon, owing to differences in seasonality and other climate factors. Using the same methodology as that for the tropical plots, the SIGEO initiative has taken advantage of long-term, forest plot-associated research at SERC, located in the Chesapeake Bay watershed in Maryland, and the National Zoo's Conservation Biology Institute in the forests of Front Royal, Virginia, Harvard Forest, Massachusetts, Yosemite National Park, California,

and Wind River, Washington, to quickly establish a series of large-scale temperate plots in the United States that permit direct comparison to the forests in the tropical plot network. Partnerships in temperate China and Europe have helped expand temperate-tropical and temperate-temperate comparisons to a global scale.

#### ENABLING STRI'S MISSION THROUGH ORGANIZATIONAL EXCELLENCE

STRI has just published its 20-year plan for upgrading its facilities, many of which date back to the pre-World War II era of Panama Canal defense. The 20-year STRI facilities plan represents a spectacular opportunity for the Smithsonian to provide its world-class group of tropical scientists with the modernized, sustainable, and state-of-the-science facilities needed to face the challenges of the 21st century, when biological problems will play a central role in global events. These facilities will continue to serve not only the Smithsonian, but also the scientific and academic communities of the United States for decades to come. The rate of landscape transformation, the loss of forests and reefs in the tropics, an ever-growing population to feed and house, the danger of emerging diseases, and the still uncertain science of global change, taken together, highlight the fact that the research done at STRI — and the national and international role of the Institute — has never been more important.

STRI also offers important facility resources for other federal agencies and universities. On the terrestrial side, STRI serves as the headquarters for SIGEO, and as a base for tsunami-monitoring equipment installed by the U.S. Geological Survey. The Institute provides the Environmental Protection Agency (EPA) with sites to monitor mosquitoes and their role as disease vectors, and assists the National Institutes of Health (NIH) with its funded projects to survey birds as carriers of avian influenza. On the marine side, the two-ocean stage provided by STRI marine facilities permits scientists to move between experiments in the eastern Pacific Ocean and Caribbean Sea in a few hours, and represents a principal component of the Smithsonian Marine Science Network extending from the Chesapeake to Florida, Belize and Panama. The recurring two-ocean theme in marine science at STRI has resulted in landmark studies of the evolution and ecology of tropical marine species and communities, as well as research funded by NSF and NIH for the ecologically guided discovery of new pharmaceutical compounds. Marine facilities with easy access to two oceans take on increased importance as an experimental platform for studying the impact of global change and ocean acidification on coastal coral reefs, sea grasses, and mangroves.

The 20-year STRI facilities plan promotes a significant commitment to sustainability in the design and construction of new buildings, using

innovative design features to create a safer and more productive work environment while decreasing the ongoing costs of maintenance and security that will follow facility modernization. Importantly, the 20-year facilities plan takes advantage of real estate owned by the Smithsonian Institution to secure U.S. investment in laboratory buildings located adjacent to tropical rain forests and coral reefs. STRI excels at research on global change, biodiversity, and landscape transformation in the tropics; with modernized facilities, STRI will continue to provide the research that the United States and the world will need to secure a sustainable future. The need is immediate. The Institute cannot support Smithsonian and Administration goals without facilities which are adequately sized for their intended purpose; establish environmentally sound and safe working conditions; provide the laboratory conditions necessary to house increasingly sophisticated technologies; reduce the costs of maintenance and repair; and attract the best and the brightest scientists to carry on the legacy of STRI's research excellence.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the budget estimate includes a net decrease of -\$2,407,000 and -49 FTEs, as detailed below:

- The budget request includes a permanent transfer of -\$2,107,000 and -44 FTEs from STRI to the Office of Facilities Engineering and Operations (OFEO) to complete the integration of STRI's facilities and maintenance operations into the central office in Washington, DC. The transfer is a continuation of the FY 2004 integration of Smithsonian facilities management services into a single facilities organization (OFEO), and to standardize operations and security support, as well.
- The request also includes a programmatic decrease of -\$300,000 and -5 FTEs. The reduction to programs will be absorbed by reducing travel, public outreach activities, and the forest ecology program. The resources are realigned to support the Institution's Strategic Plan.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries for a small percentage of STRI employees involved in research, public outreach, and fund raising. Donor/sponsor-designated funds support specific programs and projects to investigate key indicators of global environmental health. For instance, HSBC, a major donor, has formed a climate partnership with the Smithsonian and the environmental organization Earthwatch Institute to establish a regional training center at SERC to promote citizen involvement in

global change science. Furthermore, the National Zoo's Conservation Biology Institute has become one of the National Ecological Observatory Network (NEON) sites, providing a tremendous opportunity for cross-fertilization and synergy between SIGEO and NEON.

Donor-designated support also provides an endowed chair for the director of STRI and an endowed staff position in tropical paleoecology. The chair in paleoecology currently investigates global change over the last 60 million years, in part by taking advantage of the multi-billion-dollar expansion of the Panama Canal, which is exposing new fossils and geology during the massive excavations. The Panama Canal expansion is a unique opportunity to improve our understanding of the role that the Isthmus of Panama has played with regard to climate and biodiversity change through time. Donor-designated support also funds postdoctoral studies of the relationship between brain size and behavioral complexity, and postdoctoral fellowships in tropical marine biology, using STRI's Bocas del Toro and Galeta field stations in the Caribbean and its Naos laboratory and Rancheria Island field station in the eastern Pacific.

Government grants and contracts support programs such as the Panama International Cooperative Biodiversity Group (ICBG), funded by the National Institutes for Health and administered by STRI, which conducts innovative biomedical research and training, and monitors wildlife that could be carriers of avian influenza and other animal-borne diseases.

# Introduction, Valuing World Cultures

As a steward and goodwill ambassador of cultural connections, with a presence in some 100 countries and expertise and collections that encompass the globe, the Smithsonian will build bridges of mutual respect and present the diversity of world cultures and the joy of creativity with accuracy and insight.

RESEARCH Goal: The Smithsonian contributes insights into the evolution of humanity and the diversity of the world's cultures, arts, and creativity.

ACCESS Goal: The Smithsonian will inspire audiences to explore the cultural and artistic heritages of diverse peoples.

UNITS primarily associated with this Grand Challenge:

- Arthur M. Sackler/Freer Gallery of Art
- Center for Folklife and Cultural Heritage
- Cooper-Hewitt, National Design Museum
- Hirshhorn Museum and Sculpture Garden
- National Museum of African Art

# ARTHUR M. SACKLER GALLERY/FREER GALLERY OF ART

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS		_	GENERAL TRUST		DONOR/SPONSOR- DESIGNATED		T GRANTS NTRACTS			
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	45	6,113	0	106	54	8,805	0	24			
FY 2011 ESTIMATE	45	6,135	0	172	56 9,746		0	198			
FY 2012 ESTIMATE	45	6,135	0	172	56	9,941	0	194			

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	13	1,835	13	1,825	0	-10
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	1	125	2	175	1	50
Public Programs						
Provide reference services and information	2	164	2	164	0	0
Exhibitions						
Offer compelling, first-class exhibitions	13	1,772	13	1,762	0	-10
Revitalizing Education						
Education						
Engage and inspire diverse audiences	5	591	4	581	-1	-10
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	7	973	6	963	-1	-10
Mission Enabling						
Information Technology						
Modernize the Institution's information technology systems and infrastructure	1	205	2	195	1	-10
Management Operations						
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse	1	125	1	125	0	0
conaborative, committed, innovative, and diverse						
Modernize the Institution's financial management and accounting operations	2	345	2	345	0	0
Total	45	6,135	45	6,135	0	0

#### 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 among the most important collections of Asian art in the world. The Museums collect, study, exhibit, and preserve exemplary works of Asian art, as well as works by Whistler and other American artists of the "Aesthetic Movement" as 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' collections.

To meet the goal of Excellent Research, the FSG has recently appointed a Head of Scholarly Programs and Publications, who will link the Museums' vigorous but often dispersed initiatives, ensure they are better coordinated and better known, and seek new funding sources. FSG will also host a three-day workshop for curators of Asian art in American museums, the second gathering in what is to be the first of an annual series.

To achieve the goal of Broadening Access, the FSG will continue to host international loan exhibitions and complementary public programs, as well as to expand the number and range of exhibitions and loans offered to other museums throughout the nation and worldwide. Several shows will be traveling internationally. The Museums will continue work on improving the website by introducing a new search tool for its Collections Online, and, most importantly, be establishing a new Digital Media group that will aim to be a world leader within the next five years. This involves a major realignment of resources.

To support the goal of Mission Enabling through organizational excellence, the 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. The Museums will continue to implement its new management tracking system that it has commissioned from ManagePro, and continue with the highly successful participatory budgeting approach.

The FY 2012 budget request includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$22,000.

### **MEANS AND STRATEGY**

To achieve the goals of Broadening Access and Revitalizing Education, the FSG has held numerous high-profile exhibitions to raise attendance and reassert the FSG's pre-eminence in the field of Asian art. This has proved highly successful, but also costly in terms of financial and staff resources. In

accordance with the five-year Strategic Plan of 2009, the FSG has reduced its international loan exhibitions received by the Museum, and is now concentrating more on the Museum's own permanent collections. In 2012, the Museum intends to complete the refurbishment of the galleries of Chinese art begun in 2010.

2012 marks the 25th anniversary of the opening of the Arthur M. Sackler Gallery, and this is a cause for celebration that will see a vigorous schedule of programs, exhibitions and long-term displays. One of the international shows will be *SHIPWRECKED: Tang Treasures and Monsoon Winds*, that will display part of the cargo from a 9th-century Arab dhow that was taking 60,000 Chinese goods to the Persian Gulf. FSG has organized this show in collaboration with institutions in Singapore, and will travel it to as many as 14 venues around the world. China remains a key focus with a show on the Empress Dowager that draws on some remarkable photographs from the Archives, the first time that this resource has been heavily featured in an exhibition. The intention is to travel this exhibition too.

To strengthen collegial ties and offer a regular program on the arts of Asia to new audiences, the FSG will continue to develop a network of museum partners, often where collections and/or areas of expertise are lacking. The major Museum of Islamic Art in Doha is keen to partner with FSG, for example.

As part of its goal to advance Revitalizing Education, and to provide greater access to high-quality educational resources, the FSG will be looking more carefully at state, county, and municipal educational mandates to ensure that the FSG's programs support public schools' curricula. In addition, the FSG will devote more effort to develop long-lasting teaching materials based on the FSG's world-renowned collections, and to place 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 Strengthening Collections management, the 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. The search tool for the Collections Online will be completely overhauled.

With a special allocation of funds to the Smithsonian, the FSG will continue its research into Nazi-era provenance issues. FY 2012 will see the strengthening of the international ties developed over the previous two years.

Visitor surveys will be conducted throughout FY 2011, and the FSG has now instituted a Visitor Advisory Team to ensure that lessons from these surveys are fully incorporated into our efforts in FY 2012.

To achieve the goal of Strengthening Collections, the 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 the FSG's collections and many other museums remain accessible to future generations. In FY 2012, curators and researchers will continue to study and publish new research on the collections, including ancient Chinese art from Dr. Paul Singer's collection. Work will proceed on a major exhibition and online publication of the Pulverer Collection of Japanese books with a major grant from the Getty Foundation, and with the collaboration of Ritsumeikan University that is digitizing more than 100,000 images for us.

The newly appointed Head of Scholarly Programs and Publications will ensure that FSG research efforts are more focused on its own collections, that work is better coordinated, that FSG link more vigorously with researchers in universities in the Washington, DC area as well as internationally, and that FSG have appropriate distribution, either in print or online, of scholarly publications.

To meet the goal of Mission Enabling, the FSG plans to introduce improved administrative efficiencies and reporting mechanisms. As part of these improvements, the Museums will enhance accountability by linking the strategic plans and goals of the Museums directly to departmental activities and outputs, which will ensure that resources are effectively deployed and managed. All this will be monitored through the major management tracking system introduced in FY 2010. Greater emphasis will be placed on linking work to the Strategic Plan of the Smithsonian as a whole.

**NONAPPROPRIATED RESOURCES** — General trust and donor/sponsor-designated funds are generated from memberships, Museum shop sales, special events, unrestricted and restricted gifts and grants, and endowment income. The Freer Gallery of Art and the Arthur M. Sackler Gallery are highly dependent upon non-appropriated sources to fund the programs and operations necessary to provide the quality of exhibitions, programs, and publications expected by visitors and scholars.

# **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 2010 ESTIMATE	15	2,282	12	1,469	1	297	2	833			
FY 2011 ESTIMATE	15	2,300	9	1,166	1	331	2	865			
FY 2012 ESTIMATE	15	2,300	9	1,141	4	1,600	0	150			

# STRATEGIC GOALS: BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY :	2011	FY	2012	Cha	nge
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Broadening Access						
Exhibitions						
Offer compelling, first-class exhibitions	8	1,315	8	1,315	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	2	325	2	325	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national	2	225	2	225	0	0
collections						
Mission Enabling						
Security and Safety						
Provide world-class protection for	0	100	0	100	0	0
Smithsonian facilities, collections, staff,						
visitors and volunteers						
Information Technology						
Modernize the Institution's information	1	125	1	125	0	0
technology systems and infrastructure						
Management Operations						
Modernize the Institution's financial	2	210	2	210	0	0
management and accounting operations						
Total	15	2,300	15	2,300	0	0

#### BACKGROUND AND CONTEXT

The Center for Folklife and Cultural Heritage (CFCH) is a research and educational unit of the Smithsonian Institution with the mission of "promoting the understanding and continuity of diverse, contemporary grassroots cultures in the United States and around the world." It is the largest of a triumvirate of federal offices (with the Library of Congress' American Folklife Center and National Endowment for the Arts' Folk and Traditional Arts program) that support traditional arts and culture in the United States and abroad. For more than four decades, the Center has accomplished this mission through research, documentation, presentation, dissemination, conservation, and continuation of traditional knowledge and artistry in collaboration with literally thousands of organizations, foundations, and governments in the United States and worldwide. Its most visible public products are the Smithsonian Folklife Festival and Smithsonian Folkways recordings, which directly reach many millions of people per year and have earned major recognition such as 19 Grammy Award nominations, as well as four Grammy Awards and one Latin Grammy Award since 1997.

The CFCH, with its highly qualified and professional staff and first-rate production capabilities for public events, also produces a wide range of other products: multi-media website features and publications; exhibitions; documentary films; symposia; print publications; educational materials; and more. Ethnographic research and documentation are fundamental to all of its products and anchor its active engagement in high-profile international cultural heritage policy discussions. Its Ralph Rinzler Folklife Archives and Collections house, preserve, catalogue, and provide access to the collections derived from CFCH research and presentations. Professional training and advancement efforts include offering and hosting fellowship programs, internships, and research opportunities.

The FY 2012 budget request includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of \$18,000.

#### **MEANS AND STRATEGY**

Research, production capacity, and entrepreneurial resource leveraging are CFCH's principal means of accomplishing its core mission, employing more than half its staff, creating its public products, and delivering them to a broad national and international public. Institutional collaboration and major public impact far beyond Washington are its key strategies in fulfilling its mission. Institutional collaborations (more than 100 partnerships in the past three years), fund raising, and mission-driven business activities leverage the Center's modest federal investment many times over to reach nearly 20

million people per year through the Smithsonian Folklife Festival (one million visitors), Smithsonian Folkways Recordings (10+ million listeners via recordings, radio programs, downloads, streams), websites (6+ million), and other products. The CFCH also periodically applies its event production capacity to put on other major, national cultural events consistent with its mission, such as the National World War II Reunion, the First Americans Festival for the opening of the National Museum of the American Indian, and programs for the Olympic Games and Presidential inaugurations.

In 2011 and 2012, the CFCH expects to collaborate with at least nine other Smithsonian units to create and deliver programmatic content. The yield from research of ethnographic information and multi-media primary sources makes its Ralph Rinzler archives one of the principal resources in its field internationally. Via the Folklife Festival, 2011 will bring much new documentation of the people, history, and culture of Rhythm & Blues music in the United States, of the rich bio-cultural diversity of Colombia, exploring how Colombian cultural expressions are inextricably connected to their distinctive environments, and of the service and accomplishments of Peace Corps Volunteers as the agency commemorates the first fifty years of its work. Documenting these cultures and milestones will enable the Center to address the Smithsonian Grand Challenges of Understanding the American Experience and Valuing World Cultures. These major events are in collaboration with the National Museum of African American History and Culture (NMAAHC), the Government of the Republic of Colombia, and the Peace Corps. In 2011 and 2012, the CFCH will further harness the power and reach of the Web to broaden access to Festival content far beyond the Mall through programmatic features preceding, during, and following the 10day Mall event.

In 2011 and 2012, Smithsonian Folkways Recordings, will produce at least 15 original documentary recordings of music from the United States and cultures around the world, including music from Central Asian, Latin American, and African American traditions. A singular, major product will be a six-CD set covering nearly a century of jazz history, tailored to university education as well as to the interests of enthusiasts of America's signature music. In addition, Folkways will continue to extend its reach to millions more listeners, distributing its 3,000 album titles and 42,000 + tracks of audio to teachers, students, scholars, and the general public. Digital distribution will expand further, opening new horizons for the creation and delivery of the Center's educational content via downloadable streams, RSS "podcast" feeds, and multi-media video features. Folkways expects its own Web visitation to increase to more than six million hits in 2011 and seven million in 2012. Folkways will also bolster its million-plus circulation of digital content from non-Smithsonian websites such as iTunes U. It will expand its collaboration with a private partner to deliver the entire Folkways collection

to more than 450 libraries throughout the continent and beyond. The *Musica del Pueblo* virtual exhibition featuring video and audio recordings and text on Latino roots musical traditions, will expand its offerings of American and Latin American content. This mission-critical content will also leverage additional revenues through online and retail sales.

The Ralph Rinzler Folklife Archives and Collections will tackle two principal challenges in 2011 and 2012 — receiving a plethora of incoming ethnographic research, and assessing, cataloguing, preserving, and making available endangered, valuable, multi-media holdings through sharp prioritization of delicate and critical collections materials. Its work will be enabled by a \$335,500 grant from the Save America's Treasures program to digitize and preserve the entire Moses and Frances Asch collection of recordings and documentation, recognizing the national and international prominence of the Folkways collections.

Center curators and research staff will continue to publish books, articles, and Web features, and make professional presentations at gatherings of specialists. One special book in progress will explore curatorial challenges, approaches, and highlights via the Smithsonian Folklife Festival. The CFCH's Cultural Heritage Policy team will continue its vital participation in U.S. and United Nations Educational, Scientific and Cultural Organization (UNESCO) cultural heritage policy formulation through consultation with the U.S. Department of State, cooperative work with the UNESCO, and collaborations with other national and international organizations.

The Center will contribute to the Smithsonian's goal of Mission Enabling by taking special steps to provide for the security and safety of people and property outdoors on the National Mall during the Festival period, and for equipment in need of adequate storage year-round. The Center will also continue to improve its information technology infrastructure and related project budgeting and planning.

NONAPPROPRIATED RESOURCES — General trust funds support salaries and benefits of personnel. Donor/sponsor-designated funds cover costs related to specific projects such as the Smithsonian Folklife Festival and several other educational programs. Income from sales of Smithsonian Folkways Recordings pays staff salaries and expenses. In 2010, more than \$4.8 million was raised in outside revenues, grants, and contracts. The CFCH is part of the planned Smithsonian National Campaign, with a test goal to raise \$16.1 million to support the mission of the Center.

# **COOPER-HEWITT, NATIONAL DESIGN MUSEUM**

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS			IERAL IUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	34	4,103	24	2,898	12	3,630	0	160			
FY 2011 ESTIMATE	34	4,089	20	3,421	12 4,968		0	130			
FY 2012 ESTIMATE	34	4,244	18	3,501	10	5,468	0	50			

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY 2011		FY 2012		Change	
Program Category I		\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Ensure the advancement of knowledge in the humanities	4	325	4	325	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	0	0	1	90	1	90
Public Programs						
Provide reference services and information	1	120	1	120	0	0
Exhibitions						
Offer compelling, first-class exhibitions		295	4	295	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences		250	3	250	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	7	1,622	7	1,622	0	0
Mission Enabling						
Facilities						
Improve the overall cleanliness and efficient operation of	8	730	8	885	0	155
Smithsonian facilities		730	8	000	U	155
Information Technology						
Modernize the Institution's information technology systems and infrastructure	2	257	1	167	-1	-90

Performance Objective/		FY 2011		FY 2012		ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Management Operations						
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	1	80	1	80	0	0
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse	1	105	1	105	0	0
Modernize the Institution's financial management and accounting operations	3	305	3	305	0	0
Total	34	4,089	34	4,244	0	155

#### **BACKGROUND AND CONTEXT**

Cooper-Hewitt, National Design Museum (CHNDM), one of two Smithsonian museums located outside of Washington DC, 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 goals of Broadening Access and Revitalizing Education, 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 2012. Together, these programs will help CHNDM engage larger, more diverse audiences, and fulfill its mission to serve as a catalyst for design education, throughout the nation and internationally.

The Museum devotes resources to ensure the advancement of knowledge in the humanities by fostering a greater understanding of the role of design in everyday life and its impact on shaping the built environment of the past, present and future; and to encourage the "by-products" of design thinking — such as creative problem solving and team work— in other disciplines and areas of life, through interactive, engaging in-person and online experiences.

For FY 2012, the request includes an increase of \$155,000 for a Director of Operations to supervise information technology, human resources, safety, and facilities management. This position is critical to support the ongoing major renovation and revitalization projects at the Museum. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$141,000.

## **MEANS AND STRATEGY**

In FY 2012, Cooper-Hewitt's 91st Street facility will be closed to the public due to major renovations. This will require the Museum to secure off-site locations to present exhibitions and provide educational opportunities. This period of time during the renovation has been coined "On the Move."

To achieve the goal of Broadening Access, CHNDM will concentrate its resources on maintaining a world-class exhibition program, physical and virtual, that will attract diverse audiences and provide visitors with a balance of historic and contemporary design shows. Each of the upcoming exhibitions in FY 2012 will feature significant objects and original theses, and will have a strong appeal to diverse audiences.

Design with the Other 90%: CITIES, is the second exhibition in the Museum's ground-breaking series that explores the ways in which design can help solve some of the world's most urgent problems. The exhibition will present design solutions that are addressing challenges created by rapid urban growth in informal settlements, or slums, primarily in developing and emerging economies. Close to one billion people live in informal settlements or slums, which are projected to swell to two billion by 2030. The exhibition will include some of the most successful and innovative local and global design solutions that address the consequences of our massive urban planetary growth. This exhibition will be presented at the United Nations in October 2011.

During summer 2012, CHNDM will present *Graphic Design Now*, an exhibition co-organized with the Walker Art Center. It will be installed at Governor's Island in lower Manhattan. *Graphic Design Now* explores the worlds of design-driven magazines, newspapers, books, and posters; the expansion of branding programs for corporations, subcultures, and nations; the entrepreneurial spirit of designer-produced goods; the renaissance in digital typeface design; and the transformation of raw data into compelling information narratives.

In conjunction with these exhibitions, the Museum will offer a series of public programs, such as lectures, panels, workshops, studio visits, and an international conference to engage and inspire the general public as well as professional, youth, and education-oriented audiences.

CHNDM resources will continue to support the strategic goal of Excellent Research, ensuring the advancement of knowledge in the humanities through exhibition-related scholarly research to create the most innovative and educational exhibitions for the public. The Museum anticipates that important new research will be published in conjunction with both major exhibitions presented in FY 2012. Catalogues will be published for the *Design with the Other 90%: CITIES* exhibition

and co-published with the Walker Art Center for *Graphic Design Now*. CHNDM will also develop an open network data base that will be released as part of the *CITIES* exhibition, allowing anyone, anywhere, to learn and benefit from these dynamic design solutions.

In addition to the two exhibitions planned for FY 2012, the Museum will be working on several exhibitions for the fall 2013 grand re-opening of the Museum — Design Across the Smithsonian, This is Design, Maira Kalman Selects from the Collection, and History of the Carnegie Mansion, among others. The Museum will also be working on several publications to accompany these exhibitions — a collections handbook; a design book for children, written and illustrated by Maira Kalman; a K–12 education textbook; and a book on the Carnegie Mansion.

To achieve the goal of Strengthening Collections, 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 2012. The Museum will also continue to support an on-site graduate program with the New School/Parsons on the history of decorative arts and design, which will enable students and scholars to access objects in CHNDM's collections.

To achieve the goal of Revitalizing Education, CHNDM continues to engage and inspire diverse audiences through continual national outreach efforts. Cooper-Hewitt offers a wide variety of educational opportunities and programs, most of which are free. The goal across all of the programs is to engage K–12 students in the design process through active observation, critical discussion, creativity and presentation. The programs foster collaboration among students, teaching them how to work in teams, to define problems and find solutions, while improving their verbal and written communication skills. During the time Cooper-Hewitt is "On the Move" and unable to host school groups, it will bring design workshops into classrooms across New York City.

The Museum will also continue to offer an expanded Smithsonian Design Institute program nationally as well as in New York City. This program is geared to K–12 educators and draws a steadily increasing national and international audience each year. In 2012, special emphasis will be placed on using the design process to enhance science, technology, engineering, and math (STEM) skills.

CHNDM hopes to make its educational opportunities available to a broader audience in FY 2012 through greater use of the World Wide Web. In particular, the Museum plans to devote resources to increasing the accessibility of its educational programs through its website for K–12 teachers, (www.educatorresourcecenter.org), through increased components of the *City of Neighborhoods* educational programs and Smithsonian Design Institute educational programs to support the growing network of program participants and to make program resources available to broader

audiences. The Educators' Resource Center is a website that uses downloadable lesson plans aligned to national standards to show K-12 teachers how design-based learning works with diverse learning styles. These online tools provide educators with the resources they need to engage in the design process and use it effectively in their classrooms.

To further the Smithsonian's goal of Mission Enabling, CHNDM will enhance its reputation, and that of the Smithsonian, by continuing to secure significant media coverage across national and international print and digital platforms such as *The New York Times, The Washington Post* and *The Wall Street Journal*, as well as general interest publications and those relating to all fields of design. Cooper-Hewitt will maintain and cultivate substantive relationships with the public, our exsiting membership community, state and local government, children, educators, business leaders and designers.

Mission Enabling support goals will be achieved through reviews of on-site and off-site storage, redesign of CHNDM's website to create a world-class online resource for design education, and streamlined financial systems to improve the efficiency of the procurement process. Additionally, the museum has embarked upon an ambitious two phase renovation project.

Phase One, (Townhouse) of the Museum's renovation, will be completed in 2011. The renovation will provide a new public entrance on East 90th Street for direct access to a modernized National Design Library with two reading rooms and a rare book facility. The renovated space also includes curatorial and administrative offices, and an additional education classroom.

Phase Two, Museum (Carnegie Mansion) renovation, which begins in FY 2011, will increase exhibition space with a spectacular new third-floor gallery, restored historic fabric, and greater access to the Museum's collections through the new *This is Design* exhibition, which will fill the first-floor galleries with highlights from the collections, and will include some interactive components.

The renovation is a critical project that will enable the Museum to play an important and vibrant role locally and globally. After the renovation, it is estimated that the Museum will experience 100 percent growth in the number of students participating in Cooper-Hewitt's programs and surpass 300,000 visitors to the Museum per year. Only with renovated and improved facilities will Cooper-Hewitt be able to accommodate this growth and fulfill its mission as the nation's design education resource and authority for design enthusiasts of all ages.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

 For FY 2012, the request includes an increase of \$155,000 for a Director of Operations position to supervise information technology, human resources, safety, and facilities management. The position is critical for the success of the numerous, ongoing revitalization projects at the Museum. The funds were redirected from the Outreach line-item (Smithsonian Institution Scholarly Press) related to the Institution's effort to rationalize Smithsonian funding sources.

**NONAPPROPRIATED RESOURCES** — Non-appropriated resources support 70 percent of the Museum's operating budget. General trust funds are generated from memberships, Museum shop sales, admissions, special events, and unrestricted donations. General trust funds support salaries and benefits of administrative personnel, development and business activities, and other program-related costs. The Museum also raises funds from private sources to support research, exhibitions, public programs, and administrative functions. This includes securing donations for new exhibitions, educational initiatives, and public outreach. Donor/sponsor-designated funds are critical to support exhibitions and educational initiatives. In addition, significant endowment gifts support the research, exhibitions, public programs and administrative functions. The Museum recently embarked on a Capital Campaign and has surpassed the 95 percent mark towards a \$54 million renovation goal, and 70 percent of our \$10 million endowment goal. A wonderful public-private partnership supports the Museum with private funds contributing one and one half dollars for every federal dollar spent. Every member of the Museum's Board of Trustees has contributed to the campaign, and both New York City and New York state are also supporting the campaign — a terrific endorsement of Cooper-Hewitt and its vision for the future.

# HIRSHHORN MUSEUM AND SCULPTURE GARDEN

	APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS			
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000		
FY 2010 ESTIMATE	39	4,412	1	797	21	3,400	0	0		
FY 2011 ESTIMATE	39	4,356	1	922	26	7,155	0	0		
FY 2012 ESTIMATE	39	4,356	1	850	29	8,155	0	0		

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	Performance Objective/ FY 201		FY	2012	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Ensure the advancement of knowledge in the humanities	2	294	2	294	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	1	117	1	117	0	0
Public Programs						
Provide reference services and information	2	284	2	284	0	0
Exhibitions						
Offer compelling, first class exhibitions	13	1,499	13	1,499	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences		453	4	453	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	10	1,111	10	1,111	0	0
Mission Enabling						
Facilities						
Improve the overall cleanliness and efficient		92	1	92	0	0
operation of Smithsonian facilities						
Management Operations						
Enhance the reputation of the Smithsonian by	2	162	2	162	0	0

Performance Objective/		FY 2011		FY 2012		Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000	
maintaining good relations with the news media and with federal, state, and local governments							
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse	1	75	1	75	0	0	
Modernize the Institution's financial management and accounting operations	2	203	2	203	0	0	
Modernize and streamline the Institution's acquisitions management operations	1	66	1	66	0	0	
Total	39	4,356	39	4,356	0	0	

#### 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. The HMSG enhances public understanding and appreciation of contemporary art through acquisition, exhibitions, education and public programs, conservation, and research.

The Museum allocates resources to further the Institution's goals so that progress toward one goal supplements work toward the others. For instance, through its efforts under Excellent Research, the HMSG has developed a deep expertise in the conservation of time-based media works that are at the forefront of contemporary art, and this knowledge enables the Museum to sustain these works under the goal of Strengthening Collections, and to display these works in compelling exhibitions under the goal of Broadening Access.

The HMSG dedicates a significant portion of its resources to the Institution's goal of Broadening Access, primarily through its presentation of insightful, deeply researched exhibitions of modern and contemporary artists, many of them with novel thematic interpretations that win critical and public acclaim. The HMSG supplements these exhibitions with an active roster of public programs, critical essays, and carefully selected images in original catalogues, and through continued progress in digitizing images of every work in the collection and posting them to the Museum's website.

The Museum's extensive collection is central to its purpose, and, pursuant to the Institution's goal of Strengthening Collections, the HMSG dedicates another substantial portion of its resources to the preservation of its thousands of artworks. Moreover, the HMSG makes these artworks available to

museums around the country with a very active loan program, and lends staff expertise on conservation matters to arts organizations around the globe.

The Museum contributes to Revitalizing Education with numerous educational programs, including a gallery interpretive guide project that is adapted to audience areas of interest and ongoing research from many fields of contemporary culture, and efforts to bring senior, non-museum education professionals into programs where they can expand on the HMSG's didactic approaches. The Museum pursues the goal of Mission Enabling by constantly improving its financial and administrative management tools and procedures.

The FY 2012 budget request includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$56,000.

#### **MEANS AND STRATEGY**

In FY 2012, Excellent Research continues as the Museum develops a major public forum on the intersections of art, design, technology and education, featuring international subject-matter experts and an interactive online component effectively extending participation to audiences far beyond the walls of the Museum. Also, the Museum will launch a series of online and on-site programs dealing with the role of technology and new media in contemporary art and museum culture.

In FY 2012, exhibitions will remain at the forefront of the Hirshhorn Museum and Sculpture Garden's missions to broaden access to the arts and, specifically, to increase public understanding and engagement in the transformative power of modern and contemporary art.

The Museum will open the year with a rare exhibition of Andy Warhol's "Shadows" series. A special loan from Dia Art Center, Beacon, New York is enabling the Hirshhorn to display all 102 of these iconic paintings by the legendary American artist in a dramatic installation customized to the signature architecture of the Hirshhorn's unique gallery spaces. Later in the year, the Museum will creatively integrate its familiar permanent collection with recent, thought-provoking works by prominent American artist Peter Coffin. The year will conclude with a major exhibition of recent work by Chinese artist Ai Weiwei. This large, multi-media exhibition, which will be a collaboration with the Mori Museum in Tokyo, Japan and the Cincinnati Art Museum, will introduce American museum-goers to the beautiful and intellectually poignant work of one of China's most significant and influential living artists.

The Museum's distinctive *Directions* series will continue, in FY 2012, to feature work by important emerging national and international artists. Potential

collaborations currently under investigation include projects with Sharon Lockhart, Sarah Morris, David Claerbout, and Rafael Lozano-Hemmer. A continuing series of moving-image artworks by emerging national and international artists will also be displayed in the Museum's dedicated Black Box gallery space. All exhibitions presented in FY 2012 will be complemented by a combination of public tours led by interpretive guides, docents, and invited specialists, lectures and other public programs, and brochures, catalogues and online educational resources.

Outside the walls of the Museum, FY 2012 will see the completion of the international tour of the Museum's widely admired moving-image exhibition, *The Cinema Effect*, which began its three-venue tour of Spain in FY 2011.

Substantial planning and development will continue in FY 2012 for major exhibition projects opening in upcoming years, including: a thematic survey of the imagery and processes of destruction in international, postwar art; a survey of the role of the landscape in American, 20th-century abstract art; a thematic exploration of animation and new moving-image technologies in art; and a major, historical, international survey of surrealist sculpture. The Museum will also move ahead in FY 2012 with plans for a large-scale exhibition in FY 2014 celebrating the Museum's fortieth anniversary with a thematic exhibition project highlighting the museum's collection and exploring the role and meaning of the art museum in 21st-century society.

Two major commissions for FY 2012 with important American artists further the Museum's longstanding commitment to creative collaboration with contemporary artists. Early in the year, renowned American conceptual artist Barbara Kruger will transform the public areas of the Museum's lower level with a dramatic, customized overlay of text and images. In spring 2012, the Museum will launch a new digital-video projection by important new-media artist Doug Aitken. Aitken's 360-degree projection will cover the monumental, modernist façade of the Museum, temporarily "dissolving" the architecture with a stunning array of light, color, imagery, and sound. It is anticipated that this highly-visible projection will attract and enchant thousands of visitors to the Hirshhorn from around the National Mall, the region, and nation.

With a newly redesigned website, one that starts with the methods of social media rather merely accommodating them, the Museum will further the goal of Broadening Access by engaging with local and remote audiences as they draw in information with individualized knowledge portals. HMSG will also refine its communication procedures to diffuse deep knowledge of contemporary art and culture, whether presented in the museum or elsewhere, and not merely chatter about events. The Museum will still publish original catalogues to

complement the viewing of its exhibitions and produces other books that examine design and cultural shifts of the early 21st century.

The Museum will support Revitalizing Education with a range of programs geared toward people with varying levels of art experience and cultural interests, and by expanding or revising the concept of a museum as a center of learning. One or more working artists will design and lead Artist at Work with Youth workshops for elementary school- aged children with three sessions in both the fall and spring. Artists will also present their ideas and inspirations to people of all ages in the "Meet the Artist" programs and "In Conversation" interviews and panel discussions. The Museum will draw upon a wide pool of artists, researchers, and experts from unexpected fields to provide interpretive tours in Friday Gallery Talks, and it will present Washington's most thoughtprovoking film series, portraying art and critical thought from independent artists and documentary film makers from around the world. In concert with major educational foundation sponsors, HMSG will expand the ARTLAB+ program, a design studio for teens that hosts workshops where teens learn and explore using digital media. The Museum will sustain its "Interpretive Guides" program, which brings advanced art students into the galleries to aid visitors' critical experience with art on display, and which develops the students' own education objectives and teaching skills. Finally, the Museum's signature "After Hours" programs will once again provide the nation's capital with high-energy live musical performances and extended hours for the exhibition galleries.

In FY 2012, the Museum's main action toward Strengthening Collections will continue be its multi-year project to shift approximately 50 percent of the permanent collection to a secure storage location at the Museum Support Center in Suitland, Maryland. The ongoing move will improve the storage conditions of permanent collection artworks both at HMSG and MSC, as well as make the breadth of the collection more accessible to exhibition and research projects, for Smithsonian museums and visiting museum professionals from around the world. Further developing itself as a center for research and preservation of time-based media (e.g., film, digital video and audio) artworks, the HMSG will present the symposium TechFocus II with partner institutions The American Institute for Conservation of Historic and Artistic Works.

Efforts to photograph and catalogue the entire permanent collection will be brought to near completion, a project supported by conservation surveys of select works in specialized media, and bringing ever more of the collection to the public via extensive search features on the Museum's public website. Pending completion of space redesign plans for the Museum's lower level in late FY 2011, work will begin on upgrading and expanding the conservation laboratories.

Under the goal of Mission Enabling, the Museum will continue to pursue capital projects that merge the functional with the artistic through the inclusion of artists and designers with central Smithsonian engineering. The Museum will continue to refine its public spaces to a population that applies mobile technology in every facet of life, and expects access to Web-based knowledge and social media platforms to enliven their interpretive experience as they explore museum galleries. The HMSG administration will institute long-range program planning reviews to improve resource allocation, funds management and more effective cost sharing of major exhibitions and programs with outside organizations.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits of administrative and development personnel, as well as some programs and public relations staff, development activities, and exhibition and program-related costs. Donor/sponsor-designated funds support development, exhibitions, public programs, communications, and marketing.

# **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 2010 ESTIMATE	29	4,504	1	683	2	873	0	0				
FY 2011 ESTIMATE	29	4,461	1	569	3	1,580	0	0				
FY 2012 ESTIMATE	29	4,461	1	569	3	1,580	0	0				

# STRATEGIC GOALS: BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	1	112	1	112	0	0
Public Programs						
Provide reference services and information	4	466	4	466	0	0
Exhibitions						
Offer compelling, first-class exhibitions	8	1,587	8	1,587	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	7	818	7	818	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	3	669	3	669	0	0
Mission Enabling						
Information Technology						
Modernize the Institution's information technology	1	154	1	154	0	0
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer	3	300	3	300	0	0
centered and results oriented						
Modernize the Institution's financial management	2	355	2	355	0	0
and accounting operations						
Total	29	4,461	29	4,461	0	0

#### BACKGROUND AND CONTEXT

Africa — the cradle of humanity — is part of everyone's heritage. The mission of the National Museum of African Art (NMAfA) is to inspire conversations about the beauty, power, and diversity of African arts and cultures worldwide. The Museum's vision is to be the world's leading center of scholarly and artistic excellence on the arts of Africa. The Museum accomplishes its mission and vision through effective use of its unparalleled collections, exhibitions, programs, publications, and educational initiatives which will be widely accessible and strengthened through collaborations with African, diasporic, and global arts communities. The Museum collects and exhibits ancient to contemporary works of art from the entire continent of Africa. NMAfA's activities and programming support the Grand Challenges of the Smithsonian's Strategic Plan, particularly in the areas of Valuing World Cultures and Understanding the American Experience.

To achieve the goal of Broadening Access, the NMAfA dedicates resources to the Web and to the Museum's social media capabilities, integrates digital technology in exhibitions, provides online educational resources, and promotes public access to the Museum's art and photographic collections. A key component of Museum operations is the creation of temporary and semi-permanent exhibitions of artworks from its own collection and from other museum and private collections. In FY 2012, the NMAfA will have three concurrent exhibitions on view, featuring works from the permanent collection. A temporary exhibition of contemporary art, which opened in FY 2011 and includes a publication, will remain on view through the first quarter of FY 2012. In addition, the Museum will present four temporary exhibitions — two organized by NMAfA and two touring exhibitions organized by outside institutions — one of which opens in the last month of FY 2011.

Of the NMAfA-organized exhibitions, one includes a publication and features photographs from the Museum's Eliot Elisofon Photographic Archives and objects from the art collection. The second, also accompanied by a publication, includes a mixture of Museum and Ioan objects, both traditional and contemporary, exploring African cultural astronomy and the arts. Regarding the touring exhibitions, in the last month of FY 2011, the Museum will host an important exhibition of Nigerian artworks organized by an outside institution. Later in FY 2012, the Museum will host a contemporary exhibition featuring the work of a leading woman photographer from Morocco. A number of these exhibitions will extend into FY 2013. In addition, the NMAfA will be involved in planning a reinstallation of selected artworks from the Walt Disney-Tishman African Art Collection, as well as a major reinstallation of artworks from the Museum's permanent collection, slated for late FY 2012 and lasting into FY 2013.

The NMAfA will present new educational programs online, continue to catalogue objects and images from its collections for online access, and expand its outreach to local communities and underserved or new audiences, particularly African immigrant communities and young adult audiences. In keeping with the Smithsonian's Strategic Plan, the NMAfA will forge meaningful collaborations within and outside the Smithsonian, and strengthen its networking nationally and internationally — particularly on the continent of Africa.

NMAfA will achieve its goal of Broadening Access through organizational excellence by continuing to improve information technology (IT) operations, staff performance, and media relations and marketing. A comprehensive IT plan will integrate all of the Museum's IT operations. A media and marketing strategy, renewed annually, will expand the Museum's visibility and membership, and promote its programs locally, nationally, and internationally. A fundraising plan, renewed annually, will enhance the Museum's capacity to offer outstanding exhibitions, publications, programs, and outreach. Furthermore, the Museum will continue to assess its effectiveness in reaching out to educators, scholars, and the public through continued use of visitor surveys and other performance evaluation tools.

FY 2012 will see the completion of the Museum's operational plan, which will complement NMAfA's strategic plan that was completed in FY 2011. As a way to establish the staff as stakeholders in the success of the NMAfA, the goals of the Museum's strategic plan and the Secretary's goals will continue to be integrated into the performance plans of all staff members. Emphasis will be on public visibility and customer-centered performance. At the same time, quality programming and ongoing research will continue as the foundation for programs, including exhibitions.

The Museum will continue to increase its public visibility and fulfill its mission to various stakeholders, including students, teachers, cultural community organizations, the diplomatic corps, African immigrant groups, scholars, collectors, and volunteers located in the metropolitan Washington, DC area. An enhanced Web presence and enhanced social media capabilities will expand the Museum's visibility and impact nationally and internationally.

The FY 2012 budget request includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$43,000.

#### **MEANS AND STRATEGY**

To achieve the goals of Broadening Access and Revitalizing Education, the NMAfA is directing resources to activities that will result in consistently high-quality programs and larger audiences. In FY 2012, the Museum will provide greater Web and digital access to NMAfA collections through enhanced navigation features via eMuseum and multi-media applications, and by completing additional image and object catalogue records for the Museum's public access database. The Museum's website will be expanded to include additional podcasts, blogs, Facebook and Twitter options, online educational resources, activities for younger audiences, and an expanded Web presence for the Eliot Elisofon Photographic Archives.

Funding and staff permitting, the NMAfA will continue to seek visitor feedback on exhibitions and programs, and implement performance assessments of its public programs. In anticipation of the development of a gallery devoted to the permanent collection, the Museum will begin to hold "town hall" meetings with teachers of primary, secondary, and college students, as well as representatives from local community groups, to solicit input for future exhibitions and activities. These efforts will result in more effective planning and development of programs and services that will enable the Museum to successfully reach its target groups and expand its audience base. In addition, marketing strategies will be reviewed and tested to determine the most effective ways to engage and communicate with diverse audiences.

Ongoing educational programs will include "Africa in Motion" musical and dance performances, programs geared to younger visitors and family groups, such as "Let's Read About Africa," storytelling and art-making activities, exhibition-related teacher/student workshops, and an annual Community Day. The NMAfA will also use lectures, gallery tours, and film series based on the Museum's current exhibitions to target mixed-generation audiences. For adult audiences, the Museum will continue its highly successful film and lecture series, drawing on current exhibitions and featuring noted scholars and artists.

The Museum will continue its quarterly Conservation Clinics to educate the public about conservation and the important relationship between science, technology, and art. Ongoing quarterly Curatorial Clinics will continue to provide opportunities for members of the public to learn about African art forms, styles, materials, and contexts of use as part of museum connoisseurship and object quality assessments. To educate casual and serious collectors of African art, the Museum's website will be expanded to include helpful tips on object identification, assessment, and care.

To achieve the goal of Strengthening Collections, the Museum will continue online cataloguing of its art and photographic collections; the NMAfA's priorities will continue to be the Walt Disney-Tishman African Art Collection and the Eliot Elisofon Photographic Archives. Digital access to these materials will facilitate research and study by students, teachers, scholars, conservators, and the general public. Efforts will be made to integrate contextual photographs from the Eliot Elisofon Archives with related objects in the collection.

The Museum's Walt Disney-Tishman Highlights exhibition will close at the end of FY 2011 to prepare the gallery for a temporary exhibition of photographs from the Eliot Elisofon Photographic Archives. The FY 2011 exhibition African Mosaic, which features selected highlights from the Museum's acquisitions over the last decade, will continue through much of FY 2012 and will be part of a phased reinstallation of the permanent collection beginning late FY 2012 and extending into FY 2013. Brave New World II, a small exhibition of contemporary artworks drawn from the permanent collection that opened in FY 2010, will also continue through part of FY 2012. Also continuing through the first quarter of FY 2012 is Artists in Dialogue 2, a contemporary exhibition organized by the Museum. It opened in FY 2011 and features the work of Sandile Zulu from South Africa and Henrique Oliveira from Brazil. It is the second in a series of exhibitions in which exciting artists are invited to a new encounter — one in which each artist responds to the work of the other, resulting in original, site-specific works for the Museum.

Two new and innovative exhibitions organized by the Museum are slated to open in FY 2012. Chief S.O. Alonge: Photographer to the Court of Benin, 1926-1989 will celebrate the history of Nigerian photography with a special focus on the Museum's collection of photographs by one of Nigeria's early premier photographers. As an official photographer for the Royal Court of the Benin Kingdom, Alonge documented the rituals, pageantry, and regalia of the court for more than a half century. The exhibition, drawn from the collection of the Eliot Elisofon Photographic Archives, will feature selected photographs and other materials that explore the history of photography in Nigeria, with a concentration on Alonge's contributions. The exhibition and accompanying publication, which will be developed and authored by the Museum's supervisory archivist in collaboration with an NMAfA curator and an outside scholar, will also highlight works of art from the court of Benin in the Museum's permanent collection and rare collections of Nigerian photography in the Museum's Eliot Elisofon Photographic Archives. Four months later, the Museum will open African Cosmos/Stellar Arts, a groundbreaking exhibition featuring some 80 works of traditional and contemporary African art, including many works from NMAfA's permanent

collection. The exhibition explores African knowledge of the cosmos and how African cultures use heavenly bodies and celestial phenomena as symbol and metaphor, particularly in the visual and performing arts. The exhibition will be accompanied by a major publication, authored by the Museum's deputy director and chief curator, along with selected scholars and artists.

During the last month of FY 2011, the Museum will open a major international loan exhibition focusing on the arts of Nigeria's Benue River Valley. *Central Nigeria Unmasked* is the first major international exhibition to present a comprehensive view of the remarkable arts produced by the many and diverse peoples living in the Benue River Valley. The exhibition, which features more than 150 extraordinary objects — made largely of wood, ceramic, or metal, and drawn from museum and private collections in the United States and Europe — offers an exceptional opportunity to discover the rarely seen and little-known artistic genres of central Nigeria. The exhibition will remain on view through early spring of FY 2012.

During FY 2012, the Museum will devote staff resources to the planning of exhibitions in FY 2013 and beyond, including the reinstallation of 60 works from the Walt Disney-Tishman African Art Collection. Staff members will also devote considerable effort to planning the installation of a redesigned gallery devoted to the Museum's permanent collection. This long-term display of selected works from the NMAfA's permanent collection will attract general audiences, collectors, and scholars, as well as local school groups that rely on consistently available works of art for their themed tours and curriculum projects. Planning will also continue for a contemporary exhibition featuring the work of a Moroccan woman photographer, and for a number of other exhibitions slated for FY 2013 and FY 2014, including one organized by visiting curator Simon Njami.

In FY 2012, the NMAfA will return to its schedule to deaccession works from the art collection. Additionally, the Museum will continue to assess and refine the FY 2011 move of selected works form the permanent collection to off-site storage in Pod 3 of the Museum Support Center.

To address the goal of Broadening Access, the NMAfA is focusing resources in several areas: IT operations, staff performance and accountability, and relations with the media. The Museum's IT plan has integrated information technology functions for administration, collections management, exhibitions, and public access. The IT plan will be reviewed on an annual basis, with updates made as needed. Museum administrators will use the five-year strategic plan and feedback from visitor surveys to conduct

annual reviews and updates to the NMAfA's operational plan that ensure quality public programs and experiences for all audiences.

Accountability is being achieved by integrating the NMAfA's strategic goals and operational plans and the Secretary's annual goals into performance plans for all Museum staff members. In addition, personnel and programmatic management responsibilities have been incorporated into the performance plans of all department heads to provide more effective programs, activities, and relevant projects that meet the expectations of the Museum's audiences and visitors. Educational brochures and special websites will increase the educational value of NMAfA exhibits. The Museum intends to forge better relations with media, corporations, foundations, community interest groups, and congressional representatives by expanding its contact base and distributing more information about the Museum.

NONAPPROPRIATED RESOURCES — General trust funds support staff salaries, benefits, and travel. Funds raised from individual and corporate donors will support NMAfA's major exhibition efforts in FY 2012, including exhibition-related publications, educational programming, and outreach. Corporate and foundation sponsorships support the planning and implementation of exhibitions, including installation expenses and exhibition-related public programming, travel, and curatorial collaborations.

### Introduction, Understanding the American Experience

America is an increasingly diverse society that shares a history, ideals, and an indomitable, innovative spirit. The Smithsonian will use its vast resources across disciplines to explore what it means to be an American and how the disparate experiences of individual groups strengthen the country as a whole, and to share our story with people of all nations.

RESEARCH Goal: The Smithsonian advances and synthesizes knowledge that contributes to understanding the American experience, particularly with regard to its history, art, and culture, as well as its connections to the rest of the world.

ACCESS Goal: The Smithsonian turns knowledge into awareness, action, and results, and encourages American cultural vitality.

UNITS primarily associated with this Grand Challenge:

- Anacostia Community Museum
- Archives of American Art
- National Museum of African American History and Culture
- National Museum of American History, Behring Center
- National Postal Museum
- National Museum of the American Indian
- National Portrait Gallery
- Smithsonian American Art Museum

# **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 2010 ESTIMATE	18	2,048	2	350	0	145	0	7				
FY 2011 ESTIMATE	18	2,063	3	404	0	240	0	10				
FY 2012 ESTIMATE	18	2,063	3	404	0	240	0	10				

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

## Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	3	447	3	447	0	0
Broadening Access						
Public Programs						
Provide reference services and information	4	613	4	613	0	0
Exhibitions						
Offer compelling, first-class exhibitions	4	389	4	389	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	3	288	3	288	0	0
Mission Enabling						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	2	151	2	151	0	0
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse	1	86	1	86	0	0
Enhance the reputation of the Smithsonian by maintaining good relations with the news media and with federal, state, and local governments	1	89	1	89	0	0
Total	18	2,063	18	2,063	0	0

#### BACKGROUND AND CONTEXT

Since its inception as the first federally funded, community-based museum on September 15, 1967, the Anacostia Community Museum (ACM) has faced unique challenges related to mission, resources, and location. Over the years, ACM has developed into a valuable cultural resource for the region and the country, setting a ground-breaking direction in terms of traditional museological thought and practice.

Although the original 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 opening, the community rejected the eclectic collection of Smithsonian 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.

Over the past decade, the region has seen a subtle but dramatic shift in demographics. In order to remain relevant to the community and unique within the Smithsonian framework, the ACM mission and vision was revised in 2008. With input from a broad range of ACM stakeholders, the focus of the Museum was revised. The new mission states that ACM will challenge perceptions, generate new knowledge and deepen understanding about the ever-changing concepts and realities of "community." A five-year strategic plan (FY 2009–FY 2013), developed to ensure the Museum's viability and sustainability in the future, provides a guide for the facilitation of programs and activities that will further the new ACM mission. Moving forward, the Museum is focusing on the documentation and interpretation of the impact of historical and contemporary social and cultural issues on Anacostia and other urban communities throughout the region, the country, and the world. The Museum's new identity is basically a return to its original charter as a community museum. However, the new direction defines the term "community" in much broader terms.

The FY 2012 budget request includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of + \$15,000

#### **MEANS AND STRATEGY**

ACM will continue to work toward accomplishing the Institution-wide goal of inspiring generations through knowledge and discovery. ACM will embrace the Smithsonian Grand Challenges and use our resources, strengthened through collaborative efforts, in research, exhibitions, collections, and public and education programs. Using resources that engage the broad range of Smithsonian and external partners, ACM will draw upon those things that bring groups of people together — social, ethnic, religious, geographic, and other commonalities. Specifically, the Museum will 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 heritage and community preservation projects.

Major initiatives for 2011 and FY 2012 include on- and off-site exhibitions. On-site *Word, Shout, Song: Lorenzo Dow Turner Connecting Communities through Language* has been extended through July 24, 2011. This exhibition will be followed by *Call and Response: Community and Creativity* (August 21, 2011–March 4, 2012.) The ACM 45th anniversary exhibition, *Reclaiming the Edge: Urban Waterways and Civic Engagement* will open on September 15, 2012. Off-site *Anacostia Then and Now* will be installed at the Thurgood Marshall/Savoy Schools from March 2011 through August 2012, and a satellite version of *Call and Response* will be installed at the Historical Society of Washington, DC from September 2011 through February 2012.

Several research and collections access initiatives, facilitated by the ACM Community Documentation Initiative (CDI), are ongoing. Data collected from the CDI real-time documentation of community history (DC Wards 7 and 8) will be made accessible to scholars, students, and the general public through Web-based access vehicles. Continued digitization of ACM archival and material culture collection will increase access to our holdings. In addition, a second edition of *East of the River Continuity and Change* will be published in FY 2012, and papers presented at the FY 2011 Lorenzo Dow Turner Symposium will be published in *The Black Scholar Journal*.

Recognizing ACM's unique responsibility to youth development within the southeast Washington, DC community and beyond, the Museum Academy Program will expand its out-of-school-time programming for elementary and middle school students. A second program site is being planned for FY 2012. 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.

The Young Museum Career Professionals program, established in FY 2008, is being redesigned to better accommodate staff time and student's academic requirements. This program offers internship opportunities for high school juniors and seniors, and will be a career-building resource for them. The various program components provide direct access to the professional staff in exhibition design, research, collections, public affairs, and administration of the ACM and other Smithsonian Institution units. This 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.

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.

**NONAPPROPRIATED RESOURCES** — General trust funds support the salaries and benefits of the museum director, development officer, and outreach coordinator.

## **ARCHIVES OF AMERICAN ART**

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2010 ESTIMATE	17	1,858	1	288	25	2,223	0	2				
FY 2011 ESTIMATE	17	1,880	1	245	25	2,677	0	121				
FY 2012 ESTIMATE	17	1,880	1	250	25	2,700	0	127				

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

## Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Cha	nge
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	0	10	0	10	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	3	281	3	281	0	0
Public Programs						
Provide reference services and information	3	273	3	273	0	0
Exhibitions						
Offer compelling, first-class exhibitions	1	70	1	70	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	0	10	0	10	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	8	892	8	892	0	0
Mission Enabling						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	2	344	2	344	0	0
Total	17	1,880	17	1,880	0	0

#### BACKGROUND AND CONTEXT

The Smithsonian's Archives of American Art (AAA) enriches research about America's most significant art and artists. With more than 15,000 linear feet containing approximately 16 million items, it is the world's pre-eminent resource dedicated to collecting and preserving papers and primary records of the visual arts in America. Constantly growing in range and depth, ever increasing accessibility to its many audiences, it is an unparalleled and essential resource for the appreciation, enjoyment and understanding of art in America.

To achieve the Institution's goal of Broadening Access, AAA continues with its ambitious digitization program, begun in 2005, to digitize a significant portion of its extensive holdings. AAA's website will continue to be developed to improve delivery of unprecedented numbers of new digital files, the core of which represents AAA's innovative work to digitize entire archival collections, representing hundreds of linear feet, along with descriptive information, engaging content, online exhibitions, robust search, and reference services. AAA's Lawrence A. Fleischman Gallery in the Donald W. Reynolds Center (DWRC) continues to reach new and diverse audiences. The results of the comprehensive Preservation and Assessment Survey conducted between FYs 2004-2008 will continue to be used to prioritize collection processing and preservation activities to achieve the Institution's goal of Strengthening Collections. In FY 2012, AAA will continue to prioritize collections for minimallevel processing, and to digitally reformat at-risk audio-visual media items from collections. The digital preservation of close to 2,000 interviews conducted for AAA's Oral History Program and a new digital infrastructure for interview transcripts will result in improved access to these unique resources. The goal of Mission Enabling through organizational excellence will be met by continually assessing and enhancing staff development and conscientious oversight of internal controls.

The FY 2012 budget request includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of + \$22,000.

#### **MEANS AND STRATEGY**

To achieve the Institution's goal of Broadening Access, AAA continues to direct resources to optimize its presence in the DWRC by mounting compelling exhibitions in its Lawrence A. Fleischman Gallery. The exhibitions planned for FY 2012 include one by guest curator and artist Brian Dettmer, noted for his alteration of books, maps, record albums, and archival documents. In the fall of 2011, the Archives will present *Six Degrees of Peggy Bacon*, an exhibition that underscores the interconnections among collections

and the concept that everyone is on average approximately six steps away from any other person on Earth. In the summer of 2012, the Archives will show its depth of first-hand accounts in the exhibition *A Day in the Life: Diaries from the Archives of American Art*.

In addition, AAA will also reach new audiences by continuing to collaborate within the Smithsonian and with outside organizations, such as the Getty Research Institute on educational events to raise AAA's national profile. In 2012, the Archives will launch the Archives of American Art Graduate Essay Prize to be given to compelling original research using the resources of the Archives of American Art as primary evidence. The competition, open to anyone currently enrolled in a graduate program in Art History, Visual Culture, or American Studies, will introduce a new generation of scholars to the Archives' online resources. Through public programs, professional presentations, online exhibitions, and object loans to other museums and institutions worldwide, AAA will continue to widen its audience and provide a greater understanding of the history of visual arts in the United States.

The AAA website will be the center for public engagement through a newly designed site that promotes increasingly interactive access through a blog and user generated input, and efficient and effective reference services. AAA will continue to increase public visits to its website by adding finding aids to processed collections; thousands of images of digitized documents; sound and video recordings; and online exhibitions. An unprecedented number of oral history interview transcripts will be added as a result of grants received from the Brown Foundation, Terra Foundation for American Art, the Lasdon Foundation, the Widgeon Point Charitable Foundation, and the Art Dealers Association of America.

In FY 2012, AAA will increase its digitization efforts with at least an additional 50 linear feet of AAA's collections digitized in their entirety as part of the renewal of support provided by the AAA's digitization program funded by the Terra Foundation for American Art through June 2016. This effort, in combination with digitization completed for reference requests, exhibitions, loans, and special projects, will produce an estimated 125,000 digital files and continue to bring increased public access to AAA collections. The Terra Foundation will also continue its support for AAA's webmaster and other IT positions to enable AAA to provide new levels of access to AAA's collections by expanding thematic, topical, chronological, and geographical pathways to collections; and by increasing the numbers of records and images contributed to the Smithsonian and external delivery systems. AAA will complete the comprehensive retrospective digital reformatting of nearly 2,000 interviews conducted as part of its Oral History Program with

matching grant funds from the federal Save America's Treasures grant. AAA will continue development of its internal digitization and Collection Information Systems database to ensure proper collections documentation and support increasingly complex workflows. These efforts will enable AAA to encompass the life cycle of a collection and oral history from preacquisition to storage and access. AAA's investment in the digitization of its collections will be preserved by fully participating in the Smithsonian's Artesia Digital Asset Management System (DAMS) and initiatives in the Smithsonian's Digitization Program and Research and Collections Data Management offices.

In FY 2012, between 20–25 large and significant research collections totaling between 500–600 linear feet of the archival papers of painters, sculptors, critics, and collectors will be preserved and fully processed according to national standards, resulting in new, fully searchable finding aids added to AAA's website. AAA will also continue minimal level preservation and processing initiatives begun in FY 2011 by minimally preserving and processing new accessions so that they do not become part of the backlog. Corresponding finding aids and inventories to minimally processed collections will be produced and made available on the AAA website.

AAA will continue to strengthen its collections stewardship through its ongoing comprehensive surveys of collections and audio-video media, which began in FY 2004 and systematically identifies preservation and access needs for collections and determines the degree of potential research value and other factors needed to formulate processing and preservation priorities. As collections are processed, electronic finding aids that meet national best practices will be produced, thereby increasing and broadening access to collections via the website. A similar corresponding survey to assess the current condition and access levels of audio-visual media within collections, completed in FY 2009, and continually updated for new accessions will continue to provide the foundation for prioritizing at-risk, time-based media for preservation quality digital reformatting and cataloguing in order to increase access to these previously hidden materials. AAA will be able to use its survey methodology to systematically measure and quantify progress made on its collections stewardship goals.

AAA will continue to provide researcher access to its collections in its Washington, DC and New York research centers as well as affiliated research centers throughout the United States, including providing remote reference service through its Web-based form and inter-library loan program.

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

The goal of Mission Enabling through organizational excellence will be addressed by continuing to implement the goals of the Smithsonian, thereby ensuring that its workforce is efficient and skilled, and by adopting best practices to safeguard Smithsonian resources.

**NONAPPROPRIATED RESOURCES** — General trust funds support AAA's development office, including salaries and benefits. Donor-designated funds support specific programs and projects, including exhibitions, internships, production of oral history interviews, collections processing, and publication of the Archives of American Art *Journal*. Grants support AAA's digitization program with funds from the Terra Foundation for American Art and the federal Save America's Treasures and the Historic Preservation Grants Division of the National Park Service to digitize AAA's entire collection of oral history interviews.

# NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2010 ESTIMATE	43	12,894	1	357	3	339	0	0				
FY 2011 ESTIMATE	46	13,324	7	860	5	1,126	0	0				
FY 2012 ESTIMATE	46	13,437	11	1,400	2	784	0	0				

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Ensure the advancement of knowledge in the humanities	6	1,506	6	1,506	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	1	246	1	284	0	38
Exhibitions						
Offer compelling, first-class exhibitions	4	1,594	4	1,596	0	2
Revitalizing Education						
Education						
Engage and inspire diverse audiences	5	1,035	5	1,039	0	4
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	7	2,023	7	2,045	0	22
Mission Enabling						
Facilities						
Execute an aggressive, long-range revitalization program	0	1,967	0	1,944	0	-23
and limited construction of new facilities						
Information Technology						
Modernize the Institution's information technology	0	200	0	200	0	0
systems and infrastructure						

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Management Operations						
Strengthen an institutional culture that is customer	5	1,039	5	1,061	0	22
centered and results oriented						
Ensure that the Smithsonian workforce is efficient,	1	129	1	129	0	0
collaborative, committed, innovative, and diverse						
Modernize the Institution's financial management and	2	266	2	266	0	0
accounting operations						
Enhance the reputation of the Smithsonian by maintaining	3	960	3	962	0	2
good relations with the news media and with federal,						
state, and local governments						
Modernize and streamline the Institution's acquisitions	3	585	3	587	0	2
management operations						
Ensuring Financial Strength						
Secure financial resources required for the Institution's	9	1,774	9	1,818	0	44
mission						
Total	46	13,324	46	13,437	0	113

#### **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. The mission of the NMAAHC is to help all Americans remember and, by remembering, stimulate a dialogue about race and help to foster a spirit of reconciliation and healing. It will be a beacon for the nation that reminds us of what we were, what challenges we still face, and what we can become. 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.

When the founding director was hired in 2005, he committed to open the NMAAHC on the National Mall within 10 years. With the completion of pre-design and programming phases for the building in 2008, the selection, in April 2009, of Freelon Adjaye Bond/Smith Group as the architectural firm to design the facility, and the selection, in 2011, of Ralph Appelbaum and Associates to create the exhibition design for the inaugural exhibitions, the NMAAHC is on schedule to complete the design of the building in two years, begin construction in 2012, and complete construction and open up to the public in 2015.

For FY 2012, the budget request includes a program increase of \$113,000 to support requirements for leased space, which is further justified in the Non-Discretionary Costs section of this budget submission. As authorized by Public Law 108-184, these funds are requested to remain available until expended.

When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$543,000.

#### **MEANS AND STRATEGY**

The focus of NMAAHC activities is to continue laying the groundwork required to design, build, and open the Museum on the National Mall in 2015. This will be accomplished through temporary and permanent exhibitions, first-class scholarly research, comprehensive collections of African American history and culture, innovative public and educational programs, state-of-the-art technology and associated websites, publications, conferences, and enhanced fundraising efforts.

The NMAAHC has met the required benchmarks for design and construction for the Museum's building — selecting a building site, establishing a gallery for temporary exhibits, choosing an architect to design the facility, and choosing an exhibition designer for its inaugural exhibitions. A strategic communications firm has been engaged to navigate the regulatory environment as well as inform the public via an intensified marketing and strategic communications plan. A major part of the NMAAHC's visibility campaign is the implementation and management of strategic marketing, communications services, and a public information campaign to help disseminate information about the Museum's exhibitions, programs, and policies to the press and the general public.

The Museum will continue its capital campaign to raise the required matching funds for design and construction of the new building. A national membership campaign has been successfully included within the capital campaign.

The NMAAHC will continue collaborative partnerships within the Smithsonian Institution, as well as with African American organizations and other national organizations, in order to generate support to build and develop the Museum, acquire collections, support the development of exhibitions, test interpretive methods and concepts, leverage resources, and disseminate and share information via various electronic media and websites.

The Museum will continue its scholarly research in all areas of African American history and culture, as well as its acquisition of objects, books, papers, photographs, and other items to build a national collection. The NMAAHC will offer

compelling, first-class exhibitions when it opens in 2015. In FY 2012, the Museum will be well within the second phase of design and development of its inaugural exhibitions. Temporary exhibitions are being created to inform the public about the new Museum and to test ideas and strategies for incorporation into permanent exhibitions. The NMAAHC has established a website to disseminate information, gain outreach to wider audiences, preview exhibitions and public and educational programs, maintain connections to the public, and serve as the principal platform of the Museum's national membership program.

To achieve the goal of Excellent Research, the NMAAHC will use its resources to build on planned partnerships as follows:

- In May of 2009, The Civil Rights History Project Act of 2009, HR 998, was
  passed to support a partnership between the Library of Congress and
  Smithsonian Institution via the NMAAHC. The legislation supports a
  cooperative project that will capture the personal histories and testimonials
  of individuals who participated in the civil rights movement.
- The NMAAHC entered a partnership with FamilySearch, a genealogical research website owned by The Church of Jesus Christ of the Latter-Day Saints. The Museum will be one of three host sites (along with FamilySearch, and the National Archives and Records Administration) that will provide access to a relatively unknown treasure trove of information: The Freedmen's Bureau Records. Once the records are digitized and indexed, they will provide access to a comprehensive collection of letters, diaries, marriage records, and bank records, representing freed slaves in Virginia and, eventually, 14 additional states and the District of Columbia.

To achieve the goal of Broadening Access, the NMAAHC is directing resources to:

### Digitization and Web Support

- The foundation of the Museum's efforts to broaden access is to create searchable and accessible digital records of its collection. It is expected that new acquisitions will continue to be added to the collection information system as they become available and that the staff will continue to make progress in inventorying and digitizing the materials acquired before FY 2010
- An updated content strategic plan and site design will be developed in 2012 with the goal of enhancing functionality, ease of navigation, and

overall robustness of the Museum's website, which will serve as a conduit to and from NMAAHC's social media sites. The website and current social media sites (Facebook, Twitter, YouTube, and Flickr) will be integrated with the Museum's monthly and quarterly outreach and messaging planning. The NMAAHC will also seek to optimize other social networking sites such as the Smithsonian's Ustream and MySpace channels.

o The NMAAHC and the Smithsonian American Art Museum (SAAM) will launch phase two of *Oh, Freedom! Teaching Civil Rights through African American Art* @ *the Smithsonian*, a Web-based project. This collaborative project will provide educators with inspirational and pedagogical tools to teach the importance of the African American civil rights struggle, the movement's centrality to and impact on American history, and its vital connection to artistic and cultural expression.

#### Public Programs

- In conjunction with the Center for Folklife and Cultural Heritage (CFCH), the NMAAHC will continue to produce the African American Legacy Recording Series. Three new releases planned for FY 2012 include a recording of African American banjos; a recording of three generations of New Orleans brass bands; and a multiple CD compilation entitled Sounds of the South, an Anthology.
- o The NMAAHC will continue to produce signature educational public programs (performances, films, book-signings, etc.) for a variety of audiences in support of its exhibitions. Past programs included several landmark events involving an array of national and community partners. Among them was a reading of *The Green Book* by Calvin Ramsay, a oneact play inspired by *The Negro Motorist Green Book*, a guide used by African American travelers between the 1930s and 1960s to find accommodations throughout the United States. The Museum also presented a panel discussion based on the first published comprehensive collection of rap and hip-hop lyrics, *The Anthology of Rap*. The John F. Kennedy Center for the Performing Arts joined NMAAHC education staff to produce the Latin Jazz concert, *A Different Flavor: Latin Jazz at the Apollo*, a program supporting the NMAAHC exhibition *Ain't Nothing Like the Real Thing: How the Apollo Theater Shaped American Entertainment*.

#### Exhibitions

- Exhibitions will document, examine, and display the history of African Americans from slavery to the present. Each exhibit will showcase the culture of African Americans, their ongoing struggles for freedom and equality, and their role in building the country and shaping its economic life. NMAAHC exhibits will focus on the history and identity of African Americans, as well as the many ways African Americans have continued to challenge America and contribute to the nation's accomplishments.
- In 2012, the conceptual design phase for the 10 inaugural exhibitions will be completed, and the second phase of design development will be under way.
- Exhibitions will reside in three principal areas: History, Culture, and Community:
  - ➤ **History** will include three exhibitions: *Slavery and Freedom*; *Segregation and Civil Rights*; and *1968 and Beyond*.

Slavery and Freedom will provide a wide-ranging and sharply nuanced look at American slavery, from the first Africans brought to the British colonies in the early 17th century to the end of Reconstruction following the Civil War. Segregation and Civil Rights will explore the years following the end of Reconstruction to examine how the nation struggled to define the status of African Americans. Beyond 1968 will explore the experiences of African Americans during the first 40 years of an integrated American society, 1968 to 2008.

➤ Culture will include four exhibitions: *Musical Crossroads*; *Living Culture*; *Visual Arts*; and *Sports*.

Musical Crossroads will examine African American music as an integral American phenomenon through the lens of social and historical change, and will allow visitors an opportunity to listen and remember. Living Culture will be a dynamic exhibit focusing on the significant cultural contributions of African Americans beyond music and the visual arts, including entertainment, oratory, folk art, fashion, and intellectual arts such as literature, playwriting, science, and philosophy. Visual Arts will offer a comprehensive sweep rather than an encyclopedic presentation

of art by African Americans. It will also provide a showcase for contemporary African American art and artists. *Sports* will use the world of sport as a unique and popular lens that provides an understanding of the African American experience and the role of race in America.

➤ Community will include two exhibitions: Power of Place and Make a Way Out of No Way.

Power of Place is a thematic exhibition that will use the lens of place to immerse visitors in the broad geographic diversity of the African American experience. Make a Way Out of No Way will focus on the creation and development of both formal and informal African American (as well as interracial) institutions, activities, and material culture. Themed stories will show how African Americans crafted possibilities in a harsh world that denied them opportunities.

The tenth exhibition gallery will be a youth gallery entitled *Explore More!* It will be a highly exploratory, content-rich space designed to engage NMAAHC's youngest visitors in age-appropriate, higher-order thinking skills, kinesthetic experiences, and tactile activities. The gallery will serve as an introduction to, and a direct content and interpretive link between, the History, Culture, and Community clusters.

- The NMAAHC is organizing two temporary exhibitions to be presented in the Museum's gallery at the National Museum of American History (NMAH): For All the World to See: Visual Culture and the Struggle for Civil Rights, and an exhibition in partnership with the Thomas Jefferson Foundation about the enslaved community at Monticello during the Revolutionary War era.
  - ➤ For All the World to See: Visual Culture and the Struggle for Civil Rights is organized in collaboration with the Center for Art, Design and Visual Culture at the University of Maryland, Baltimore County. It represents the first comprehensive exhibition and publication to analyze the historical role played by visual images in shaping, influencing, and transforming the fight for civil rights in the United States.
  - The Monticello exhibition will explore the complex issues of 18th- and early 19th-century slavery, race, and American

freedom. This is the first exhibition to provide a comprehensive look at the lives of many of the people who helped to create Thomas Jefferson's world at Monticello. Set in the context of slavery in America, the exhibit will focus on the hundreds of African Americans who played a major role in building, developing, servicing, and maintaining Monticello.

- In partnership with the Smithsonian Institution Traveling Exhibition Service (SITES), the NMAAHC will have two traveling exhibitions on tour in FY 2012:
  - ➤ Ain't Nothing Like the Real Thing: How the Apollo Theater Shaped American Entertainment is a collaborative effort with the Apollo Theater Foundation as part of its 75th anniversary celebration. This exhibition will be the first to focus on the historical, social, and cultural significance of the world-famous Apollo Theater in the Harlem neighborhood of New York City.
  - ➤ Let Your Motto Be Resistance: African American Portraits is a collaborative exhibition project between the NMAAHC and National Portrait Gallery (NPG). The exhibition features 100 photographic portraits of notable African Americans drawn from the NPG collection. Portraits of figures from politics, academia, sports, the world of religion and the arts provide the basis for an examination of portrait photography through the lens of the African American experience. The exhibit explores the influential role of these images in shaping public identity and individual notions of race and status.

To achieve the goal of Revitalizing Education, funding will continue for:

- Save Our African American Treasures: A National Collections Initiative of Discovery and Preservation. Treasures will enable the Museum to 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 other museums and historical institutions.
- The ongoing Classroom Treasures Program, a gift from the W. F. Kellogg Foundation, continues to take place in classrooms and community centers around the country. Through literacy-based, hands-on programming, students learn about historic events and then examine real and mock material culture from the past to piece together family biography. They then are

charged with investigating light, water, and pest damage of those materials to learn how to preserve both objects and their family oral histories. Older students continue to be engaged in conversations on race where they are encouraged to ask complex questions, voice their opinions, and explore their creative potential.

To achieve the goal of Strengthening Collections, the NMAAHC will continue to identify, acquire, and process collections as the Museum prepares for the inaugural exhibitions that will accompany the opening of the building, as well as to develop public programs. To date, the Museum has collected more than 11,000 items. Most of the collections are being temporarily housed in the new Pennsy Drive facility in Maryland. This facility includes specialized office and training spaces, exhibit design and fabrication shops, conservation facilities, and climate-controlled space to house the Museum's collections.

To achieve the goal of Mission Enabling, the NMAAHC will continue to develop its operating organizational structure and make 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.

#### Management Operations

- The NMAAHC will continue to direct its resources to NMAAHC's visibility campaign. The NMAAHC's Public Affairs Department will engage and work with a strategic communications firm to design and implement an intensified marketing and strategic communications plan targeting the media and the general public in major cities across the country.
- A strategic technology plan will be developed to improve operations, communications, storage, and security efficiencies, (e.g., collections management, SharePoint, and virtualization). Exhibition technologies will be advanced through the work of the exhibition design firm.

#### Ensuring Financial Strength

To secure the resources needed to build and develop the Museum, the NMAAHC continues to use its federal fundraising resources to support the fundraising staff, 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. The Museum has launched its national membership campaign to reach out to communities across the nation to build a wide base of supporters and create a sense of ownership by the public. To date, the Museum has acquired more than 17,000 members. The membership program will continue throughout FY 2012 and will incorporate direct mail and online, Web-based strategies to further engage members.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the budget estimate includes a program increase of \$113,000 to support requirements for leased space, which is further justified in the Non-Discretionary Costs section of this budget submission.

**NONAPPROPRIATED RESOURCES** — General trust funds support salary and benefit costs of the Museum director. Donor/sponsor-designated funds support staff, special events for exhibition openings, and costs related to specific programs and projects, including educational programs, donor-related special events, and outreach activities.

# NATIONAL MUSEUM OF AMERICAN HISTORY, KENNETH E. BEHRING CENTER

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS			GENERAL TRUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2010 ESTIMATE	171	22,349	13	2,535	50	5,446	20	3,663				
FY 2011 ESTIMATE	171	22,437	15	1,994	45	8,585	20	4,065				
FY 2012 ESTIMATE	171	22,637	14	2,105	42	8,378	20	4,200				

Note: Operating resources include the National Postal Museum

# NATIONAL MUSEUM OF AMERICAN HISTORY, KENNETH E. BEHRING CENTER

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Ensure the advancement of knowledge in the humanities	22	2,995	22	3,045	0	50
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	10	1,248	10	1,248	0	0
Public Programs						
Provide reference services and information	13	1,815	13	1,815	0	0
Exhibitions						
Offer compelling, first-class exhibitions	50	6,403	50	6,453	0	50
Revitalizing Education						
Education						
Engage and inspire diverse audiences	6	820	6	820	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national	42	5,395	42	5,395	0	0
collections						
Mission Enabling						
Facilities						
Improve the overall cleanliness and efficient operation of Smithsonian facilities	1	203	1	203	0	0

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Execute an aggressive, long-range revitalization	1	441	1	341	0	-100
program and limited construction of new facilities						
Security and Safety						
Provide a safe and healthy environment	1	114	1	114	0	0
Information Technology						
Modernize the Institution's information technology	4	614	4	614	0	0
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is	4	404	4	404	0	0
customer centered and results oriented						
Ensure that the Smithsonian workforce is	3	288	3	288	0	0
efficient, collaborative, committed, innovative,						
and diverse						
Modernize the Institution's financial management	8	832	8	832	0	0
and accounting operations						
Total	165	21,572	165	21,572	0	0

#### **BACKGROUND AND CONTEXT**

The National Museum of American History (NMAH), Kenneth E. Behring Center, inspires a broader understanding of our nation and its people through research, exhibitions, collections activity, education, and public programs. 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 — including the original Star-Spangled Banner, the desk Thomas Jefferson used when writing the Declaration of Independence, Abraham Lincoln's top hat, Thomas Edison's light bulbs, Alexander Graham Bell's telephones, Dizzy Gillespie's angled trumpet and Dorothy's ruby slippers from *The Wizard of Oz*.

In 2010, more than four million people physically visited the Museum on the National Mall, supplemented by another 8.5 million online, making NMAH the most visited history museum in the world. In fact, a reader's poll in the January 2010 issue of *Southern Living* voted NMAH as the Best Museum in Washington, DC. 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.

FY 2012, the budget estimate includes no increase. When compared to the FY 2010 appropriation, the budget estimate includes a decrease of -\$19,000.

#### **MEANS AND STRATEGY**

In 2009, the Institution adopted a new Strategic Plan. The NMAH research activities, programs and exhibitions are aligned with the major theme of Understanding the American Experience. During 2011, the Museum will develop a strategic plan that complements the Smithsonian plan and ultimately brings a greater understanding of how striving to create a "more perfect union," based on freedom and justice, economic opportunity, technological innovation, and social progress, formed a nation and its people.

NMAH staff continues to conduct research, plan and design future exhibits and programs, conduct programs and performances, develop traveling exhibitions, acquire new collections, contribute to history education nationwide, and extend the scope of the Museum through new and expanding electronic outreach initiatives. The Museum continues to plan and implement daily and special programs to serve current visitors and attract new and underserved audiences. NMAH staff will continue to collaborate with other Smithsonian units on exhibitions and educational public programs.

The Star-Spangled Banner Gallery lies at the heart of the Museum. As visitors enter, a companion exhibition sets the scene for a dramatic historic event: the Battle of Baltimore during the War of 1812, when this young nation survived an assault by the British. This permanent exhibition demonstrates the Smithsonian's commitment to meet the dual challenges of preserving the Star-Spangled Banner and communicating its history and significance to visitors.

#### **FY 2010 ACCOMPLISHMENTS**

In FY 2010, the NMAH completed the research and deployed an interactive American History Timeline that is available to our visitors in the Museum's welcome center. The 101 turning points of American History that are highlighted were selected by the director of the NMAH. In its *Documents Gallery*, the Museum exhibited, for the first time to the American public, a hand-written letter from George Washington to a friend, articulating his vision for the new American republic.

Research in the Division of Political History resulted in the publication of the book *Freedoms We Lost*, on how freedoms among colonial-era Americans laid the foundation for the American Revolution. Research in the Division of Culture and the Arts on the history of portraiture is leading to a new book tentatively titled *Daguerreotype to Digital*.

The First Ladies at the Smithsonian exhibition, showcasing premier objects from the nearly century-old First Ladies Collection, remains one of the most popular Smithsonian Institution exhibitions. In 2010, the NMAH expanded

the First Ladies gallery with gowns from the past 50 years, including the recent donation from the current First Lady.

In FY 2010, the NMAH organized an inspirational year of public and educational programs for our visitors. Under the theme of *Stories of Freedom and Justice*, the NMAH hosted a number of special events, including: a threeday Martin Luther King Jr. Day family festival; a 50th anniversary commemoration of the student sit-ins at the Greensboro, North Carolina lunch counter; a national youth summit; continuous performances of the award-winning *Join the Student Sit-ins* theater program; the ninth annual celebration of Jazz Appreciation Month, focusing on *Jazz and Justice*; and sponsorship of two naturalization ceremonies in June and September.

With Federal appropriations, the Museum has made progress on a major effort to enhance the preservation and access of its vast military uniform collection, and has also launched a major initiative to conserve the Bible that was created and owned by President Thomas Jefferson.

#### **FY 2011 PLANS**

In FY 2011, the NMAH opened a new gallery focused on Treasures of Popular Culture from 1939, including the ruby slippers from the *Wizard of Oz* and a small exhibit of 1961 Avedon photographs of President Kennedy's family. The Museum will commemorate President Reagan's birth with a special case and video, and commemorate the tragedy of September 11, 2001 with a special program and display of objects from the collections. The Museum will also sponsor an exhibit and other activities in recognition of the 150th anniversary of the start of the American Civil War.

In FY 2011, the NMAH will host special programs and events to celebrate the 50th anniversary of the Freedom Rides, including a national conversation with youth in collaboration with museums in Cincinnati, Ohio; Dearborn, Michigan; Pittsburgh, Pennsylvania; Los Angeles, California; and Birmingham, Alabama. In addition, the Museum has launched a new theater program, "Time Trials," that invites the public to discuss and debate the legacy of historic Americans, starting with Benedict Arnold.

The Museum's popular website continues to be expanded and upgraded with new features on exhibitions, collections, and public programs. Smithsonian History Explorer, an education website, offers free, standards-based, innovative resources for teaching and learning about American history as part of the NMAH Thinkfinity initiative. This year, a particular focus is on forming partnerships with three September 11 memorial sites to co-produce educational materials for the 10th anniversary of the September 11th terrorist attacks.

#### **FY 2012 PLANS**

The Museum will open the renovated Warner Brothers Theater and launch a new public program featuring classic films. Construction of the theater will start during FY 2011.

The Museum will close its West Wing to allow for planned construction and upgrade of its HVAC and other utility systems, as well as a much-needed renovation of the exhibit galleries. This construction is the next phase of the Museum's master plan for renovation and improvement. Design and construction will be managed by the Smithsonian Office of Facilities Engineering and Operations. In advance of the wing closure, NMAH staff will be fully occupied deinstalling existing exhibits and moving collections and treasured objects to alternative locations so that construction may proceed on schedule.

The Museum is preparing to open two exhibits in FY 2012. A new exhibit of the *First Ladies* is being developed and the new *American Stories* exhibit, featuring the Museum's history timeline and illustrative objects, is planned to open. A third exhibit, *Food for Thought*, showcasing Julia Child's kitchen, is scheduled to open late in the fiscal year.

Museum staff will continue to research, develop, and design major new exhibits and a new education center for the reopening of the Museum's West Wing, currently scheduled for FY 2014. In addition, the NMAH is already developing an exhibit on American business and commerce entitled *American Enterprise*; a new exhibit on American sports, music and entertainment; a new exhibit on American Democracy; and, several interactive spaces for children and adults.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits for a small but essential percentage of NMAH staff, as well as associated non-personnel operating costs. Donor/sponsor-designated funds are the Museum's primary means for developing and installing exhibits, and they are the primary means of funding public and educational programs and activities. Donor-designated funds are also vital to continuing the renovation of the public spaces in the Museum.

#### NATIONAL POSTAL MUSEUM

# STRATEGIC GOALS: BROADENING ACCESS; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

#### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	1	74	1	75	0	1
Exhibitions						
Offer compelling, first-class exhibitions	1	155	1	158	0	3
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	4	496	4	510	0	14
Mission Enabling						
Facilities						
Execute an aggressive, long-range revitalization	0	100	0	300	0	200
program and limited construction of new facilities						
Information Technology						
Modernize the Institution's information technology	0	25	0	7	0	-18
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer	0	15	0	15	0	0
centered and results oriented						
Total	6	865	6	1,065	0	200

#### **BACKGROUND AND CONTEXT**

The National Postal Museum (NPM) was created to preserve, interpret, and exhibit historical stamps and postal objects. With more than six million objects, the Museum is responsible for the Smithsonian's second-largest collection. 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. The NPM uses its collections in innovative exhibits and programs that educate the public about the history of America, transportation, economics, and commerce.

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 a new 12,000-square-foot Stamp Gallery that will enable the Museum to display the full breadth of the National Stamp Collection; the design and fabrication of several new history galleries; and continued

upgrades of and enhancements to the increasingly popular Web-based, 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 2012, the budget estimate includes a total increase of \$200,000 for lease costs and utility expenses, which are justified in the Non-Discretionary Costs section of this budget submission. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$307,000.

#### **MEANS AND STRATEGY**

The National Postal Museum's primary activities are aimed at meeting the Smithsonian's Grand Challenges of Valuing World Cultures and Understanding the American Experience through the prism of postal communications and philately. These challenges will be met by Broadening Access to the Museum's collections, programs and exhibitions; Revitalizing Education by serving as a laboratory to create new models and methods of innovative educational programs; Strengthening Collections through improved preservation, storage, and digital imaging; and Mission Enabling by working with other Smithsonian units and external partners on complex issues.

Arago continues to be the Smithsonian's most popular online collections program. In FY 2012, the Museum will redesign the remainder of its website to incorporate many of the user-friendly features of Arago and provide online visitors with greater access to the Museum's vast online resources. The redesigned website will include an improved exhibits module featuring all online exhibits, past and present.

In FY 2012, the Museum will continue partnering with local schools and Teachers of the Year to offer training in new media and object-based learning. The Teacher Leaders Program, funded by the Pearson Foundation, will empower teachers and students to use museum objects and new media tools, including blogs and cell phones, to expanding learning opportunities throughout the Smithsonian.

The NPM will open two new exhibitions in FY 2012. In November 2011, *Mail Call* will tell the compelling story of U.S. military mail from the American Revolution to the current conflicts in Iraq and Afghanistan. How does mail reach our soldiers? What role does it play in the lives of the men and women who volunteer to serve their country? *Mail Call* explores the great lengths taken to establish and operate postal services under extraordinary circumstances and the vital link that mail provides between military service personnel and their families and friends.

Fire and Ice: Hindenburg and Titanic, an innovative exhibit that brings together two marvels of transportation, will open at the National Postal Museum in March 2012. Both the *Titanic* and the *Hindenburg* operated as the world's largest and most efficient mobile post offices. Each in its day promised the fastest possible worldwide mail service, and each met a tragic end. Fire and Ice will provide a fascinating history of two of the most famous but least understood modes of transportation and communication in the 20th century.

The Museum's federal resources are primarily dedicated to improving the stewardship of the national collections for present and future generations. In FY 2012, the NPM will continue to process new acquisitions, which includes digitizing and cataloguing these entries using the automated collections information system (CIS). Enhanced cataloguing and digital records will be created for more than 5,000 philatelic and postal history items selected for the new Stamp Gallery. A major initiative to improve accessibility to off-site collections will remain a Museum priority. In FY 2012, the Museum staff will prepare three major collections for public display: the National Stamp Collection, the Benjamin K. Miller collection, and the Postmaster General Collection.

The NPM will direct resources toward maintaining the Museum's information technology (IT) systems and infrastructure requirements to meet the strategic goal of Mission Enabling. The Museum will continue to replace network hardware and related computer systems that support a host of programmatic and exhibition needs required to modernize its IT systems. Additional resources will also be directed toward the general administrative support needed to enhance Museum operations.

NONAPPROPRIATED RESOURCES — The United States Postal Service provides the NPM with an annual grant, which supports nearly 75 percent of the Museum's core functions and operational costs. These costs include salaries and benefits, utilities, facility maintenance, exhibitions, research, education, and collection management programs. Fundraising initiatives continue to generate increased support from donor/sponsor-designated funds to cover new exhibitions, educational projects, and special events. However, continued efforts remain focused on securing the donor-designated funds needed for the new Stamp Gallery and on expanding the Museum's displays of stamps and mail, with permanent exhibits of the National Stamp Collection and rare gems.

# NATIONAL MUSEUM OF THE AMERICAN INDIAN

		APPI	LICATIO	N OF OPE	RATING	RESOURC	ES		
	FEDERAL APPROPRIATIONS			NERAL RUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE	FTE \$000		\$000	
FY 2010 ESTIMATE	266	32,530	3	1,181	15	3,910	0	2,291	
FY 2011 ESTIMATE	266	32,400	4	1,400	15	4,304	0	89	
FY 2012 ESTIMATE	259	31,900	4	1,400	15	4,304	0	89	

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Cha	ange
Performance Category	FTEs	\$000	FTEs	\$000	FTEs	\$000
Excellent Research						
Research						
Ensure the advancement of knowledge in the humanities	15	2,060	15	2,060	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	5	973	5	973	0	0
Public Programs						
Provide reference services and information	44	4,497	37	3,997	-7	-500
Exhibitions						
Offer compelling, first-class exhibitions	34	5,872	34	5,872	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	54	5,691	54	5,691	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	31	3,612	31	3,612	0	0
Mission Enabling						
Facilities						
Improve the overall cleanliness and efficient operation of Smithsonian facilities	15	1,800	15	1,800	0	0
Security and Safety						
Provide world-class protection for Smithsonian		_				
facilities, collections, staff, visitors, and	1	193	1	193	0	0
volunteers						

Performance Objective/	FY	2011	FY	2012	Cha	ange
Performance Category	FTEs	\$000	FTEs	\$000	FTEs	\$000
Information Technology						
Modernize the Institution's information	18	2,486	18	2,486	0	0
technology systems and infrastructure	10	2,400	10	2,480	U	U
Management Operations						
Strengthen an institutional culture that is	31	3,411	31	3,411	0	0
customer centered and results oriented	31	3,411	31	5,411	U	U
Enhance the reputation of the Smithsonian by						
maintaining good relations with the news media	4	390	4	390	0	0
and with federal, state, and local governments						
Ensure that the Smithsonian workforce is						
efficient, collaborative, committed, innovative,	3	256	3	256	0	0
and diverse						
Modernize the Institution's financial management	9	937	9	937	0	0
and accounting operations	Ŭ	307	J	307	Ŭ	0
Modernize and streamline the Institution's	2	222	2	222	0	0
acquisitions management operations		222		222	U	0
Total	266	32,400	259	31,900	-7	-500

#### **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 NMAI will focus its resources to support exhibits concerning the cultures and histories of Native communities and to present contemporary works of art to the public at the National Mall Museum and the George Gustave Heye Center in New York. These exhibits, along with educational and cultural arts programming, are expected to attract more than 1.5 million visitors annually. The offering of art and 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 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 2012 budget estimate includes a net decrease of -\$500,000 and -7 FTEs. This decrease curtails the visitor services program at the Mall Museum, which impacts the number of visitors who will gain first-hand knowledge of Native culture and history. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$630,000 and -7 FTEs.

#### **MEANS AND STRATEGY**

To achieve the goal of Broadening Access, the NMAI is directing its resources to: 1) activities that will result in increased visitation to the Mall Museum 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 that will demonstrate the presence of contemporary Native peoples today; 3) outreach to Native communities, tribes, and organizations, through Web-based technology, video conferences, internships, seminars, and symposia; and 4) expanding access to the NMAI collections online.

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 public audiences 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.

To achieve the goal of Revitalizing 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 NMAI's National Education Initiative, "Sharing American Indian Knowledge through Educational Excellence," will continue to be developed in collaboration with Native educators and cultural experts to create exemplary materials that reflect indigenous pedagogy and knowledge, and create model materials that Native communities can expand upon for their own purposes. The resource center will continue to provide daily information about Native peoples of the Western hemisphere, including Hawaii, thereby providing opportunities to correct stereotyping and expand public knowledge. To promote learning across the generations, a new Activity Center will introduce Indigenous science understanding of the natural world to 150,000 school children and museum visitors. Various tribal educational resources, including curricula, will be made available to teachers.

In addition, as part of the Excellent Research strategic goal to advance knowledge in the humanities, staff will make research, film, video, audio, and photographic content developed for exhibitions broadly available at the 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 will also direct presentations in galleries and all public space and

program areas to ensure maximum use of all the educational resources available to enhance the visitor experience.

The strategic goal of Mission Enabling 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 collections through the acquisition of contemporary works.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

The FY 2012 budget estimate includes a decrease of -\$500,000 and -7 FTEs to reduce the visitor services program at the Mall Museum.

(-\$500,000, -7 FTEs) This request curtails the Mall Museum's visitor services program, which acts as NMAI's primary interface with the public — providing information and directing visitors to public spaces, exhibit galleries, the theater, and special programs. The decrease impacts the number of visitors who will gain first-hand knowledge of Native culture and history, thereby diminishing the visitor experience overall. The staff reductions in the visitor services program will be accomplished through attrition; volunteers will continue to be available at the Museum information desk to assist visitors. The Museum will redirect resources toward NMAI research programs and to higher priority programs that support the Institution's Strategic Plan.

NONAPPROPRIATED RESOURCES — General trust funds support salary and benefit costs for the Museum director and other program-related costs. Donor/sponsor-designated funds support salaries and benefits for development staff; costs associated with reaching NMAI's National Campaign fundraising goals; publications and special events for exhibition openings; costs related to specific programs and projects, including educational programs, advertising, production of fundraising proposals, member- and donor-related special events; and outreach activities.

# **NATIONAL PORTRAIT GALLERY**

		APPLICATION OF OPERATING RESOURCES												
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS							
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000						
FY 2010 ESTIMATE	55	5,967	3	880	6	1,604	0	0						
FY 2011 ESTIMATE	55	5,999	1	542	8	2,804	0	0						
FY 2012 ESTIMATE	55	5,999	1	550	8	2,900	0	0						

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Cha	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Ensure the advancement of knowledge in the	10	1,014	10	1,014	0	0
humanities						
Broadening Access						
Public Programs						
Provide reference services and information	1	102	1	102	0	0
Exhibitions						
Offer compelling, first-class exhibitions	17	1,653	17	1,653	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	8	785	8	785	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	11	1,467	11	1,467	0	0
Mission Enabling						
Management Operations						
Strengthen an institutional culture that is customer	7	821	7	821	0	0
centered and results oriented						
Information Technology						
Modernize the Institution's information technology						
systems and infrastructure	1	157	1	157	0	0
Total	55	5,999	55	5,999	0	0

#### **BACKGROUND AND CONTEXT**

The Smithsonian National Portrait Gallery (NPG) inspires visitors from around the world by illuminating the American experience through powerful images that connect people and their stories.

The NPG strives to bring visitors face to face with exceptional Americans and their remarkable stories across time, place, and circumstance. The Gallery uses diverse approaches in visual biography to focus on changing notions of American identity, and to track evolving ideas about who is significant and has an impact on American culture. The NPG aspires to be widely known as the place that sparks thought and conversation, and includes the audience as an active participant in defining American identity through portraiture and biography.

NPG devotes a major portion of resources to Broadening Access, thereby increasing the availability and accessibility of the Museum's collections through exhibitions, public programs and publications. The program exhibitions explore themes in history, biography, and art in a way that brings out new meaning and understandings. The collections are digitized with a view to making them accessible to more people for more purposes. Highlights of special exhibitions planned for the remainder of FY 2011 include:

- Calder's Portraits: A New Language. Best known for his abstract mobiles and stabiles, Alexander Calder (1898–1976) was also a prolific portraitist.
- Capital Portraits: Treasures from Washington Private Collections, 1730–2010. This exhibition presents portraits that reside in private Washington, DC collections. Many of the works have never been on public display.
- One Life: Ronald Reagan. The National Portrait Gallery will join with millions of Americans commemorating the centennial of the birth of the 40th president.
- 150th Commemoration of the Civil War: The Death of Ellsworth. This alcove exhibition recounts the death of Colonel Elmer E. Ellsworth in Alexandria, Virginia. Ellsworth was the first Union officer to be killed in the four-yearlong struggle.

NPG is also using new tools and technologies, including public programs, new media and social networking, to broaden access to reach new audiences.

A significant portion of resources is devoted to Strengthening Collections, which is fundamental to the work at NPG. For a better understanding of the American experience, the Gallery collects actively to document the historic and ongoing accomplishments and creativity of the American people. Collections are

pivotal to the work of the Museum and include curatorial departments, conservation, registrar and other collections activities.

A key use of NPG resources has been toward Revitalizing Education. NPG is actively engaged with diverse scholars to ensure broad-based participation in the research and dissemination of knowledge relating to American history, biography, and art. With its compelling educational programs, NPG is attracting new visitors and appealing to its diverse national and international audience. School programs at the NPG inspire students with stories of the people who have made significant contributions to the history, development, and culture of the United States.

Budgetary resources are used for Mission Enabling activities such as Museum administration and operations. The Museum strives to understand the distinct needs of the staff, public, communities, and stakeholders served by NPG, so the Museum can deliver value and efficiency in information technology, procurement, human resources, strategic planning, business activities, budget, and finance.

For FY 2012, the budget estimate includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$32,000.

#### **MEANS AND STRATEGY**

Major special exhibitions are also being planned for FY 2012, including:

- Seeing Gertrude Stein: Five Stories. Drawing upon a wealth of rarely seen artistic and archival materials, the exhibition will illuminate Stein's life and pivotal role in art during the 20th century.
- 1812: A Nation Emerges. To mark the bicentennial of the War of 1812, this
  special exhibition will examine the history and visual biography of this
  forgotten war and the pivotal impact it had on the development of our young
  nation.

The NPG will continue to broaden access to its great collections in FY 2012 through its enhanced website publications, and public programs, and by using new and existing technologies to reach new audiences. The Museum will use advertising and social networking to increase awareness of NPG programs.

The Museum will continue Strengthening Collections in FY 2012 by striving to fill gaps in its collections to ensure that it represents the changing face of America. Efforts to acquire, preserve, protect, catalogue, store, or manage Smithsonian collections will remain a centerpiece of work at NPG.

NPG will continue to plan for the revitalization of education programs through development of new materials and programs, external collaborations, innovative techniques, and utilization of effective management and assessment tools. It also includes the development or coordination of educational materials or programs aimed at students, teachers, and lifelong learners. The Museum will plan educational activities and access or evaluate those activities as necessary to achieve NPG's educational goals.

NPG will foster Mission Enabling through the cultivation of customercentered and results-oriented mind-sets and practices. There are planned activities that aim to attract, hire, retain, train, motivate, recognize and reward a workforce of employees, volunteers, Fellows and interns, as well as efforts to ensure that the Smithsonian embraces a culture of equal opportunity and diversity.

NONAPPROPRIATED RESOURCES — General trust funds support critical positions and help defray costs of exhibitions, publications, public lectures, symposia, special events for exhibition openings, loan exhibition development, fund raising, management, and research. Donor/sponsor-designated funds support specific programs and projects for exhibitions, collection acquisitions, educational programming, outreach, and support of the NPG Presidents' Circle. Private donations are critical to the Museum's overall planning and programming. The unique public-private partnership of our Museum shows how federal funds and the support provided through the generosity of our donors work together to help the Portrait Gallery achieve its goals.

# **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 2010 ESTIMATE	92	9,245	6	788	25	6,420	2	194					
FY 2011 ESTIMATE	92	9,343	6	1,015	27	6,061	2	149					
FY 2012 ESTIMATE	92	9,343	6	1,020	26	6,069	2	145					

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	iange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Ensure advancement of knowledge in the humanities	5	554	5	554	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	8	765	8	765	0	0
Public Programs						
Provide reference services and information	13	1,298	13	1,298	0	0
Exhibitions						
Offer compelling, first-class exhibitions	21	2,190	21	2,190	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	7	704	7	704	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	22	2,264	22	2,264	0	0
Mission Enabling						
Security and Safety						
Provide a safe and healthy environment	1	44	1	44	0	0
Information Technology						
Modernize the Institution's information technology systems and infrastructure	2	227	2	227	0	0
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	13	1,297	13	1,297	0	0
Total	92	9,343	92	9,343	0	0

#### **BACKGROUND AND CONTEXT**

The Smithsonian American Art Museum (American Art) 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 42,000 works, spanning three centuries of 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 American Art and the National Portrait Gallery) and the Renwick Gallery, dedicated to American crafts and decorative arts.

To achieve the goal of Excellent Research, American Art curators and research Fellows-in-residence use the collection and other resources to develop new insights into America's cultural and artistic legacy. The resulting knowledge informs collection development and serves as the basis for exhibitions, associated award-winning catalogues and scholarly publications, and material for online content and educational programs. The Museum's peer-reviewed journal, *American Art*, serves as an additional venue for scholarship in the field. The Museum hosts international symposia on topics of relevance in the field of American art.

Broadening Access is achieved through a web of activities. The Museum is taking full advantage of the latest technologies (e.g., audio, multimedia, cell phone and podcast tours and applications) as well as innovative cross-platform educational games that integrate new social media and services to engage audiences both online and on site. An expanded videoconference center delivers the Museum's programs around the world. American Art's popular research service, *Ask Joan of Art*, provides more than 5,000 customized answers to queries each year. Digitization of the collection continues apace, thereby enabling the Museum to add new content and features to its online resources.

An ambitious schedule of exhibitions developed in-house and complemented by shows obtained from other organizations attracts new visitors and encourages repeat visits. Large exhibition spaces, shops, and restaurant greet visitors with a broad range of activities to maintain their interest. The Lunder Conservation Center provides a window on preservation of the nation's collections, and the Luce Foundation Center for American Art displays 3,500 collection objects in a unique visible storage center. The Renwick Gallery has additional space for exhibitions, public programs, and rotating displays of its permanent collection of American crafts. Multiple traveling exhibitions organized

by the Museum are shared with museums throughout the United States, giving the public broad, direct access to the nation's artistic and cultural heritage.

Public programs complement Museum exhibitions and collections through courtyard concerts, family days, heritage month programs, tours and gallery talks, scavenger hunts, sketching workshops, and alternate reality games.

Diverse activities advance the goal of Revitalizing Education. National education programs directly reach K-12 teachers and students. These include adoption of the latest technologies where most effective, as well as incorporation of art into core curricula. Resident teacher institutes are supplemented by online/on-demand courses for the K-12 community. Students are brought into the Museum as often as possible to provide that unique direct experience with great art.

The goal of Strengthening Collections is achieved through multiple activities. Scholarship and research help set acquisition goals. Gifts of art and private funds raised through development activities pay for additions to the national collection. Conservators obtain new tools and training to preserve the artwork. These are shared with colleagues and with the public in the Lunder Conservation Center. Conservation fellowships ensure that experience and knowledge are shared within the community of conservation practitioners.

Mission Enabling encompasses many activities. A proactive safety program ensures a safe and healthy environment for Museum staff and visitors. IT staff implement and maintain the information framework on which so many other efforts depend. This includes the exhibition space screens, kiosks, and interactive portals to programs and information. Managers carefully plan, promote, protect and conserve the Museum's resources.

For FY 2012, the budget estimate includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$98,000.

#### **MEANS AND STRATEGY**

Research on the collections and related topics by staff, recently augmented by our new curator of Latino art (a collaboration with the Smithsonian Latino Center), continues in support of exhibitions and the permanent collection, including five new exhibition catalogues scheduled for FY 2012. The Museum's award-winning, peer-reviewed journal, *American Art*, will publish three issues of new scholarship. American Art hosts approximately 20 research Fellows from throughout the country each year, greatly increasing the number of scholars using the collections. The resulting discoveries and interpretations by staff and Fellows help Americans understand and appreciate

their rich cultural heritage as well as advance scholarship in American art. Research also will feed into educational programs as well as the Web/new media.

Two-thirds of American Art's collection already is online and the Museum continues to digitize and post new images and content. The Museum makes images and content available through online image- and video-sharing sites and seeks collaborative initiatives with other institutions. American Art is expanding its online presence via social media (e.g., Facebook, Twitter, and YouTube) and hosts the art blog, Eye Level. More podcasts and videos will be added to the Museum's online library. American Art's online database of American outdoor sculpture is being updated to include new community-building platforms, such as online maps and Wikis. Acquisition of video capture and editing technology enables the Museum to continue to expand its audience by webcasting events and hosting online discussions via instant messaging and blogs. Interactive exhibition components are added whenever needed. In addition to expanding Web content, Ask Joan of Art, the highly successful online reference service (fielding questions from all 50 states and 28 countries last year), will continue to serve the general public and researchers alike. Geocoding of records in the Save Outdoor Sculpture! database (adding latitude and longitude markings) will allow development of a Google map application to help connect Americans throughout the country with their cultural heritage.

Six exhibitions are planned for FY 2012 at American Art and its Renwick Gallery. Major exhibitions at the DWRC include: *African American Art, Multiplicity* (a print show), *Inventing a Better Mousetrap: Patent Models from the Rothschild Collection*, and *The Art of Video Games*. The Renwick Gallery will feature *Something of Splendor: Decorative Arts from the White House* and a show celebrating the Gallery's 40th anniversary and emerging artists: *40 Under 40*. The well-received rotating exhibit, *Watch This!*, will showcase video and new media art from the Museum's permanent collection on monitors and interactive displays.

As part of its ongoing efforts to make as much material as possible accessible to the public, the Museum regularly rotates artworks in the permanent collection galleries to show the many facets of American art and culture, as well as to encourage return visits. FY 2012 includes two rotations from the permanent collection. The Luce Foundation Center for American Art displays an additional 3,500 collection objects in densely installed glass cases.

National outreach includes touring exhibitions with *Modern Masters* and *To Make a World: George Ault and the 1940s America* touring to three venues. *1934: A New Deal for Art* continues to crisscross America,

travelling to three museums in FY 2012; the latter will visit its sixth, seventh, and eighth venues out of 13. Interactive exhibition components continue evolving to keep pace with proliferating information conduits. In addition, whenever possible, American Art honors requests by other museums for loans from the national collection.

American Art engages a diverse audience through a range of public programs. The Museum will continue its popular tours, gallery talks, demonstrations and workshops. Individuals may bring in objects and talk with conservators about the proper care and handling of family heirlooms. Family Days and heritage month programs will create and sustain new relationships between the public and their cultural history. Public programs in the galleries, McEvoy auditorium and Kogod Courtyard will be supplemented by new offerings on the Web/new media. The Museum will continue its trendsetting use of alternate reality games that engage the technically savvy on their own virtual turf as well as in the galleries.

Education will continue to expand as the Museum implements new ways to use the Internet. American Art continues to develop its highly successful distance-learning program that reaches classrooms worldwide. The enlarged videoconference center will enable American Art to surpass the 8,800 students served in the 2009–2010 school year. New partnerships with the National Park Service and National Archives and Records Administration expand our reach to more diverse audiences. The intern program, hosting approximately 50 students (this past year from 28 states, Washington, DC, Italy and Canada), will continue to prepare the next generation of museum professionals. The Clarice Smith American Art Education Initiative will host two institutes for 50 teachers each year (last year representing 16 states, Washington, DC and Puerto Rico). The CISCO Virtual Institute will provide online, on-demand courses for K–12 teachers to provide resources and skills to incorporate art into their core curricula through the use of technology.

The safe storage and display of collection objects is always a top priority. American Art continues to develop public interest and awareness of storage and conservation issues through the Luce Foundation Center and the Lunder Conservation Center and their many public programs. The acquisition of new tools and instrumentation will allow more complete monitoring of the collection and application of leading-edge conservation techniques to preserve the collection. New artworks will be acquired to fill gaps in the collection identified through the Museum's collections plan. Time-based media (works that exhibit a changing observable state such as video or LEDs) and Latino art will receive special attention. The new curator of Latino art will provide guidance on the Museum's collection priorities.

Information technology and administrative procedures will be strengthened through close monitoring of resources and processes, especially as budgets tighten. Strong partnerships with Smithsonian central offices enable American Art to provide an end-user perspective on policy changes. Use of the Museum's searchable, Web-based Wiki format keeps staff current on the dynamic procedural and regulatory environment. Continual review of work and work conditions will be followed by proactive implementation of safer techniques and materials for both staff and the Museum environment.

NONAPPROPRIATED RESOURCES — Nearly all of American Art's non-personnel costs, including those for exhibitions, educational and public programs, and additions to the national collection, are paid with funds provided by individuals, foundations, and corporations. Donor/sponsor-designated funds support specific programs and projects. For instance, in FY 2010 American Art received an \$8 million donation from a board member for its education program, which will allow the addition of a dedicated educational space in the Museum and expand educational offerings to schools. American Art's Capital Campaign is putting special emphasis on endowments so as to provide secure funding for these ongoing projects and activities. Additionally, general trust funds support salaries and benefits of some staff, fundraising activities, and related costs.

# Introduction, Mission Enabling

The backbone of the Smithsonian must remain a dedicated workforce of employees and volunteers with 21st century skills and perspectives. Strong, responsive support services — such as collections stewardship, facilities management, Web and new media, audience research, marketing, and financial management — are essential to accomplish the Smithsonian's mission and vision. Finally, we need to generate revenue in new ways to ensure that we can fund our vision for the future.

UNITS primarily associated with this Grand Challenge:

- Outreach
- Communications
- Institution-wide Programs
- Office of Exhibits Central
- Museum Support Center
- Museum Conservation Institute
- Smithsonian Institution Archives
- Smithsonian Institution Libraries
- Office of the Chief Information Officer
- Administration
- Office of the Inspector General
- Facilities Maintenance
- Facilities Operations, Security, and Support

# **OUTREACH**

		APPLICATION OF OPERATING RESOURCES												
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS							
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000						
FY 2010 ESTIMATE	62	9,669	20	3,124	1	1,558	1	154						
FY 2011 ESTIMATE	62	9,612	20	3,678	2	2,792	1	101						
FY 2012 ESTIMATE	62	9,291	19	3,224	2	1,975	0	45						

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	2	1,532	2	1,326	0	-206
Ensure the advancement of knowledge in the	0	1,130	0	1,015	0	-115
humanities						
Broadening Access						
Public Programs	-	000		000		-
Provide reference services and information	2	309	2	309	0	0
Exhibitions						
Offer compelling, first-class exhibitions	39	4,663	39	4,663	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	11	1,176	11	1,176	0	0
Mission Enabling						
Information Technology						
Modernize the Institution's information technology	1	95	1	95	0	0
systems and infrastructure						
Management Operations						
Strengthen an institutional culture that is customer	6	615	6	615	0	0
centered and results oriented						
Ensure that the Smithsonian workforce is efficient,	1	92	1	92	0	0
collaborative, committed, innovative, and diverse						
Total	62	9,612	62	9,291	0	-321

#### **BACKGROUND AND CONTEXT**

Broadening Access is a key component of the Smithsonian's Strategic Plan. All of the Institution's outreach activities link the Smithsonian's 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.

Smithsonian outreach programs serve 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 Fellowships and Internships (OFI); 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 budget request includes a decrease of -\$321,000 in the Smithsonian Institution Scholarly Press (SISP) that is related to ongoing efforts to rationalize Smithsonian funding sources. The SISP is an activity that is scalable in nature and project based. This reduction is part of our efforts to shift scalable programmatic activities from federal funding to trust so that administrative and infrastructure activities that are now trust funded can be moved to be federally funded. The SISP will receive \$321,000 in trust funds to offset the federal decrease.

When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$378,000.

#### **MEANS AND STRATEGY**

Smithsonian Institution Traveling Exhibition Service (40 FTEs and \$4,758,000) — Now operating under the Smithsonian's newly established Office of the Assistant Secretary for Education and Access, in FY 2012

SITES will celebrate its 60th year of sharing Smithsonian exhibitions with people and places all across the country. More than 500 communities in all 50 states will host SITES shows in formats ranging from large-scale interactive exhibits for mainstream art and natural history museums to poster sets tailored to school classrooms. Encompassing subjects that parlay the Smithsonian's vast collection and research pursuits, SITES' FY 2012 offerings will address such topics as innovation and invention, clean water, hometown sports, the Civil War, and new planetary findings.

SITES is a national leader in exhibitions that honor and celebrate the cultural heritages of African Americans, Latinos, Asian Pacific Americans, Native Americans, and the many other peoples who make up the nation. FY 2012 resources will continue to be dedicated to this focus, generating cross-cultural public engagement through such exhibition topics as Latino Music; American identity among first generation youth; ethnic foodways; African American aviation history; and the skateboarding traditions originating in Native American reservation communities.

SITES' landmark Museum on Main Street (MoMS) initiative will continue to enrich in tangible ways the underserved populations of rural America, whose access to national cultural programs is limited. Civic engagement and community businesses join forces when small-town USA opens a MoMS exhibition. And in FY 2012, SITES will for the first time place one of six shows in all 50 states.

Education, scientific research, and the harnessing of technology to reach younger generations are central tenets of today's Smithsonian, and SITES will be positioned in FY 2012 to address all three into groundbreaking exhibits for children. Included among them will be *Sid the Science Kid*, *Solar System Journeys*, *X-ray Vision*, and a variety of cell phone applications that spark the imagination of young people beyond the core exhibit setting.

While Americans may know the Smithsonian from one-time school trips or family visits, the presence of the Institution's resources on their home town turf has a deeper resonance. SITES exhibitions represent the valuable public impact of the federal dollar. They are a source of immense local pride, bringing together people from diverse ethnic, age and socioeconomic groups to celebrate a shared national heritage.

Smithsonian Affiliations (2 FTEs and \$309,000) — 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. There are currently 164 affiliate museums in 40 states, the District of Columbia, Puerto Rico, and Panama.

These strategies have resulted in the display of more than 7,500 Smithsonian artifacts in Affiliate locations, including items such as historic spacecraft, First Ladies' gowns, Civil War arms and uniforms, outdoor sculptures, scientifically significant mineral collections, and many more. 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. New videoconferencing capabilities have also extended the reach of Smithsonian Affiliations. Current Affiliate projects build on the "Grand Challenges" outlined in the Smithsonian Strategic Plan.

Smithsonian Center for Education and Museum Studies (14 FTEs and \$1,498,000) — Smithsonian content experts and educators will work together to help strengthen American education and enhance our nation's ability to compete globally. The Smithsonian will serve as a laboratory to create methods and models of innovative informal education and link them to the formal education system. SCEMS venues will take advantage of a range of interactive, Web-based technologies, and its programs will encourage continual exploration by learners of all ages. To guide these educational efforts across the Smithsonian, we will create an Institution-wide approach for education that leverages resources, strengthens communications, coordinates programming, and rewards innovative thinking and collaboration.

Office of Fellowships and Internships (5 FTEs and \$1,938,000) — The Office of Fellowships and Internships (OFI) has the central management and administrative responsibility for the Institution's programs of research, fellowships, and other scholarly appointments. One of its primary objectives is to facilitate the Smithsonian's scholarly interactions with students and scholars at universities, museums, and other research institutions around the world. The Office administers Institution-wide research support programs, and encourages and assists other Smithsonian museums, research institutes

and research offices with developing additional fellowships and visiting appointments.

Fellowships are offered by the Smithsonian Institution to provide opportunities for graduate students, pre-doctoral students, and postdoctoral and senior investigators to conduct research in association with members of the Smithsonian professional research staff, and to more effectively use the resources of the Institution.

To meet the goal of Excellent Research and maintain the Smithsonian's level of expertise in the research community, the Institution must be able to continue attracting the best scholars. In FY 2011, the overall value of fellowship stipends increased, and it became apparent that OFI must continue to increase fellowship stipends to provide awards comparable to other prestigious programs and to enable the Smithsonian to maintain a competitive edge. While the value of each award has increased, the number of fellowships awarded must decrease in the absence of additional resources. There is a need to rebuild the funding base available to the Institution's Fellowships and Scholarly Studies Program so that the Smithsonian has the resources necessary to help today's young scientists become the next generation's top researchers. In addition, the Institution must continue to provide current staff with the financial support needed 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, the Office of Fellowships and Internships, 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:

- establishing an interdisciplinary postdoctoral fellowship in the area of stable isotope biogeochemistry
- improving cryopreservation 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 (1 FTE and \$788,000) —

Through the Contributions Series program, continually 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, museum conservation, 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.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the budget request includes a decrease of -\$321,000 in the Smithsonian Institution Scholarly Press and corresponding increases to the Cooper-Hewitt, National Design Museum +\$155,000; Office of the General Counsel +\$110,000; and the Office of the Comptroller +\$56,000 related to the Institution's effort to rationalize Smithsonian funding sources. The SISP will receive \$321,000 in trust funds to offset the federal decrease.

**NONAPPROPRIATED RESOURCES** — General trust funds provide support to defray the costs of staff salaries and benefits, fund raising, exhibition design and production, publications, materials, outside specialists, and contractual services. Donor/sponsor-designated funds cover costs related to specific projects and programs.

### **COMMUNICATIONS**

		APPLICATION OF OPERATING RESOURCES												
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS							
	FTE	\$000	FTE	\$000	FTE	FTE \$000		\$000						
FY 2010 ESTIMATE	24	2,457	30	3,868	0	57	0	0						
FY 2011 ESTIMATE	24	2,494	31	4,020	0	100	0	0						
FY 2012 ESTIMATE	25	2,594	30	3,914	0	0	0	0						

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; AND MISSION ENABLING

### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	1	59	1	43	0	-16
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	1	56	2	208	1	152
Public Programs						
Provide reference services and information	9	810	9	832	0	22
Mission Enabling						
Management Operations						
Enhance the reputation of the Smithsonian by	12	1,452	12	1,394	0	-58
maintaining good relations with the news media and						
with federal, state, and local governments						
Ensure that the Smithsonian workforce is efficient,	1	117	1	117	0	0
collaborative, committed, innovative, and diverse						
Total	24	2,494	25	2,594	1	100

### **BACKGROUND AND CONTEXT**

The Office of Communications and External Affairs (OCEA) consists of four departments: the Office of Public Affairs (OPA), the Visitor Information and Associates' Reception Center (VIARC), the Office of Government Relations (OGR), and the Office of Special Events and Protocol (OSEP).

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 facilitates the goal of Mission Enabling as it 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's message to the Web by overseeing content on the central and press room websites. 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 Broadening Access by promoting participation in the Institution's programs and activities. VIARC also advances the goal of Excellent Research by providing behind-the-scenes volunteers who assist staff in conducting their research.

OGR serves as the liaison between the Smithsonian Institution and various federal agencies, as follows: Office of Management and Budget, House and Senate Appropriations and oversight Committees, House and Senate staff, and other contacts.

OSEP contributes to the advancement of the Institution by taking a proactive leadership role in the planning and execution of a wide variety of special events and conferences. The Office participates in strategic decision making by developing event opportunities which will help the Institution achieve its goals and objectives.

For FY 2012, the budget estimate includes an increase of 1 FTE and \$100,000 for Web support for digitization. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of + \$137,000 and 1 FTE.

#### **MEANS AND STRATEGY**

To achieve the goal of Mission Enabling, 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 and visitors' brochures. It also produces *Science at the Smithsonian*, an online blog devoted to scientific research, and *The Torch*, a monthly online staff newsletter. 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 Broadening Access 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 2,200 volunteers throughout the Smithsonian, representing one-third of the Smithsonian volunteer corps. VIARC advances the goal of Excellent Research through the "Behind-the-Scenes" volunteer program, which assists staff in conducting their research. Volunteer assignments range from clerical tasks to highly complex research, conservation, and technical work.

To achieve the goal of Mission Enabling, 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.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the budget estimate includes an increase of 1 FTE and \$100,000 for Web support for digitization. The Web support for digitization increase is as follows:

 (+\$100,000, +1 FTE) These funds will be used to hire a Web expert to expand and enhance the use of Web and new media technologies to promote the expanding availability of the Institution's digitized collections. The funds will support and enhance digitization initiatives to capture the imagination of young and underserved audiences.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits of personnel and other related costs. In addition, these funds provide general support for information dissemination, outreach, publications, and general operations.

### **INSTITUTION-WIDE PROGRAMS**

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR- DESIGNATED		GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	0	10,839	0	0	0	0	0	0			
FY 2011 ESTIMATE	0	11,628	0	0	0	0	0	0			
FY 2012 ESTIMATE	0	10,928	0	0	0	0	0	0			

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/		FY 2011		FY 2012		Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000	
Excellent Research							
Research							
Engage in research and discovery		1,503	0	1,303	0	-200	
Broadening Access							
Public Programs							
Provide reference services and information	0	1,121	0	1,121	0	0	
Strengthening Collections							
Collections							
Improve the stewardship of the national collections	0	5,869	0	5,469	0	-400	
Mission Enabling							
Information Technology							
Modernize the Institution's information technology	0	3,135	0	3,035	0	-100	
systems and infrastructure							
Total		11,628	0	10,928	0	-700	

#### **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. The Institution first received funds in FY 1995 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.

The budget request includes increases of 2 FTEs and \$500,000 for collections needs for the National Museum of Natural History (NMNH) and the National Zoo (NZP), which are justified here to strategically address critical collections care needs, but are included in the FY 2012 estimates for the specific units. The budget request also includes a decrease of -\$700,000 from the Institution-wide programs and the funds are realigned to support the Institution's Strategic Plan.

When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$89,000.

#### 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 subjects 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 that no other institution in the world can match. Whether they are acquired from tropical rainforests, archaeological sites, everyday life, the depths of the oceans, and even extra-terrestrially, objects and specimens are preserved and maintained for public exhibition, education, and study.

Currently, Smithsonian museum collections total 137.2 million objects and specimens. In addition, the holdings of the Smithsonian include 1.8 million library volumes and materials, including rare books, and more than 100,000 cubic feet of archives. Among the vast collections are irreplaceable national icons, examples of 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 frozen Asian elephant blood samples to a rare Michelangelo drawing; from insects and meteorites to paintings and

memorabilia of the U.S. presidency. As the steward of the national collections, the Smithsonian has the unique responsibility to manage and preserve the collections held in trust for the public. This responsibility for preserving and making collections accessible is an 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. Smithsonian collections serve as a storehouse of ideas and a foundation for scholarship, discovery, and education. For example:

- Scientific collections acquired a century or more ago are being used today to address challenges facing society, including climate change, the identification of invasive species, and the control of deadly diseases.
- Smithsonian collections contribute to population recovery of endangered species, 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 is an essential resource for scientists worldwide studying the earth sciences, the biological world, and human origins and cultures.
- Smithsonian collections define our national identity, documenting our history and diversity, and are used by researchers around the globe to study the artistic, cultural, and technological developments of the American and people worldwide.

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. Because collections stewardship 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. The Institution is addressing these stewardship issues with collections staff and funding in each Smithsonian collecting unit, along with the centrally managed Collections Care and Preservation Fund.

The Administration 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 collections serve an important role in public health and safety, national security, trade and economic development, medical research, and environmental monitoring. In addition, Smithsonian cryocollections (almost one million frozen biological samples at three units) support the

use of new technologies in emerging Institution-wide and national research initiatives.

Improved care of collections is a national priority. In early 2009, the Interagency Working Group on Scientific Collections (IWGSC), established by the Committee on Science of the National Science and Technology Council and cochaired by the Smithsonian, issued a report on the current state of federal scientific collections and provided recommendations for their management and use. The Smithsonian has made excellent progress at raising the level of collections care and accessibility with improved collections care funding in recent years, and is now a leader in the federal community. The Smithsonian's collections care initiative and the FY 2012 requested increase directly support the recommendations of the IWGSC report, *Scientific Collections: Mission-Critical Infrastructure for Federal Science Agencies*, the Organization for Economic Cooperation and Development Global Science Forum, and the recently passed America Competes Bill, by taking a systematic approach to safeguarding collections for current and future generations of researchers and scientists.

The Smithsonian has also recognized the importance of collections in its organization by creating, starting in FY 2011, the office of Deputy Under Secretary for Collections and Interdisciplinary Support (DUSCIS). This raises the profile of the National Collections Program, as well as other collections-based activities such as the Libraries and the Archives, that serve the entire Institution. The DUSCIS is also responsible for coordinating collections-related digitization priorities with the Office of the Chief Information Officer (OCIO).

#### MEANS AND STRATEGY — RESEARCH EQUIPMENT POOL

The Smithsonian's ambitious research agenda requires appropriate equipment to reach its goal of Excellent Research. This basic equipment infrastructure requires regular maintenance, upgrades, and routine replacement. With the current allocation, the Institution will strive to prioritize and address the many research needs throughout the Smithsonian community.

#### MEANS AND STRATEGY — LATINO INITIATIVES POOL

To achieve the goal of Broadening Access through research, exhibitions, collections, performing arts, and educational 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 the Smithsonian's ability to provide relevant programming through the support of exhibits, collections management, public programs, education, research, and community/public outreach and the acquisition of Latino art and artifacts. Projects are selected on a competitive basis from proposals that

demonstrate effective deployment of the pool funds, other Smithsonian resources, and external funding.

#### MEANS AND STRATEGY — COLLECTIONS CARE INITIATIVE

To achieve the goals of Broadening Access and Strengthening Collections, resources will be applied to address these most critical collections areas:

- Collections care and preservation; and
- Collections information systems

The collections care and preservation resources will enable the Smithsonian to implement an Institution-wide collections assessment program, preserve collections, and store them in better conditions for use, while the collections information systems resources will further the digitization of collections information and images, and provide improved public access to the national 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
- o development of short- and long-term collection goals for Smithsonian units
- establishment of the Smithsonian Collections Space Steering Committee to develop a plan for addressing current and projected Institution-wide collections space requirements
- stabilization and treatment of specific collections at risk
- o development of an Institution-wide collections assessment

In FY 2010, the Smithsonian conducted an Institution-wide collections assessment adapted from a survey tool used by the National Museum of Natural History. The resulting data is guiding long-term strategic plans for collections care, identifying areas where improvements are needed, establishing priorities, and providing a practical framework for the allocation of collections care resources. The Collections Care Initiative is important to help the Institution meet the strategic goals for Strengthening Collections and make progress toward addressing the Smithsonian's collections needs. Collections care funding provides resources for the Smithsonian to implement the Institution-wide collections assessment program,

address the Smithsonian Inspector General's collections-related audit recommendations, and improve the preservation, storage, and accessibility of collections currently at risk of loss or damage.

The Smithsonian will strategically correct collections care deficiencies identified in the Institution-wide collections assessment that serves as a model for use by federal agencies in the management and preservation of collections. Stewardship of collections is a key component of the Smithsonian's mission and the core priority of the Smithsonian's Strategic Plan, as well as a national priority critical to the country's research infrastructure. Collections care funding directly supports the Smithsonian's overarching goal of improving the preservation and accessibility of collections that are vital to current and future scholarly research, education, and the nation's scientific enterprise.

In FY 2012, the Smithsonian will continue to build on these initiatives and follow an action plan for strategically addressing the critical preservation and storage needs of collections, based on the results of the Institution-wide collections assessment.

#### • IRM Pool — Collections Information Systems

Collections information systems serve as cornerstones for accountability, public education, and research. Digitizing collections information helps achieve the goals of Strengthening Collections and Broadening Access by 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 millions of 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, the Anacostia Community Museum, and the National Museum of African American History and Culture
- 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

#### FY 2012 REQUEST — EXPLANATION OF CHANGE (COLLECTIONS CARE INITIATIVE)

The FY 2012 budget estimate for Institution-wide programs does not include an increase for the Collections Care and Preservation Fund. However, the CCPF does increase by \$500,000 from the FY 2010 appropriated level. The CCPF provides essential resources to meet professional standards of collections care and address the Institution's highest priority collections management needs. The CCPF enables the Institution to provide better access to the national collections as well as the improved storage, conservation, and preservation resources needed to ensure their longevity and availability. The CCPF is important to meet the strategic goal for Strengthening Collections and make progress toward strategically addressing Institution-wide critical collections care needs.

- Unit-Based Collections Care and Preservation (+\$500,000 and 2 FTEs) —
   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 units' justifications. The increases are as follows:
  - (+\$250,000, + 2 FTEs) This request provides the NMNH with funds to address specific collections care deficiencies identified through the Museum's collections assessment and improve the preservation, storage, and accessibility of the collections. This increase will enable NMNH to replace substandard storage cabinetry that is currently detrimental and hazardous to the Museum's collections; digitize original handwritten collection ledgers, thereby increasing their accessibility for scholarly use; update inventories of collections; and create electronic catalogue records and images for important insect, animal, and plant specimens.
  - (+\$250,000) This request provides the National Zoological Park with resources to support the welfare and care of the living collection.
     Excellence in animal care is paramount for maintaining the Zoo's

accreditation by the Association of Zoos and Aquariums (AZA), as well for maintaining compliance with the Animal Welfare Act. The requested increase will provide necessary animal food, medicine, and enrichment supplies and pest management supplies needed to support the animal collection.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE (INSTITUTION-WIDE POOLS)

The Research Equipment Pool, Information Resources Management Pool, and the Collections Care and Preservation Fund (CCPF) are reduced by -\$700,000 in FY 2012 to fund programs in support of the Institution's Strategic Plan. However, when compared to the FY 2010 appropriated level, as noted earlier, the CCPF increased by +\$500,000 and the overall Institution-wide account increased +\$89,000.

## OFFICE OF EXHIBITS CENTRAL

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR- DESIGNATED		GOV'T GRANTS & CONTRACTS				
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	28	2,982	9	188	0	-16	0	0			
FY 2011 ESTIMATE	28	3,012	4	398	0	0	0	0			
FY 2012 ESTIMATE	28	3,012	6	491	0	0	0	0			

#### STRATEGIC GOALS: BROADENING ACCESS AND MISSION ENABLING

#### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/		FY 2011		FY 2012		Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000	
Broadening Access							
Exhibitions							
Offer compelling, first-class exhibitions		2550	24	2534	0	-16	
Mission Enabling							
Management Operations							
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse.		462	4	478	0	16	
Total		3,012	28	3,012	0	0	

#### **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 strategic goal of Broadening Access, 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, financial, 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, and 3-D technologies. The OEC's Special Exhibitions Division (SED) will continue to host compelling Smithsonian exhibitions in the S. Dillon Ripley Center's International and Concourse Galleries as well as in the Commons, Schermer, and Great Hall Galleries in the Institution's Castle Building. The Office of Exhibits Central is also partnering with the Office of the Chief Information Officer (OCIO) in support of the Smithsonian's Digitization Strategic Plan.

The FY 2012 budget request includes no increase under this line item. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$30,000.

#### **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 SED provides exhibition services throughout the museum community.

In FY 2012, most OEC resources will be focused on achieving the goal of Broadening Access by:

- improving the quality of exhibition design, consultation, production, and installation services
- increasing and maintaining staff knowledge and expertise in state-of-the-art technology, techniques, and advances in the exhibit field, and upgrading equipment to support emerging trends
- improving the exhibit development process
- partnering with OCIO in implementing the Digitization Strategic Plan

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.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits of personnel and associated costs for the Smithsonian Community Committee activities.

#### MUSEUM SUPPORT CENTER

		APPL	ICATIO	N OF OP	ERATIN	G RESOUR	CES		
	FEDERAL APPROPRIATIONS			GENERAL TRUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS		
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000	
FY 2010 ESTIMATE	25	1,858	0	0	0	0	0	0	
FY 2011 ESTIMATE	25	1,874	0	0	0	0	0	0	
FY 2012 ESTIMATE	25	1,874	0	0	0	0	0	0	

#### STRATEGIC GOAL: STRENGTHENING COLLECTIONS

#### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/ Program Category		FY 2011		2012	Change	
		\$000	FTE	\$000	FTE	\$000
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	25	1,874	25	1,874	0	0
Total	25	1,874	25	1,874	0	0

#### **BACKGROUND AND CONTEXT**

The Museum Support Center (MSC) is the Smithsonian's principal off-site collections preservation and research facility. Located in Suitland, Maryland, this facility houses more than 55 million objects, or 40 percent of the Institution's irreplaceable national collections, primarily from the National Museum of Natural History (NMNH), but also from other Smithsonian museums, such as the National Museum of American History, the Hirshhorn Museum and Sculpture Garden (HMSG), the Freer and Sackler Galleries, the National Museum of African Art (NMAfA), the National Postal Museum, the Smithsonian Environmental Research Center, and the National Zoological Park. Over the past five years, the MSC has greatly expanded the capacity of the facility by adding one Pod and renovating a second, and by installing high-density mobile storage systems in these new spaces. The MSC accommodates collections within several general types of storage media: collections in cabinets; open shelving for biological specimens preserved in alcohol; high bay storage for very large objects such as totem poles, boats, meteorites, and

large mounted mammals; freezers for tissues and film; and large mobile racks for storing art.

The facility also houses laboratories for molecular systematics, conservation, and other specialized research. The MSC staff provides disaster response and management services, including a hazardous response team; construction coordination and logistics support; safety and pest control; collections relocation; administrative, shipping and receiving services; and computer support services for administrative, research, and collections data management needs. In addition, the MSC supports contracted maintenance services and required calibration for much of the specialty collections preservation and laboratory equipment, such as environmental chambers, freezers, nitrogen systems, fume hoods, reverse osmosis water systems, and oxygen detection systems.

The FY 2012 budget request includes no increases. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$16,000.

#### **MEANS AND STRATEGY**

To support the Smithsonian strategic goal of Strengthening Collections, the FY 2012 funding will be used to complete relocation of collections from NMNH, HMSG, and NMAfA. MSC staff will complete the moves of art and tissue samples, collections stored at multiple locations, to the recently renovated Pod 3 at the MSC. Relocations will include cleaning, stabilization (such as object supports and archival storage containers), and pest control.

In FY 2012, MSC staff will continue to prepare for the multi-phased master plan renovations at the MSC, which will improve and update support systems and laboratory spaces at the MSC facility. In addition, the MSC will support maintenance of the collections and the research equipment needed to protect staff and collections.

# **MUSEUM CONSERVATION INSTITUTE**

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS			NERAL RUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	FTE \$000		\$000					
FY 2010 ESTIMATE	24	3,119	0	71	0	9	0	0					
FY 2011 ESTIMATE	25	3,236	0	69	0	586	0	0					
FY 2012 ESTIMATE	25	3,236	0	10	0	247	0	0					

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Performance Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	11	1,227	11	1,206	0	-21
Broadening Access						
Public Programs						
Provide reference services and information to the public	1	120	1	122	0	2
Revitalizing Education						
Education						
Engage and inspire diverse audiences	1	89	1	90	0	1
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	7	1,035	7	1,041	0	6
Mission Enabling						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	4	659	4	671	0	12
Modernize the Institution's financial management and accounting operations	1	106	1	106	0	0
Total	25	3,236	25	3,236	0	0

#### BACKGROUND AND CONTEXT

The Smithsonian's Museum Conservation Institute (MCI) is the center for specialized technical collection research and conservation for all Smithsonian museums and collections. MCI combines knowledge of materials and the history of technology with state-of-the-art instrumentation and scientific techniques to provide technical research studies and interpretation of artistic, anthropological, biological, and historical objects. Through its *Healthy Environments, Healthy Practices, Healthy Collections* initiative and the training program "Preventing Illicit Trafficking — Protecting Cultural Heritage," MCI responds to the threats that affect cultural heritage in multiple and complex ways, including developing less invasive and damaging storage, display, and conservation techniques, and supporting U.S. agencies and the museum community in understanding and identifying illicitly trafficked cultural heritage.

MCI, as the only Smithsonian resource for technical studies and scientific analyses for most of the Smithsonian's collections, brings unique analytical capabilities to Smithsonian researchers, including a central mass spectroscopy instrument core and advanced technological capabilities. These services are available to Smithsonian units at no charge. In addition to requests for consultations from within the Smithsonian, MCI responds to requests from affiliates and outside organizations, such as the White House, U.S. Congress, U.S. Department of Homeland Security — Immigration and Customs Enforcement, U.S. Department of State, and other federal, museum, and academic organizations.

The FY 2012 budget request includes no increases. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of +\$117,000.

#### **MEANS AND STRATEGY**

To achieve the goal of Excellent Research, MCI will provide increased technical and research assistance to the museums and scientific research centers. MCI will initiate, facilitate, and support collaborative research projects on biological isotopes and proteomics, nanoscale analysis of museum materials, modern museum and collection materials such as plastics, the mechanisms of degradation and biodeterioration, and historical and archaeological technologies. MCI will also use its website, publications, hosted symposia, presentations, invited seminars, and lectures to disseminate the results of its research programs.

MCI's technology transfer initiatives (nanoscale analyses and imaging, proteomics, modern materials, and biodeterioration) will cross all of the boundaries between Smithsonian units and support all of the Smithsonian's Grand Challenges. MCI's exploration of new technologies in nanoscale imaging and proteomics will support Unlocking the Mysteries of the Universe and Understanding and Sustaining a Biodiverse Planet, respectively. MCI's exploration of materials science related to modern materials, especially plastics, will support Understanding the American Experience; biodeterioration research will use technology from Sustaining a Biodiverse Planet to support Valuing World Cultures. MCI's investigations of historical and archaeological materials and technologies will also support Valuing World Cultures.

To achieve the goal of Broadening Access, MCI'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 800 information requests annually. MCI's website will be enhanced to increase the impact of the Institute's research and outreach programs.

MCI will achieve the goal of Revitalizing Education by continuing to promote career development for Smithsonian conservators and other collections care providers through colloquia, symposia, and workshops, as well as distance-learning opportunities. 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 the Institute's constituencies encounter. MCI will also 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 the Institution's newest museums. MCI will continue to offer internships for students pursuing careers in conservation and conservation science.

To achieve the goal of Strengthening Collections, MCI 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 continue its study of the assessment and remediation of collection hazards. MCI will focus on developing and using less invasive and less damaging materials and procedures for collection conservation, reflecting the importance of incorporating energy-efficient and "green" materials and practices into the Institute's work. MCI will pursue collaborative conservation treatment

projects with other Smithsonian units 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 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), museum hazards (such as pests and pesticides), and collections storage.

MCI's umbrella theme, *Healthy Environments, Healthy Practices, Healthy Collections,* directly supports the Smithsonian's Strategic Plan priorities in all four Grand Challenge areas, although its primary impact will be in Understanding the American Experience and Valuing World Cultures.

To achieve the goal of Mission Enabling, MCI will use its own 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 goals of the Smithsonian's museums and research centers. MCI will encourage staff to participate in budget-performance integration, succession management, and leadership development programs. MCI will continue to implement and communicate efficient, rational, and creative operational and administrative practices that enable staff to advance the Smithsonian mission while ensuring resources are wisely managed in a manner that reflects transparency and the Smithsonian's status as a public trust. MCI will ensure an efficient, collaborative, committed, innovative, and accountable workforce through leadership, development, evaluation, and support of staff and the recruitment, selection, and development of diverse, highly skilled employees. MCI will promote diversity in all aspects of working with the Institution's operations, employees, Fellows, interns, and vendors. MCI will continue to improve communications with internal and external stakeholders.

NONAPPROPRIATED RESOURCES — Annually, MCI receives non-appropriated resources from gifts and endowments, grants and contracts, discretionary income, and business ventures. These sources provide, on average, \$50,000 for specific programs and projects in research, education, and outreach designated by the donor/sponsor and \$15,000 for general activities at the discretion of the director. In FY 2010, MCI was awarded more than \$58,000 for sponsor-designated research and equipment. In addition, The Andrew W. Mellon Foundation challenge grant has resulted in a restricted endowment of \$5 million, with an annual payout of approximately \$250,000. The funds released by the endowment will remain in the MCI budget for strengthening conservation science research.

# **SMITHSONIAN INSTITUTION ARCHIVES**

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000					
FY 2010 ESTIMATE	20	2,054	4	481	3	141	0	0					
FY 2011 ESTIMATE	20	2,193	4	358	1	56	0	0					
FY 2012 ESTIMATE	20	2,193	4	366	1	57	0	0					

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

#### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Ensure the advancement of knowledge in the	2	251	2	251	0	0
humanities						
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	2	269	2	269	0	0
Public Programs						
Provide reference services and information	2	215	2	215	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	12	1,181	12	1,181	0	0
Mission Enabling						
Management Operations						
Strengthen an institutional culture that is customer	2	277	2	277	0	0
centered and results oriented		211		211	U	U
Total	20	2,193	20	2,193	0	0

#### BACKGROUND AND CONTEXT

The Smithsonian Institution Archives (SIA) serves as the institutional memory of a unique American cultural resource and steward of national collections. The history of the Smithsonian serves in many ways as the history of the scientific enterprise in America, particularly in the 19th century. SIA

supports the Smithsonian community, scholars, and the public by evaluating, acquiring, and preserving the records of the Institution and related documentary materials, as well as by making them accessible. In addition, SIA 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.

For FY 2012, the budget estimate includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes an increase of + \$139,000.

#### **MEANS AND STRATEGY**

In FY 2012, SIA will continue to 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, and the Smithsonian Affiliations Program); set archival collections management standards; and assist all Smithsonian units with the proper disposition of their files.

An ongoing challenge will be the care and preservation of the historical photographic collection that documents the visual history of the Institution. The goal is to provide much broader and easier access to these collections.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits for an archivist, a paper conservator, a head of Web and new media, as well as a visual information specialist/imaging technician. In addition, a marketing/public affairs coordinator position is funded by donor/sponsor-designated trust funds.

# **SMITHSONIAN INSTITUTION LIBRARIES**

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS			NERAL RUST		SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000					
FY 2010 ESTIMATE	86	10,008	9	1,326	4	1,541	0	0					
FY 2011 ESTIMATE	86	9,983	8	1,288	6	2,218	0	0					
FY 2012 ESTIMATE	86	9,983	8	1,138	6	2,560	0	0					

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	20	2,978	20	2,978	0	0
Ensure the advancement of knowledge in the humanities	19	2,374	19	2,374	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	5	472	5	472	0	0
Public Programs						
Provide reference services and information	4	418	4	418	0	0
Exhibitions						
Offer compelling, first-class exhibitions	1	74	1	74	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national collections	24	2,087	24	2,087	0	0
Mission Enabling						
Management Operations						
Ensure that the Smithsonian workforce is						
efficient, collaborative, committed, innovative,	1	109	1	109	0	0
and diverse						
Strengthen an institutional culture that is	11	1,387	11	1,387	0	0
customer centered and results oriented		.,,,,,		.,,,,,		
Ensuring Financial Strength						
Secure the financial resources required for the Institution's mission	1	84	1	84	0	0
Total	86	9,983	86	9,983	0	0

#### **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, visiting Fellows, and 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.

The FY 2012 budget request includes no increases. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$25,000.

#### **MEANS AND STRATEGY**

SIL's strategic plan for 2009–2013, A Focus on Service, demonstrates the Libraries' dedication to providing information and creating innovative services and programs for the Institution and general public. SIL provides the correct selection of information resources (digital and print), and discovery tools to improve research productivity in support of the four Grand Challenges and Smithsonian Strategic Plan priorities. In 2012, SIL will continue to seek interactive engagement with users — through experimentation, trial projects, and Web-based communities — making Web content available to millions of scholars, students, teachers, researchers, and interested people worldwide. SIL will expand its use of social media by making information available on mobile and tablet devices and by using blogs, Facebook, and Twitter to promote its programs and resources. SIL also reaches individual researchers and members of the public in every state and many foreign countries by acquiring and making available crucial books and articles on site and through its inter-library loan program. The Resident Scholar programs will continue to build collaborative partnerships worldwide with scholarly programs and individuals who find the Libraries' collections vital to their research.

SIL will enhance researchers' access to Smithsonian collections through digital images and information offered on networked resources. Initiatives include developing Web-based discovery and retrieval tools and continuing to add new information to the Smithsonian Institution Research and Information System (SIRIS). For example, through the Smithsonian Collections Search Center, SIL provides access to research collections covering more than 460,000 pieces of commercial catalogues and trade literature, representing more than 27,000 manufacturers, corporations, and companies. SIL also makes available Art and Artists File material from the Libraries' art collections and provides users access to Smithsonian Research

Online, which documents the scholarly output of the Institution at (http://research.si.edu/).

SIL continues to supply information resources that are critical to the Smithsonian's work by acquiring, preserving, cataloguing, and managing print and digital collections, particularly around the Smithsonian centers and areas of interdisciplinary research. SIL's Book Conservation Laboratory staff work to preserve and stabilize volumes that are damaged to ensure their availability for future use, and the Libraries' Digital Imaging Center scans volumes to share on the Internet with users everywhere. SIL responds to staff and visitor needs by redesigning facilities to retain tightly focused, onsite collections integrated with collaborative space, while relieving overcrowded libraries by providing environmentally sound off-site shelving and housing at the Pennsy Drive facility. In FY 2012, renovations are continuing in the libraries in the National Museum of Natural History (NMNH), at the Smithsonian Environmental Research Center (SERC), the Museum Support Center (MSC), as well as at the National Zoological Park's Smithsonian Conservation Biology Institute at Front Royal, Virginia.

SIL continues to inform the nation about its collections and to 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, science, and artifact collections. In NMNH, the Libraries will display heavily illustrated works from the 19th and early 20th centuries, documenting information on species that now face environmental challenges. Most exhibitions have an online component to broaden the audience and keep the exhibitions updated for future learning.

SIL collaborates with other Smithsonian units and external organizations in many ways. The Libraries create and publish 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. With the support of private funding, SIL houses the Secretariat for the Biodiversity Heritage Library, an international project to digitize and make easily available the legacy literature of biodiversity, involving partners in the United States, China, Australia, and Brazil. SIL will also continue digitizing its own biodiversity literature to contribute to the Library. In 2012, SIL will expand its efforts to include digitization projects in history, arts, and culture.

SIL partners with the Smithsonian Scholarly Press to produce the electronic *SI Contributions* series and other publications, including

conference proceedings, and also hosts and maintains the Scholarly Press's website. SIL maintains the Smithsonian Research Online (SRO) database, comprising both the Smithsonian Digital Repository (SDR) and the Smithsonian Research Bibliography (SRB) to preserve and provide permanent access to the published results of the Institution's scholarly research. In FY 2012, SIL will develop these tools to provide information to use as Smithsonian Key Performance Indicators. SIL will continue to work with the Institution's art and history museums to expand the content of the SRO system retrospectively, with the goal of eventually providing a complete record of Smithsonian research productivity.

SIL will provide metadata guidance and incorporate, as appropriate, emerging national metadata standards on an Institution-wide basis for SIL and Smithsonian digital publications and products.

**NONAPPROPRIATED RESOURCES** — General trust funds help defray the costs of providing information services to Smithsonian units, and support publications, public programs, and fundraising efforts. In FYs 2011 and 2012, SIL will increase its efforts to raise funds through full participation in the Smithsonian's comprehensive fundraising campaign. The Libraries intend to focus efforts on established priorities: acquisitions, conservation, digitization, fellowships, and exhibitions.

#### OFFICE OF THE CHIEF INFORMATION OFFICER

		APPLICATION OF OPERATING RESOURCES											
	FEDERAL APPROPRIATIONS		GENERAL TRUST			/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS						
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000					
FY 2010 ESTIMATE	88	43,536	17	3,108	0	21	0	0					
FY 2011 ESTIMATE	90	45,613	18	3,392	0	0	0	0					
FY 2012 ESTIMATE	91	46,144	18	3,392	0	0	0	0					

#### STRATEGIC GOALS: BROADENING ACCESS AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	6	2,500	7	2,900	1	400
Mission Enabling						
Information Technology						
Modernize the Institution's information technology	84	43,113	84	43,244	0	131
systems and infrastructure						
Total	90	45,613	91	46,144	1	531

#### BACKGROUND AND CONTEXT

The Office of the Chief Information Officer (OCIO) provides vision, leadership, policy, and oversight associated with managing and operating the information technology (IT) for the Institution's museums and research centers.

For FY 2012, the budget estimate reflects a net increase of 1 FTE and \$531,000. This request includes:

- \$1,381,000 for non-discretionary communications increases that are justified in the Mandatory Costs section of this budget submission
- \$400,000 and 1 FTE in programmatic increases for Digitization
- -\$750,000 decrease for IT infrastructure consolidation across the Institution
- -\$500,000 decrease to reduce the Institution's desktop replacement program

When compared to the FY 2010 appropriation level, the budget estimate includes an increase of + \$2,608,000 and + 3 FTEs.

#### MEANS AND STRATEGY

The OCIO will use best practices in the management and operations of information technology to enhance the "increase and diffusion of knowledge" and achieve the Institution's goals of Broadening Access and Mission Enabling. The following strategies are cross-cutting and central to the Smithsonian's mission of connecting Americans to their history and heritage, as well as to promoting innovation, research, and discovery in science:

- Use state-of-the-art, secure information systems to modernize financial, human resources, facilities management, collections, education, and research processes
- Replace network equipment, servers, desktop computers, and 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 implement 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, and cost-effective voice and data communications systems that support Smithsonian missions
- Meet federal requirements for providing timely and accurate financial information
- Improve the Institution's ability to integrate financial and performance management systems as part of the Enterprise Resource Planning (ERP) effort

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the OCIO budget estimate includes a total increase of 1 FTE and \$531,000. This includes 1 FTE and \$400,000 for increased storage capacity for the Digital Asset Management System; a decrease of -\$750,000 for IT infrastructure consolidation; a decrease of -\$500,000 for a reduction to the Institution's desktop replacement program; and \$1,381,000 for increased communications costs. The communications increase request is justified in the Mandatory Costs section of this budget submission. The programmatic increase of 1 FTE and the net decrease of -\$850,000 for the OCIO's FY 2012 requested budget are described below:

Digitizing Collections (+ \$400,000, +1 FTE) — In FY 2009, the Institution established a Digital Asset Management System (DAMS) support branch to develop the Smithsonian's pilot DAMS into a full enterprise production system with mature processes and production-quality data. The focus of the

DAMS is on managing the master digital assets (e.g., images, video, and audio) and providing access to digital derivatives — including collection, non-collection, and scientific digital assets. As such, the DAMS is a key component of the Smithsonian's digital infrastructure and a primary component of the Enterprise Digital Asset Management Network (EDAN) architecture.

One of the key components of the Institution's Strategic Plan is to broaden access to the Smithsonian's collections, exhibitions, and outreach programs. To accomplish this goal, the Institution will use new media and social networking tools to deliver information in customized ways that bring the Smithsonian's resources to audiences who cannot visit the museums and research centers in person.

An increase of 1 FTE and \$400,000 will be used to increase storage capacity in the DAMS to support a greatly expanded number of digital assets contained in the system, to include audio and video assets, and provide the level of operational support and maintenance required for an Institution-wide system managing these critical assets. Funds are requested to move toward the ideal of a unified, digital Smithsonian by continuing the process of digitizing resources, making existing digital assets more open and available, and ensuring that all digitization efforts are coordinated. As the Institution embraces the potential of sharing its knowledge and collections online, executing this plan will ensure that digital assets are created and managed to maximize access and use both internally and externally.

- Information Technology (IT) Infrastructure Consolidation (-\$750,000) Currently, both the Office of the Chief Information Officer (OCIO) and some individual units provide helpdesk and desktop support services to Smithsonian staff. The Institution is evaluating support services that could be consolidated under the OCIO. The main objective of consolidation is to implement efficiencies with standard support procedures, hardware, and software. An outcome of consolidation will be to provide a consistent and quality level of support for all Smithsonian units through a common management structure.
- Desktop Replacement Program Reduction (-\$500,000) OCIO will implement a reduction of the Institution's desktop replacement life-cycle program. This will reduce the number of desktop computers replaced by 20 percent, thereby extending use of the equipment beyond its industry best practices life cycle. The resources will be realigned to support the Institution's Strategic Plan.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits of personnel and other related costs of the OCIO.

# **ADMINISTRATION**

		APPLICATION OF OPERATING RESOURCES										
	FEDERAL APPROPRIATIONS			GENERAL TRUST		/SPONSOR- GNATED	GOV'T GRANTS & CONTRACTS					
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000				
FY 2010 ESTIMATE	181	32,874	151	25,942	5	3,189	0	758				
FY 2011 ESTIMATE	182	33,326	154	27,738	6	3,935	0	1,243				
FY 2012 ESTIMATE	185	33,949	160	28,442	6	3,907	0	480				

# STRATEGIC GOALS: EXCELLENT RESEARCH; BROADENING ACCESS; REVITALIZING EDUCATION; STRENGTHENING COLLECTIONS; AND MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Excellent Research						
Research						
Engage in research and discovery	0	20	0	20	0	0
Ensure the advancement of knowledge in the humanities	0	22	0	22	0	0
Broadening Access						
Digitization and Web Support						
Provide improved digitization and Web support	0	12	0	12	0	0
Public Programs						
Provide reference services and information	0	44	0	44	0	0
Exhibitions						
Offer compelling, first-class exhibitions	0	44	0	44	0	0
Revitalizing Education						
Education						
Engage and inspire diverse audiences	3	320	3	320	0	0
Strengthening Collections						
Collections						
Improve the stewardship of the national	2	238	2	238	0	0
collections						
Mission Enabling						
Security and Safety						
Provide a safe and healthy environment	2	370	2	370	0	0
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	23	3,857	23	3,967	0	110

Performance Objective/	FY	2011	FY	2012	Ch	ange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Ensure that the Smithsonian workforce is efficient, collaborative, committed, innovative, and diverse	71	13,050	71	13,141	0	91
Modernize the Institution's financial management and accounting operations	55	10,287	55	10,379	0	92
Modernize and streamline the Institution's acquisitions management operations	26	5,062	29	5,392	3	330
Total	182	33,326	185	33,949	3	623

#### **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 Under Secretary for Science, the Under Secretary for History, Art, and Culture, and the Under Secretary for Finance and Administration, as well as the central administrative activities of human resources, diversity, financial, and contract management, as well as legal services. The FY 2012 estimate reflects the change in presentation of moving the Office of Special Events and Protocol from the Administration line item to the Communications line item under the strategic goal of Mission Enabling.

For FY 2012, the budget estimate reflects an increase of 3 FTEs and \$623,000. This request includes:

- \$36,000 for the annual audit of the Smithsonian's financial statements (+\$18,000) and increased processing fees for the Smithsonian's payroll services (+\$18,000), which are increases that are justified in the Non-Discretionary Cost section of this book
- \$91,000 increase for Workers' Compensation, based on the bill for FY 2012 and justified in the Non-Discretionary Cost section of this budget submission
- \$496,000 and 3 FTEs in programmatic increases to support critical requirements to strengthen internal system controls, develop and conduct procurement policy reviews, develop and implement corrective action plans, and to develop and oversee the contracting and procurement-related training for all Smithsonian procurement delegates. This request supports the recommendations of the Board of Regents' Governance Committee

When compared to the FY 2010 appropriation level, the budget estimate includes an increase of + \$1,075,000 and +4 FTEs.

#### **MEANS AND STRATEGY**

The Institution will use best practices in management 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 promote innovation, research, and discovery in science:

- Support the Board of Regents and its committees
- Develop and implement necessary internal controls as recommended by the Board of Regents' Governance Committee, which will involve strengthening personal property management inventory controls and meeting increasing demands for acquisition of goods and services by realigning and augmenting resources
- 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
- Provide oversight of the Smithsonian budget process as it is developed and executed to support the operating and capital programs of the Institution, establish and enforce budgetary policies and procedures, and ensure that resources support achievement of the Institution's goals and objectives
- Provide high-quality legal counsel and advice to the Regents, the Secretary, Under Secretaries, advisory boards, unit directors, Smithsonian Enterprises, and the Woodrow Wilson International Center for Scholars
- Provide leadership and guidance for Institution-wide collections initiatives, policies, and programs to improve the stewardship of Smithsonian collections
- Manage human resources, foster diversity, and align human capital with the Institution's goals and performance objectives. Continue to conduct workforce and gap analyses, strengthen training policies, develop succession planning, and evaluate and improve assessment tools for human resources performance
- Ensure the financial strength of the Institution and provide the Smithsonian with effective and efficient budgeting, financial, contracting, and management support services, including reliable financial reporting
- Advance the Institution's mission in the most economic, efficient, and effective way by supporting audit, evaluation, investigative, contracting, and other advisory services
- Increase the Latino Center's public and educational outreach by: 1)
  improving the Latino Virtual Museum in Second Life, the only interactive
  three-dimensional virtual museum at the Smithsonian, and expanding its
  educational and social media applications; and 2) conducting multiple
  educational and public programs on Latino culture, heritage, and scientific
  achievements across the Institution.

- Increase the capacity of the Asian Pacific American Program (APAP) to reach a wider audience through an enhanced online presence, providing educational and programmatic materials nationwide, and through more public programs that reach a varied constituency
- Work with the Smithsonian Secretary's executive diversity committee, Office
  of Human Resources, and Office of Equal Employment and Minority Affairs
  to increase the diversity of the workforce throughout the Institution

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

For FY 2012, the Administration budget estimate includes a total increase of 3 FTEs and \$623,000, which includes \$18,000 for inflation costs for the annual audit of the Smithsonian's financial statements; \$18,000 for increased processing fees for the Smithsonian's payroll services; and an increase of \$91,000 for the Workers' Compensation bill for FY 2012. These amounts are justified in the Non-Discretionary Cost section of this budget submission.

The programmatic summary of 3 FTEs and \$496,000 for the FY 2012 requested budget increase is described in greater detail below:

- (+\$110,000) This increase supports additional legal resources for the Institution and helps relieve the workload of the current Office of the General Counsel (OGC) attorneys. The funds will improve OGC's ability to serve as the gatekeeper that the Governance Committee of the Board of Regents and the Independent Review Committee have recognized the Institution requires. The funds were redirected from the Outreach line item (Smithsonian Institution Scholarly Press) related to the Institution's effort to rationalize Smithsonian funding sources.
- (+\$386,000, +3 FTEs) This increase (\$330,000 and 3 FTEs) is requested to hire one systems coordinator to strengthen internal system controls, one compliance review manager to develop and conduct procurement policy reviews, and develop and implement corrective action plans, and one acquisition career manager to plan, develop, and oversee the contracting and procurement-related training for all Smithsonian procurement delegates and professionals. The request also includes funds redirected (\$56,000) from the Outreach line item (Smithsonian Institution Scholarly Press) to the Office of the Comptroller related to the Institution's effort to rationalize Smithsonian funding sources.

With the FY 2012 budget request, the Smithsonian will be able to resolve critical internal control weaknesses identified in the Institution's risk assessment; improve the contracting system control environment and

streamline administrative processes; continue implementing the Office of Contracting and Personal Property Management staff training and policy compliance reviews; ensure compliance with established policies and required certifications for contracting personnel; promote a culture of accountability Institution-wide; and strengthen critical internal controls.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits of personnel and other related costs. General trust funds also are used to support administrative activities, information dissemination, outreach, publications, and fund raising. Donor/sponsor-designated funds provide support for costs related to programs and projects such as scientific research. For example, the Seward Johnson and Hunterdon endowment funds are used to improve basic support and strengthen important research efforts carried out at marine stations, and for pursuing scientific opportunities in oceanographic research.

#### OFFICE OF THE INSPECTOR GENERAL

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS			ENERAL RUST				GRANTS NTRACTS			
	FTE	\$000	FTE	\$000	FTE	\$000	FTE	\$000			
FY 2010 ESTIMATE	22	2,700	1	237	0	0	0	0			
FY 2011 ESTIMATE	22	2,607	1	260	0	0	0	0			
FY 2012 ESTIMATE	22	2,607	1	1 260		0	0	0			

#### STRATEGIC GOAL: MISSION ENABLING

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/		2011	FY	2012	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Mission Enabling						
Management Operations						
Strengthen an institutional culture that is customer centered and results oriented	22	2,607	22	2,607	0	0
Total	22	2,607	22	2,607	0	0

#### **BACKGROUND AND CONTEXT**

The Inspector General Act requires the Office of the Inspector General (OIG) to conduct and supervise audits and investigations that are, in the judgment of the IG, necessary or desirable relating to programs and operations of the Smithsonian Institution.

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 Institution's annual financial statement audits and Federal Information Security Management Act (FISMA) reviews. The OIG also conducts audits and reviews as listed in its annual Audit Plan.

The FY 2012 budget request includes no increase. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$93,000.

The Inspector General Reform Act of 2008 requires that the budget request detail the amount of funds requested by the OIG for staff training and to support the Council of the Inspectors General on Integrity and Efficiency (CIGIE). The OIG has requested \$39,000 for training which is funded in the base resources.

#### **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 selects mission-critical 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 Plan and annual performance plans and reports; or
- have known performance and accountability or high-risk issues

The OIG's Audit Plan includes four mandatory sets of audits: (1) the annual audits of the Smithsonian's financial statements, which the IG oversees; (2) the annual reviews under FISMA, which the IG also oversees; (3) an audit of the Smithsonian's administration of contracts awarded under the American Recovery and Reinvestment Act; and (4) an audit of the travel and other expenses of the Regents, conducted at their request to fulfill a statutory requirement. In addition, the plan includes audits of major contract proposals for fair and reasonable pricing; collection practices of the museums to safeguard their assets from damage and loss; internal controls; management of institutional policies; and Smithsonian membership organizations.

The investigative staff will continue to conduct administrative and criminal investigations, resolve complaints, and proactively engage the Institution's staff to detect and prevent waste, fraud, and abuse.

In addition, the OIG will 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.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits of personnel and other related costs.

#### **FACILITIES MAINTENANCE**

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS					/SPONSOR- GNATED		GOV'T GRANTS & CONTRACTS			
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000			
FY 2010 ESTMATE	347	72,935	0	0	0	0	0	0			
FY 2011 ESTIMATE	347	70,000	0	0	0	0	0	0			
FY 2012 ESTIMATE	391	72,107	0	0	0	0	0	0			

#### STRATEGIC GOAL: MISSION ENABLING

#### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Change	
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Mission Enabling						
Facilities						
Implement an aggressive and professional maintenance program	347	70,000	391	72,107	44	2,107
Total	347	70,000	391	72,107	44	2,107

#### **BACKGROUND AND CONTEXT**

The mission of the Office of Facilities Engineering and Operations (OFEO) is to provide world-class services and stewardship by building, operating, maintaining, and ensuring a safe, secure, and healthy environment that enhances the Smithsonian experience for more than 30 million visitors annually.

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. OFEO is responsible for the maintenance and repair of an infrastructure of approximately 12 million square feet of owned and leased buildings and structures, including 19 museums and galleries, nine research centers, and the National Zoological Park (NZP). The buildings and structures range from the well-known museums to supporting structures such as guard booths, animal shelters, and hay barns.

The National Research Council (NRC) recommends that annual maintenance funding total 2 to 4 percent of the physical plant's current

replacement value. The Institution's FY 2008 replacement value was conservatively estimated at \$5.3 billion, which equated to a minimum funding requirement of \$100 million for maintenance and minor repair projects. Those requirements have been validated through the Facility Condition Assessment process and Reliability Centered Maintenance (RCM) analysis, and have been reviewed by the Government Accountability Office (GAO). The GAO recognized the deteriorating condition of Smithsonian buildings and cited the underfunded maintenance program as one of the principal causes. The current replacement value has increased to \$6.3 billion, raising the minimum annual maintenance funding target to approximately \$125 million.

Additionally, as new and renovated museums and major exhibitions open, maintenance requirements rise due to technological advances and the increased number of systems supporting the Smithsonian's infrastructure.

Recent funding increases have allowed OFEO to address high-priority maintenance and minor repair projects along with other critical maintenance. However, the Smithsonian continues to face deferred maintenance since funding remains below the NRC target levels. Insufficient funding creates an accelerated degradation of building systems and components that, in turn, increases the number and cost of major repairs to be addressed by the Institution's Capital Program. Through increased preventive maintenance and by addressing deficiencies in a timely manner the Institution would be able to realize the originally anticipated useful life of its facilities. The Smithsonian's goal is to reduce its deferred maintenance through the coordinated efforts and appropriate funding of its maintenance and capital programs.

For FY 2012, the budget estimate includes an increase of 44 FTEs and \$2,107,000 to reflect the transfer of facilities management services from the Smithsonian Tropical Research Institute in Panama. When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$828,000 and an increase of +44 FTEs.

#### **MEANS AND STRATEGY**

To support the Institution's goal of Mission Enabling, OFEO continues an aggressive, long-range facilities maintenance and minor repair program, using an RCM approach that includes benchmarking efforts with 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-1 standard for building maintenance, referred to as "Showpiece Facility." The "Showpiece Facility" level of maintenance will ensure that preventive maintenance is scheduled and performed on time; emergencies

are infrequent and handled efficiently to ensure proper temperature and humidity levels for collections requirements; maintenance activities are highly organized and focused; and service and maintenance calls are responded to immediately. This optimum level of maintenance is no less than what should be expected at the world's largest and most visited museum and research complex.

During FY 2012, the Institution will attempt to achieve efficiencies in managing its existing resources to improve its level of service to approach APPA's maintenance level 2, "Comprehensive Stewardship" standard. This level of maintenance will ensure that equipment and building components are in operating condition; sufficient staffing is in place to respond to maintenance calls in a timely manner; and electrical and mechanical systems are routinely tested and upgraded.

Additionally, OFEO will continue providing protection for the Institution's facilities, collections, staff, visitors, and volunteers through state-of-the-art physical security measures.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

The FY 2012 budget estimate includes an increase of 44 FTEs and \$2,107,000 to reflect the transfer of maintenance, operations, and security services from the Smithsonian Tropical Research Institute (STRI) to OFEO. The transfer is a continuation of the FY 2004 integration of Smithsonian facilities management services into a single facilities organization, and to standardize operations and security support, as well. The integration is needed to provide equitable maintenance and operations services at STRI as well as alterations, renovations, construction, and security. While the majority of the resources will be directed toward maintenance and operations requirements at STRI, a portion of the funds will support their security needs. During FY 2011, STRI and OFEO will refine the total resource needs and determine the appropriate allocation between the Facilities Maintenance, and Operations, Security and Support line items. No increases are requested for overall maintenance requirements.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries and benefits, and other related costs. Donor/sponsor-designated funds provide support for costs related to Smithsonian programs, such as horticulture operations, architectural history, and historic preservation projects.

# **FACILITIES OPERATIONS, SECURITY, AND SUPPORT**

		APPLICATION OF OPERATING RESOURCES									
	FEDERAL APPROPRIATIONS					/SPONSOR- GNATED		GRANTS NTRACTS			
	FTE	\$000	FTE	\$000	FTE \$000		FTE	\$000			
FY 2010 ESTIMATE	1,317	197,307	12	426	4	252	0	0			
FY 2011 ESTIMATE	1,317	193,459	7	1,298	2	241	0	0			
FY 2012 ESTIMATE	1,317	192,727	7	1,210	2	241	0	0			

#### STRATEGIC GOALS: BROADENING ACCESS AND MISSION ENABLING

### Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY	2011	FY	2012	Ch	nange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Broadening Access						
Exhibitions						
Offer compelling, first-class exhibitions	4	460	4	460	0	0
Mission Enabling						
Facilities						
Improve the overall cleanliness and	573	123,990	573	124,467	0	477
efficient operation of Smithsonian						
facilities						
Security and Safety						
Provide world-class protection for	700	62,609	700	61,400	0	-1,209
Smithsonian facilities, collections, staff,						
visitors, and volunteers						
Provide a safe and healthy environment	40	6,400	40	6,400	0	0
Total	1,317	193,459	1,317	192,727	0	-732

### **BACKGROUND AND CONTEXT**

The mission of the Office of Facilities Engineering and Operations (OFEO) is to provide world-class services and stewardship by building, operating, maintaining, and ensuring a safe, secure, and healthy environment that enhances the Smithsonian experience for more than 30 million visitors annually.

The Facilities Operations, Security, and Support (OSS) program within OFEO operates, secures, and supports the Smithsonian's physical

infrastructure in partnership with Smithsonian program staff. OFEO provides operational security and support services for approximately 12 million square feet of owned and leased facilities, including 19 museums and galleries, nine research centers, and the National Zoological Park.

Resources within OSS support facilities operations, including activities such as fire protection; building system operations; 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 2012, the budget estimate includes a net decrease of -\$732,000. This amount includes an increase of \$477,000 for utilities, postage, and rent, which is justified in the Non-Discretionary Costs section of this budget document; and a programmatic decrease of -\$1,209,000 for the return of nonrecurring strategic security plan funds made available in FY 2010 and requested in FY 2011.

When compared to the FY 2010 appropriation level, the budget estimate includes a decrease of -\$4,580,000.

#### **MEANS AND STRATEGY**

To achieve the Institution's goal of Broadening Access, OFEO will continue to develop exhibits and public programs for horticulture, architectural history, and historic preservation.

To achieve the Institution's goal of Mission Enabling, OFEO's base resources will focus on meeting the growing operational requirements of the Institution's facilities. OFEO will continue to efficiently use its resources to revitalize facilities and grounds to provide attractive and appealing spaces to meet program needs and public expectations. OFEO will continue benchmarking the Institution's custodial staffing and service levels with other museums and professional organizations, including the Association of Higher Education Facilities Officers (APPA). As a past recipient of the prestigious APPA Award of Excellence, OFEO is committed to measuring performance and staffing levels to ensure that the highest affordable levels of appearance and cleanliness, as well as efficient operations, are maintained.

The Institution is committed to achieving APPA's appearance level 2, referred to as "Ordinary Tidiness." This level of appearance will provide an acceptable level of cleanliness that meets public expectations. With current

resources, OFEO achieves appearance level 3, "Casual Inattention." While this level of appearance is not totally acceptable, it ensures a generally clean and odorless environment. With the planned opening of the National Museum of African American History and Culture and the reopening of the Arts and Industries Building, OFEO will require additional future staff and funding to avoid having the appearance level of the largest and most visited museum complex in the world slip to an unacceptable appearance level.

Just as OFEO is committed to providing the highest levels of facility care, its Office of Protection Services (OPS) is equally committed to providing the highest levels of security. OPS will continue to provide protection for the Smithsonian's facilities, collections, staff, visitors, 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 any elevated risks identified. During FY 2011, OPS will continue implementing a two-year phased security officer staffing plan that was initiated in FY 2010.

OFEO continues its commitment to ensure that Smithsonian employees have a safer and healthier workplace by creating a culture that embraces and promotes zero injuries; provides professional services promoting a culture of health and wellness; and ensures that all Smithsonian facilities comply with environmental regulations and best practices.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

The FY 2012 budget estimate includes a net decrease of -\$732,000. This includes an increase of \$477,000 for utilities, postage, and rent, which is justified in the Non-Discretionary Costs section of this budget document. The change also includes a programmatic decrease of -\$1,209,000 to return funding as the implementation of a comprehensive security officer staffing strategy nears completion. The plan to transition less critical, unarmed security posts to coverage by contract security staff will be completed by the end of FY 2011.

**NONAPPROPRIATED RESOURCES** — General trust funds support salaries, benefits, and other related costs. Donor/sponsor-designated funds cover costs related to Smithsonian programs, such as horticulture operations and architectural history and historic preservation projects.

# **FACILITIES CAPITAL**

FY 2010 Appropriation	\$125,000,000
FY 2011 CR Estimate	\$125,000,000
FY 2012 Estimate	\$100,000,000
FY 2012 National Museum of African	\$125,000,000
American History and Culture	

#### STRATEGIC GOAL: ENHANCED MANAGEMENT EXCELLENCE

# Federal Resource Summary by Performance Objective and Program Category

Performance Objective/	FY :	2011 CR	F١	/ 2012	С	hange
Program Category	FTE	\$000	FTE	\$000	FTE	\$000
Mission Enabling						
Facilities						
Execute an aggressive, long-range revitalization program and limited construction of new facilities	48	91,050	48	78,100	0	-12,950
Security and Safety						
Provide world-class protection for Smithsonian facilities, collections, staff, visitors, and volunteers	0	1,400	0	3,650	0	2,250
Provide a safe and healthy environment	0	12,550	0	18,250	0	5,700
Subtotal	48	105,000	48	100,000	0	-5,000
National Museum of African American History and Culture		20,000		125,000		105,000
Total	48	125,000	48	225,000	0	100,000

#### **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.

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 (in FY 2001 dollars). The National Academy of

Public Administration (NAPA) study of that same year supported these findings, as did Government Accountability Office (GAO) reports of April 2005 and September 2007. Funding levels for the past few years have allowed the Smithsonian to make some progress against this requirement.

In the Facilities Capital Program, 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 failures in building systems that can create hazardous conditions for visitors and staff, harm animals, damage collections, and cause the loss of precious scientific data. Fulfilling the Smithsonian's mission also requires construction of the National Museum of African American History and Culture (NMAAHC).

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 to 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 resources to provide for safe, codecompliant, and functional facilities that support Smithsonian programs. Sustained future funding to meet these requirements is essential to sustain the viability of the Institution's physical plant.

#### FY 2012 REQUEST — EXPLANATION OF CHANGE

The Institution requests \$225,000,000 and 48 FTEs for the Facilities Capital Program in FY 2012. The Institution is requesting \$125 million for the National Museum of African American History and Culture (NMAAHC) and \$100 million for revitalization and for the planning and design of future projects. Major renovation efforts will continue at the National Zoological Park (NZP), which will be guided by the 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 National Museum of Natural History (NMNH) and the National Museum of American History (NMAH). This request also provides funding to renovate the Mathias Laboratory at the Smithsonian Environmental Research Center (SERC), and continue work on the Smithsonian Tropical Research Institute's (STRI) Gamboa Laboratory. Other priorities include funding to renovate the Cooper-Hewitt, National Design Museum's (CHNDM) Carnegie Mansion and to address various safety and security deficiencies.

The chart that follows summarizes the Institution's full request for the highest priority FY 2012 projects and the related future program funding requirements through FY 2016.

#### **SMITHSONIAN INSTITUTION**

# Federal Facilities Capital Program Summary

FY 2010 - FY 2016

		Congress	Congress	Trust*					Trust*
CATEGORY			Request	Estimate	Future Program Estimates				Estimate
\$Millions	FY 2010	FY 2011	FY 20	012	FY 2013 FY 2014		FY 2015	FY 2016	FY2013-16
REVITALIZATION									
Major Projects									
Arts & Industries Building	11.6							30.0	TBD
Cooper-Hewitt Museum		8.9	7.0	3.2	1.4				5.3
Greenhouse Replacement	2.5								
Hirshhorn Museum								8.7	
Museum Support Center	15.0	5.0			5.0	7.0	7.0	7.0	
National Air and Space Museum			0.7				15.0	15.0	
National Museum of American History	7.0	18.0	11.0	3.5	34.8	6.0	5.0		
National Museum of Natural History	16.3	16.6	8.0		17.1	16.9	19.0	10.8	
National Zoological Park	16.0	11.4	17.0	0.5	12.3	21.5	13.5	17.1	1.5
Renwick Gallery						6.0	9.0		
SERC, Mathias Lab & Contees Wharf Road		8.2	17.4		15.9	4.0	1.3		
Smithsonian Castle					10.0	15.0	18.0	15.0	
STRI, Gamboa	3.0	4.0	4.0		3.0				
Other Revitalization Projects	15.1	22.3	19.7	2.0	30.2	47.2	29.4	26.2	2.0
Facilities Planning and Design	16.7	10.6	15.2		19.3	23.3	31.8	20.2	
Anti-Terrorism Protection	1.8				1.0	3.1	1.0		
SUBTOTAL	105.0	105.0	100.0	9.2	150.0	150.0	150.0	150.0	8.8
CONSTRUCTION									
National Museum of African American History & Culture	20.0	20.0	125.0	101.5	80.0				129.2
Construct Hilo Control Building Extension						1.6			
Construct SERC Library/Seminar Facility						5.7	0.6	4.5	2.0
SUBTOTAL	20.0	20.0	125.0	101.5	80.0	7.3	0.6	4.5	131.2
TOTAL PROGRAM	125.0	125.0	225.0		230.0	157.3	150.6	154.5	
LEGACY FUNDING									
Arts & Industries Building	30.0								

<sup>\*</sup> Trust funding is mostly programmatic

# **SUMMARY TABLES**

#### REVITALIZATION

# **Major Projects**

Investment in major projects 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)
Cooper-Hewitt, National Design Museum	Carnegie Mansion Renovation	7,000
National Air and Space Museum	Replace Electrical System	750
National Museum of American History	West Wing Renovation	11,000
National Museum of Natural History	Revitalize Public and Non-Public Space	8,000
National Zoological Park	Upgrade Fire Suppression, Life-Safety and Infrastructure Systems	9,500
	Renovate Training and Education Center	3,000
	Complete Asia Trail II	3,000
	Rebuild North Retaining Wall (GSB)	1,500
SI Environmental Research Center	Renovate Mathias Lab/Replace Trailers	16,500
	Realign Contee's Wharf Road	900
SI Tropical Research Institute	Replace Gamboa Laboratory Facilities and Upgrade Utility Infrastructure	4,000
TOTAL MAJOR PROJECTS		\$65,150

# **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 National Museum of American History	Project Convert Reheat System Replace Switchgear Replace Motor Control Panel	\$(000) 1,000 900 830
National Museum of the American Indian	Replace Roof (CRC) Install Roof Fall Arrest System (Mall)	900 750
Donald W. Reynolds Center	Replace Flat Seam Copper Roof	900
Multiple Locations	Construction Supervision and Administration Misc. projects \$500,000 and under	5,580 8,820
TOTAL OTHER PROJECTS		\$19,680
FACILITIES PLANNING AND DESIGN		\$15,170
TOTAL REVITALIZATION		\$100,000

## **NEW FACILITIES DESIGN/CONSTRUCTION**

Facility	<u>Project</u>	<u>\$(000)</u>
National Museum of African American History and Culture	Construct Museum	<u>125,000</u>
TOTAL NEW FACILITIES		\$125,000
TOTAL REQUEST		\$225,000

#### REVITALIZATION PROJECTS

**Major Projects:** 

**PROJECT TITLE**: Renovate Carnegie Mansion

**INSTALLATION:** Cooper-Hewitt, National Design Museum (CHNDM)

**LOCATION:** Manhattan, New York

FY 2012 COST ESTIMATE (Thousands of Dollars): \$7,000

PRIOR-YEAR FUNDING: \$8,850

FUTURE-YEAR FUNDING (FY 2013): \$1,400

Total \$17,250

#### **BUILDING BACKGROUND:**

The 64-room Carnegie Mansion, designed by the architectural firm of Babb, Cook & Willard, was built between 1899 and 1902. It was the first private residence in the United States to have a structural steel frame and one of the first in New York to have a residential Otis passenger elevator (now in the collection of the Smithsonian's National Museum of American History). The Mansion was transferred to the Smithsonian in 1972 and the Museum opened there in 1976.

#### PROJECT JUSTIFICATION:

The Mansion requires interior and exterior renovation work. On the interior, the electrical distribution system and emergency systems (i.e., fire alarm, sprinkler and emergency egress) are in poor condition and do not meet current code requirements. The lighting system dates from the 1970s and does not meet the needs of a modern museum. These upgrades have been planned to coincide with a Museum-funded project to expand exhibition spaces. Many areas of the Museum have asbestos-containing materials (ACM), as documented in a 1992 study, which will be disturbed during the project and will require ACM abatement.

#### PROJECT DESCRIPTION:

Renovation of the Mansion infrastructure will include replacement of the electrical distribution system, an upgrade of the lighting system, abatement of asbestos/lead in areas affected by the renovation, upgrades to the fire alarm and sprinkler systems, security system enhancements, replacement of the building's main elevator, and modifications to emergency egress. These efforts will benefit from and be coordinated with a Museum-funded project to add gallery space on the third floor, relocate the Museum's Registrar and a ground-floor conservation laboratory, and restore historic finishes. Combining the renovation work with the expansion project will allow the project to be performed economically, with minimal additional impact to Museum operations. The Institution requests \$6.975 million in federal support in FY 2012 to continue the interior portion and begin the exterior

phase of the Mansion renovation. Non-federal sources will provide more than 60 percent of the funding for this project.

#### PROGRESS TO DATE:

Design of the Mansion renovation project will be completed during the first half of FY 2011, with the actual renovation set to begin prior to the end of the fiscal year. The Museum moved its collections to an off-site storage facility in Newark in late FY 2009. Renovation work on the adjacent Miller-Fox House is under way and will be completed in FY 2011.

### IMPACT OF DELAY:

The Mansion renovation will benefit from efficiencies related to completing this infrastructure work concurrently with the exhibit expansion project planned by the Museum. Aside from the cost savings to be realized by combining the projects, the Museum's electric, fire alarm, and sprinkler systems are not in compliance with current code requirements. A delay in starting this project will increase the risk of one or more system failures.

**PROJECT TITLE:** Replace Electrical System

**INSTALLATION:** National Air and Space Museum (NASM)

**LOCATION:** Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$750

PRIOR-YEAR FUNDING: \$8,329

Total \$9,079

#### **BUILDING BACKGROUND:**

NASM was built in 1976 to memorialize the national development of aviation and space flight. The 636,000-square-foot building preserves and displays artifacts, aeronautical and space flight equipment, significant historical data, and related technologies. The Museum hosted more than seven million visitors in FY 2009 and is one of the most visited museums in the world.

#### PROJECT JUSTIFICATION:

The building and all its systems have been in operation since 1976. The electrical system is prone to failure, out of compliance with building codes, and severely overtaxed by electronic requirements that did not exist when the building opened. In addition, in 2004 NASM was designated as a shelter-in-place facility for natural and man-made emergencies, creating additional power demands from communications systems and ventilation fans. Some upgrades have been made in areas where equipment had totally failed, including the primary high-voltage transformers.

### PROJECT DESCRIPTION:

The project replaces all high-voltage systems in the building, including the incoming feeder and switchgear; replaces the electrical equipment, risers and wiring that operate the mechanical systems; provides power to new distribution panels; upgrades the automation of distribution circuits; and replaces the emergency generator.

#### PROGRESS TO DATE:

Guided by the results of a 2006 study, all previous phases of the project were completed before the end of 2010, except for correcting hot-neutrals within the electrical system and replacing electrical wiring in the floor throughout the building. This wiring distributes power for exhibitions and administrative areas. The Institution requests \$750,000 in FY 2012 to complete this final phase of the project.

#### IMPACT OF DELAY:

A delay in completing this project could increase the frequency of major electrical disruptions and result in the possible shutdown of exhibition and staff areas. This may impair the ability of NASM to effectively serve as a shelter-in-place facility for federal agencies and the Smithsonian.

PROJECT TITLE: Revitalize NMAH West Wing Public Space (Package III)

**INSTALLATION:** National Museum of American History (NMAH)

**LOCATION:** Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$11,000

PRIOR-YEAR FUNDING: \$11,000

FUTURE-YEAR FUNDING (FY 2013): \$38,000

Total \$60,000

#### PROJECT JUSTIFICATION:

This project continues the National Museum of American History (NMAH), Kenneth E. Behring Center, modernization. All three public floors of the Museum's West Wing, comprising approximately 119,000 square feet, are part of this major renewal, which redefines the visitors' experience, and modernizes and clarifies circulation. The Museum's West Wing renovation, which is the next step outlined in the NMAH Master Plan of February 2006, is guided by the report of the Blue Ribbon Commission on the National Museum of American History, dated March 2002.

#### PROJECT DESCRIPTION:

The scope of work for this project includes replacement of two zones of the HVAC system, the power-distribution system, fire-detection and alarm systems, life-safety egress, fire protection, and a staff elevator. In addition, the modernization will provide new exhibit space for exhibitions such as *Sports and Entertainment, Music and Popular Culture, American Presidency*, and *First Ladies*. The Institution requests \$11 million in FY 2012 to continue construction.

#### PROGRESS TO DATE:

The design firm was selected in July 2009 and completed the 35 percent design milestone during 2010. The 65 percent design development is anticipated in early March 2011. Construction is scheduled to begin in the second half of 2011.

#### IMPACT OF DELAY:

Delays to the West Wing renovation would increase the risk of mechanical systems failures and delay improvements needed to meet current fire-protection coverage and safety standards. The planned renovation will help minimize threats to the safety of the Museum's collections, visitors, and staff. Existing equipment and systems are at the end of their useful lives and will begin to fail at increasing rates, demand increasing maintenance staff time, and be more expensive to replace if this project is delayed.

In addition, a delay of the West Wing renovation could result in a breach of agreements with several major donors. This could put anticipated pledge payments at risk.

**PROJECT TITLE**: Revitalize Public and Non-Public Space

**INSTALLATION:** National Museum of Natural History (NMNH)

**LOCATION:** Washington, DC

### FY 2012 COST ESTIMATE (Thousands of Dollars):

Continue HVAC/Utility System Replacement

and Building Renovation \$8,000\*

PRIOR-YEAR FUNDING: \$238,970

### FUTURE-YEAR FUNDING (FY 2013+):

Ongoing HVAC replacement and code

improvements \$<u>122,100\*</u>

Total \$369,070

### **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 1.5 million square feet. The building includes 300,000 square feet of public museum space, with collections, laboratory, office, and building services spaces filling the remainder. NMNH typically hosts nearly eight 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. Now 50 years old, they are in need of replacement. Breakdowns of the mechanical systems are frequent, repair parts are often difficult to procure, and the system does not provide the environmental air quality necessary for visitors or 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, main stairwells and auditorium exit corridors are dark, violating building codes, and are insufficiently served by smoke-evacuation fans. Many of the building elevators constantly break down, occasionally trapping staff and visitors. Asbestos-laden pipes in the utility tunnels are a potential health hazard and hamper proper maintenance and response to utility failures. The windows in the original portion of the building are deteriorated.

#### 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.

<sup>\*</sup> Does not include funding in Planning and Design account to complete future design of revitalization project.

Asbestos and lead will be abated or encapsulated; the fire-protection, communications, alarm, and emergency power systems will be upgraded; and storm-water systems and a hazardous-chemical control facility will be installed. To date, \$239 million has been appropriated for the revitalization project.

The Institution requests \$8 million in FY 2012 to continue the renovation. Specific work will include: continuing replacement of the main building windows (\$1.0 million); the start of HVAC renovations on the southeast section of the main building's ground floor and mezzanine (\$2.9 million); and the completion of the West Wing second floor renovation (\$4.1 million).

#### PROGRESS TO DATE:

Recently completed construction includes HVAC renovations of the West Wing basement, the southwest portion of the third floor of the main building, replacement of the emergency generator, and the East Court Basement, ground, and first floor renovation. Work continues on renovating six of the building's elevators, the HVAC renovation of the ground and first floor of the West Wing, renovations to the Court Air Towers (Air Towers Phase II), and modernizing electronic security in the collections areas. During FY 2011, work began on renovations to the doors in the North Lobby, the perimeter security was installed on the south and west sides of the building, and the chillers were replaced. Design work was completed for the Main Building's northeast and northwest ground-floor HVAC renovation, and the Institution awarded the construction contract in December. The updated space and master plans are complete and will form the basis for sequencing future infrastructure renovations.

## IMPACT OF DELAY:

If funding is delayed, building systems will continue to deteriorate and environmental conditions required for the Museum's collections and the visiting public cannot be maintained. In addition, the Museum's exhibit re-installation program would not proceed according to the planned schedule, causing the continued closure of several important exhibition areas to the public.

PROJECT TITLE: Upgrade Utility and Safety Infrastructure

**INSTALLATION:** National Zoological Park (NZP), Rock Creek and Front Royal

**LOCATION:** Washington, DC and Front Royal, Virginia

FY 2012 COST ESTIMATE (Thousands of Dollars): \$9,500

PRIOR-YEAR FUNDING: \$27,658

FUTURE-YEAR FUNDING (FY 2013+): \$9,750

projection based on master plan

Total \$46,908

#### PROJECT JUSTIFICATION:

Much of NZP's current utility, safety, and fire-protection infrastructure is obsolete and failing, and does not meet the needs of the National Zoo to protect and support the safety of animals, staff, and visitors. Correcting deficiencies in water and electrical service mains and distribution is crucial to provide critical fire-suppression systems in many of the unprotected areas of the Zoo, and to supply adequate water for the animals. Improving perimeter containment fencing is necessary to meet American Zoo and Aquarium Association (AZA) standards as protection against animal escapes and unwanted intrusions into the animal holding areas.

#### PROJECT DESCRIPTION:

The Institution requests \$9.5 million in FY 2012 to install critical fire-protection and life-safety systems at both the Rock Creek Park and Front Royal, Virginia facilities, including utility upgrades in Beaver Valley; upgrades to water, sewage, and storm-water management; perimeter containment fencing; power distribution system upgrades; and smoke-evacuation equipment in areas where animals are kept.

#### PROGRESS TO DATE:

The Institution has used previous funds to coordinate its Rock Creek and Front Royal utilities master plans, and developed concept designs for upgrading underground utilities and fire-protection systems. Using the master plan, the Zoo is developing and implementing projects in priority order to address its infrastructure needs.

Through FY 2010, many critical infrastructure and fire-protection projects have been completed with federal funding, including funds from the American Reinvestment and Recovery Act. Projects include: replacement of the medium-voltage electrical distribution system throughout the Zoo; new ductbank conduits, feeders, switches and transformers; replacement of the fire-protection water supply from the Adams Mill gate to the Great Ape House (phases 1 and 2 of the Utility Master Plan); installation of new and/or replacement of fire hydrants throughout the Zoo; installation of upgraded fire-alarm, smoke-detection, and fire-suppression systems throughout all animal facilities at the Zoo; and central fire alarm-monitoring system and fire protection for several facilities at NZP-Front Royal. Designs are under

way for smoke-evacuation systems in animal facilities, phased implementation of fire protection is continuing for remaining Front Royal facilities, and the Zoo will proceed with implementation of the utility master plans for both the Rock Creek and Front Royal facilities.

## 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:** Renovate Training and Education Center

**INSTALLATION:** National Zoological Park (NZP)

**LOCATION:** Front Royal, Virginia

FY 2012 COST ESTIMATE (Thousands of Dollars): \$3,000

PRIOR-YEAR FUNDING: \$1,000

Total \$4,000

### PROJECT JUSTIFICATION:

Discovering and understanding biological diversity and advancing scientific solutions for conserving wildlife cannot be achieved without significant creative collaboration. Toward that end, the Institution and George Mason University (GMU) signed a Memorandum of Agreement (MOA) in October 2008 to establish a collaborative education program in global conservation studies. The MOA commits both parties to provide an accredited educational program and facilities to house the program. This program will enhance and expand the NZP's long history of providing education and professional training for the next generation of conservation and science professionals, as well as provide much-needed, updated, code-compliant facilities to house educational and residential functions. The Smithsonian will use federal and trust funds to renovate and expand an existing structure for the educational facility; GMU will construct new residential and food service facilities on site via a ground lease with the Smithsonian and \$20 million in bond funding from the Commonwealth of Virginia.

#### PROJECT DESCRIPTION:

This renewal project renovates and expands an existing building (Building 701-0116) at the Front Royal site. The building (approximately 14,925 gross square feet) is made up of two wings connected by a passage. One wing will be renovated for classrooms; the other wing will be demolished and replaced with a two-story wing (within approximately the same footprint) to house laboratories and offices. While the building footprint remains essentially the same, the total area will increase to approximately 25,400 gross square feet to accommodate the program, circulation requirements, and the constraints of the sloping site. The final design includes a partial green roof and a geothermal heating/cooling system which support the LEED-gold certification goal. The Institution requests \$3.0 million in FY 2012 to complete the project.

#### PROGRESS TO DATE:

A design contract was awarded in January 2010 and construction documents will be complete in early 2011. A multi-year funded construction contract is expected to be awarded in spring 2011, using appropriated and privately raised funds.

#### IMPACT OF DELAY:

If the project is not funded, advancing the Smithsonian's science goal of making a substantial impact in the conservation and recovery of species and habitats will be significantly delayed. The Commonwealth of Virginia bond financing for the GMU residential and food service components was approved in 2009, and the University expects to award a design-build contract in early 2011. The Smithsonian-Mason Global Conservation Studies program cannot begin without both partners' implementation of the needed facilities projects.

**PROJECT TITLE**: Asia Trail II — Elephant Trails

**INSTALLATION:** National Zoological Park (NZP), Rock Creek Park

LOCATION: Washington, DC

### FY 2012 COST ESTIMATE (Thousands of Dollars):

Construction, Phase II: Elephant Trails \$3,000

#### PRIOR-YEAR FUNDING:

Facilities Planning and Design 8,580
Construction, Asia Trail Phase I 41,030
Construction, Phase II: Elephant Trails 31,240\*

Subtotal \$80,850 \$80,850

Total \$83,850\*\*

#### BUILDING/SITE BACKGROUND:

The NZP in Washington, DC, a National Historic District, was built in the 1890s and was expanded in the 1930s with such historic buildings as the stone Elephant House. The 167-acre NZP is now more than 120 years old and its age and popularity have taken a visible toll. The Zoo's physical environment has vastly deteriorated. More than half of the buildings have seriously compromised structural, mechanical, electrical, and fire and life-safety systems. During its last accreditation review, the American Zoo and Aquarium Association (AZA) stated: "It is critically important that forward momentum is maintained in all areas and on all levels at a pace that will see the Zoo complete its strategic plan, and facility renovations, as quickly as possible." The National Academy of Sciences' study of Zoo animal care and regular U.S. Department of Agriculture (USDA) inspections confirm this requirement.

#### PROJECT JUSTIFICATION:

The National Zoo is a leader among the few institutions that have a strong multi-disciplinary program focused on elephant management and reproductive studies, both on site and in the field. To continue this progress, a larger facility is needed to create a multi-generational herd that will enable the Asian elephants to live in a more natural social structure and thus encourage more normal behaviors and interactions among the elephants, while also promoting the overall health and welfare of the elephants held in captivity.

Standards for elephant care have changed drastically since 1930. As ethical concerns are raised about maintaining captive elephants, the NZP must lead by example, providing a top-notch facility of sufficient size and flexibility to ensure both animal well-being and keeper safety, while providing an engaging and educational visitor experience. The arrangement of the elephant housing, flexibility in enrichment opportunities, and space for exercise are major issues influencing the health and welfare of the captive elephants. Furthermore, the birth of a male elephant in

<sup>\*</sup> Reflects the reprogramming of \$867,588 appropriated in FY 2006 for design of critical NZP life-safety projects.

<sup>\*\*</sup> Does not include \$23.8 million in privately raised funds (\$7.5 million for Phase I; \$16.3 million for Phase II).

November 2001 increased the urgency of moving toward NZP's goals of housing and exhibiting elephants as recommended by current zoological standards. An adult male elephant needs more space and stronger housing, and he and his keeper must be separated at all times. The current facilities do not meet those requirements.

#### PROJECT DESCRIPTION:

Phase II of the Asia Trail project will provide the larger complex that is needed to meet the NZP's long-range commitment to the Asian elephant program. The new facilities for Elephant Trails will include renewal of the existing Elephant House and construction of a new elephant-holding facility. The project will encompass nearly 10 adjacent acres and provide adequate year-round housing, new exhibit yards, safe primary containment, an elephant trek, and heavily landscaped perimeters. An innovative series of elephant habitats will provide exercise for the animals as well as sensory stimuli outside of their daily routine. Large pools and multiple enrichment devices in the animals' indoor and outdoor enclosures will enable the elephants to exhibit behaviors currently restricted by space limitations. Accessible areas will let the public observe the elephants and keeper demonstrations, with new and exciting interpretive programs, including scientific research on elephants.

#### PROGRESS TO DATE:

The Zoo has completed construction on the first phase of Elephant Trails, which includes the new Elephant Barn addition, two exterior habitats, an Elephant Camp interpretive area, and the elephant trek. The next phase of work includes the interior renovation of the existing historic Elephant House and completion of the final exterior habitat area. Performance and schedule issues with the design-build contractor who installed the first phase of the work led the Smithsonian to terminate that contract and continue with another contractor to complete the project. Corrective work and delays in schedule reduced the available budget to complete the intended design. The FY 2012 request for \$3 million will ensure that a reduced-size, final habitat and elephant pool can be built to animal care standards, and will provide safe and adequate visitor viewing. The completion of the final phase of Elephant Trails is projected for 2013.

#### IMPACT OF DELAY:

A delay would seriously impair the Zoo's effort to improve the quality of life for the Asian elephants in its care, and place the overall elephant program at risk. Ultimately, a delay in renovating the elephant facility will ripple into subsequent projects intended to bring the Zoo's facilities into compliance with USDA and AZA standards, and to correct extensive infrastructure deficiencies identified throughout the NZP.

PROJECT TITLE: Repair Structural Systems and North Road Retaining Wall,

General Services Building (GSB)

**INSTALLATION:** National Zoological Park (NZP), Rock Creek Park

**LOCATION:** Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$1,500

PRIOR-YEAR CONSTRUCTION FUNDING: \$5,957

(Design funding not shown)

FUTURE CONSTRUCTION FUNDING (FY 2013+): \$23,500

Total \$30,957

#### PROJECT JUSTIFICATION:

The General Services Building (GSB) houses numerous critical functions at the NZP, including the animal nutrition commissary, maintenance and repair shops, and offices for safety, horticulture, exhibits, project management, engineering design and space for construction staff, 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 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 GSB and in the retaining wall that supports the North Road, the major public and private thoroughfare through the Zoo. These extremely complex and disruptive repairs include the installation of structural shear walls and mezzanines for lateral stability, reinforcement of columns, underpinning of a portion of the foundation wall and waterproofing. In order to accomplish this, the GSB functions and occupants must be relocated during the course of a phased, two-year construction period. The planned fire-protection and life-safety upgrades that were previously identified as a separate effort are now incorporated into this structural renovation to minimize impact on the functionality of critical services. Prior-year funding was used to address the most immediately essential repairs to the GSB. During the course of design in 2008-2009, the Institution re-evaluated programmatic uses of the GSB with the view that all functions except the Commissary would need to be relocated during the construction period. Nearly all functions will be relocated temporarily into swing space for the duration of the phased construction. However, it was determined that the Vehicle Maintenance Branch, which services all Smithsonian vehicles and currently resides in the GSB, would best serve the Institution by a permanent relocation to Suitland, Maryland. Funded with \$4 million in FY 2010, the construction of the new facility in Suitland and the relocation of the vehicle maintenance function are under way. For FY 2012, the Institution

requests \$1.5 million to begin work on the GSB structural renovation and retaining wall reconstruction.

#### PROGRESS TO DATE:

Repairs addressing the most immediate areas of structural concern were completed early in 2009. Design for comprehensive structural stabilization, fire-protection, and life-safety upgrades of the GSB is substantially complete and design of the retaining wall reconstruction is under way. Some immediate repairs to the existing retaining wall are also in progress. Construction of the Vehicle Maintenance Branch facility is expected to be complete in 2011. Upon completion of the relocation phase, the Institution expects to award preparatory and swing space contracts for the GSB and retaining wall projects in FY 2012.

#### IMPACT OF DELAY:

Delay of the project will risk structural failure in the building and injury to staff or visitors. Deterioration of the building and retaining wall will accelerate, the amount of intervention needed to correct the problems will increase, and the costs will escalate. Until the work is completed, the NZP will not be able to comply with the USDA requirement to stop water infiltration into the commissary.

**PROJECT TITLE**: Renovate Mathias Laboratory/Replace Trailers

**INSTALLATION:** Smithsonian Environmental Research Center (SERC)

**LOCATION:** Edgewater, Maryland

FY 2012 COST ESTIMATE (Thousands of Dollars): \$16,500

PRIOR-YEAR FUNDING: \$8,250

FUTURE-YEAR FUNDING (FY 2013): \$15,860

Total \$40,610

#### **BACKGROUND:**

SERC conducts long-term research addressing such issues as global climate change, the effects of nutrients/chemicals passing through our landscapes, maintenance of productive fisheries, changes to our environment from biological invaders, and protection of fragile wetlands and woodlands. SERC is situated on an approximately 2,650-acre site along the Rhode River on the shore of the Chesapeake Bay. The Center's laboratories are housed in the Mathias Lab and a series of dilapidated temporary trailers. The Mathias Lab itself is a converted dairy barn that has been modified in several phases over the years — the oldest portion of the building dates from 1935.

#### PROJECT JUSTIFICATION:

SERC needs to reconfigure existing laboratory and support space to achieve an integrated solution to three critical problems revealed by an analysis of the facility. First, SERC must eliminate the use of decrepit and unsafe trailers that provide 25 percent of the organization's laboratory space and 65 percent of its office space. Second, substandard laboratory and support space must be upgraded to eliminate unsafe conditions and improve operating efficiencies. Third, energy and maintenance inefficiencies must be eliminated to control operating costs.

#### PROJECT DESCRIPTION:

This project will replace all on-site temporary trailers with a 62,000-square-foot laboratory and support facility, and renovate the existing Mathias Laboratory to achieve code-compliant laboratory and support space. The fully integrated 90,300-square-foot facility will incorporate sustainable technologies and building methods to achieve improved functional relationships and reduced energy and maintenance costs. The Institution requests \$16.5 million in FY 2012 to continue construction.

#### PROGRESS TO DATE:

The Smithsonian awarded a design contract in March 2009 and 100 percent of the design was completed in October 2010. In response to a request for quotation (RFQ) advertisement, 21 construction firms expressed interest and seven were short-listed for bidding on this project. Bids are expected in spring 2011, with construction planned to start mid-FY 2011.

#### IMPACT OF DELAY:

A delay in integrating SERC's laboratory and support space will increase the risks associated with use of the deteriorating trailers and delay the realization of energy and maintenance cost savings generated by this project.

PROJECT TITLE: Realign Contee's Wharf Road

**INSTALLATION:** Smithsonian Environmental Research Center (SERC)

**LOCATION:** Edgewater, Maryland

FY 2012 COST ESTIMATE (Thousands of Dollars): \$900

FUTURE-YEAR FUNDING (FYs 2014–2015): \$5,300

Total \$6,200

#### **BACKGROUND:**

SERC conducts long-term research addressing such issues as global climate change, the effects of nutrients/chemicals passing through our landscapes, maintenance of productive fisheries, changes to our environment from biological invaders, and protection of fragile wetlands and woodlands. SERC is situated on an approximately 2,650-acre site along the Rhode River on the shore of the Chesapeake Bay.

#### PROJECT JUSTIFICATION:

Contee's Wharf Road provides the only public access to the research center. It is a temporarily paved road that presents a hazard to staff and visitors even during the best weather conditions. Parts of the road were washed away during rain storms, making two-way traffic nearly impossible, and accidents have occurred that required spot repairs to the road.

## PROJECT DESCRIPTION:

This project will widen and realign the road to eliminate the dangerous passing areas and will also permanently pave the road. The Institution requests \$900,000 in FY 2012 to begin construction.

#### PROGRESS TO DATE:

The re-alignment project is at the schematic design stage and construction documents are being prepared for review by the Maryland Department of the Environment. Design is scheduled to be completed in June 2011.

#### IMPACT OF DELAY:

Continued deterioration of Contee's Wharf Road would increase the risk to staff, visiting scientists, and the public who must use the road to access SERC's facilities.

PROJECT TITLE: Gamboa Development: Replace Laboratory Facilities

**INSTALLATION:** Smithsonian Tropical Research Institute (STRI)

**LOCATION**: Panama

FY 2012 COST ESTIMATE (Thousands of Dollars):

Replace Laboratory Facilities \$4,000

PRIOR-YEAR FUNDING: \$9,368

FUTURE-YEAR FUNDING: \$3,000

Total \$16,368

#### **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 recently used trust funds to purchase 18 acres (formerly leased) from the Republic of Panama at a location in Gamboa. STRI also has 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 America 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:

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 building has been unoccupied — and unoccupiable — for many years. A structural assessment determined that it would be more cost effective to replace the old facility with a comparably sized building made of concrete and/or steel, with low-maintenance, pest-free materials that meet the full requirements for use as a laboratory building. The Institution plans to construct a new building of approximately 40,000 square feet that will replace the space in the Santa Cruz School, as well as the space in other buildings in Gamboa and Panama City that STRI must return to the Republic of Panama. The new building will be slightly larger than the current space to accommodate the latest building codes and provide sufficient space for mechanical equipment. 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 upgrading the potable water, storage and wastewater systems; securing the perimeter; installing a backup generator and transformer; creating parking spaces and a driveway; and improving the site drainage system.

For FY 2012, the Institution requests \$4 million to continue construction of the schoolhouse replacement for use as laboratory space, which includes the upgrade of site utilities and infrastructure. The Smithsonian will request future funding for additional site development at Gamboa, as defined by the master plan, and to complete the laboratory facilities replacement.

#### PROGRESS TO DATE:

STRI awarded a design contract and the 35 percent design has been completed. Construction is expected to start in mid-FY 2011.

#### IMPACT OF DELAY:

A further 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.

#### Other Revitalization Projects

PROJECT TITLE: Convert Reheat System

**INSTALLATION:** National Museum of American History (NMAH)

**LOCATION**: Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$1,000

PROJECT DESCRIPTION: The NMAH fourth and fifth floor interior and basement HVAC systems are designed as constant volume systems with steam reheats. The areas primarily served are collection storage rooms and conservation labs. Pipes, coils, and all associated control devices are located in the ceiling space above these conservation rooms and labs. The steam reheat coils on the fourth and fifth floors were replaced approximately 18 years ago. They are beyond their service life and must be replaced. Over time, the deterioration of the original existing piping and faulty valves has caused leaks, impacting the work environment and putting the Museum's collection at high risk of damage.

PROJECT TITLE: Replace Switchgear

**INSTALLATION:** National Museum of American History (NMAH)

**LOCATION:** Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$900

PROJECT DESCRIPTION: Currently, substations 1, 3, 7, and 8 do not meet the National Electrical Code (NEC). The NEC requires that switchgear protective devices, such as circuit breakers and relays, be able to withstand the current amperage that they will experience in the event of an electrical fault. The requested funds will be used to replace the switchgear devices.

**PROJECT TITLE**: Replace Motor Control Center Panels

**INSTALLATION:** National Museum of American History (NMAH)

**LOCATION**: Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$830

PROJECT DESCRIPTION: Motor control panels throughout the Museum are beyond their expected useful life. The panels have had to be modified over the years to keep them functioning, but replacement parts are no longer available. Many of the panels have deteriorated to the point where they have become a potential hazard to staff working in the area. The requested funds will be used to replace the panels, thereby alleviating this life-safety concern and reducing the risk of system failures.

**PROJECT TITLE:** Replace Roof (Cultural Resource Center)

**INSTALLATION:** National Museum of the American Indian (NMAI)

**LOCATION:** Suitland, Maryland

FY 2012 COST ESTIMATE (Thousands of Dollars):

\$900

<u>PROJECT DESCRIPTION</u>: The facility's copper roof has developed leaks. The water infiltration creates the potential for mold to develop within the building, placing collections and staff at risk. This project will correct the leaks by replacing a portion of the roof.

PROJECT TITLE: Install Roof Fall Arrest System (Mall)

**INSTALLATION:** National Museum of the American Indian (NMAI)

**LOCATION:** Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$750

<u>PROJECT DESCRIPTION</u>: The building does not have a fall arrest system for staff or contractors performing routine maintenance, conducting inspections, or making repairs on the roof and other high-bay areas in the building. The Occupational Safety and Health Administration (OSHA) requires such protection for workers exposed to vertical drops of six feet or more. This project will construct a fall arrest rigging system on the exterior and interior high-bay areas of the building.

**PROJECT TITLE**: Replace Flat Seam Copper Roof **INSTALLATION**: Donald W. Reynolds Center (DWRC)

LOCATION: Washington, DC

FY 2012 COST ESTIMATE (Thousands of Dollars): \$900

<u>PROJECT DESCRIPTION</u>: The building's copper-seam roof has developed multiple leaks. The water infiltration will eventually damage the structure of the building and currently creates potentially hazardous conditions for staff and visitors. This project will replace the copper flat-seam portion of the roof.

**PROJECT TITLE**: Construction Supervision and Administration

INSTALLATION: Multiple Locations LOCATION: Institution-wide

FY 2012 COST ESTIMATE (Thousands of Dollars): \$5,580

PRIOR-YEAR FUNDING (FY 2011): \$5,245

FUTURE-YEAR FUNDING (FY 2013): \$5,900

<u>PROJECT DESCRIPTION:</u> This request includes staff costs for permanent costestimating staff, the 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 \$5.58 million. The construction managers 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 support all aspects of the procurement process for acquiring the necessary contract services to execute the Capital Program. These five positions 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 site work can take place. This category includes 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 operations at the Department of Defense and the National Aeronautics and Space Administration (NASA). The funding will enable development of project baselines, including costs, scope, and schedules, prior to receiving funds to perform the work.

In order to plan and design ahead of Capital Program execution, funding of 10 to 15 percent of the following year's program is required each year. The funding requested for FY 2012 will provide necessary planning and design to the 35 percent stage for most projects included in the planned FY 2014 program, and will complete design for projects planned for FY 2013. 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 \$15,170,000 for planning and design in FY 2012. These funds will be used to design several major revitalization projects at the National Museum of Natural History (\$2.5 million), the National Zoological Park (\$3.0 million), and the Renwick Gallery (\$1.5 million), as well as to prepare designs for numerous smaller revitalization projects and master planning (\$7.67 million). Funds will also be used to provide an increment of the Smithsonian's share of the cost for engineering design of the Giant Magellan Telescope project (\$0.5 million). This budget request will also enable the Smithsonian to prepare comprehensive 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.

#### **CONSTRUCTION PROJECTS**

PROJECT TITLE: Plan, Design, and Construct the National Museum of

African American History and Culture

**INSTALLATION:** National Museum of African American History and Culture

**LOCATION**: Washington, DC

(\$000s)						
	Federal	Private				
FY 2012 Cost Estimate	\$125,000	\$101,890				
Prior-Year Funding Execution	\$45,000	\$16,880				
Future-Year Funding	\$80,000	\$131,230				
Total	\$250,000	\$250,000				

#### **BUILDING BACKGROUND:**

The National Museum of African American History and Culture Act, signed by President George W. Bush on December 19, 2003, established the newest museum within the Smithsonian Institution.

#### PROJECT JUSTIFICATION:

The purpose of the proposed action is to fulfill the mandate of the National Museum of African American History and Culture Act (NMAAHC Act), P.L. 108–184, enacted by the Congress on December 16, 2003. The law directs that the new Museum provide for the collection, study, and establishment of programs relating to African American life, art, history, and culture. To that end, the Museum will create and maintain permanent and temporary exhibits documenting the history of African American life during the periods of slavery, Reconstruction, the Harlem Renaissance, the civil rights movement, and other periods of the African American diaspora. The Museum will also provide for the collection and study of artifacts and documents relating to African American life, and foster collaboration with other museums, historically black colleges and universities, and other organizations to promote the study and appreciation of African American life and its impact on the nation and all of its people.

Section 2 of the NMAAHC Act outlines the findings of Congress as to why such a museum was needed. The findings of Congress were based in large part on the conclusions of the Presidential Commission, known as the NMAAHC Plan for Action Presidential Commission, in its 2003 study, *The Time Has Come: Report to the President and Congress*. This Presidential Commission stated that:

"... the time has come to establish the National Museum of African American History and Culture because the museum is important not only for African Americans but for all Americans. It is the only institution that can provide a national meeting place for all Americans to learn about the history and culture of African Americans and their contributions to and relationship with every aspect of our national life.

Further, the museum is the only national venue that can respond to the interests and needs of diverse racial constituencies who share a common commitment to a full and accurate telling of our country's past as we prepare for our country's future. And, even more importantly, it is the only national venue that can serve as an educational healing space to further racial reconciliation."

#### PROJECT DESCRIPTION:

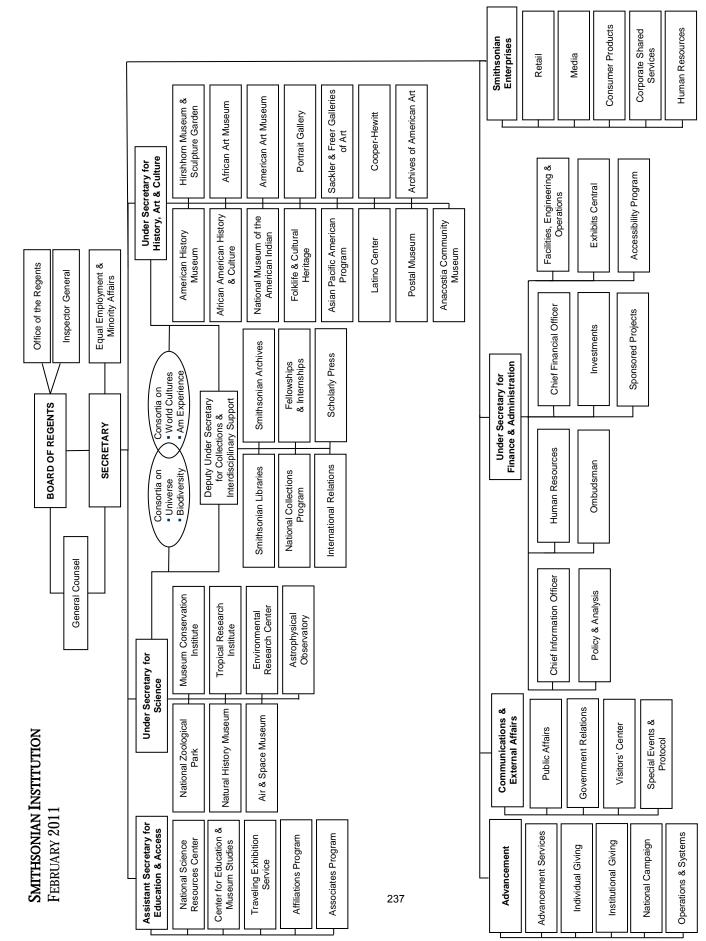
The 315,000-square-foot Museum will be built on a five-acre site, located on the National Mall near the Washington Monument. The site is bounded by Constitution Avenue and Madison Drive, between 14th and 15th Streets, NW. This prominent site has westerly panoramic views, sweeping from the White House grounds on the northwest to the Jefferson Memorial on the southwest. The National Mall and the Washington Monument are both listed on the National Register of Historic Places.

#### PROGRESS TO DATE:

The Smithsonian Board of Regents selected the Monument site for the new Museum building in January 2006. Transfer of the site from the National Park Service to the Smithsonian was completed in June 2007. The Cultural Resources Report (Section 106) and the "Tier 1" environmental impact statement (EIS) have been completed and pre-design services for "Master Facilities Programming" (Architectural Programming/Exhibitions Master Planning) were completed in October 2008. A design competition involving six invited architect-engineer (A/E) teams culminated in April 2009 with the selection of Freelon Adjaye Bond/SmithGroup as the A/E team for the Museum design. The Institution awarded an A/E design contract in early FY 2010. Along with the development of concept design, historic preservation consultations are ongoing and the draft environmental impact statement was issued to the public in November 2010. Concept design submissions have been made to both the National Capital Planning Commission and the Commission of Fine Arts, and schematic design is in progress. An exhibit design firm has been selected through a technical and price proposal process and start-up work began in January 2011. A request for proposals for a construction manager at risk was issued in December 2010, and selection and award are anticipated by summer 2011.

#### IMPACT OF DELAY:

The Museum is scheduled to open in late 2015 (FY 2016) to coincide with the 150th anniversary of the end of the Civil War; the 150th anniversary of the 13th amendment, which ended slavery in America; and, the 50th anniversary of the Voting Rights Act. A delay in funding would slow down or stop the final design and construction process. This would introduce schedule delays and probable increases to the overall estimated project costs.



# VISITS TO THE SMITHSONIAN FY 2006-FY 2010

MUSEUM	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
MALL					
SI Castle	1,202,611	1,580,962	1,683,655	1,823,699	1,813,818
A&I Building <sup>1</sup>	0	0	0	0	0
Natural History	5,561,758	7,285,149	6,583,858	7,543,542	6,969,616
Air and Space/ Silver Hill	5,045,712	5,942,353	6,867,547	7,040,578	8,013,000
American Indian	1,620,692	1,822,087	1,479,338	1,412,202	1,365,915
Freer Gallery	420,319	564,178	606,486	624,219	516,164
Sackler Gallery	223,958	318,792	283,671	321,749	307,732
African Art	192,845	290,727	311,788	376,610	333,342
Ripley Center	233,226	278,672	415,601	444,536	365,580
American History <sup>2</sup>	2,874,640	0	0	4,178,295	4,237,760
Hirshhorn	749,313	743,126	670,330	685,016	612,460
OFF MALL					
DW Reynolds Center (AA/PG) <sup>3</sup>	274,840	787,648	960,202	1,042,915	1,010,876
Renwick	165,103	122,801	129,124	166,198	145,555
Anacostia	42,805	38,288	38,963	29,691	52,552
Cooper-Hewitt	186,628	226,998	165,468	164,098	180,852
American Indian <sup>4</sup> (Heye Center/CRC)	233,696	275,542	318,312	286,053	295,862
National Zoo	2,480,967	2,843,018	2,061,848	2,275,626	2,217,060
Postal	439,048	365,180	306,785	356,993	330,453
Udvar-Hazy Center	1,019,885	1,069,398	1,128,003	1,199,655	1,106,804
TOTAL	22,968,046	24,554,919	24,010,979	29,971,675	29,875,401

<sup>&</sup>lt;sup>1</sup>The Arts and Industries (A&I) Building closed to the general public in January 2004.

<sup>&</sup>lt;sup>2</sup>The National Museum of American History closed to the public in September 2006 and reopened in November 2008.

<sup>&</sup>lt;sup>3</sup>The Donald W. Reynolds Center [(American Art (AA) and National Portrait Gallery (PG)] was closed to the public from January 2000 through June 2006. It reopened in July 2006.

<sup>&</sup>lt;sup>4</sup>Includes the George Gustav Heye Center in New York City, and the Cultural Resources Center in Suitland, Maryland.

#### TRUST FUNDS

In addition to support provided by federal appropriations, the Smithsonian Institution receives and generates trust funds to expand and enrich its programs. Growing the trust budget is key to accomplishing the Institution's Strategic Plan objectives in fiscal years (FYs) 2011–2016. The Institution will take steps in FY 2012 to increase revenue from diverse private sources by strengthening the Smithsonian's first fundraising capability, launching a national campaign, and identifying new sources of revenue. Trust funds will be used to leverage the Smithsonian's research capacity through partnerships with Federal agencies, universities, nongovernmental organizations, industry, and other private organizations, national and international. Trust funds will also be raised to meet the Institution's funding commitments with Congress to renovate the Arts and Industries Building, and to open the National Museum of African American History and Culture. The following provides an overview of the current sources of trust funds.

The Institution's trust funds include general trust funds with limited or no restrictions on their use, 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 affect the return on the endowment, short-term interest income, and donor giving, as well as restaurant, magazine, catalogue, 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 2010	FY 2011
(Dollars in Millions)	Estimate	Estimate
General Trust	71.0	76.6
Donor/Sponsor-Designated	160.0	189.2
Government Grants and Contracts	111.8	110.0
Total Available for Operations	\$342.8	\$375.8

**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; payout from unrestricted endowments; net proceeds from the museum shops, catalogue, 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; licensing fees from the Smithsonian Channel and student travel programs; 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 2011 general trust funds total \$76,600,000. 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 2011 are projected to total \$189,200,000. 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 align with the Smithsonian's expertise in a particular area of science, history, art, or education. For FY 2011, Government grants and contracts are projected to be \$110,000,000. Of this amount, \$88,700,000 would be available for astrophysical research and development carried out by the Smithsonian Astrophysical Observatory.

#### APPROPRIATION LANGUAGE AND CITATIONS

The Act of August 10, 1846, 9 Stat. 102-106, 20 U.S.C.§§ 41-70, established the Smithsonian Institution "for the increase and diffusion of knowledge," and provided the organizational structure for the Institution's administration. The mission of the Smithsonian Institution has remained unchanged throughout its 165-year history, although additional authority for many of the Institution's programs and operations has been enacted over the years. Those statutes, along with the Smithsonian charter, are cited below as the authority for the Smithsonian Institution's FY 2010 appropriation language, except where specific authorizing language has been included in the wording of the appropriation itself. FY 2011 appropriation language and citations will be submitted to the Appropriations Subcommittees when available.

#### **Appropriation: Salaries and Expenses**

1. For necessary expenses of the Smithsonian Institution, as authorized by law, including research in the fields of art, science, and history;

20 U.S.C.§§ 50, 53a, 69, 75b(b), 76bb(c), 77a, 78, 80a(a), 80m, 80g-1(b)(1),(3) provide that (1) "...all objects of art and of foreign and curious research, and all objects of natural history, plants, and geological and mineralogical specimens...shall be so arranged and classified...as best to facilitate the examination and study of them..." (2) "Appropriations are authorized for...the making of solar observations at high altitudes..." (3) "The Secretary of the Smithsonian Institution is hereby authorized...to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States..." (4) "The Gallery [National Portrait Gallery] shall function as a free public museum for the exhibition and study of portraiture and statuary depicting men and women who have made significant contributions to the history, development, and culture of the people of the United States and of the artists who created such portraiture and statuary." (5) "The Joseph H. Hirshhorn Museum and Sculpture Garden...shall be used for the storage, exhibition, and study of works of art..." (6) "The national air and space museum shall...provide educational material for the historical study of aviation and space flight." (7) "The Secretary of the Smithsonian Institution is authorized to cooperate with any State, educational institution, or scientific organization in the United States for continuing paleontological investigations..." (8) "It shall be equipped with a study center for scholarly research into the meaning of war, its effect on civilization, and the role of the armed forces..." (9) "...the Board may...conduct programs of research and education (in the Museum of African Art)..."(10) The purposes of the National Museum [of the American Indian] are to (1) advance the study of Native Americans, including the study of language, literature, history, art, anthropology, and life...(3) provide for Native American research and study programs.

2. development, preservation, and documentation of the National Collections;

20 U.S.C.§§ 50, 50a, 59, 69, 75e, 76c, 76cc(a), 77a, 80a, 80m, 80q-1(b)(2), 81 provide that (1) "...all objects of art and of foreign and curious research, and all objects of natural history, plants, and geological and mineralogical specimens...shall be delivered to such persons as may be authorized by the Board of Regents to receive them, and shall be so arranged and classified...as best to facilitate the examination and study of them..." (2) "The Smithsonian Institution is authorized to include in its estimates of appropriations such sums as may be needful for the preservation and maintenance of the John Gellatly art collection." (3) "All collections of rocks, minerals, soils, fossils, and objects of natural history, archaeology, and ethnology...when no longer needed for investigations in progress shall be deposited in the National Museum." (4) "The Secretary of the Smithsonian Institution is hereby authorized...to continue independently or in cooperation...the excavation and preservation of archaeological remains." (5) "...the Board may - (1) purchase, accept, borrow, or otherwise acquire portraiture, statuary, and other items for preservation, exhibition, or study." (6) "...the Regents are authorized...to acquire (by purchase or otherwise) and sell contemporary works of art or copies thereof..." (7) "There is established in the Smithsonian Institution a Board of Trustees...which shall have the sole authority (i) to purchase or otherwise acquire...works of art for the Joseph H. Hirshhorn Museum and Sculpture Garden..." (8) "The national air and space museum shall...collect, preserve, and display aeronautical and space flight equipment of historical interest and significance..." (9) "...the Smithsonian Institution shall collect, preserve, and

exhibit military objects of historical interest and significance." (10) "...the Board may purchase, accept, borrow or otherwise acquire additional works of art or any other real or personal property for the Museum (of African Art); preserve, maintain, restore...or otherwise hold any property of whatsoever nature acquired..." (11) "The purposes of the National Museum [of the American Indian] are to...(2) collect, preserve, and exhibit Native American objects of artistic, historical, literary, anthropological, and scientific interest..." (12) "The National Zoological Park is placed under the direction of the Regents of the Smithsonian Institution, who are authorized to transfer to it any living specimens, whether of animals or plants, in their charge, to accept gifts for the park...to make exchanges of specimens..."

3. presentation of public exhibits and performances;

20 U.S.C.§§ 75b(b), 76c(b), 76bb(c), 77a, 80a(a), 80m(a), 80q-1(b) provide that (1) "The Gallery [National Portrait Gallery] shall function as a free public museum for the exhibition and study of portraiture and statuary..." (2) "In order to encourage the development of contemporary art and to effect the widest distribution and cultivation in matters of such art, the Regents are authorized to...conduct exhibitions..." (3) "The Joseph H. Hirshhorn Museum and Sculpture Garden...shall be used for the storage, exhibition, and study of works of art..." (4) "The national air and space museum shall...collect, preserve, and display aeronautical and space flight equipment of historical interest and significance..." (5) "...the Smithsonian Institution shall collect, preserve, and exhibit military objects of historical interest and significance." (6) "...the Board may...display...any property of whatsoever nature acquired (for the Museum of African Art)..." (7) "The purposes of the National Museum [of the American Indian] are to...(2) collect, preserve, and exhibit Native American objects of artistic, historical, literary, anthropological, and scientific interest..."

4. collection, preparation, dissemination, and exchange of information and publications;

20 U.S.C.§ 53a provides that "Appropriations are authorized for the...preparation of manuscripts, drawings, and illustrations for publication."

- 5. conduct of education, training, and museum assistance programs;
  - 20 U.S.C.§ 65a provides "The Director of the National Museum under the direction of the Secretary of the Smithsonian Institution shall (1) cooperate with museums and their professional organizations in a continuing study of museum problems and opportunities, both in the United States and abroad;... (2) prepare and distribute significant museum publications; (3) perform research on, and otherwise contribute to, the development of museum techniques...."
  - 20 U.S.C. § 77a provides that "The national air and space museum shall...provide educational material for the historical study of aviation and space flight."
  - 20 U.S.C.§ 79a provides that "The purpose of setting aside such an area [Barro Colorado Island] is to preserve and conserve its natural features...thus providing a place where duly qualified students can make observations and scientific investigations for increase of knowledge, under such conditions and regulations as may be prescribed by the Smithsonian Institution."
  - 20 U.S.C. § 79e provides that "There are authorized to be appropriated annually...such sums as are necessary for the administration of [the Canal Zone Biological Area] for the maintenance of laboratory or other facilities..."

The Panama Canal Treaty and ancillary agreements vest in the Smithsonian Tropical Research Institute responsibility to serve as custodian of the Barro Colorado Nature Monument. The Panama Canal Act of 1979, Public Law 96-70, as amended, implements the provisions of the Panama Canal Treaty.

- 20 U.S.C.§ 80m(a) provides that "...the Board [of Regents] may... (3) conduct programs of research and education (in the Museum of African Art)...."
- 6. maintenance, alteration, operation, lease agreements of no more than 30 years, and protection of buildings, facilities, and approaches;
  - 20 U.S.C.§§ 53a, 76g, 76ee, 79b, 80m, 81 provide that respectively, (1) "Appropriations are authorized for the maintenance of the Astrophysical Observatory and...for repairs and alterations of buildings and grounds occupied by the

Smithsonian Institution in the District of Columbia and elsewhere..." (2) "There are authorized to be appropriated annually such sums as may be necessary to maintain and administer the Gallery [National Portrait Gallery]..." (3) "There is authorized to be appropriated...such additional sums as may be necessary for the maintenance and operation of such [Hirshhorn] [M]useum and [S]culpture [G]arden." (4) "The Smithsonian Institution shall...be responsible for the construction and maintenance of laboratory and other facilities on the area provided for the use of students authorized to carry on studies within the confines of the area..." (5) "...the Board may...preserve, maintain...any property of whatsoever nature acquired (for the Museum of African Art)..." (6)"The National Zoological Park is placed under the direction of the Regents of the Smithsonian Institution, who are authorized...to administer and improve the said Zoological Park for the advancement of science and the instruction and recreation of the people." Public Law 101-512 making appropriations for the Department of the Interior and Related Agencies for the fiscal year 1991 extended the maximum term for leases from ten years to thirty years.

7. not to exceed \$\_\_\_\_\_for services as authorized by 5 U.S.C. 3109;

5 U.S.C.§ 3109 provides that "When authorized by an appropriation or other statute, the head of an agency may procure by contract the temporary (not in excess of 1 year) or intermittent services of experts or consultants or an organization thereof, including stenographic reporting services."

8. and purchase, rental, repair, and cleaning of uniforms for employees,

5 U.S.C.§ 5901 provides that "(a) There is authorized to be appropriated annually to each agency of the Government of the United States,...on a showing of necessity or desirability, such sums as may be necessary to carry out this subchapter. The head of the agency concerned...shall-- (1) furnish to each of these employees a uniform at a cost not to exceed \$400 a year...or (2) pay to each of these employees a allowance for a uniform not to exceed \$400 a year..."

40 U.S.C.§ 193t provides that "The special police provided for in section 193n of this title [Smithsonian Institution]...may be furnished, without charge, with uniforms and such other

equipment as may be necessary for the proper performance of their duties..."

10. \$\_\_\_\_\_\_, to remain available until September 30, 2011, except as otherwise provided herein;

Wording added by the Congress in Public Law 111-88 making

Wording added by the Congress in Public Law 111-88 making appropriations for the Department of the Interior and related agencies for the fiscal year 2010 to extend the availability for the Salaries and Expenses account from one year to two years unless otherwise provided.

11. of which not to exceed \$\_\_\_\_\_ for the instrumentation program, collections acquisition, exhibition reinstallation, the National Museum of African American History and Culture, and the repatriation of skeletal remains program shall remain available until expended; of which \$\_\_\_\_ is for fellowships and scholarly awards;

Wording added by the Congress in Public Law 100-446 making appropriations for the Department of the Interior and related agencies for the fiscal year 1989 to permit the Institution to establish no-year funding within the Salaries and Expenses account for the development of major scientific instrumentation. Public Law 101-512, making appropriations for the Department of the Interior and Related Agencies for the fiscal year 1991, allowed no-year funding to be used for purchases for museum collections; the design, production, and reinstallation of museum exhibitions; and the repatriation of skeletal remains. Public Law 108-447 making appropriations for the Department of the Interior and Related Agencies for fiscal year 2005 allowed no-year funding for the National Museum of African American History and Culture. Public Law 108-108 making appropriations for the Department of the Interior and Related Agencies for fiscal year 2004 established two-year funding for fellowships and scholarly research awards.

31 U.S.C.§ 1301(c) provides "An appropriation in a regular, annual appropriation law may be construed to be permanent or available continuously only if the appropriation ... (2) expressly provides that it is available after the fiscal year covered by the law in which it appears."

12. of which \$\_\_\_\_ may be made available to carry out activities under the Civil Rights History Project Act of 2009 (20 U.S.C. 80s et seq.), to remain available until expended;

Wording added by the Congress in Public Law 111-88 making appropriations for the Department of Interior and Related Agencies in 2010.

13. and including such funds as may be necessary to support American overseas research centers:

Wording added by the Congress in Public Law 99-190 making appropriations for the Department of Interior and Related Agencies in 1986.

14. *Provided,* That funds appropriated herein are available for advance payments to independent contractors performing research services or participating in official Smithsonian presentations.

31 U.S.C.§ 3324 provides that "(b) An advance of public money may be made only if it is authorized by-- (1) a specific appropriation or other law..."

## Appropriation: Facilities Capital

1. For necessary expenses of repair, revitalization, and alteration of facilities owned or occupied by the Smithsonian Institution, by contract or otherwise, as authorized by section 2 of the Act of August 22, 1949 (63 Stat. 623),

Act of August 22, 1949 (63 Stat. 623), 20 U.S.C.§ 53a, provides that "Appropriations are authorized...for repairs and alterations of buildings and grounds occupied by the Smithsonian Institution in the District of Columbia and elsewhere..."

20 U.S.C.§ 81 provides that "The National Zoological Park is placed under the direction of the Regents of the Smithsonian Institution, who are authorized...to administer and improve the said Zoological Park for the advancement of science and the instruction and recreation of the people."

Department of the Interior and Related Agencies Appropriations Act, 2004, (Public Law 108-108) established the Facilities

Capital appropriation. The appropriation includes activities formerly financed through the Repair, Restoration and Alteration of Facilities appropriation and the Construction appropriation.

2. and for construction,

20 U.S.C. § 53a provides that "Appropriations are authorized...for repairs and alterations of buildings and grounds occupied by the Smithsonian Institution in the District of Columbia and elsewhere..."

3. including necessary personnel,

Wording added by Congress in Department of Interior and Related Agencies Appropriations Act, 2003, (Public Law 108-7) for clarification.

4. \$ to remain available until expended,

31 U.S.C.§ 1301 provides "An appropriation in a regular, annual appropriation law may be construed to be permanent or available continuously only if the appropriation ... (2) expressly provides that it is available after the fiscal year covered by the law in which it appears."

5. of which not to exceed \$\_\_\_\_ is for services as authorized by 5 U.S.C. 3109:

5 U.S.C.§ 3109 provides that "When authorized by an appropriation or other statute, the head of an agency may procure by contract the temporary (not in excess of 1 year) or intermittent services of experts or consultants or an organization thereof, including stenographic reporting services."

#### Appropriation: Legacy Fund

 For the Purpose of developing a public-private partnership to facilitate the reopening of the Arts and Industries Building of the Smithsonian Institution,

Wording added by Congress in Department of Interior and Related Agencies Appropriations Act, 2010, (Public Law 111-88).

2. \$ to remain available until expended,

31 U.S.C.§ 1301 provides "An appropriation in a regular, annual appropriation law may be construed to be permanent or available continuously only if the appropriation ... (2) expressly provides that it is available after the fiscal year covered by the law in which it appears."

3. for repair, renovation, and revitalization of the building:

Act of August 22, 1949 (63 Stat. 623), 20 U.S.C.§ 53a, provides that "Appropriations are authorized...for repairs and alterations of buildings and grounds occupied by the Smithsonian Institution in the District of Columbia and elsewhere..."

4. *Provided*, That such funds shall be matched on a 1:1 basis by private donations;

Wording added by Congress in Department of Interior and Related Agencies Appropriations Act, 2010, (Public Law 111-88)

20 U.S.C.§§ 55, provides that "...such sums as the Regents may, from time to time, see fit to deposit, not exceeding, with the original bequest, ...This shall not operate as a limitation on the power of the Smithsonian Institution to receive money or other property by gift, bequest, or devise, and to hold and dispose of the same in promotion of the purposes thereof."

20 U.S.C.§§ 56, provides that "The Regents are authorized to make such disposal of any other moneys which have accrued, or shall hereafter accrue, as interest upon the Smithsonian fund, not herein appropriated, or not required for the purposes herein provided, as they shall deem best suited for the promotion of the purpose of the testator."

5. *Provided further*, That major in-kind donations that contribute significantly to the redesign and purpose of the reopened building be considered to qualify toward the total private match:

Wording added by Congress in Department of Interior, Environment and Related Agencies Appropriations Act, 2010, for further clarification of use of funds. 6. Provided further, That privately contributed endowments, which are designated for the care and renewal of permanent exhibitions installed in the Arts and Industries Building, be considered as qualifying toward the total private match:

> Wording added by Congress in Department of Interior, Environment and Related Agencies Appropriations Act, 2010, for further clarification of matching funds.

7. *Provided further,* That this appropriation may be made available to the Smithsonian Institution incrementally as private funding becomes available;

Wording added by Congress in Department of Interior, Environment and Related Agencies Appropriations Act, 2010, for further clarification of availability of funds.

8. *Provided further,* That any other provision of law that adjusts the overall amount of the Federal appropriation for this account shall also apply to the privately contributed requirement:

Wording added by Congress in Department of Interior, Environment and Related Agencies Appropriations Act, 2010, for further clarification.

 Provided further, That the unobligated balances provided under this heading in Public Law 110-161 and Public Law 111-8 are hereby rescinded.

> Wording added by Congress in Department of Interior, Environment and Related Agencies Appropriations Act, 2010, to rescind prior-year unobligated balances.

# Adjustments for FY 2011 (Dollars in Thousands)

		Adjustments for FY 2011 Continuing Resolution					
	FY 2010 Adjusted Base	Annualization FY 2010 Pay Raise \$000	Buyouts \$000	Rent, Utilities, Other Fees	Strategic Plan Adjustments \1 \$000	Permanent Transfers FY 2010/11 \$000	FY 2011 Continuing Resolution \$000
Unit	\$000			\$000			
MUSEUMS AND RESEARCH CENTERS							
Unlocking the Mysteries of the Universe							
National Air and Space Museum	18,259	184	(254)	300	0	(93) <b>\2</b>	18,396
Smithsonian Astrophysical Observatory	24,323	166	(104)	0	0	0	24,385
Major Scientific Instrumentation	3,822	0	0	0	0	0	3,822
Universe - Center	0	0	0	0	200	0	200
Subtotal, Unlocking the Mysteries of the Universe	46,404	350	(358)		200	(93)	46,803
Understanding and Sustaining A Biodiverse Planet							
National Museum of Natural History	47,622	452	(411)	0	750	0	48,413
National Zoological Park	23,190	215	(191)	0	138	0	23,352
Smithsonian Environmental Research Center	3,756	45	(28)		0	0	3,773
Smithsonian Tropical Research Institute	14,546	106	(6)	0	0	0	14,646
Biodiversity - Center	0	0	0	0	750	0	750
Subtotal, Understanding and Sustaining a Biodiverse Planet	89,114	818	(636)	0	1,638	0	90,934
Valuing World Cultures							
Arthur M. Sackler Gallery/Freer Gallery of Art	6,113	59	(37)	0	0	0	6,135
Center for Folklife and Cultural Heritage	2,282	18	0	0	0	0	2,300
Cooper-Hewitt, National Design Museum	4,103	32	(55)	9	0	0	4,089
Hirshhorn Museum & Sculpture Garden	4,412	39	(95)	0	0	0	4,356
National Museum of African Art	4,504	32	(75)	0	0	0	4,461
World Cultures - Center	0	0	0	0	300	0	300
Subtotal, Valuing World Cultures	21,414	180	(262)	9	300	0	21,641
Understanding the American Experience							
Anacostia Community Museum	2,048	15	0	0	0	0	2,063
Archives of American Art	1,858	22	0	0	0	0	1,880
National Museum of African American History & Culture	12,894	112	0	318	0	0	13,324
National Museum of American History, Behring Center	22,349	221	(393)	100	0	160 \3	22,437
National Museum of the American Indian	32,530	248	(38)	0	0	(340) \3,4,5,8,9	32,400
National Portrait Gallery	5,967	61	(79)	0	0	50 \4	5,999
Smithsonian American Art Museum	9,245	102	(54)	0	0	50 \ <b>5</b>	9,343
American Experience - Center	0	0	0	0	300	0	300
Subtotal, Understanding the American Experience	86,891	781	(564)	418	300	(80)	87,746
TOTAL MUSEUMS AND RESEARCH CENTERS	243,823	2,129	(1,820)	727	2,438	(173)	247,124

# Adjustments for FY 2011 (Dollars in Thousands)

		Adjustments for FY 2011 Continuing Resolution				<u>1</u>	
	FY 2010 Adjusted Base	Annualization FY 2010 Pay Raise	Buyouts	Rent, Utilities, Other Fees	Strategic Plan Adjustments \1	Permanent Transfers FY 2010/11	FY 2011 Continuing Resolution
Unit	\$000	\$000	\$000	\$000	\$000	\$000	\$000
MISSION ENABLING							
Program Support and Outreach							
Outreach	9,669	69	(126)	0	0	0	9,612
Communications	2,457	37	0	0	0	0	2,494
Institution-wide Programs	10,839	0	0	0	900	(111) \6	11,628
Office of Exhibits Central	2,982	30	0	0	0	0	3,012
Museum Support Center	1,858	16	0	0	0	0	1,874
Museum Conservation Institute	3,119	24	0	0	0	93 \2	3,236
Smithsonian Institution Archives	2,054	27	0	0	0	112 \7	2,193
Smithsonian Institution Libraries	10,008	82	(107)	0	0	0	9,983
Subtotal, Program Support and Outreach	42,986	285	(233)	0	900	94	44,032
Office of the Chief Information Officer	43,536	152	(67)	1,492	500	0	45,613
Administration	32,874	153	(104)	105	0	298 \6,8,9	33,326
Office of the Inspector General	2,700	22	(115)	0	0	0	2,607
Facilities Services							
Facilities Maintenance	72,935	367	(650)	0	(2,652)	0	70,000
Facilities Operations, Security, and Support	197,307	1,033	(711)	(4,451)	500	(219) \7,8	193,459
Subtotal, Facilities Services	270,242	1,400	(1,361)	(4,451)	(2,152)	(219)	263,459
TOTAL MISSION ENABLING	392,338	2,012	(1,880)	(2,854)	(752)	173	389,037
GRAND TOTAL, SMITHSONIAN INSTITUTION	636,161	4,141	(3,700)	(2,127)	1,686	0	636,161

#### Footnotes for FY 2011 Appropriation:

- \1 Realignment of funds to achieve the Secretary's strategic plan objectives.
- .2 Transfer of \$93,000 from National Air and Space Museum to Museum Conservation Institute to support a Conservator position...
- \3 Transfer of \$160,000 from National Museum of the American Indian to National Museum of American History to offset base erosion and cover necessary pay expenses.
- 4 Transfer of \$50,000 from National Museum of the American Indian to National Portrait Gallery to offset base erosion and cover necessary pay expenses.
- \5 Transfer of \$50,000 from National Museum of the American Indian to Smithsonian American Art Museum to offset base erosion and cover necessary pay expenses.
- \6 Transfer of \$111,000 from Institution-wide Programs to Administration to cover costs of a program analyst position as part of a federal-trust swap.
- \7 Transfer of \$112,000 from Facilities Operations, Security and Support to Smithsonian Archives to fund expenses for commercial records management and storage services.
- 8 Transfer of \$107,000 from Facilities Operations, Security and Support to Administration to cover costs for realignment of Under Secretary administrative functions.
- \9 Transfer of \$80,000 from National Museum of the American Indian to Administration to fund costs for Asian Pacific American Program.